2012

An analysis of instructional practices of contingent faculty in community colleges

Carol A. Schwartz
The University of Toledo

Follow this and additional works at: http://utdr.utoledo.edu/theses-dissertations

Recommended Citation
http://utdr.utoledo.edu/theses-dissertations/423

This Dissertation is brought to you for free and open access by The University of Toledo Digital Repository. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of The University of Toledo Digital Repository. For more information, please see the repository's About page.
A Dissertation

Entitled

An Analysis of Instructional Practices

of Contingent Faculty in Community Colleges

by

Carol A. Schwartz

Submitted to the Graduate Faculty as partial fulfillment of the requirements for the Doctor of Philosophy Degree in Higher Education

David Meabon, Ph.D., Committee Chair

Mary Ellen Edwards, Ph.D., Committee Member

Larry G. McDougle, Ph.D., Committee Member

Bin Ning, Ph.D., Committee Member

Renay Scott, Ph.D., Committee Member

Dr. Patricia R. Komuniecki, Dean
College of Graduate Studies

The University of Toledo

December 2012
An Abstract of

An Analysis of Instructional Practices of Contingent Faculty in Community Colleges

by

Carol A. Schwartz

Submitted to the Graduate Faculty as partial fulfillment of the requirements for the Doctor of Philosophy Degree in Higher Education

December 2012

The academy has long acknowledged teaching, service, and research as the threefold work of its members. Those members in community colleges primarily engage in teaching, as opposed to research and service, but historical trends show an increase in the percent of courses taught by contingent instructors as opposed to full-time faculty members. This trend, when considered with the fact that almost half of the students now pursuing postsecondary educational opportunities do so in community colleges, provides a rich landscape for investigation.

This dissertation examines, through description correlation methods, the existence of relationships between characteristics of community college contingent faculty and the planning, preparation, class environment, instruction, and professional development activities used by contingent faculty in community colleges, specifically those instructors in the Arts and Sciences or general education divisions.

Those varied teaching activities are the components of Danielson’s Framework for Teaching, a model developed to address wide-ranging aspects of instruction. That model serves as the conceptual framework for this study, which included participants
from across the nation who work in community colleges differentiated by size and the populations they serve.

The analysis of the results of this correlational study leads to recommendations for more effective instructional practices in contingent faculty and improved integration of this group into the academic life of community colleges.
# Table of Contents

Table of Contents .............................................................................................................. v

List of Tables ..................................................................................................................... ix

List of Figures .................................................................................................................... xi

I. Chapter One: Introduction ............................................................................................ 1

A. Statement and Significance of the Study ................................................................. 1

B. Problem Statement ...................................................................................................... 5

C. Theoretical Framework .............................................................................................. 6

C. Conceptual Framework ............................................................................................... 7

D. Purpose ......................................................................................................................... 9

E. Research Questions ..................................................................................................... 9

F. Methods ......................................................................................................................... 10

a. Population .................................................................................................................. 10

b. Sample ....................................................................................................................... 11

c. Procedures ................................................................................................................ 12

d. Analysis ..................................................................................................................... 13

G. Assumptions, Limitations, Delimitations ............................................................... 13

a. Assumptions .............................................................................................................. 13

b. Limitations ............................................................................................................... 13

c. Delimitations ............................................................................................................ 15

H. Definition of Terms ................................................................................................... 15

I. Operational Definition ............................................................................................ 16

J. Summary ...................................................................................................................... 16
II. Chapter Two: Literature Review

A. Theoretical Framework: Constructivist Learning Theory

B. Community Colleges
   a. History and Background
   b. Community College Ties to Secondary Education
   c. Community College Students
   d. Community College Faculty

C. Contingent Faculty

D. Teaching and Instruction
   a. Instruction by Contingent Faculty
   b. Pedagogy and Classroom Practice
   c. Models of Instruction
      Scholarship of Teaching
      Danielson’s Framework
      The Learning Paradigm

E. Evaluating Teaching and Instruction

F. Summary

III. Chapter Three: Research Design and Methodology

A. Research Questions

B. Population

C. Sample

D. Procedures

E. Instrumentation
a. Validity................................................................................................................74
b. Reliability............................................................................................................75
c. Data Collection................................................................................................76
d. Components of Survey Instrument.................................................................78
F. Analysis ............................................................................................................82
G. Summary .........................................................................................................85

IV. Chapter Four: Findings ..................................................................................86
A. Analysis of Measures of Central Tendency ....................................................86
B. Teaching Experience and Danielson’s Framework for Teaching Analysis ....88
C. Professional Development and Danielson’s Framework for Teaching Analysis
..........................................................................................................................91
D. Academic Discipline and Danielson’s Framework for Teaching Analysis ....94
E. Carnegie Classification and Danielson’s Framework for Teaching Analysis.99
F. Analysis of Responses to Open-Ended Question ..........................................103
G. Summary .........................................................................................................108

V. Chapter Five: Summary, Conclusions, and Recommendations .....................110
A. Populations and Sample ..................................................................................111
B. Analysis ...........................................................................................................111
C. Summary and Conclusions.............................................................................112
  a. Domain One: Preparation and Planning Correlations .........................114
  b. Domain Two: Classroom Environment Correlations ............................116
  c. Domain Three: Instruction ..................................................................116
  d. Domain Four: Engagement in Professional Responsibilities ..........117
e. Open-ended Responses from Question 41 ...........................................118

D. Recommendations for Research.................................................................120

E. Recommendations for Practice.....................................................................122

References 124

Appendices

Appendix A: Danielson’s Domains 142

Appendix B: Initial Email Contact to Chief Academic Officers 144

Appendix C: Initial Letter Contact to Chief Academic Officers 145

Appendix D: Follow-up Email Contact to Chief Academic Officers 146

Appendix E: Email Message to AS/GE Contingent Faculty 147

Appendix F: Instructional Practices Survey 148

Appendix G: IRB Approval and Documents 158

Appendix H: Initial Analysis: Measures of Central Tendency 160
List of Tables

Table 1: Identification of Variables for Analysis and Type as Presented in Survey ......65
Table 2: Community colleges in each Carnegie Classification and number contacted...67
Table 3: Responses and Non-Responses to Invitation to Participate in Study ............72
Table 4: Cronbach’s Coefficient Alpha Results for Internal Reliability by Domain ......75
Table 5: Survey Responses: Completed, Partial, and Abandoned............................79
Table 7: Composite Z-Score Questions Used for Domains.........................................88
Table 8: Correlation of Teaching Experience and Domain 1 Composite: Planning and
Preparation.........................................................................................................................89
Table 9: Correlation of Teaching Experience and Domain 2 Composite: Classroom
Environment.........................................................................................................................90
Table 10: Correlation of Teaching Experience and Domain 3 Composite: Instruction ..90
Table 11: Correlation of Teaching Experience and Domain 4 Composite: Professional
Responsibilities......................................................................................................................91
Table 12: Correlation of Professional Development Engagement and Domain 1
Composite: Planning and Preparation..................................................................................92
Table 13: Correlation of Professional Development Engagement and Domain 2
Composite: Classroom Environment...................................................................................93
Table 14: Correlation of Professional Development Engagement and Domain 3
Composite: Instruction........................................................................................................93
Table 15: Correlation of Professional Development Engagement and Domain 4
Composite: Professional Responsibilities.............................................................................94
Table 16: Correlation Between Academic Disciplines and Domain 1 Composite: Planning and Preparation ................................................................. 95
Table 17: Correlation between Academic Disciplines and Domain 2 Composite: Classroom Environment ................................................................. 96
Table 18: Correlation between Academic Disciplines and Domain 3 Composite: Instruction ................................................................................. 97
Table 19: Correlation between Academic Disciplines and Domain 4 Composite: Professional Responsibilities ......................................................... 98
Table 20: Correlation between Carnegie Classifications and Domain 1 Composite: Planning and Preparation ......................................................... 100
Table 21: Correlation between Carnegie Classifications and Domain 2 Composite: Classroom Environment ......................................................... 101
Table 22: Correlation between Carnegie Classifications and Domain 3 Composite: Instruction ................................................................................. 102
Table 23: Correlation between Carnegie Classifications and Domain 3 Composite: Professional Responsibilities ......................................................... 102
Table 24: Responses to Question 41 ........................................................................ 104
Table 25: Grouped Responses to Question 41 ......................................................... 106
List of Figures

*Figure 1.* Increase in percent of community college instructors serving in contingent capacity in the period between 1962 and 2003........................................................................................................4
Chapter One

Introduction

Community colleges are a uniquely American creation designed to expand access to higher education through open enrollment policies and comprehensive programs. In addition to an established history of providing postsecondary educational opportunities to many Americans, particularly minorities, throughout the challenges of the previous century, according to Lothian (2009), President Barack Obama speculated that these institutions “could play a key role in helping boost the ailing economy for years to come” (para. 1). Community colleges have traditionally welcomed a tremendously diverse group of students who reflect a wide range of academic ability and preparation; traditional and non-traditional ages, from high school students earning college credits, to mature adults who embrace life-long learning and seek retraining for employment; cultural and racial minorities; and every segment of the socio-economic strata. It appears that both community colleges and educational opportunity are slated for further expansion in the next decade as they play a key role in the same initiatives as they have in the past and in addition provide postsecondary dual enrollment options for high school students and developmental education programs.

Statement and Significance of the Study

The academy has long indentified the threefold work of its members—teaching, service, and research, but Ernest Boyer (1990) stated that the order of priority of these dimensions clearly shifted in the second half of the 20th century, corresponding to the changes in business and industry. Research took precedence over teaching often at the expense of undergraduate students. In his response to that shift, Boyer called for not only
a return to the classroom, but also for the professoriate to engage in a reexamination of scholarship of teaching and learning.

In light of Boyer’s suggestion and eventual proposal for the study, promotion, and reflection of instructional practices, many leaders in the academy identified the lack of preparation for teaching in higher education. Cross (1998) clearly summarized the issue in saying that

Few college teachers know much about the learning process. For the most part, they have only their own experience as learners to guide them. And for most who choose academic life, learning has come easily. Such is not the case for many of today’s students. (p. 8)

Atkinson similarly noted this problem in saying, “Most of us were not trained to teach. Semester after semester we face groups of students without the requisite skills to teach effectively” (2001, p. 1226). In addition, Lattuca and Domagal-Goldman recognized that “Although clarity, organization, and preparation are clearly important dimensions of good teaching, good instructors must also demonstrate expertise in their discipline or field, as well as effective teaching methods that give students access to the domain’s knowledge base” (2007b, p. 81).

Because community colleges instructors teach primarily, as opposed to engage in research or service, it is ironic that they have little preparation for the very activity for which they are hired. Those who teach in a contingent capacity, or on a part-time, as needed basis, in community colleges may possess exceptional work experience in their disciplines, but also frequently lack pedagogical training due to the primacy of their employment and work outside of the academy.
Almost half of the students who are now pursuing postsecondary educational opportunities can be found in American community colleges (American Association of Community Colleges, n.d.), which serve the dual purpose of providing transferable, general education course credit as well as career, vocational, and technical education that leads to employment in the global economy. Individuals enroll in community colleges to earn associate’s degrees, accumulate academic credits to transfer to four-year institutions, become certified in a variety of technical and vocational fields, and learn new skills through lifelong learning programs (Cohen & Brawer, 2008).

While such a large proportion of students who are engaged in postsecondary education are in community colleges for many different reasons, few instructors are prepared for teaching in such institutions (Cohen & Brawer, 2008). Academic credentials for teaching in community colleges vary, but generally, a master’s degree with a minimum of 18 hours of graduate credit in the specific discipline being taught is needed for instructors of transfer credit courses. The required credentials are considerably more diverse for those who teach in career, vocational, or technical areas; those instructors are expected to have at least a high school diploma, but job experience and expertise can account for their preparation to teach (Townsend & Twombly, 2007). Instructors frequently have little to no preparation for the complex tasks of designing courses, creating instructional materials, constructing student learning experiences, assessing student learning in varied and valid formats, and revising instructional practice based on assessment results (Austin, 2002).

Currently, approximately two-thirds of community college instructors are employed part-time by their institutions and the number and percent of these faculty
members, also known as contingent or adjunct faculty, has risen over the past 45 years, allowing community colleges to maintain lower costs to students (Gappa, Austin, & Trice, 2007; Townsend & Twombly, 2007). The figure below shows the increase, as recorded by Townsend and Twombly (2007), in the percent of community college faculty serving in contingent capacity between 1962 and 2003.

![Increase in Percent of Community College Instructors serving in Contingent Capacity](image)

*Figure 1. Increase in percent of community college instructors serving in contingent capacity in the period between 1962 and 2003.*

These part-time instructors have been called adjunct faculty members, but with the current trend toward new and different appointment types and employment, contingent faculty is a more accurately descriptive, collective term (American Association of University Professors, n.d.). Given that teaching is not their full-time employment, it is possible that their preparation for teaching is inadequate, though a review of the literature shows that opinions vary depending on specific time period analyzed or criteria used to determine effectiveness (Benjamin, 2002; Green, 2007; Roueche, Roueche, & Milliron, 1996; Wyles, 1998).
The problem of having instructors who are not prepared to engage in sound pedagogical and/or instructional practices can be a distinct disadvantage for the students in their classes.

**Problem Statement**

Schmidt (2008) identified three studies by various researchers that determined there is a relationship between contingent faculty and decreased student success. These results of studies by Umbach, Jaeger, and Eagan are included in Chapter 2, but Schmidt acknowledges that there are differences between the instructional practices of full-time and part-time faculty. In addition, the intersection of contingent faculty with part-time community college students can be a particularly detrimental combination because “compared with full-time faculty members, part-timers advised students less frequently, used active teaching techniques less often, spent less time preparing for class, and were less likely to participate in teaching workshops” (Schmidt, 2008, para. 24). Clearly, among the conditions Schmidt cited, three are defined specifically within instructional preparation and teaching practices.

Ewell (1997) makes a compelling case, not only for promoting student learning, but also for systemically changing faculty engagement practices, strongly supported by institutional leadership. It is exceedingly difficult for institutions to address the issue of improved student learning in community colleges seriously and systematically without knowing more about the instructional practices of faculty members. Because of the renewed focus and emphasis on the role of community colleges, which now use a majority of contingent faculty, research on the instructional practices of community college contingent faculty is needed. This is an issue of concern to students, their
potential employers, the communities in which they will live and work, four-year institutions where they may continue their studies, and the academy in general.

**Theoretical Framework**

The nature of knowledge is one of two fundamental bases of philosophy. The exploration and investigation into what people can know and how they know it challenged the human imagination as early as the 6th century B.C, when early thinkers and philosophers began to organize and record ideas, questions, and hypotheses about humans’ rational existence. That search took the form of an exchange of ideas, allowing “students” to construct meaning through interaction with their “teachers” and other students. Xenophanes understood that humans construct knowledge based on their experiences and continue to shape their understanding, but an individual’s ideas and understanding continue to belong to that person. This is the foundation of constructivist thinking and learning, though it was not described by that term in ancient Greece (Magee, 1998).

For the ancients and for the philosophers who followed them, the quest for understanding human thought and knowledge was really a search for truth. It was the advent of modern psychology at the end of the 19th century that began to shift the emphasis away from knowledge as truth and toward cognition and learning. Epistemology, or the study of knowledge, was first used by Ferrier in 1854 (*Dictionary of Philosophy*, 1983), though questions about the origin, structure, and development of knowledge have been considered for many millennia.

John Dewey (1910), an American philosopher and educational reformer, was one of the first writers in modern philosophy and education to articulate the principles of
constructivist learning. He identified knowledge as the result of connecting prior knowledge to new experiences. Jean Piaget further supported this view with his assertion that children learn by interpreting their interactions with the environment through adaptation, though Lev Vygotsky added the dimension of social interaction to this dynamic process (Ormrod, 2011). This developing theory paralleled the research and influence of the behaviorists, who were more concerned with learning by conditioning rather than cognitive processes. With the advent of the last quarter of the 20\textsuperscript{th} century, Bruner (1973) further strengthened constructivist theory with the learner as “an active participant in the knowledge getting process, one who selections and transforms information, who constructs hypotheses, and who alters those hypotheses in the face of inconsistent or discrepant evidence” (p. 397).

Today, constructivist theory is a dominant influence on teaching and learning in the United States (Richardson, 1997). While many pedagogical practices have been developed based on this theory, Danielson’s Framework for Teaching, which is based on constructivist theory, is an integrated, conceptual model that has been used to shape instructional practice in American K-12 education at the turn of the 21\textsuperscript{st} century (Woolley, Benjamin, & Woolley, 2004).

**Conceptual Framework**

Shulman (1986) recognized the complexity of preparation for teaching and theorized that that instructors need to develop pedagogical content knowledge (knowing how to teach one’s discipline) and curricular knowledge (awareness of programs, materials, and resources for teaching one’s discipline), in addition to content knowledge (knowledge of one’s discipline). Shulman’s dimensions were carried further and
translated into applied principles that by Charlotte Danielson (1996), who identified four
domains of teacher responsibilities and their corresponding activities in order to define,
support, and assess effective teaching: 1: Planning and Preparation; 2: Classroom
Environment; 3: Instruction; and 4: Professional Responsibilities.

The Framework for Teaching is the name given to these four domains
collectively. The principles found within the Framework were derived from work of the
Educational Testing Service (ETS) in creating the Praxis program, a series of assessments
used to gauge the proficiency and achievement of teacher candidates in K-12 teacher
preparation programs and to grant licensure and certification in 40 U.S. states and
territories (2011). In addition, Danielson’s Framework for Teaching formed the basis of a
teacher evaluation program in Chicago Public School because consistency of ratings
show the “Danielson Framework does provide reliable information about the type of
instruction taking place in classrooms” (Sartain, Stoelinga, & Krone, 2010, p. 9).

Because these principles and activities are broad and overarching, they have the
potential for application in postsecondary settings. This view is supported by Danielson
(personal communication, May 6, 2010) stating, “to the extent that higher education is
education, most (if not all) of the same principles apply.” In addition, she acknowledged,
“the principles of instructional design should be the same.”

Each of the domains is grounded in organizing content and instruction for student
learning. All of the domains reflect Shulman’s observations about the preparation for
teaching, through Danielson’s practical activities and procedures for effective instruction
(see Appendix A). In addition, the Framework draws upon the work of other researchers
to provide a basis for sound and effective instructional practices.
Purpose

The purpose of this study was to identify the planning, preparation, class environment, instruction, and professional development activities used by contingent faculty in community colleges. The findings were intended to demonstrate whether professional characteristics of community college contingent faculty in the Arts and Sciences or general education (AS/GE) division and institution size and population served are related to the frequency of their instructional practices as defined by Danielson’s Framework domains (1996). Professional characteristics included academic discipline, teaching experience, and frequency of engagement in professional development. These characteristics align with the planning, classroom environment, preparation, and instructional activities found in Danielson’s four domains. Frequency was measured by the number of occurrences within a term for each of the activities. This descriptive, correlation study looked for relationships between professional and demographic characteristics of community college contingent faculty and the frequency of their instructional practices. The results might provide opportunities to create, improve, and expand effective professional development for contingent faculty members, which in turn can improve their students’ learning experiences.

Research Questions

This study examined four research questions:

1. Is there a relationship between community college contingent faculty’s academic discipline and the frequency of planning, preparation, and instructional activities defined by Danielson’s domains?
2. Is there a relationship between community college contingent faculty’s teaching experience, and the frequency of planning, preparation, and instructional activities defined by Danielson’s domains?

3. Is there a relationship between the frequency of community college contingent faculty’s engagement in professional development activities and the frequency of contingent faculty’s planning, preparation, and instructional activities defined by Danielson’s domains?

4. Is there a relationship between community college size and population served, defined by Carnegie Classifications, and the frequency of contingent faculty’s planning, preparation, and instructional activities defined by Danielson’s domains?

The components of Danielson’s domains were dependent variables for this study; the professional characteristics of the respondents and institutional classification were the independent variables.

**Methods**

**Population**

Contingent faculty teaching courses in the Arts and Sciences or general education divisions in public community colleges was the population for this study because of the nature of instruction for courses in these disciplines. Arts and Science or general education courses serve as the intersection of all academic programs. Disciplines areas defined for this study included Behavioral and Social Sciences; Biological and Natural Sciences; English and Communications; Humanities; Mathematics and Computer Sciences; and Professional Studies.
Sample

For this study, community colleges were as defined as public, Associate’s degree-granting institutions as defined by the Carnegie Classifications™. The Carnegie Classification is a system of organization used to identify the diversity in American higher education institutions for research and policy purposes. Although this system has been used for forty years, it has been revised most recently in 2010, and is regularly updated. This study used the data from the 2010 update, the most recent available data (Carnegie Foundation for the Advancement of Teaching, n.d.-a).

Schools awarding Associate’s degrees generally, although not exclusively, were identified as two-year schools in the Carnegie system, which additionally uses both size and residential character in describing schools. “Because few two-year institutions serve a residential population, these institutions are classified solely based on FTE enrollment” (Carnegie Foundation for the Advancement of Teaching, n.d.-b, para. 3). According to the Integrated Postsecondary Education Data System (IPEDS) of the National Center for Educational Statistics (n.d.), “The full-time equivalent (FTE) of students is a single value providing a meaningful combination of full time and part time students.” Eight Carnegie size classifications of Associate-degree granting institutions were identified for use in this study: Associate's--Public Rural-serving Small; Associate's--Public Rural-serving Medium; Associate's--Public Rural-serving Large; Associate's--Public Suburban-serving Single Campus; Associate's--Public Suburban-serving Multi-campus; Associate's--Public Urban-serving Single Campus; Associate's--Public Urban-serving Multi-campus; Associate's--Public 2-year colleges under 4-year universities. There are 951 institutions
that are defined by the eight Carnegie Classifications; from these, a stratified random sample of 32% of community colleges was used for this study.

**Procedures**

After receiving assurance of interest and participation in this study from the chief academic officer (CAO) of each institution to be included in the sample, an email with a link to an online survey (See Appendix F) created by the researcher was sent to the institutional contact. This message included a request to forward the survey, via email distribution procedures, to contingent Arts and Sciences or general education (AS/GE) faculty working in the community colleges identified for this study.

A panel of educators with higher education teaching experience and with expertise in Danielson’s domain model and its application and practice in instructional procedures reviewed and validated the survey instrument. The researcher then created the survey in an online format, which was reviewed by individuals without teaching expertise for practical and functional use.

Using an online survey format for the study provided advantages in flexibility; speed, ease, and timeliness of distribution; respondents’ convenience; ease of data entry and analysis; low administrative costs; and most importantly, the ability to obtain a large sample. These advantages far outweigh the drawbacks which include: potential lack of technological experience of respondents; impersonal approach; privacy and security concerns (J. R. Evans & Mathur, 2005). In addition, incentives, in the form a drawing for gift certificates, were offered to contingent AS/GE faculty members who complete the survey. A copy of the survey questions is found in Appendix F.
Analysis

This study investigated whether there are relationships between components of Danielson’s Framework (1996), and the professional characteristics of community college contingent AS/GE faculty and the Carnegie Classification of the institutions in which they teach. Descriptive and correlational methods were used to analyze data gathered through the survey.

Assumptions, Limitations, Delimitations

Assumptions

The first assumption was that the four domains of Danielson’s Framework for Teaching can be applied to teaching in higher education.

A second assumption was that AS/GE contingent faculty members responded to the survey with a serious attitude and provided true responses. There was no reason to assume otherwise because of the anonymity guaranteed for respondents.

A third assumption was that conceptual framework, or the portions of it used for this study, provided an accurate reflection of instructional practices. The survey questions used addressed those aspects of instructional practice that are common to all levels of teaching.

A fourth assumption was that the survey data would result in a broad distribution of responses for all variables to warrant correlation analysis.

Limitations

One of the limitations of this study is the use of a survey questions with categorical answers choices, which might have limited responses in ways that people would not have necessarily chosen.
A second limitation is that only Arts and Sciences or general education (AS/GE) contingent faculty were identified to participate in this study. Other career, technology, or vocational divisions such as engineering or nursing were excluded from the study because specific pedagogical approaches are frequently embedded within those disciplines due to the nature of instruction, application in the field, or requirements set by external accrediting agencies in specific disciplines.

Another limitation was the use of self-reporting in the survey, which has been questioned because of potential response bias. Social desirability is often identified as an issue in general studies that examine some behaviors (Bertrand & Mullainathan, 2001). While “professional desirability” could have been a bias and limiting factor, no data on the existence of this phenomenon was found in studies that examine professional behavior (Jackson, 1999). Similarly, self-reporting of data is usually not verifiable by other means (Podsakoff & Organ, 1986).

An additional limitation of the study was the absence of responses from contingent AS/GE faculty in one of the Carnegie Classifications: those who teach in urban, multi-campus institutions. Of those institutions contacted, only three of the chief academic officers agreed to participate in the survey but arrangements for contingent AS/GE faculty participation were not completed within the data collection period.

Data collection took place during the summer, which created a further limitation of the study. Depending on the institution’s summer schedule, there was a possibility that the contingent faculty teaching during the summer term was not the same as the contingent faculty teaching during the other terms of the academic year.
Finally, this study is not intended to be a comprehensive or exhaustive analysis of the multifaceted work of community colleges, nor of all instruction in community colleges. The parameters of the study limited the investigation to those criteria specifically stated.

**Delimitations**

A delimitation of this study was the exclusion of teacher education faculty members from the group of respondents because of their knowledge of pedagogy and teaching practices and their familiarity with Danielson’s Framework (1996).

**Definition of Terms**

Because different types of two-year colleges have existed for varied purposes during the past century, definitions of key concepts within the study are provided below to establish clarity in this study.

*Carnegie Classification™*: a system developed by the Carnegie Foundation, to acknowledge and represent institutional differences among America’s higher education institutions.

*Community College*: for the purpose of this study, community colleges are two-year, public, associate-degree granting institutions, as defined by Carnegie Classifications.

*Contingent Faculty*: part-time, non-tenure track faculty members; otherwise known as adjuncts.

*Domain*: one of the four segments or areas of endeavor, as defined by Danielson, which describes an approach and activities for effective teaching.

*Framework (for Teaching)*: the collective term for Danielson’s model that consists of four domains, or groups of activities
Pathwise®: a series of professional development programs for teachers and instructional personnel, derived from Danielson’s Framework for Teaching and provided by the Educational Testing Service (ETS).

Pedagogy: the method(s) or practice(s) of teaching.

Praxis®: a series of assessments, provided by the Educational Testing Service (ETS), for teacher candidates and new teacher practitioners; the assessments that deal with teaching proficiency, rather than content, are based on Danielson’s Framework for Teaching.

Operational Definition

Composite score: the variable that represents some overall measure of instructional practices in each of the four Domains of the Framework for Teaching.

Summary

Given the diversity of community college students and the current climate of increased accountability from all public entities, expectations will rise for postsecondary institutions. The primacy of teaching in community colleges, as opposed to research and service, the increasing dependence on the use of contingent faculty in those same institutions, along with a new emphasis on student learning as a measure of effectiveness in higher education makes this study timely as well as desirable for a better understanding of the nature of community colleges.

Using constructivist learning as a theoretical basis combined with Danielson’s Framework for Teaching as a functional approach, this study examined the instructional practices of contingent community college teachers. The results might provide information that would be helpful as rapid expansion of educational opportunity in community colleges that will likely continue along with an increase in the trend of hiring
contingent faculty to maintain lower costs. Examining these instructional practices provides opportunities to create, improve, and expand effective professional development for contingent faculty members, which in turn can improve their students’ learning experiences.
Chapter Two  

Literature Review

This study addressed the question of relationships or correlations between specific characteristics of community college contingent instructors and instructional practices. Narrowing the field of inquiry to community college contingent instructors required that background knowledge about postsecondary institutions be narrowed specifically to address community colleges; that data about students engaged in higher education focused specifically on those students who attend community colleges; that knowledge about higher education faculty be culled to look at those who teach in community colleges; that distinctions be made between those who teach in tenure-track, tenure-eligible, or full-time positions and those who work on a contingent, part-time basis. In addition, the literature review traced the development of increasing emphasis instructional practices for student learning as a measure of the effectiveness of higher education and contextualized these instructional practices within the Framework of research-based effective practices.

Recognizing that this study was designed to analyze relationships between a particular, identifiable faculty group and explicit instructional practices, an appreciation and understanding of the critical factors was distilled from a considerable body of theories, knowledge, research, and data-specific information that addresses broader concepts.

In this chapter, constructivist theory is established as the current basis for learning and teaching in American education. A review of the history of American community colleges and the role they serve in postsecondary education today is presented along with
a profile of American community college students. Further, an overview of community college faculty, particularly those who serve in a contingent capacity is provided along with an analysis of teaching and instruction. This includes an examination of pedagogical practices and models of instruction, along with the development of student-centered approaches in classroom practice, specifically the Scholarship of Teaching, the Framework for Teaching, and the Learning Paradigm. An evaluation of teaching and instruction draws this review of literature to a conclusion.

**Theoretical Framework: Constructivist Learning Theory**

Humans have long pondered questions about knowledge, just as they also sought knowledge about the practicalities of their lives and the abstract concepts they experienced. Ancient philosophers wondered what people can know, how they know it, and whether that knowledge is a reflection of reality, which they identified as truth. These questions were debated and ideas were exchanged among early philosophers and they constructed models of understanding. Xenophanes, an ancient Greek who lived in southern Italy, posited that humans construct knowledge based on their experiences and continue to shape their understanding through subsequent experiences, but an individual’s ideas and understanding continue to belong uniquely to that person. This was the first description of constructivist thinking and learning in Western culture, though it was not described by that term in ancient Greece (Magee, 1998). Plato and Aristotle also supported a constructivist view of learning, particularly through the identification of sensory input (Pelech, 2010; Stevenson & Haberman, 1998). Though the ancient Greeks sought truth through knowledge, often in absolute terms, constructivist
theory moves knowledge away from absolutes, and moves knowledge toward a subjective understanding by each individual.

Support for a constructivist view of learning continued through other historical periods. As early as the fifth century, Augustine of Hippo articulated the view that a teacher does not transmit knowledge, but rather creates a learning environment where one constructs new understanding based on previous knowledge (Reed & Johnson, 2008). Though many centuries removed from the ancient Greeks, Thomas Aquinas also affirmed the role of sensory perception in constructing knowledge (Baggini & Stangroom, 2004). John Locke, a 17th century empiricist, confirmed the principles of constructivism in An Essay Concerning Human Understanding, with the premise that knowledge is the product of experience. His example of the mind as a blank slate, or tabula rasa, which records various perceptions and organizes them into some meaningful connections is a prime example of empiricist thought embodied in the Enlightenment (Morgan, 2002; Sahakian & Sahakian, 1966).

In the modern era, the question of knowledge construction and learning shifted from the purview of philosophers to a concern for psychologists. Epistemology, or the study of knowledge, was first used by Ferrier in 1854 (Dictionary of Philosophy, 1983), though questions about the origin, structure, and development of knowledge had been considered for many millennia. Functionalism, founded by William James, was among the first schools of psychological thought with the focus on “consciousness and behavior in adapting to the environment” (Hergenhahn & Olson, 2005, p. 45). John Dewey (1910), an American philosopher and educational reformer, was one of the first writers to clearly address both modern philosophy and education to articulate the principles of
constructivist learning. He identified knowledge as the result of connecting prior knowledge to new experiences. “Dewey is viewing knowledge as the product of recursive actions; in other words, knowledge grows from what is already known (Pelech, 2010, p. 12). In other terms, “Meaningful learning, then, occurs when people create new ideas or knowledge (rules and hypotheses that explain things) from existing information (for example facts, concepts, and procedures)” (Snowman & McCown, 2010, p. 38).

During the first half of the 20th century, two schools of research represented dramatically opposing views toward learning: some supported a behaviorist approach and others investigated cognitive or social cognitive development. Among those who theorized and researched cognitive development was Jean Piaget who postulated that children learn by interpreting their interactions with the environment. Lev Vygotsky added the dimension of social interaction to this dynamic process (Ormrod, 2011) and differentiated between spontaneous knowledge and scientific knowledge. “Spontaneous knowledge is knowledge that the student constructs from his everyday experience, while scientific knowledge is the knowledge that the student constructs through direct, formal instruction” (Pelech, 2010, p. 13) These developing cognitive theories paralleled the research and influence of the behaviorists, who were more concerned with learning by conditioning rather than cognitive engagement.

According to constructivist theory, this process of constructing knowledge through experiences continues throughout one’s lifetime and “cognitive growth is stimulated when people are confronted with practical, contextual problems or personal problems that present situations that require a new way to think” (Pelech, 2010, p. 8). “The Constructivist philosophy is a description of knowledge rather than a prescription
for learning” (Pelech, 2010, p. 7) and it “describes the process undergone by the learner during instruction” (Foote, Vermette, & Battaglia, 2001, p. 3).

In the last quarter of the 20th century, Bruner (1973) further strengthened constructivist theory of the learner as “an active participant in the knowledge getting process, one who selects and transforms information, who constructs hypotheses, and who alters those hypotheses in the face of inconsistent or discrepant evidence” (p. 397). In Bruner’s view, the instructor provides the correct condition for students’ learning by putting knowledge “into a form that fits growing minds” (Bruner, 1973, p. 398). He refers to this process as “translation” into “the child’s way of viewing things” (Bruner, 1973, p. 413).

Today, constructivist theory has dramatically influenced diverse aspects of teaching and learning for all students as well as specifically identified groups of learners. While its application is common in K-12 education, it has also been used for students with special learning needs, as well as at-risk students. Programs for adult learners and professional education have borrowed from constructivist theory (Pelech, 2010).

While many pedagogical practices have been developed based on constructivist theory, Danielson’s Framework for Teaching, which is the conceptual framework used in this study, is an integrated, conceptual model that has been used to shape instructional practice along such principles. Among the constructivist premises inherent in Danielson’s Framework are Demonstrating Knowledge of Students; Setting Instructional Outcomes; Designing Coherent Instruction; Designing Student Assessments; Establishing a Culture for Learning; Engaging Students in Learning; Using Assessment in Instruction; Demonstrating Flexibility and Responsiveness. Each of these practices comes directly
from one of the four domains of the Framework and is based on a constructivist model as Bruner described it: creating the correct condition for student learning by creating appropriate learning environments that stimulate making connections to prior knowledge.

**Community Colleges**

Community colleges provide post-secondary educational opportunities and programs that are rooted in and responsive to their communities. While these might vary among college transfer programs, technical and career programs, or job-specific training, the mission of community colleges includes basic commitments to

- serving all segments of society through an open-access admissions policy that offers equal and fair treatment to all students;
- providing a comprehensive educational program;
- serving the community as a community-based institution of higher education;
- teaching and learning;
- fostering lifelong learning. (Vaughan, 2006, p. 3)

Open admissions policies distinguish these institutions that increase access and opportunity for students and support the principle of increased education for greater democracy (Vaughan, 2006).

**History and Background**

While there is evidence of the existence of a small number of two-year colleges in the later nineteenth century, the history of community colleges generally begins with the establishment of Joliet Junior College in 1901 (Levinson, 2005), although a few other institutions make similar claims (Quigley & Bailey, 2003). The growth of community colleges continued forward with support from and promotion by the prodigious and innovative William Rainey Harper, who is credited with naming these institutions junior
colleges (Geller, 2001). That name was used commonly in slightly different contexts until the 1970s, and is still used by a very limited number of schools today, but the majority of these two-year schools are currently called community colleges. In the historical discussion of two-year institutions in this chapter, “junior college” will be used when authors used that term to describe community colleges in their original work. Although the Truman Commission first identified a significant transition toward the community college concept and named them as such in their 1947 report (Quigley & Bailey, 2003), the twenty years that followed did not necessarily see the adoption of that newly descriptive name. In addition to the name change introduced by the Truman Commission, another significant change was the rapid growth that took place during that same period. “Community colleges became a national network in the 1960s with the opening of 457 public community colleges - more than the total in existence before that decade” (American Association of Community Colleges, 2011, para. 3).

Harper supported the idea of students beginning their postsecondary studies in two-year institutions, so that “universities would be responsible for the higher-order scholarship, while the lower schools would provide general and vocational education to students through age nineteen or twenty” (Cohen & Brawer, 2008, p. 7). Harper’s junior colleges were grounded in the liberal arts, and designed to provide transition and transfer to universities. This view changed dramatically in the post-World War II era when the community colleges shifted their focus to serving the specific educational needs of their communities rather than using the liberal arts model, although this happened slowly, rather than in one, swift, post-war movement (Quigley & Bailey, 2003).
Documenting the growth and expansion of junior and community colleges throughout the twentieth century has been open to various interpretations. Deegan and Tillery (1985) identify four generations that characterize the vast changes that these institutions have seen from 1900 to the present: extension of high school (1900-1930); junior college (1930-1950); community college (1950-1970); comprehensive community college (1970- mid 1980s). While their approach is chronological and effective in plotting a path from inception to almost the end of the twentieth century, it does not incorporate adequately the various social, economic, and educational influences on the expansion of this segment of higher education. Ratcliff (1994) identifies the comprehensive community college as the single contributor that accounts for the adaptability of American higher education and notes that community colleges are mediators between those individuals who pursue higher education and those who do not. Ratcliff provides a more comprehensive and historical analysis of the development of community colleges through his “seven streams of educational innovation” (p. 4). In addition, Eaton (1994) differentiates among the subtleties of purpose for which many of these schools were founded, placing emphasis on the need for renewal of the collegiate dimension in community colleges and the need for strengthening relationships between two- and four-year institutions. Cohen and Brawer (2008) have an exceptional account of the concept of community education, as does Levinson (2005), with both accounts explaining the many ways in which community colleges reflect the needs and the support of the populations that they serve, but also revealing how community colleges grew as extensions of high schools.
Community College Ties to Secondary Education

The increased access to higher education runs parallel to the expanded opportunity, economic growth, and burgeoning affluence that began at the mid-point of the 20th century, with a tacit recognition that not all postsecondary education would necessarily result in a baccalaureate degree. The vocational or functional facets of providing an educated work force were certainly a motivating factor that influenced the growth and development of community colleges in the second half of the last century (Dougherty, 1994). However, the organizational premises of the post-World War II community colleges are strongly tied to the high school purpose, curriculum, and experience (Cohen & Brawer, 2008; Deegan & Tillery, 1985; Quigley & Bailey, 2003). With those ties, and in many cases and communities, high school teachers were also teaching in the community colleges and this trend continued into the second half of the twentieth century. Townsend and Twombly (2007) acknowledge there were many articles from the 1940s in the now-defunct *Junior College Journal* that explore the need for specific background and preparation to teach at the community college level. “Perhaps most interesting is the agreement among these authors that junior college instructors should have considerable professional education coursework” (p. 57). While this may have been a common view from the late 1930s to 1950, today most community college instructors do not have teaching credentials, but rather some may choose to engage in in-service training about teaching, whether offered by the community college at which they have been hired, or some other source. This approach seems inadequate if We view community college teaching as a profession that finds itself in a middle position on the continuum of teaching as a profession between high school and
university teaching. It occupies this middle position not because of the weaknesses of community college or the individuals occupying faculty positions but because of the characteristics and role of the community college and its students. (Townsend & Twombly, 2007, p.ix)

Using various lenses permits us to view the background and history of community colleges to gain a clearer understanding of them today. Cohen and Brawer (2008) anticipate that many aspects of community colleges will remain much as we know them; they will continue to serve a diverse population by providing transfer and career education, open access, and cooperative partnerships with other educational sectors as well as with business. The administration, governance, and organization of community colleges are stable; characteristics of finance will likely remain the same. It is unlikely that the number of community colleges will increase, as the growth in the number of institutions leveled off by 1975 when Americans found themselves within commuting distance of a community college. The exception to this could possibly lie in universities that develop two-year community colleges. Conversely, community colleges in some states are awarding baccalaureate degrees. “Nationwide, 17 states now allow community colleges to award baccalaureate degrees, whether bachelor's of science or bachelor's of applied science. Some community colleges have become four-year institutions. Other states, like California, are considering community-college baccalaureates” (Gonzalez, 2011, June 12, para 5). Florida introduced this innovation in 2001, but Sanford C. Shugart, president of Valencia College in Florida, “emphasizes that the state must ensure that such degrees continue to be related only to the state's work-force needs” (Gonzalez, 2011, June 12, para. 11). Community colleges’ vertical expansion also includes serving
students in Grades 10 to 12, through various enrollment options with high schools (Cohen & Brawer, 2008).

Despite the possibility of some community colleges offering baccalaureate degrees, Cohen and Brawer (2008) contend that developmental education will continue to increase in importance, and other support services such as those for students with limited English proficiency will be more common. The integration of student services and instruction has not been strong in the past though progress has been made through instructional support centers, though funding often keeps these functions separated. Delivery of instruction will continue to utilize technology for distance learning options. Community colleges currently see considerable competition from proprietary, schools. Although more costly, these for-profit schools have seen tremendous growth, often at the expense of public community colleges (Farnsworth, 2006, October 27), though they have not eliminated the need for and use of community colleges by a large portion of those individuals seeking post-secondary educational opportunities there.

Community College Students

Today’s community colleges play an integral role by providing access to post-secondary opportunities for students who might not be able to attend college four-year institutions. According to the American Association of Community Colleges (AACC), (2012a) 44% of students engaged in postsecondary education are enrolled in community colleges. Almost thirty years ago, community college students accounted for 49% of undergraduate college enrollment (Warren, 1985). Despite the high percentages at either point, this group can be historically described very succinctly in two words: “number and variety” (Cohen & Brawer, 2008, p. 43).
Beginning in the early 1970s, the issue of increased access was analyzed by Cross as she described the shift from aristocratic and meritocratic educational philosophies of access to that of egalitarian access. She describes that egalitarian access saying, “New students to higher education are characterized by their lack of success in traditional, subject-oriented education” (1971, p. 70). But access alone was not the only characteristic of opening the doors of higher education to more students: “Our present concern with access assumes that equality of educational opportunity will be achieved when new students have equal access to educational programs that were designed for a different kind of student” (Cross, 1971, p. 72). Because of this shift, Cross suggests an accommodation model that proposes “the gap between student abilities and educational offerings will be narrowed by moving education toward learning needs” (p. 76).

McKeachie, who had been studying college teaching and students learning since the 1950s, contemporaneously promoted this shift toward learning, as opposed to teaching, in a number of journal articles. Specifically, McKeachie (1974) endorsed the value of active learning and the effectiveness of meaningful learning experiences for students. Some forty years later, McKeachie is still writing on the same topic, though in greater collaboration and with a decidedly more practical approach than in his original research (Svinicki & McKeachie, 2010).

In describing the growth of community colleges, Cohen and Brawer (2008) also help to explain the wide range of abilities among community college students: “community colleges also recruited students aggressively; to an institution that tries to offer something for everyone in the community, everyone is potentially a student” (p. 45). This recruitment activity also explains why community colleges see more students
who are older than the 18-24 year old traditional age. Currently the average age of community college students is 29. These older, “non-traditional” students often are employed full-time, are responsible for economic support of a household, and have other family responsibilities (American Association of Community Colleges, 2012b).

Because of mission, design, location, tuition factors, and the aforementioned growth factor, “community colleges tend to enroll students who are more academically, economically, and socially disadvantaged than do other postsecondary institutions” (O'Gara, Mechur Karp, & Hughes, 2009, p. 196). This factor was identified by Warren (1985) more than 25 years ago, in noting a significant increase in the number of students attending community colleges part-time between 1970 and 1980. In addition to their part-time status, he explained that these students were likely to focus on occupational concerns, rather transfer issues. Additionally, he also underscores the difference in academic ability, stating “no knowledgeable person doubts that students in community colleges, on the average, are lower in academic ability than are students in four-year colleges” (p. 60). The issue of lower academic ability may be due, in large part, to community colleges’ open admission policy, compounded by students’ life conditions, which could be vastly different from traditional, full-time, residential undergraduate college students at other institutions.

Noting that one of the major obstacles to community college students’ success is inadequate preparation for postsecondary education, the William and Flora Hewlett Foundation identified several changes that could create changes for improvement. Among these changes was an increase in student success by replicating effective
instructional programs and building capacity for colleges to track student performance in order to improve instruction and support services (Burdman, 2009).

Cohen and Brawer (2008) open an extended discussion of the implications and impact community colleges’ open admission policy and mission of extending access by stating:

In general, students who enter community colleges instead of universities have lower academic ability and aspirations and are from a lower socio-economic class. The various studies that have attempted to control for those variables frequently also attempt to control for the fact that minority students are more likely to attend school part-time, and community colleges encourage part-time attendance. (p. 57)

The issue of part-time enrollment has had an impact on the perception of college attendance. “The assumption that a college education must occur in a fixed period of years after graduation from high school is being effectively challenged by community college students” (Warren, 1985, p. 54).

In response to the changing student population and increased need to address their academic shortcomings, community colleges have stressed practices and services for academically disadvantaged students. An example of this can be found in a textbook, designed for use in an introduction or orientation to community college course, which states that community college is the place for those who had low grade point averages at other institutions or in high school, or if students need help with basic skills such as reading, writing, or math (Baldwin, 2005). Despite the fact that community colleges have expanded student services, assured smaller class sizes, increased contact with instructors,
and added developmental/remedial courses to the curriculum, achievement (measured by retention and program completion) often eludes these students. “It is time to assert that access to college is just not enough. Student success matters. College completion matters. And teaching and learning — the heart of student success — matter (Center for Community College Student Engagement, 2010, p. 20).

**Community College Faculty**

Of the available information and research on community colleges, very little is dedicated to providing a clear picture of its faculty. This is surprising considering that the Integrated Postsecondary Education Data System (IPEDS) of the National Center for Educational Statistics (2010) identifies 384,896 individuals serving in primarily instructional capacity in public community colleges with an additional 32,100 in the capacity in private associate’s degree-granting schools. Despite those numbers, Townsend and Twombly clearly make the point that there is insufficient understanding of community college faculty, which accounts for the title of their comprehensive book, *Community College Faculty: Overlooked and Undervalued* (2007). The authors note that current research is limited to viewing community college faculty through the lens of those who serve in four-year institutions, which is inadequate, “resulting in unfair portrayals of community college faculty as somehow inferior” (p. xiii). A study by Lee (2002) supports this view, based on research about community college faculty identification with a reference group, through the creation of a “University as Reference Group” composite score based on questions in the 2000 Community College Faculty Survey. Lee’s data support the contention that both full-time and part-time community
college faculty use university faculty as a reference group, as opposed to high school
teachers, which was another choice in the survey used.

Conversely, Cohen and Brower (2008) characterize community college faculty as reflecting secondary school teachers in a number of ways, although they may not identify with them as a reference group. The areas of similarity between community college and secondary school teachers include curriculum and to a greater degree, work rules such mandating time spent on campus and at college functions, and teaching schedule. Much of this was due to two-year colleges being the outgrowth of secondary schools in many cases, and during the mid-twentieth century period of growth and expansion of community colleges, a considerable portion of the faculty had experience teaching in elementary or secondary schools. For the same reason, community colleges’ organizational structure and governance often resemble that found in school districts, rather the universities.

The academic preparation for community college faculty is also much more closely related to that of high school teachers. A master’s degree with a minimum of 18 hours of graduate credit in the specific discipline being taught is needed by instructors teaching transfer credit courses, which are frequently found in the Arts and Sciences or general education divisions of community colleges. Those who teach career, vocational, or technical courses may have credentials that are considerably more diverse, but they are expected to have at least a high school diploma. In some cases, job experience and expertise can account for their preparation to teach (Townsend & Twombly, 2007).

Those who study community colleges, faculty issues, and attendant topics have raised a more interesting question: Is community college teaching a profession? If not,
how could it become one? While this consideration first appeared more than forty years ago, Palmer (1994) submitted that

Community college teaching as a profession has yet to develop a distinctive nature, one that will provide its practitioners with a collective identity and serve and the frame of reference to be used by those outside the profession to understand its roles and purpose. (p. 423)

More recently, Cohen and Brawer (2008) explore this concept at length, pointing out that community college faculty have not reached a point of providing a well-defined group of clients with a distinct service. In addition, community college teachers are not independent or self-managing. While the body of their work consistently revisits the issue of professional status for faculty, Cohen and Brawer contend that this is a matter of maturity and that community college faculty may yet reach such a point. They also acknowledge that some scholars believe that professionalism may have a negative effect on teaching as faculty’s interest and allegiance may shift from the classroom toward other disciplinary concerns. But the roles of research and scholarship at community colleges are minimal and Cohen and Brawer maintain, as does Outcalt (2002), that a new allegiance to instruction could emerge as a distinctly different kind of professionalism for community college faculty. Townsend and Twombly (2007) indicated that:

Although teaching is the agreed-upon emphasis of the community college, there is considerable evidence that teaching is not given the attention it deserves, given its primary place in the community college. We believe the scholarship of teaching undergirds all the work of faculty in community college (, p. x).
While instruction might well be the hallmark of community college faculty professionalism, the conceptualization also needs to include concerns about economic conditions and influence on entry into the profession by new members, especially in terms of socialization and commitment.

Though not identified in the literature, this researcher proposes that a considerable and major difficulty with the concept of professionalization of community college instruction lies in the fact that such a sizeable proportion of these instructors are employed part-time and identified as contingent faculty. The changing nature of the work force along with economic conditions that support the continued and overwhelming use of a flexible labor force seem to indicate that there would be fewer full-time, tenure-track opportunities available in community colleges in the near future. While scholars wrestle with the concept of “professionalization” of community college teaching, the fact that contingent faculty comprise approximately two-thirds of those engaged in community college instruction (Townsend & Twombly, 2007; Wallin, 2004) seems to decrease the possibility of professional status recognition any time in the near future.

**Contingent Faculty**

The very nature of faculty work in higher education has been changing drastically. “What was once a predominantly homogeneous and tenured workforce is now a highly diverse workforce in the majority of faculty members occupy non-tenure-bearing positions” (Gappa, et al., 2007, p. 49). This observation applies more pointedly to community colleges where contingent faculty account for two-thirds of the teaching staff (Gappa, et al., 2007; Townsend & Twombly, 2007). In addition, it appears that trend is likely to increase in community colleges.
Given the cost savings, community colleges will continue to hire adjunct faculty. Moreover, these faculty members will continue to play a crucial role in fulfilling the institutional mission and will have an enormous impact on the institutional culture. At the same time, there are growing concerns about an institution’s ratio of adjunct faculty to full-time faculty and its impact on the college. (Green, 2007, p. 29)

The current literature has shown apprehension about the effects of the consistently rising proportion of contingent faculty in higher education, particularly as they constitute the majority of community college instructors. Although Mendelowitz (1998) expressed concerns about the academic consequences of an over-reliance on part-time faculty, there have been few empirical efforts to examine the quality of teaching of part-time faculty members teaching at the college level, specifically community colleges. This lack of empirical studies has not deterred those who study teaching and learning in higher education from examining the trend of increasing dependence on the use of contingent faculty.

According to Roueche, Roueche, and Milliron (1996), “investigations document that part-timers tend to be haphazardly selected, poorly socialized, rarely supported, and often ignored by the college-at large” (p. 32). Further, they found “that few college administrators are aggressively and systemically directing their colleges' efforts toward integrating part-time faculty” (p. 39). “The overarching problem is not the growing number or the overall proportion of adjunct faculty; rather, it is the institutional neglect of this critical mass” (Wyles, 1998, p. 92). “Administrators must invest in and embrace adjunct faculty as a critical part of the culture” (Green, 2007, p. 34). Given that about
two-thirds of community college faculty members teach part-time, there must be opportunities to expand instructors’ skills and collaborative faculty efforts must be extended to include all faculty (Center for Community College Student Engagement, 2010, p. 17). Additionally, support for greater collaboration among all faculty is justified by Benjamin (2003), who noted that “full-time faculty spend from almost 50 percent to 100 percent more time on instruction per credit hour than do part-time faculty” (p. 86). Further, “research abounds about what works in teaching and learning. Instructors, however, must be given the opportunities necessary to learn more about effective teaching strategies and to apply those strategies in their day-to-day work” (Center for Community College Student Engagement, 2010, p. 16).

Strange and Banning (2001) support this concept of faculty integration for effectiveness on a larger basis. Their research concludes that student learning experiences require safety, inclusion, and involvement in a community of learners where “goals, structures, values, people, and resources come together in a seamless experience for purposes or self-actualization and fulfillment” (p. 110). This community of learners visualized by Strange and Banning is difficult to imagine and likely impossible to create with contingent faculty under the circumstances described by Roueche, et. al. (1996): contingent faculty being poorly chosen and socialized into the institutional culture, and lacking support in their teaching.

In addition to the difficulty of establishing support for contingent faculty and collaboration between contingent and full-time, there is also the question of how well contingent faculty can serve students outside of the classroom. One study indicates that “many part-time faculty members are employed at multiple institutions or have jobs
outside academia and thus have limited time to meet with students outside class” (Eagan & Jaeger, 2008, p. 41). Other authors echo concern for this type of limit on contingent faculty’s ability to work with students, though usually in a more speculative manner, as indicated by Umbach and Wawrzyski (2005) who stated, “faculty out-of-class interactions with students has little or no relationship with student perceptions of a supportive environment or student perceptions of gains. Students appear to seek their support from sources other than faculty” (pp. 173-174). In addition, the 2007 Community College Survey of Student Engagement found that students identified faculty members as the best source for advising, which was confirmed by a 2009 study of students in “student success courses” (O’Gara, et al.). Of the students who participated in this study, data indicate that, “unlike the general college advisors, their student success professors knew them on a personal level and could suggest courses that fit into their academic and career plans (p. 206). Unfortunately, this element of support is decreased when contingent faculty spend less time on campus.

Leslie and Gappa (2002) acknowledged there is “a serious gap in our understanding of part-timers’ teaching in community colleges” (p. 60) and analyzed available data from a Center for the Study of Community Colleges (CSCC) survey in 2000, and the 1992-1993 National Survey of Postsecondary Faculty (NOSPF), which is conducted by the National Center for Education Statistics (NCSE). From these data, they found that 15 to 17 percent of contingent instructors have more than one postsecondary teaching job at a time, which is a considerably smaller proportion than other researchers have surmised or described in generally characterizing contingent faculty members as those who aspire to full-time academic positions. In their conclusion, Leslie and Gappa
(2002) state that “part-timers in community colleges look more like full-time faculty than is sometimes assumed” (p. 65).

Conversely, using the data from the same CSCC survey conducted in 2000, Schuetz (2002) found notable differences between full-time and part-time faculty in the distribution of instructional activities, engagement with students, and connections to colleagues. Given Schuetz’s findings, (addressed in the section on teaching and instruction), there are advantages, as well as disadvantages, that contingent faculty bring to community college classrooms and students.

There may be an advantage in hiring contingent faculty in many disciplines or areas because faculty are often hired to maintain close ties with business and industry; many are practitioners in the field in which they are teaching. That way, the college can remain on the cutting edge in the face of changing career needs, skill expectations, and the nature of work. (Wyles, 1998, p. 89)

“The connection to the world of work cannot be stressed enough. Adjuncts have a special ability to bring life to ideas with interesting and often contemporary examples” (Green, 2007, p. 30).

While there are varying data on when and how teaching by contingent faculty may be advantageous or at least be neutral, one study highlighted an effect that easily might be overlooked. In the 2008 study conducted by Eagan and Jaeger, students generally were not affected by having graduate students as faculty, nor did full-time, non-tenure track faculty have any significant effect on student persistence. However, a
significant negative effect was seen when part-time faculty members taught “gatekeeper courses” (introductory courses for needed for admission to programs).

Teaching and Instruction

The quality of teaching is a significant issue at all levels. Paulsen and Feldman (1995) recognize this, noting that, “college instructors do not teach in a vacuum. They are part of an organization whose culture could both positively and negatively affect their teaching” (p. 687). While the quality of instruction is increasingly coming to the fore in higher education, it is even more critical for community colleges because teaching is the primary focus of faculty in those institutions, as opposed to research. To an even greater degree, the quality of instruction by contingent faculty in community college is worthy of increased examination and study because these part-time instructors teach such a high proportion of community college classes. For this reason, “integrating adjunct faculty into the culture of the learning organization therefore becomes a critical goal for higher education institutions” (Wyles, 1998, p. 92).

Instruction by Contingent Faculty

Research data on this topic vary depending on the specific focus of individual studies. Huston (2009) states that some contingent faculty “enjoy the luxury of teaching in their specialty” and they are the “rock stars of the department who are prized for their topical, real world expertise” (p. 9).

Some studies show no significant difference between full-time and part-time faculty” (Green, 2007, p. 33). This view is supported by Wyles (1998) who offers additional comments on this issue, albeit from one institution, stating,
At the same time, adjunct faculty have dispelled the old and outworn pronouncements that part-time faculty are less committed employees, less effective teachers, and less credentialed faculty. Evidence from my institution’s experience shows that the current adjunct cohort receives student evaluations showing them to be as effective in the classroom as their full-time colleagues, that they have produced student outcomes that compete favorably with those of full-time faculty, and that they have earned credentials of equal status to their full-time counterparts. (p. 90)

But Riley (2011) cautions against the use of teaching evaluations. “Reliance on student evaluations as the sole measure of job performance is not the key to improving teaching quality” (p. 66), noting a University of Texas program that provides considerable monetary remuneration, up to $10,000, for those faculty members who receive positive teaching evaluations. Fish (2010) is highly critical of the plan that was designed for increased accountability because faculty are not held to professional standards, but the preferences of their students. He proffers that students are not knowledgeable nor do they have authority to evaluate how they should be taught. Rather, he states that student evaluations measure “present satisfaction in relation to a set of expectations that may have little to do with the deep efficacy of learning” (para. 4).

A recent study indicated that contingent faculty must frequently contend with “just in time” hiring practices that do not allow sufficient time to prepare for teaching a course. “This practice is also related to an erroneous administrative notion that instruction takes place solely in the classroom, a mistaken view that overlooks important instructional activities and interactions that take place before classes start and outside the
In addition, this study notes that contingent faculty often find that they are lacking in the basic resources they need for quality instruction: technology, teaching materials, work spaces, and even orientation to working conditions. Other studies cast the teaching of contingent faculty in a different light. In examining the issue of students’ social and academic integration, specifically in commuter community college settings, Jacoby (2006) notes that the pervasive use of contingent faculty has a negative effect on student learning, engagement, and persistence. This is due not only to the contingent faculty’s limited time spent with students outside of the classroom, but also because the quality of instruction and instructional methodology are reduced, and there is less curricular alignment among courses. It is important to note that Jacoby acknowledged that contingent faculty is not necessarily less qualified, but rather contend with conditions and influences that often produce negative effects in student-faculty interactions. In addition, Schibik and Harrington (2004) found a statistically significant negative relationship between exposure to contingent faculty in the first semester and retention in the second semester for freshman, although this was specifically at a comprehensive institution where a four-year study was conducted.

Research conducted by Umbach (2006) indicated that part-time faculty had fewer interactions with students, challenged students less frequently, and used active and collaborative teaching techniques less frequently when compared to their tenured, tenure-track, and tenure-ineligible full-time colleagues. Benjamin (2003) recognizes that contingent faculty are less inclined to utilize technology in teaching, less inclined to use nontraditional exam techniques, and have lower writing expectations for their students.
Banachowski (1996) determined that little data in the research supports differences in the effectiveness of full-time and part-time instructors in community college. Schuetz’s study (2002) delivered interesting results for some specific comparisons, also underscored the principle that the specific focus of any individual study will account for the differing results, particularly when comparing community college full-time and contingent faculty on varying criteria.

Despite the varying perceptions and research data, or possibly in light of such, Feldman and Paulsen (1995) identified characteristics of a supportive teaching environment: high-level administrative support; faculty involvement, shared values and ownership; a comprehensive view of scholarship; a hiring process that includes a teaching demonstration; frequent interaction, collaboration, and sense of community among faculty members; a faculty development program or teaching center; supportive and effective department chairpersons; rigorous evaluation. It should be noted that contingent faculty would likely not fully experience some of these characteristics, particularly those that involve engagement and collaboration with other faculty members, when taking into consideration the work schedules of contingent faculty and the limited amount of time available for them to engage in campus activities.

**Pedagogy and Classroom Practice**

Evans and Tress (2009) found that there is a strong desire among academics to engage in quality teaching in terms of course and content delivery. According to Nobel Prize-winning physicist, Carl E. Wieman, “faculty members teach according to habits and hunches” (Berrett, 2012, February 5, para.2), when higher education should be looking for those who have content and pedagogical expertise. This trend toward improving
pedagogical practice has recently received attention at both Harvard University (Berrett, 2012, February 5) and Johns Hopkins University (Smith, 2012).

This desire to improve the quality of teaching is not entirely new; the history of attempts at understanding and improving teaching—and learning—in the college classroom can be traced back to the period of increased access to higher education in the previous century. This interest in teaching is not all encompassing, though. Despite this desire on the part of some who are interested in the quality of instruction in higher education, “college and university teaching is thus the only profession (except the proverbially oldest in the world) for which no training is given or required” (Barzun, 1968, p. 36). It appears that there has been a presumption that teaching can be “picked up” by its practitioners. Indeed, countless books attempt to provide necessary information about teaching in higher education, particularly for contingent faculty. The titles of the book indicate the broad-ranging views of teaching college students. Fredericks (2007) chose to address these issues in “The Complete Idiot’s Guide to Teaching College,” which is part of a popular series of books on varied topics. Other books, such as “The Adjunct Professor’s Guide to Success: Surviving and Thriving in the College Classroom,” take a less popular and more focused approach toward those instructors who are teaching on a part-time basis.

Despite these attempts to provide practical support for instruction in college classes, knowledge of one’s discipline has been valued as more important, especially with the growing emphasis on research in the later part of the 20th century. This content and discipline knowledge has been held as the primary requirement for teaching in higher education as noted by Berrett (2012) who stated, “in large part, the problem is that
graduate students pursuing their doctorates get little or no training in how students learn” (para. 3).

It is also true that many instructors and professors have taught courses on subjects that fall outside of their area(s) of expertise as explained by Huston (2009). When the standard of content expertise is shown to be violable, a stronger appreciation of pedagogical knowledge and instructional skill comes into sharper focus as an important dimension of teaching in higher education.

It was really within the last quarter of the 20th century that research turned dramatically toward understanding more about student learning in higher education, although an interest in changing the instructional dynamic was evident at least 25 years earlier. McKeachie (1954) was interested in student-centered instruction as well as research on the efficacy and value of this same approach and endorsed it early on. This interest continued with other researchers in the academy for various reasons, although interestingly McKeachie and Kulick (1975) identify student unrest in the 1960s and financial support from donors and legislatures as motivating factors to improve instruction. In their comprehensive analysis of college instruction, these researchers examined both methodology and innovations utilized to increase student interaction and understanding.

Hammons (1979) provided a comprehensive description of the professional responsibilities, specifically of community college faculty, including a wide-ranging description of the various facets of teaching, from preparation, through implementation to evaluation and management. This description was not meant to be exhaustive or final,
but it is worth noting that and it was published eight years before Chickering and Gamson produced their famed “Seven Principles for Good Practice in Undergraduate Education.”

More models about effective pedagogy and interest in teaching practices for higher education appeared and more researchers provided support for such studies. Teacher effectiveness, framed in terms of student learning particularly in urban community colleges, was investigated by Guskey and associates in various studies (J. Q. Easton & Guskey, 1983; T. R. Guskey, Benninga, & Clark, 1984; T. R. Guskey & Monsaas, 1979). In these studies, researchers concluded that a systematic approach to teaching led to improved student learning. Further studies by other researchers expanded on teachers’ influences on student learning and achievement, particularly at the elementary and secondary level (Brophy, 1982). Student learning, as the focus of teaching, became an increasingly important topic of study, leading to a shift in perception about the classroom dynamic. Guskey (1986) identified that a change in teachers' beliefs and attitudes is likely to take place only after changes in student learning outcomes, as a result of changes in classroom practice, are seen. These changes may range from a new instructional approach or change in teaching procedures, classroom format, or new materials, but the important factor is that teachers are not inclined to change their attitudes—or adapt their practices to that change—until they have evidence in the form of improved achievement of student learning outcomes. For this reason, it is important that attempts at instructional change lead to demonstrable changes in student performance. Angelo and Cross affirm the importance of this change, stating, “The quality of student learning is directly, although not exclusively, related to the quality of teaching.
Therefore, one of the most promising ways to improve learning is to improve teaching” (1993, p. 7).

Models of Instruction

The teaching-learning dynamic has been studied from many different perspectives, though much of the research has focused on social and psychological aspects at pre-school, elementary, and secondary school levels. Historically, analysis of teaching and learning in college classrooms has received less attention because instructors’ content knowledge and expertise overshadowed questions about the ability to facilitate students’ learning of that very content. Rather, research about students’ psychological and social development during their college years has long centered on experiences outside of the classroom. It is primarily during the past 25 years that researchers have attempted to answer questions about faculty practices, classrooms interactions, and improved student learning in postsecondary settings. Strange noted, “The conversation used to be about what I did as a teacher. Now it’s about what students do in my presence” (2012, January)

Chickering and Gamson’s Seven Principles for Good Practice in Undergraduate Education (1987) is a frequently-cited, foundational resource on the subject of undergraduate teaching. These principles, expressed in terms of recommended faculty behaviors, are enumerated as:

The authors’ own explanation states that these principles are “not ten commandments shrunk to a twentieth century attention span” but rather “guidelines for faculty” (p. 3). The popularity of these principles might well lie in their very succinct expression; in personal correspondence with Chickering and Gamson, Peter Frederick indicated that he made use of the seven principles in many professional development workshops. “What prompted me to use them? They are pithy and make sound pedagogical sense. Pithiness is important for faculty, who do not want much educational theory” (1999, p. 79).

Although brevity of expression in conveying these principles may have been partially responsible for their popularity, Frederick was right to note that knowledge of educational theory as a basis for improving teaching traditionally has not been a priority in postsecondary classrooms.

*The Scholarship of Teaching*

Contemporaneously, Ernest Boyer (1990) gave the academy the conceptualization of the “scholarship” regarding teaching, as opposed to a focus on research or a concise, prescriptive list of behaviors. Boyer’s model involved the interaction of four different areas of scholarship: discovery, integration, application, and teaching. Although considerably more complex that Chickering and Gamson’s principles, this model surprisingly received substantial attention and motivated the academic community to reconsider and revitalize instruction. Boyer’s approach places teaching evaluation in the hands of peers and collegial interaction rather than seek assessment and evaluation from external sources or data about student learning. According to Boyer,
problems notwithstanding, faculty should, we believe, be primarily responsible for evaluating the teaching performance of colleagues, and the process should be as systematic as that used to evaluate the research. (1990, p. 38)

Boyer continues to support this premise stating that a faculty member’s philosophy of teaching statement would “undergird” evaluation procedures, though he does not address the rapidly growing body of research on learning theory and how that could improve instruction in higher education. “What Boyer did not do was to draw a sharp line between excellent teaching and the scholarship of teaching” (Hutchings & Shulman, 1999, p. 13). While Boyer strongly advocated for the importance of teaching in conjunction with the value of research, and strongly suggested the liberal arts teaching model, his construct was still somewhat amorphous and without specific structure for creating improved teaching. Where Gamson and Chickering appear to have been too concise, Boyer waxes eloquent on the importance of teaching, but reaches neither a concrete model nor systematic program for the improvement of teaching and learning.

Case (1985) provides a more encompassing view in stating that teaching involves knowing “what to teach, how to teach it, and at what levels of expectation” (p. 83). This expands his model beyond the knowledge of subject matter, indicating that there is also a need to be familiar with instructional methodology, curriculum design, and learning theories. Glassick, Huber, and Maeroff (1997) further advanced a scholarship approach to teaching by generating specific areas for consideration: goals, preparation, methods, presentation, results, and critique.

Questions about the scholarship—in the broadest sense—of teaching continued, and though it expanded beyond Boyer’s ideals, Theall and Arreola (2001) concluded that
after ten years, there was little scholarship of teaching, little faculty interest in research outside of their disciplines, and the scholarship of teaching was not considered in making tenure decisions. Despite a widespread and increased in interest in teaching, evidenced by the development of “teaching and learning” centers at many colleges and universities, this appraisal by Theall and Arreola appears to have some credibility, particularly in noting that the scholarship of teaching is not a factor in making tenure decisions.

Shulman (1986), another educational leader interested in the practice of teaching in higher education, ushered in a model around the same time that Chickering and Gamson introduced their Seven Principles, though Shulman presented three, broad and encompassing categories of knowledge that are needed for teaching. In an article that is long on historical perspective for entry into the teaching profession, Shulman identified three distinct categories of content knowledge necessary for effective teaching: (a) subject matter content knowledge, (b) pedagogical content knowledge, and (c) curricular knowledge. Over time, Shulman’s work with the Carnegie Academy for the Scholarship of Teaching and Learning (CASTL) led to further development of his ideas about the scholarship of teaching, and the refinement of ways that this might be achieved.

After working with faculty who engaged in the investigation of teaching and learning, Shulman, in collaboration with Hutchings, produced three criteria that separate the scholarship of teaching from scholarly teaching: “The work must be made public. The work must be available for peer review and critique according to accepted standards. The work must be able to be reproduced and built on by other scholars” (Hutchings & Shulman, 1999, para. 15). In the same article, Hutchings and Shulman acknowledged the work of those who engage in reflective practice in K-12 teaching. Because of the nature
of their work, K-12 teachers are equally concerned with all three of Shulman’s content knowledge dimensions: subject matter, pedagogy, and curriculum.

**Danielson’s Framework**

Following the wide parameters of Shulman’s construct, Danielson (1996) developed a framework for teaching that identified specific aspects of teachers’ responsibilities and activities that promote student learning. Grounded in constructivist learning theory, Danielson Framework is the conceptual framework for this study. This model established twenty-two component categories that are grouped into four domains of teaching responsibility. The four domains are: (a) planning and preparation, (b) classroom environment, (c) instruction, and (d) professional responsibilities. These domains were further broken down into specific components that define aspects of each domain. Danielson recognized that although the components are distinct, they are interrelated. The Framework is extraordinarily ambitious; according to Danielson, it “embodies a number of features that ensure both its validity and applicability to a wide range of instructional settings. The Framework aims to describe all of teaching, in all its complexity” (1996, p. 19). In addition, Danielson acknowledged that the Framework was developed from a body of research that identified effective practice, classroom organization, and the promotion and maximization of student learning. Danielson cited the work of Shulman (1987), Sykes and Bird (1992), and Wiggins (1998) among the significant sources for Domain 1: Planning and Preparation. The second domain, the Classroom Environment is supported by the work of Evertson and Harris (1992). There is a strong endorsement of constructivist learning theory evident in Domain 3: Instruction, which stands on the research of Brooks and Brooks (1993), and Wolk (1994) who traced
the development of project-based learning methodology for knowledge construction. In addition, the changing role of the teacher toward that of a facilitator of the learning process is underscored by the work of Brandt (1992, 1994), Gardner and Boix-Mansilla (1994), Heckman (1993), Perkins and Blythe (1994), Perrone (1994), Wiske (1994), and Woods (1994). Professional responsibilities, outlined in Domain 4, cover a wider range of activities and recommendations for improved instruction. Reflective practice, endorsed for those entering the profession as well as veteran instructors, is tied to the work of Colton and Sparks-Langer (1992), Ross and Regan (1993), and Tabachnick and Zeichner (1991). Further, DuFour and Eaker (1998) affirm the value collaboration for professional growth and development, while action research, as a source of instructional improvement, is recommended by Calhoun (1994). Note that the use of action research brings Danielson’s Framework (1996) full circle to one of the original principles identified by Shulman: scholarship and research concerning teaching.

It is important to note and understand that a significant shift exists between Shulman’s foundational scheme and Danielson’s Framework. While Shulman’s work focused more on the teaching portion of such exchanges, Danielson looked toward the learning aspect of these experiences. This is consistent with the model created by Barr and Tagg (1995) who contrasted the long-held practices of a teaching paradigm with a new, student-focused learning paradigm. This contrast involved not only classroom activities, but also institutional change. Barr and Tagg assert, “the Instruction Paradigm rests on conceptions of teaching that are increasingly recognized as ineffective” (para. 6), while the Learning Paradigm moves toward the “the achievement of overall student educational objectives such as earning a degree, persisting in school, and learning the
‘right’ things--the skills and knowledge that will help students to achieve their goals in work and life” (para. 20).

The departure from focusing on teaching to putting energies toward the goal of learning is one that requires a major shift in faculty thinking and classroom practice. It requires a concerted effort that most likely could be redirected through staff development opportunities. “One advantage of the Danielson Framework was its potential to be used as a foundation to devise part-time faculty professional development programs and activities for both the novice and veteran teacher” (Sandford, 2002, p. 53). Because of its clarity and immediate applicability, Danielson’s Framework (1996) has excellent potential for all segments of higher education faculty who are willing to consider a different approach to learning for their classes and students.

**The Learning Paradigm**

Current trends in higher education strongly underscore and support the goals of the Learning Paradigm outlined by Barr and Tagg, especially in the areas of student persistence and degree attainment. Indeed, some new and current measures of an institution’s success focus on learning and these measure are frequently considered in and institution’s accreditation process. This trend indicates that the accreditation process shifted from an examination of inputs to an analysis of outcomes (Bollag, 2006, November 16; McMurtrie, 2000, July 7; Pryor, 2010, August 30). This change was summarized by Rice (2006) who stated, “The demand for external accountability grew throughout the 1980s and the 1990s as escalating costs and competition for diminishing resources drew wider public attention to issues of effectiveness and productivity.” Further,
when the broad concern for accountability emerged in the 1980s, the accreditation process began to shift from a focus on existing resources and capacity building—inputs, if you will—to assessment of student learning outcomes. This development marked a major change in the accreditation process and focused the process on whether or not teaching makes a difference. (p. 17)

Evaluating Teaching and Instruction

As higher education and the accreditation process are changing to emphasize student achievement, individual institutions have become increasingly more interested in student learning. Indeed, the Spellings Report stated, “we are disturbed by evidence that the quality of student learning at U.S. colleges and universities is inadequate, and in some cases, declining” (U. S. Department of Education, 2006, p. 3). From universities to community colleges, an examination of students’ retention and graduation rates will no longer be an adequate measure of student success. “All too often accreditation focuses on so-called “indirect measures” (Pryor, 2010, August 30, para. 4), but as institutions take a more comprehensive approach to self-examination, student learning will become a critical factor in analyzing success. To gain a clearer picture of student learning, an inspection of classroom practice will help to establish a baseline view of the complex interaction that constitutes learning.

“Historically, student ratings have dominated as the primary measure of teaching effectiveness for the past 30 years” according to Berk (2005, p. 48), but he also advocated using multiple measures (eleven more in this article) to gain a better view and understanding of teacher performance. Those engaged in higher education, might agree that “there was probably a time when academic staff in HE (higher education) simply
followed the teaching methods that they had experienced as students” (Bourner, 1997, p. 344). Since the author proffered that statement, there has been considerable change in the sheer volume of information that is available to the public, including students, and the ways, times, speed, and media used to access information. Dissemination of information can no longer be the primary goal in the classroom; rather, the focus of classroom interaction must be more complex and sophisticated to convert information to cogent knowledge that becomes part of the thinking and learning process. Bourner recognized this, as did McKeachie long before, in addressing what instructors do in classrooms, that is, shifting the focus to the learning process. “The principle that I want to establish as practice is that we evaluate our teaching methods against the learning outcomes that we are seeking for our students” (Bourner, 1997, p. 345). This is consistent with the shift that was taking place in education on a larger scale. “This gradual but apparent shift from an ‘instructional’ to a ‘learning’ paradigm has prompted many observers to conclude that the roles traditionally performed by faculty are likely to change substantially in the near future” (Gibson-Harman, Rodriguez, & Haworth, 2005, p. 80)

The use of the learning paradigm presents some research challenges for those who choose to study that phenomenon. Value-added analysis and course sequence analysis have been used to provide data about student learning within courses. While course-sequence analysis might hold some promise, the value added model is questionable. This approach “involves predicting what standardized test scores a teacher's students should obtain based upon their previous year's test scores” (Bausell, 2011, para. 3). However, Bausell also notes that the current methodology does not identify teachers who consistently show low performance. Using one of the largest studies of value-added
teaching performance, the research points out the results were not only inconclusive, but also contradictory.

Weinberg, Hashimoto, and Fleisher (2009) created a study that analyzed the value-added model of instruction and student evaluations. This approach is unusual because the value-added model is used currently to measure the quality of primary and secondary teachers, while student evaluations have long been the consistent standard by which teacher quality in higher education is measured. But as noted by Brint, “we can use the example of K–12 teachers to imagine what a program to bring greater professionalism to college teaching might entail” (2008, para. 17).

Course-sequence analysis offers the potential to provide information about the quality and extent of students’ learning in courses as it is applied in subsequent courses, but due to the wide-ranging variables in almost all institutions of higher education, this method has not been employed, but for one notable exception. Carrell and West (2010) conducted an extensive course-sequence analysis study in a unique, controlled environment—the United States Air Force Academy (USAFA). Because of the proscribed curriculum and stable student body at the Air Force Academy, Carrell and West were able to control for a number of variables that inhibit such studies on other campuses, including a student body with similar SAT achievement scores. These unusual conditions provide “a unique opportunity to test how introductory course professors affect follow-on course achievement” (p. 11). Carrell and West examined data from 2000-2007 that included 10, 534 students. Narrowing their study to math courses in the USAFA curriculum, they also noted that “math professors only grade a small proportion of their own students' exams, vastly reducing the ability of “easy" or “hard" grading
professors to affect their students' scores” (p. 8); this allowed them to examine only the teaching of courses, rather than students’ grades at the end of a course. Among their findings, they noted that

The overall pattern of the results shows that students of less experienced and less qualified professors perform significantly better in the contemporaneous course being taught. In contrast, the students of more experienced and more highly qualified introductory professors perform significantly better in the follow-on courses. (p. 15)

In reflecting on this pattern, Carrell and West offer

One potential explanation for our results is that the less-experienced professors may teach more strictly to the regimented curriculum being tested, while the more experienced professors broaden the curriculum and produce students with a deeper understanding of the material. (p. 17)

They continue, noting that “our results show that student evaluations reward professors who increase achievement in the contemporaneous course being taught, not those who increase deep learning” (p. 17), which led them to question whether student evaluations are the most accurate or most effective measure of teaching quality. Although this study is limited to one institution, the study does provide a strong case for the authors’ conclusive question about measuring teaching quality and student learning.

If higher education is committed to analyzing the results of efforts to increase student learning, better methodologies will need to be developed but that should not impede the effort to increase the emphasis on learning, as opposed to teaching. This shift requires an adjustment in pedagogy and surprisingly, community colleges were a source
of this change. “A shortage of qualified faculty to meet growing student demand, a movement toward a “learning paradigm” in community colleges, and the pervasive influence of technology—will leave a lasting imprint on a new generation of community college faculty” (Gibson-Harman, et al., 2005, p. 77). “The best examples are new pedagogical advances originating in two-year community colleges, where the focus is primarily on teaching and learning. These then move up through the larger system and have an instructional impact even on research-intensive universities” (Rice, 2006, p. 14).

Other researchers also support using varied sources of information to provide a broader view of teaching that goes beyond classroom performance to include course planning, delivery, and revision. Lattuca and Domagal-Goldman (2007a) state that “administrators who understand the need for more holistic appraisals of teaching effectiveness require more information about teaching efforts than that supplied by end-of-course surveys” (p. 82).

A considerably more holistic approach to assessing instruction was attempted more recently. Working with a panel of content experts from varied disciplines, a study produced seven cluster areas of criteria for teaching proficiency:

(1) preparedness, including items relating to how well the instructor is prepared for teaching; (2) professionalism, including items related to the instructor's knowledge, respect for students, and effectiveness in implementing course objectives; (3) evaluation, which included items relating to whether the instructor evaluates students appropriately in a timely and objective manner; (4) rapport, which included items relating to the relationship established between instructor and student; (5) enthusiasm, which included items relating to eagerness and
passion which the instructor displays in teaching; (6) delivery, which included items relating to how effective the instructor is in conveying knowledge to students; and (7) excellence, which included items relating to a global assessment of the student's perception of the instructor's teaching excellence that did not address any specific teacher attributes. (Barnes, Matherne, Martin, Orgeron, & Ring, 2008, para. 6)

Most of these clustered themes can be combined and then compared to the four domains in Danielson’s Framework (1996) for teaching, though this study was designed to create a “an improved psychometrically sound measure of teaching proficiency that can be used in a university setting” (Barnes, et al., 2008, para. 1). Eventually, this study may produce a different model for teaching proficiency in higher education, but that will require some translation for direct application in classrooms.

The issue of translating such research to application is one that continues to challenge those who are engaged in the professional development of pedagogical effectiveness in higher education. Depending on the institution or individuals who are interested in teaching quality in higher education, this has been a concern spanning differing periods. Some institutions have turned attention to this issue recently, while others moved to examine it much earlier. From the first questions raised by McKeachie, to the scheme created by Shulman, to Danielson’s Framework, to a recent workshop conducted at Johns Hopkins University (Smith, 2012), it is now accepted that “students learn and retain more information — and persist and succeed at higher levels — when they are actively involved in learning rather than passively receiving information” (Center for Community College Student Engagement, 2010, p. 10). To that end, an many
higher education institutions are turning their attention to the classroom because “teaching quality is an essential link between improved college completion and improved learning” (Center for Community College Student Engagement, 2010, p. 4).

Summary

Chapter Two presents a review of relevant literature related to the research topic for this study. The focus of the first section was constructivist learning as and increasingly accepted foundation for American education, as the theoretical framework for this study, and for Danielson’s Framework for Teaching. In addition, this chapter traces the historical background of community colleges, including the early ties to American high schools, with attention to vast growth of development of these institutions in the later part of the 20th Century. When considering the work of community colleges, it is necessary to take into account the tremendous diversity seen in community college students, who differ from their counterparts at four-year institutions in many ways. With that in mind, it is equally important to examine the role community college faculty, particularly those who serve in a contingent capacity. Despite their historically increasing presence in community college classrooms, they have not been integrated adequately into the academic life of community colleges (Benjamin, 2002; Green, 2007; Roueche, et al., 1996; Wyles, 1998) and their teaching assignments may result in a negative effect on learning (Jacoby, 2006) and retention (Schibik & Harrington, 2004). In currently viewing teaching and instruction in higher education, there is increased emphasis on student learning, pedagogy, and classroom practice. This change was consistent with models of instruction (Chickering & Gamson, 1987) and the scholarship of teaching (Shulman, 1986). Danielson’s Framework for Teaching, though applied in k-
12 education, is contemporaneous to those models emerging in higher education. Further development of the concept of student-centered education was supported by the shift to a learning paradigm (Barr & Tagg, 1995). With these changes, evaluating teaching and learning is the final section of this chapter.

While there is considerable research about higher education faculty, studies that specifically address the role of community college contingent faculty are less numerous. Though many studies consider elementary and secondary instructional practice, studies that investigate the same in higher education are limited. Despite the abundance of studies on K-12 pedagogy and teaching, comparable studies that address higher education pedagogy and teaching are lacking. There are those who developed models of teaching effectiveness in higher education, but the field has not yet coalesced to encompass student learning the centerpiece of higher education. The information presented in this chapter draws on many different areas in an attempt to bring concepts and data together to address those questions about teaching and learning that remain unanswered in higher education.

As many higher education institutions investigate and move toward student learning as a criterion for teaching effectiveness, a change in instructors’ concept of teaching will be needed. Before an institution can embark on the transformation process toward the Learning Paradigm (Barr & Tagg, 1995), it is crucial that such change includes some plan that is understood easily and promises immediate applicability. Danielson’s Framework (1996) holds this promise by defining “those aspects of a teacher's responsibilities which promote student learning” (Sandford, 2002, p. 54) and delineating those “practices which could be useful both for designing professional
development activities for improving teaching skills” (Sandford, 2002, p. 56) among all segments of higher education faculty. Because that includes such a broad range of institutions, of varied faculty including contingent faculty, there is an opportunity to investigate current practices and look for opportunities to expand and endorse increased student learning as a goal of classroom practice.
Chapter Three
Methodology

Teaching effectiveness for student learning in higher education is quickly becoming a topic of research interest, but there is limited research on the analysis of instructional practices of faculty, particularly those who work as contingent faculty in community colleges, where teaching the primary focus of faculty work. This study uses Danielson’s Framework for Teaching (1996) as a conceptual framework for analyzing the instructional practices of community college contingent AS/GE faculty. This construct identifies four domains of teacher responsibilities and their corresponding activities in order to define, support, and assess effective teaching: 1: Planning and Preparation; 2: Classroom Environment; 3: Instruction; and 4: Professional Responsibilities.

This chapter describes the procedures and methods used in the study, including research design, population and sample, procedures, instrumentation, data collection, and data analysis.

Research Questions

This was a study of the existence of correlational relationships between professional and demographic characteristics of community college contingent AS/GE faculty and the frequency of their instructional practices as described in the four domains of Danielson’s Framework (1996). This investigation examined four research questions:

1. Is there a relationship between community college contingent AS/GE faculty’s academic discipline and the frequency of planning, preparation, and instructional activities defined by Danielson’s domains?
2. Is there a relationship between community college contingent AS/GE faculty’s teaching experience, and the frequency of planning, preparation, and instructional activities defined by Danielson’s domains?

3. Is there a relationship between the frequency of community college contingent AS/GE faculty’s engagement in professional development activities and the frequency of contingent AS/GE faculty’s planning, preparation, and instructional activities defined by Danielson’s domains?

4. Is there a relationship between community college size and population served, defined by Carnegie Classification, and the frequency of contingent AS/GE faculty’s planning, preparation, and instructional activities defined by Danielson’s domains?

The study was not limited to whether or not relationships exist, but also the addressed the extent to which the variables are related, and whether these relationships are statistically significant, that is, these relationships are more than chance relationships.

The components of Danielson’s domains were the dependent variables in this study and the professional characteristics of the respondents and institutional classification were the independent variables, as indicated in Table 1. Although the frequency of activities could be defined as a continuous variable, for the survey, the response choices for the frequency of activities in Danielson’s domains were presented in categories (see Appendix F). Conversely, the response for community college contingent AS/GE faculty’s teaching experience (measured in terms) was presented as an open-ended question that would be a continuous variable, which was later coded into categories for analysis.
<table>
<thead>
<tr>
<th>IV</th>
<th>Type</th>
<th>DV</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community college contingent AS/GE faculty’s academic discipline</td>
<td>Categorical (nominal)</td>
<td>Frequency of activities defined by Danielson’s domains</td>
<td>Categorical</td>
</tr>
<tr>
<td>Community college contingent AS/GE faculty’s teaching experience</td>
<td>Continuous</td>
<td>Frequency of activities defined by Danielson’s domains</td>
<td>Categorical</td>
</tr>
<tr>
<td>Frequency of community college contingent AS/GE faculty’s engagement in professional development activities</td>
<td>Categorical</td>
<td>Frequency of activities defined by Danielson’s domains</td>
<td>Categorical</td>
</tr>
<tr>
<td>Community college size and population served, defined by Carnegie Classification</td>
<td>Categorical</td>
<td>Frequency of activities defined by Danielson’s domains</td>
<td>Categorical</td>
</tr>
</tbody>
</table>

**Population**

The target population for this study was community college contingent faculty teaching courses in the Arts and Science or general education (AS/GE) divisions in community colleges across the nation. AS/GE faculty has been chosen because the disciplines included in these community college divisions are the same disciplines offered in secondary schools; Danielson’s Framework (1996) was originally designed for use in elementary and secondary education. In addition, AS/GE courses serve as the intersection of all academic programs, with students in every program taking at least one, and frequently more, courses in the disciplines within AS/GE. Other divisions such as engineering technology or nursing were excluded from the study because specific pedagogical approaches are frequently embedded within those disciplines due to the nature of instruction and application in the field. The survey also asked if the respondent
has an Education degree, and whether the respondent teaches (or taught) in K-12 schools. This background would provide familiarity with and practice of the Framework for Teaching principles.

The total population of contingent faculty in community colleges is indeterminate because of the shifting nature of their employment. Though they constitute an considerable proportion of community colleges’ instructional staff, the target population of community college contingent faculty, including AS/GE faculty, changes by term due to the nature of their employment and is therefore impossible to establish, except at a specific point in time.

**Sample**

For this study, community colleges were defined as public, two-year, Associate’s degree-granting institutions. Schools awarding Associate’s degrees generally, although not exclusively, are identified as two-year schools in the Carnegie Classification system, which additionally uses both size and location characteristics in describing these schools. According to the Integrated Postsecondary Education Data System (IPEDS) of the National Center for Educational Statistics (2010) criteria, 951 public, two-year, Associate degree-granting institutions in the United States were identified for potential use in this study. That group excluded other two-year, special-use schools, which are dedicated to specific curricula in many cases. Schools defined as having a specific mission, such as tribal colleges, military colleges, or historically black colleges, also were excluded, along with those classified as public, four-year schools that are primarily Associate-degree granting institutions.
“Because few two-year institutions serve a residential population, these
institutions are classified solely based on FTE enrollment” (Carnegie Foundation for the
Advancement of Teaching, n.d.-b, para. 3). With that distinction, eight group
classifications were designated in this study:

1.) Associate's--Public Rural-serving Small;
2.) Associate's--Public Rural-serving Medium;
3.) Associate's--Public Rural-serving Large;
4.) Associate's--Public Suburban-serving Single Campus;
5.) Associate's--Public Suburban-serving Multi-campus;
6.) Associate's--Public Urban-serving Single Campus;
7.) Associate's--Public Urban-serving Multi-campus;
8.) Associate's--Public 2-year colleges under 4-year universities.

The Carnegie Classifications were abbreviated in this study as follows:

RUSM = Associate's--Public Rural-serving Small
RUME = Associate's--Public Rural-serving Medium
RULA = Associate's--Public Rural-serving Large
SUSI = Associate's--Public Suburban-serving Single Campus
SUMU = Associate's--Public Suburban-serving Multi-campus
URSI = Associate's--Public Urban-serving Single Campus
URMU = Associate's--Public Urban-serving Multi-campus
2yu4 = Associate's--Public 2-year colleges under 4-year universities

Table 2

<table>
<thead>
<tr>
<th>Classification</th>
<th>Number of Institutions</th>
<th>Institutions Contacted</th>
<th>Percent Contacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUSM</td>
<td>117</td>
<td>37</td>
<td>31.6</td>
</tr>
<tr>
<td>RUME</td>
<td>296</td>
<td>94</td>
<td>31.7</td>
</tr>
<tr>
<td>RULA</td>
<td>123</td>
<td>39</td>
<td>31.7</td>
</tr>
<tr>
<td>SUSI</td>
<td>105</td>
<td>33</td>
<td>31.4</td>
</tr>
<tr>
<td>SUMU</td>
<td>99</td>
<td>32</td>
<td>32.3</td>
</tr>
<tr>
<td>URSI</td>
<td>31</td>
<td>10</td>
<td>32.2</td>
</tr>
<tr>
<td>URMU</td>
<td>138</td>
<td>44</td>
<td>31.8</td>
</tr>
<tr>
<td>2yu4</td>
<td>42</td>
<td>13</td>
<td>30.9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>951</td>
<td>302</td>
<td>31.7</td>
</tr>
</tbody>
</table>
To assure representation of contingent AS/GE faculty from all Carnegie Classifications, stratified random sampling was used to identify approximately 32% of 951 institutions to be contacted for contingent AS/GE faculty participation. While a strictly random sample would not guarantee representation of all of varied classifications of community colleges, the resulting response rates were not proportional among the various categories.

The level of significance is set at 5% (i.e., \( p < 0.05 \)) to establish the range of values around the sample mean for the research question responses. The confidence interval establishes how frequently the actual percentage of the population would choose a response that lies within the confidence interval range. Combined with a confidence level of 95%, which is used by most researchers, a sample of 384 responses would establish this confidence interval with an unknown or indeterminate population, as is the case for contingent AS/GE faculty (Creative Research Systems, 2010).

**Procedures**

Hoonakker and Carayon (2009) distinguished between various kinds of electronic surveys: a survey contained within an email message; a text document survey attached to an email message; a survey that is a self-executing program file attached to an email message; a web-based survey that participants access through a link provided in an email message. In addition, they identified the advantages of using Internet surveys: ease of administration and access to large populations; greater flexibility in survey design; reduced costs; speed of delivery and response; reduced time and error in data entry. Using an online survey format for the study will provide advantages in flexibility; speed, ease, and timeliness of distribution; respondents’ convenience; ease of data entry and
analysis; low administrative costs; and most importantly, the ability to obtain a large sample. These advantages far outweigh the drawbacks which include: a lack of technological experience of respondents; impersonal approach; privacy and security concerns (J. R. Evans & Mathur, 2005). In addition, Laguilles, Williams, and Saunders (2011) noted “web surveys are not an appropriate method for conducting general population surveys. However, web surveys are employed extensively within the field of higher education, where ready access to computers and the internet is ubiquitous” (p. 539).

Some research indicates electronic or email survey procedures may result in decreased response rates, but there is also growing evidence that, with specific preparation and delivery protocols, electronic surveys can be as effective as printed surveys that are delivered through the mail. The length of the survey, anticipated time for completion, and the ability to perceive progress toward completion of the online instrument are crucial factors in increasing survey completion. In addition, the relevance to participants must be established as quickly as possible, preferably in the first question (Clarkberg & Einarson, 2008). Denscombe (2009) found that electronic surveys tend to produce higher response rates when fixed-response questions are presented. In addition, response rate increases when respondents are familiar with computer technology and some incentive is offered. The results of a comparison between postal mail surveys, e-mail surveys, and Web-based surveys shows that Web-based surveys generate much better results than e-mail surveys. (Hoonakker & Carayon, 2009, p. 352)

In addition, research indicates that “postal mail surveys generate a higher response rate than e-mail surveys: 52% versus 33%. Fax surveys result in the lowest
response rate (32%). Web-based surveys have similar response rate to postal mail surveys: 52% versus 51%” (Hoonakker & Carayon, 2009, p. 359), though survey topics, methods and sample groups might have an effect on the results.

Beyond the varied research findings on response rates to Internet and mail surveys, the advantage of reducing response time made a web-based survey very attractive. “E-mail (7.7 days) and Web-based surveys (6.7 days) have a much shorter response time than postal mail surveys (16.1 days)” (Hoonakker & Carayon, 2009, p. 359).

Because of the advantages enumerated, this study utilized a web-based survey, produced and housed in SurveyGizmo®, accessed through a link provided in an email message to potential participants. This electronic survey format provided respondents with a level of anonymity that is not available in the other electronic formats, such as email responses. While many online survey systems were available for such research and offer similar features, SurveyGizmo® was chosen because it provided options that constituted distinct advantages for this study. Among these are the choice of the survey being housed on servers in the United States; the ability to create secure surveys that transmit encrypted respondent data; localization of time zones for data collection; the ability to make survey responses completely anonymous by removing tracking data; the ability to import from and export to common word processing software. In addition, the software system included mobile device browser recognition allowing participants to respond on phones or tablet devices. Survey data is secured through a redundancy system with secure offsite backups, and the system guarantees 99.9% uptime.
The procedures for this study adhered to those practices that research deems most effective, although caution should be urged when conducting a third-party survey, as was done in this case, asking the chief academic officer (CAO) to distribute the survey to the institution’s contingent AS/GE faculty. An initial email message explaining this research was sent to the CAO of each of the schools in the sample to solicit the institution’s interest and desire to participate in the study (see Appendix B). Email addresses for chief academic officers were obtained from publicly accessible information on college websites. In only five cases (1.6%) did these messages bounce, which means the email returned to the sender because it could not be delivered for some reason. A surface mail message containing comparable information was sent at the same time, though was received later than the email due to the time involved in surface mail transmission (see Appendix C). A total of 302 emails and 302 matching letters were sent to community colleges across the nation.

The CAOs who responded replied to the initial or follow-up email message in 99.3% of all cases. Only two situations involved surface mail: one communication was a CAO surface mail response to an email message because the CAO’s reply email messages to the researcher bounced. The other was a CAO’s email response that mentioned the surface mail letter.

The timing of the CAOs’ responses varied, but generally there was increased response after a follow-up email assured the survey was IRB-approved as exempt by the University of Toledo; the data collected would not identifiable by individual or by institution; and administrative participation was limited to about five minutes (Appendix D). A total of 47 community colleges, or 16% of those contacted, agreed to participate in
the study. Table 3 below shows a breakdown of how institutions responded within each Carnegie Classification.

Table 3

Responses and Non-Responses to Invitation to Participate in Study

<table>
<thead>
<tr>
<th></th>
<th>2yu4</th>
<th>RULA</th>
<th>RUME</th>
<th>RUMS</th>
<th>SUSI</th>
<th>SUMU</th>
<th>URSI</th>
<th>URMU</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating</td>
<td>2</td>
<td>5</td>
<td>22</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>47</td>
</tr>
<tr>
<td>No Response</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>after Second</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Email</td>
<td>8</td>
<td>27</td>
<td>68</td>
<td>27</td>
<td>20</td>
<td>24</td>
<td>8</td>
<td>26</td>
<td>208</td>
</tr>
<tr>
<td>Bad Email</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address/Contact</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Explicit Non-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participating</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>10</td>
<td>34</td>
</tr>
<tr>
<td>Stopped</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responding/No</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Follow-Through</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total 302</td>
</tr>
</tbody>
</table>

Some community colleges responded immediately that they would participate; some explicitly responded that they would not participate; other community college expressed an interest in participation, but wanted the participation decision to be made by a group, such as the president’s cabinet. In some of those cases, the contact person did not follow through or stopped responding to email inquiries.

Although three urban-serving, multi-campus community colleges agreed to participation, no responses were received for contingent AS/GE faculty in that category, even though repeated follow-up emails were sent to the contacts at each of those institutions.
In addition, 6.6% of the CAO respondents required additional assurance of Institutional Research Board (IRB) compliance that ranged from providing documentation of IRB approval from the researcher’s institution to application and approval from the participating institution (4.6% of the institutions contacted). This reflects that broad range of differences in how individual institutions interpret and apply IRB guidelines for research at their institutions, as the majority of institutions did not require internal IRB application and approval for participation of their institution.

After a CAO agreed to participate in this study, a copy of the text inviting adjuncts/contingent AS/GE faculty to participate was sent, via email, to the participating chief academic officer or his or her designee, with the request to forward the message to the institution’s adjunct/contingent AS/GE faculty via the institution’s email distribution list. This message contained a brief explanation of the study, assurances of confidentiality and the use of aggregated data (as opposed to individual responses), the option for participants to end participation in the survey at any point, and finally the link to an online survey with an estimate of how much time it will take to respond (Appendix E). The practice of sending a reminder message shortly after the survey launch is recommended according to Internet survey research studies (Hoonakker & Carayon, 2009; Kaplowitz, Hadlock, & Levine, 2004), but this was not possible with this survey because the contact with respondents was indirect, through each institution.

As an incentive to engage in this research, adjunct/contingent AS/GE faculty participants who completed the survey had an opportunity to enter a drawing for one of four $25 gift certificates to a Applebee’s restaurant chain or one of ten $10 gift certificates to a Starbuck’s coffee stores. The link to enter the drawing and provide this
contact information for the drawing was not connected to the survey, but dependent on the completion of the survey, thus maintaining anonymity of participant responses. Porter and Whitcomb (2003) noted that although there is no research literature or theoretical rationale to support their use, lottery-based incentives are commonly used as enticements to participate or complete surveys. The use of lottery incentives is common in web-based surveys in higher education and marketing research and recent research using experiment methodology supports lottery incentives increasing response rates (Laguilles, et al., 2011).

**Instrumentation**

Danielson’s Framework for Teaching (1996) was the conceptual framework for this study. The researcher created a survey that asked respondents to report their participation in various instructional activities that were derived from Danielson’s Framework (see Appendix E). While self-reporting is a very common procedure, there is “widespread suspicion that self-report methodology is the soft underbelly of the organizational research literature” (Podsakoff & Organ, 1986, p. 513). Despite this criticism, this researcher assumed that faculty members responded to the survey with a serious attitude and provided true and accurate responses because of the anonymity of the respondents, as stated in the assumptions.

**Validity**

The Framework focuses on four areas or domains of activity: Planning and Preparation, Classroom Environment, Instruction, and Professional Responsibilities. Each domain identifies specific activities that were used to formulate specific questions in the survey. The activities chosen for use in the survey instrument were those that were
appropriate or easily adapted for post-secondary classrooms. A panel of six experts, with experience teaching in higher education and training in Danielson’s Framework as applied in Praxis® and Pathwise® assessment, reviewed the survey for validity, and determined that the questions were consistent with the corresponding activities and principles of Danielson’s Framework for Teaching. Pathwise is a professional development program series for teachers and instructional personnel, derived from Danielson’s Framework for Teaching and provided by the Educational Testing Service (Educational Testing Service, 2012). This type of validity review is consistent with practices recommended by Popham (2003).

Reliability

Reliability is another fundamental concept of measurement that requires that a test produce the same result when used to measure the same behavior or construct. Of the four types of reliability testing, only internal consistency, determined by calculating Cronbach’s coefficient alpha, was appropriate for reliability testing because there is one version of the instrument, which was administered only once (Creswell, 2010).

Table 4

*Cronbach’s Coefficient Alpha Results for Internal Reliability by Domain*

<table>
<thead>
<tr>
<th>Domain</th>
<th>Cronbach’s Alpha</th>
<th>N</th>
<th>N Composite Items</th>
<th>Adequacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain 1 Composite</td>
<td>.851</td>
<td>583</td>
<td>11</td>
<td>Good</td>
</tr>
<tr>
<td>Domain 2 Composite</td>
<td>.788</td>
<td>616</td>
<td>5</td>
<td>Fair</td>
</tr>
<tr>
<td>Domain 3 Composite</td>
<td>.814</td>
<td>580</td>
<td>9</td>
<td>Good</td>
</tr>
<tr>
<td>Domain 4 Composite</td>
<td>.618</td>
<td>577</td>
<td>10</td>
<td>Marginal</td>
</tr>
</tbody>
</table>

After the data collection period ended, data was downloaded from SurveyGizmo. Raw scores were converted to z-scores because the scale of responses changed in portions of the survey and composite scores were created for each of the Framework
Domains because of the similarity of constructs within each Domain. Composite scores were used for each domain in order to have a more encompassing construct.

These composite scores are unit-weighted and calculated using Statistical Packages for the Social Sciences (SPSS) software, version 20, which was also used for all other statistical calculations in this study. Table 4 below shows the reliability coefficients for each Domain. The adequacy rating shown is a guideline for the internal reliability of Cronbach’s Alpha Coefficients (Yockey, 2011). The resulting good adequacy ratings for Domain 1: Planning and Preparation and Domain 3: Instruction can be explained by the recognition that those are the two areas with which instructors in higher education would be more familiar. Domain 2: Classroom Environment and Domain 4: Professional Responsibilities present slightly different dimensions of teaching that are not always interpreted or practiced in the same ways in higher education practice.

**Data Collection**

Human Subjects Research training was completed through the University of Toledo’s membership in the Collaborative Institutional Training Initiative (CITI) program. The University of Toledo Institutional Review Board (IRB) approved the research project as exempt on May 22, 2012.

In addition, the researcher completed the National Institutes of Health (NIH) Office of Extramural Research Training for Protecting Human Research Subjects because one of the community colleges that required an IRB application be completed in order for their institution to participate accepts only NIH training. Twenty community colleges required some type of assurance of IRB approval; six of these institutions asked for a
copy of the University of Toledo approval form; fourteen required the researcher to complete their IRB applications.

The data collection period opened on June 12, 2012 and closed on July 27, 2012. It is important to note that this timeframe corresponded to summer term for many institutions that responded to the study and therefore may have included contingent faculty who do not teach during the regular academic year. Some participating institutions extended the survey to contingent faculty teaching in both spring and summer terms, but there is no exact determination of how many institutions included contingent faculty from more than the term in which the data collection occurred. Because contingent AS/GE faculty would not be expected to know which Carnegie Classification their institution represents, there were eight iterations of the same survey, each with a different web link provided in the directions to contingent AS/GE faculty, so that the responses were returned in the correct categories, which was one of the research questions variables. The web survey system automatically separated responses into three different categories: completed, partial, and abandoned. Only completed surveys were used for analysis, n = 640.

Table 5

Survey Responses: Completed, Partial, and Abandoned

<table>
<thead>
<tr>
<th></th>
<th>Completed</th>
<th>Partial</th>
<th>Abandoned</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2yu4</td>
<td>39</td>
<td>8</td>
<td>7</td>
<td>54</td>
</tr>
<tr>
<td>URSI</td>
<td>29</td>
<td>5</td>
<td>11</td>
<td>45</td>
</tr>
<tr>
<td>URMU</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SUMU</td>
<td>24</td>
<td>9</td>
<td>4</td>
<td>37</td>
</tr>
<tr>
<td>SUSI</td>
<td>235</td>
<td>65</td>
<td>66</td>
<td>366</td>
</tr>
<tr>
<td>RULA</td>
<td>83</td>
<td>23</td>
<td>22</td>
<td>129</td>
</tr>
<tr>
<td>RUME</td>
<td>211</td>
<td>26</td>
<td>26</td>
<td>263</td>
</tr>
<tr>
<td>RUSM</td>
<td>19</td>
<td>6</td>
<td>3</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>640</td>
<td>142</td>
<td>139</td>
<td>922</td>
</tr>
</tbody>
</table>
A survey was considered completed when the respondent reaches the final “thank you” page of the survey; however, respondents could submit a completed survey without answering all questions. Partial surveys were those where the participant left the survey without reaching the final page; the participant stopped responding at some point in the survey. An abandoned response indicated a respondent opened the survey, but left without answering any question. Abandoned surveys might indicate that a respondent previewed the survey, but decided not to participate or to respond later.

Components of the Survey Instrument

The instrument consisted of 41 items; each question in the survey was derived from one of Danielson’s domains and the components, or specific activities defined as a part of each domain. The survey questions are coded with the domains and components and the survey design alignment is presented with the questions and answer choices in Table 6. Only the final question was not part of Danielson’s Framework, but was added to solicit additional information from respondents.

In most cases, participants chose responses from a Likert-type scale to reflect either how frequently she or he participated or engaged in a specific activity. Because reliability was determined by Cronbach’s coefficient alpha, some questions in the survey were intentionally presented outside of a domain pattern and the scale changed for like or very similar questions that were repeated within the survey.

Because of this changing scale in the questions, raw score responses were converted to z-scores, a standard score that can be calculated to allow researchers to compare scores from different scales, though the z-score then has a relative meaning, with a mean of 0 and a standard deviation of 1 (Creswell, 2010).
### Table 6

**Survey Design Alignment and Structure**

<table>
<thead>
<tr>
<th>Research Question Variable</th>
<th>Survey Question</th>
<th>Response choices</th>
</tr>
</thead>
</table>
| Research Question Variable  | Which of the following best describes the academic content area in which you teach at this institution? If you teach in more than one area, choose the one that indicates your primary teaching discipline. | • Behavioral and Social Sciences (Psychology, Criminal Justice, Criminology, Anthropology, Economics, Geography, History, Political Science, Sociology)  
• Biological and Natural Sciences (Anatomy, Biology, Physiology, Astronomy, Chemistry, Earth Science, Environmental Studies, Physics, Physical Science)  
• English and Communications (English, Communications, Composition, Literature, Foreign Language)  
• Humanities (Art, Drama, Humanities, Music, Philosophy)  
• Mathematics and Computer Science (Math, Statistics, Computer Science)  
• Professional Studies (Business, Social Work)  
• Other (please indicate discipline) |

| Research Question Variable  | How many terms have you been teaching in community colleges? (Total number of terms, though not necessarily continuous) | 0; 1; 2; 3; 4+ |

<table>
<thead>
<tr>
<th>Potential Filter</th>
<th>Do you have a degree in Education?</th>
<th>Yes; No</th>
</tr>
</thead>
</table>

| Potential Filter | In addition to your work at this community college, do you teach (or have you taught) in a K-12 setting? | Yes; No |

| Research Question Variable | How many professional development activities (workshops, conferences, webinars) do you participate in each year? | 0; 1; 2; 3; 4+ |

For the following series of questions, each answer choice refers to the *number of times per term* that you engage in this activity.
<table>
<thead>
<tr>
<th>Domain 1 Component 1a</th>
<th>I use different instructional techniques or strategies when I teach different topics.</th>
<th>0 times; 1-3 times; 4-6 times; 7 or more times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain 1 Component 1d</td>
<td>I use varied resources for teaching.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 1 Component 1d</td>
<td>I direct students to varied learning resources.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 1 Component 1d</td>
<td>I plan units of instruction as well as individual class sessions.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 1 Component 1f</td>
<td>I plan how I will assess students' learning when I plan instruction.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 1 Component 1f</td>
<td>I use scoring guides and/or rubrics when I assess students' work and projects.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 1 Component 1f</td>
<td>I assess students' learning in a variety of ways between tests and exams.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 1 Component 1f</td>
<td>I explain to students how their learning will be assessed.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 1 Component 1f</td>
<td>I use assessment data about students' learning to plan future instruction.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 2 Component 2a</td>
<td>I engage in friendly, respectful interactions with students in the classes I teach.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 2 Component 2b</td>
<td>I exhibit genuine enthusiasm for the content in the class I teach.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 2 Component 2b</td>
<td>I convey high expectations of students in the outcomes, activities, and assignments for my class.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 2 Component 2c</td>
<td>I clearly state the standards of conduct for students in the classes I teach.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 2 Component 2c</td>
<td>I work to maintain an atmosphere where students feel safe and supported in their learning in my class.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 3</td>
<td>I clearly identify or explain the</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Component 3a</td>
<td>purpose for individual lessons in my class.</td>
<td>times</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Domain 3 Component 3a</td>
<td>I clearly identify how and where individual lessons fit into the broader learning of my discipline in my class.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 3 Component 3a</td>
<td>I connect the content of my teaching to students' knowledge and experiences in my class.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 3 Component 3c</td>
<td>I design instructional activities and assignments that are appropriate for the students in my class.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 3 Component 3d</td>
<td>I monitor students' progress in my class.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 3 Component 3d</td>
<td>I provide timely and consistent feedback to the students in my class.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 3 Component 3d</td>
<td>I provide opportunities for my students to assess their own work according to specific criteria and performance standards.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 3 Component 3e</td>
<td>I accommodate students' questions when I am teaching.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 3 Component 3a</td>
<td>I try different approaches to teaching material that students have difficulty learning.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 4 Component 4e</td>
<td>I attend professional conferences and workshops in my discipline.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 4 Component 4e</td>
<td>I attend professional conferences and workshops about pedagogy (teaching and instructional methods).</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 1 Component 1b</td>
<td>I plan instruction keeping the strengths and challenges of my students in mind.</td>
<td>0 times; 1-3 times; 4-6 times; 7 or more times</td>
</tr>
<tr>
<td>Domain 1 Component 1c</td>
<td>I write and use specific instructional outcomes for individual class sessions.</td>
<td>Never (0 times); Rarely (1-3 times); Occasionally (4-6 times); Frequently (7-9 times); Always (every time)</td>
</tr>
<tr>
<td>Domain 4 Component 4a</td>
<td>I assess the effectiveness of my instruction by looking for evidence to support my</td>
<td>Never (0 times); Rarely (1-3 times); Occasionally (4-6 times); Frequently (7-9 times); Always (every time)</td>
</tr>
</tbody>
</table>
judgment.

<table>
<thead>
<tr>
<th>Domain 4 Component 4a</th>
<th>I consider and record suggestions for how I could change or improve instruction for the next time I teach that lesson.</th>
<th>Never (0 times); Rarely (1-3 times); Occasionally (4-6 times); Frequently (7-9 times); Always (every time)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain 4 Component 4b</td>
<td>I maintain accurate and effective records of students' completion of work.</td>
<td>Never (0 times); Rarely (1-3 times); Occasionally (4-6 times); Frequently (7-9 times); Always (every time)</td>
</tr>
<tr>
<td>Domain 4 Component 4d</td>
<td>I engage in supportive and collegial professional activities with my colleagues.</td>
<td>Never (0 times); Rarely (1-3 times); Occasionally (4-6 times); Frequently (7-9 times); Always (every time)</td>
</tr>
<tr>
<td>Domain 4 Component 4d</td>
<td>I participate in non-instructional activities (athletic events, musical performances, art shows, etc.) at my institution.</td>
<td>Never (0 times); Rarely (1-3 times); Occasionally (4-6 times); Frequently (7-9 times); Always (every time)</td>
</tr>
<tr>
<td>Domain 4 Component 4f</td>
<td>I maintain honesty, integrity, and confidentiality in my professional interactions.</td>
<td>Never (0 times); Rarely (1-3 times); Occasionally (4-6 times); Frequently (7-9 times); Always (every time)</td>
</tr>
<tr>
<td>Domain 4 Component 4f</td>
<td>I participate in department and institutional meetings or activities when invited.</td>
<td>Never (0 times); Rarely (1-3 times); Occasionally (4-6 times); Frequently (7-9 times); Always (every time)</td>
</tr>
<tr>
<td>Domain 4 Component 4f</td>
<td>I comply with institutional regulations.</td>
<td>Never (0 times); Rarely (1-3 times); Occasionally (4-6 times); Frequently (7-9 times); Always (every time)</td>
</tr>
</tbody>
</table>

If your institution could do one thing to help you improve your teaching, *other than increasing compensation*, what would you recommend?

**Analysis**

To ensure accuracy of the data coding, 5% of those responses received were chosen using SPSS. This manual check showed no errors in data coding for any of the items on the survey. Because the categorical variables define frequency of a particular activity during a term, the variable takes on the characteristics of a continuous variable, much in the way that an interval variable represents a continuous variable. The following example explains

When education levels are defined as high school, some college, undergraduate degree, etc., the levels are categorical, and the researcher should choose a test for
categorical data. However, the researcher could define education level in a slightly different way. If the researcher instead defined education level as years of full-time education, then the variable takes on the characteristics of a Continuous variable, and the researcher should choose a statistical test for a Continuous variable. (Ludford, n.d., para.6)

This descriptive correlational study investigated whether relationships exist between characteristics of Danielson’s Framework (1996) and professional characteristics of community college contingent AS/GE faculty, as indicated by the research questions.

The mean, mode, and standard deviation were calculated for responses to each of the questions in the survey. Determining the mean provided an initial view of the average for the responses to each of the questions. The mode showed which response was most frequently given for each of the questions. The standard deviation indicated how broadly the data were distributed for each question and how closely the data were distributed around the mean, though this information had limited value since the response options represented a relatively small range of data points for each question.

All analyses were performed to determine correlations between variables as indicated in the research questions. Correlations do not determine causation for any instructional practice; the correlation analysis described relationships between two variables in each research question.

To determine the relationships, Pearson correlation was used for those questions that involved continuous independent variables and continuous independent variables. Pearson correlation coefficient describes the linear relationship between two variables in the following questions:
1. Is there a relationship between community college contingent AS/GE faculty’s teaching experience, and the frequency of planning, preparation, and instructional activities defined by Danielson’s domains?

2. Is there a relationship between the frequency of community college contingent AS/GE faculty’s engagement in professional development activities and the frequency of contingent AS/GE faculty’s planning, preparation, and instructional activities defined by Danielson’s domains?

While researchers are always mindful that correlation does not equal causation, they are also interested in explanation and “it is difficult for social scientists to avoid the notion of causality, and this has certainly been dominant mode of ‘explanation’. It fits with our own experience of connections between events” (Kent, 2001, p. 189).

Analysis of variance (ANOVA) is a part of inferential statistics, which implies causal relationships, although there is debate about this function, particularly in the natural sciences. Kent (2001) provides an interesting explanation of this type of analysis. Causal analysis in the social sciences “is concerned with the ways in which some events or circumstances can produce or bring about others. The presumed causes are the ‘independent’ variables and the effects are the ‘dependent’ ones” (Kent, 2001, p. 189). Proof of causation is not established by an existing correlation, but the correlation is a necessary precondition. In cases where a causal link is implied, the cause—or independent variable—must exist before the effect, or dependent variable. ANOVA was used for those questions that involved a categorical, independent variable, which preceded the effect, and activities defined by Danielson’s domains were the dependent variables, or effects in two research questions:
1. Is there a relationship between community college contingent AS/GE faculty’s academic discipline and the frequency of planning, preparation, and instructional activities defined by Danielson’s domains?

2. Is there a relationship between community college size and population served, defined by Carnegie Classification, and the frequency of contingent AS/GE faculty’s planning, preparation, and instructional activities defined by Danielson’s domains?

The final question was open-ended, allowing respondents to provide one or more different ideas or suggestions in their responses. These responses were tallied and organized according to simple patterns.

**Summary**

This chapter presents the four research questions that determined the study and the research design. It describes the population used in this research and it further explains how the sample group was derived from the population and the Carnegie Classifications within the sample. The process for creation of the survey instrument used in this study was explained in detail, including the determination of both reliability and validity. The data collection section includes specific procedures for contacting individual institutions, as well as accounting for the responses and response rates, and the data collection timeframe. Data analysis procedures are delineated, which provide the basis for the findings in Chapter 4.
Chapter Four

Findings

The purpose of this study was to determine whether there is a relationship between the frequency of instructional practices, defined by Danielson’s Framework for Teaching, and specific professional and demographic characteristics of contingent AS/GE faculty in community colleges. An initial analysis of basic measures of central tendency—mean, mode, and standard deviation—was performed on the raw scores for each of the questions in the survey (Appendix H). These analyses were not used for correlation analyses, but they provided information for consideration.

Analysis of Measures of Central Tendency

An analysis of measures of central tendency for the raw scores of the survey results highlighted some pattern anomalies. In examining this data, the following information was culled: AS/GE contingent faculty had strong mode scores for Domain 2: Classroom Environment and many of the questions in Domain 3: Instruction. In Domain 2, this was supported by a high mean score of 3.7 or greater for all questions except “I clearly state the standards of conduct for students in the classes I teach.” The mean for this response was 3.18, which is a slight shift away from the pattern that exists for the responses in this domain.

Domain 4: Professional Responsibilities showed the greatest variation for highest and lowest mode/mean patterns. Student recordkeeping, Honesty, and Compliance show high mode and mean response patterns: “I maintain accurate and effective records of students' completion of work (5 and 4.75); “I maintain honesty, integrity, and confidentiality in my professional interactions” (5 and 4.91); and “I comply with
institutional regulations” (5 and 4.88). Conversely, low mode and mean scores were found specifically for “I attend professional conferences and workshops in my discipline” (2 and 2.099) and “I attend professional conferences and workshops about pedagogy (teaching and instructional methods) (2 and 1.826). “I participate in non-instructional activities (athletic events, musical performances, art shows, etc.) at my institution” also had a low response pattern (2 and 2.27).

In addition, there were some questions with low mode scores without correspondingly low mean scores: “I use assessment data about students' learning to plan future instruction” (2 and 2.68) and “I provide opportunities for my students to assess their own work according to specific criteria and performance standards” (2 and 2.80). Both of these statements deal with assessment in some way, though the first was from Domain 1: Planning and Preparation and the second was from Domain 3: Instruction.

Two questions, both from Domain 1: Planning and Preparation showed a high mode score with a low mean score: “I plan units of instruction as well as individual class sessions” (4 and 2.91) and “I use scoring guides and/or rubrics when I assess students' work and projects” (4 and 2.87). The pattern of high mode/low mean was not replicated with “I write and use specific instructional outcomes for individual class sessions” (4 and 3.39), which appeared later in the survey and was scored on a five-point scale as opposed to a four-point scale. While the questions differ in specificity for planning individual classes, they address the same construct.

After initial analysis of measures of central tendency, raw scores were converted to z-scores, using SPSS, because the scale of responses changed through the course of the survey. After the z-scores were determined, questions were grouped into the Domains of
Danielson’s Framework and composite scores were established for each Domain.

Composite scores are new variables that are often used to measure broad constructs by combining the responses from multiple survey items to yield a more encompassing measure, rather than the individual but related dimensions of a construct. The z-score composites were created using survey items as shown in Table 7.

Table 7

*Composite Z-Score Questions Used for Domains*

<table>
<thead>
<tr>
<th>Domain Composite</th>
<th>N Composite Items</th>
<th>Questions in Composite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain 1 Composite</td>
<td>11</td>
<td>6, 7, 8, 9, 10, 11, 12, 13, 14, 31, 32</td>
</tr>
<tr>
<td>Domain 2 Composite</td>
<td>5</td>
<td>15, 16, 17, 18, 19</td>
</tr>
<tr>
<td>Domain 3 Composite</td>
<td>9</td>
<td>20, 21, 22, 23, 24, 25, 26, 27, 28</td>
</tr>
<tr>
<td>Domain 4 Composite</td>
<td>10</td>
<td>29, 30, 33, 34, 35, 36, 37, 38, 39, 40</td>
</tr>
</tbody>
</table>

After the composite scores were created, two of the research questions were analyzed using Pearson Correlation Coefficient. The analyses are provided for each question.

**Teaching Experience and Danielson’s Framework for Teaching Analysis**

Is there a relationship between community college contingent AS/GE faculty’s teaching experience, and the frequency of planning, preparation, and instructional activities defined by Danielson’s domains?

Teaching experience was an open-ended question, to which respondents responded in “terms” taught; the range of responses was one to 168. Although 168 terms seemed a high number for this question, it would be possible if an institution has two eight-week terms within a semester.
The null hypothesis for this question was that there is no relationship between community college contingent AS/GE faculty’s teaching experience and the frequency of instructional practices as defined by Danielson’s domains, expressed as

\[ H_0: \rho = 0. \]

The alternative hypothesis states that there is a relationship between the variables, expressed as

\[ H_1: \rho \neq 0. \]

The correlations from SPSS are shown in Tables 8, 9, 10, and 11 representing Domains 1, 2, 3, and 4.

Table 8

*Correlation of Teaching Experience and Domain 1 Composite: Planning and Preparation*

<table>
<thead>
<tr>
<th>Terms Z-Score</th>
<th>Domain 1 Composite Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terms Z-Score</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Domain 1 Composite Z</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
</tbody>
</table>

In this analysis, \(N=635\). Because \(p > .05\), the null hypothesis is not rejected, therefore there is not a significant relationship between teaching experience and Domain 1: Preparation and Planning, \(r(633) = .045, p > .05\).
Table 9

Correlation of Teaching Experience and Domain 2 Composite: Classroom Environment

<table>
<thead>
<tr>
<th>Terms Z-Score</th>
<th>Pearson Correlation</th>
<th>Domain 2 Composite Z</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>.045</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.252</td>
</tr>
<tr>
<td>N</td>
<td>635</td>
<td>635</td>
</tr>
</tbody>
</table>

In this analysis, N= 635. Because p > .05, the null hypothesis is not rejected, therefore there is not a significant relationship between teaching experience and Domain 2: Classroom Environment, r(633) = .045, p > .05.

Table 10

Correlation of Teaching Experience and Domain 3 Composite: Instruction

<table>
<thead>
<tr>
<th>Terms Z-Score</th>
<th>Pearson Correlation</th>
<th>Domain 3 Composite Z</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>.030</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.444</td>
</tr>
<tr>
<td>N</td>
<td>635</td>
<td>635</td>
</tr>
</tbody>
</table>

In this analysis, N= 635. Because p > .05, the null hypothesis is not rejected, therefore there is not a significant relationship between teaching experience and Domain 3: Instruction, r(633) = .030, p > .05.
Table 11

*Correlation of Teaching Experience and Domain 4 Composite: Professional Responsibilities*

<table>
<thead>
<tr>
<th>Terms Z-Score</th>
<th>Domain 4 Composite Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terms Z-Score</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Domain 4 Composite Z</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
</tbody>
</table>

In this analysis, N= 635. Because $p > .05$, the null hypothesis is not rejected, therefore there is not a significant relationship between teaching experience and Domain 4: Professional Responsibilities, $r(633) = .053$, $p > .05$.

In summary regarding research Question 1, there is no correlation between community college contingent AS/GE faculty’s teaching experience and the frequency of instructional practices in the Domains as defined by Danielson’s Framework for Teaching.

**Professional Development and Danielson’s Framework for Teaching Analysis**

The second question that was analyzed by Pearson Correlation Coefficient was: Is there a relationship between the frequency of community college AS/GE contingent faculty’s engagement in professional development activities and the frequency of contingent AS/GE faculty’s planning, preparation, and instructional activities defined by Danielson’s domains?

Engagement in professional development activities provided specific responses (0, 1, 2, 3, 4+), in which the five choices form a continuous variable with a very narrow range.
The null hypothesis for this question was that there is no relationship between community college contingent engagement in professional development activities and the frequency of instructional practices as defined by Danielson’s domains, expressed as

\[ H_0: \rho = 0. \]

In addition, the alternative hypothesis states that there is a relationship between the variables, expressed as

\[ H_1: \rho \neq 0. \]

The correlations from SPSS are shown in Tables 12, 13, 14, and 15 representing Domains 1, 2, 3, and 4.

Table 12

*Correlation of Professional Development Engagement and Domain 1 Composite:

Planning and Preparation

<table>
<thead>
<tr>
<th></th>
<th>Pro Dev Z-Score</th>
<th>Domain 1 Composite Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pro Dev Z-Score</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>637</td>
</tr>
<tr>
<td>Domain 1 Composite Z</td>
<td>Pearson Correlation</td>
<td>.226*</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>637</td>
</tr>
</tbody>
</table>

*Correlation is significant at the .01 level (2-tailed)

In this analysis, N= 637. Because \( p < .05 \), the null hypothesis is rejected, therefore there is a significant relationship between professional development engagement and Domain 1: Planning and Preparation, \( r(635) = .030, p < .05 \).
Table 13

*Correlation of Professional Development Engagement and Domain 2 Composite:

*Classroom Environment*

<table>
<thead>
<tr>
<th></th>
<th>Pro Dev Z-Score</th>
<th>Domain 2 Composite Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pro Dev Z-Score</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.799</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>637</td>
</tr>
<tr>
<td>Domain 2 Composite Z</td>
<td>Pearson Correlation</td>
<td>.010</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.799</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>637</td>
</tr>
</tbody>
</table>

In this analysis, N= 637. Because \( p > .05 \), the null hypothesis is not rejected, therefore there is not a significant relationship between professional development engagement and Domain 2: Classroom Environment, \( r(635) = .010, p > .05 \).

Table 14

*Correlation of Professional Development Engagement and Domain 3 Composite:

*Instruction*

<table>
<thead>
<tr>
<th></th>
<th>Pro Dev Z-Score</th>
<th>Domain 3 Composite Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pro Dev Z-Score</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.015</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>637</td>
</tr>
<tr>
<td>Domain 3 Composite Z</td>
<td>Pearson Correlation</td>
<td>.096*</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.015</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>637</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).

In this analysis, N= 637. Because \( p < .05 \), the null hypothesis is rejected, therefore there is a significant positive relationship between professional development engagement and Domain 3: Instruction, \( r(635) = .096, p < .05 \).
Table 15

Correlation of Professional Development Engagement and Domain 4 Composite: Professional Responsibilities

<table>
<thead>
<tr>
<th></th>
<th>Pro Dev Z-Score</th>
<th>Domain 4 Composite Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pro Dev Z-Score</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>637</td>
</tr>
<tr>
<td>Domain 4 Composite Z</td>
<td>Pearson Correlation</td>
<td>.373*</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>637</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.01 level (2-tailed).

In this analysis, N= 637. Because $p < .05$, the null hypothesis is rejected, therefore there is a significant positive relationship between professional development engagement and Domain 4: Professional Responsibilities, $r(635) = .373, p < .05$.

In summary regarding research Question 2, There is a significant positive correlation between community college contingent AS/GE faculty’s professional development engagement and the frequency of instructional practices in Planning and Preparation, Instruction, and Professional Responsibilities, although there is not a correlation between professional development engagement and Classroom Environment.

**Academic Discipline and Danielson’s Framework for Teaching Analysis**

One-Way ANOVA was used for those questions that involved a categorical, independent variable and a continuous dependent variable.

Is there a relationship between community college contingent AS/GE faculty’s academic discipline and the frequency of planning, preparation, and instructional activities defined by Danielson’s domains?

The null hypothesis states that the mean of Danielson’s domain composite scores is equal for all academic disciplines, expressed as
\( H_0: \mu_{\text{Behavioral}} = \mu_{\text{BioNatScience}} = \mu_{\text{EnglishComm}} = \mu_{\text{Humanities}} = \mu_{\text{MathCompSci}} = \mu_{\text{ProfessStudies}} = \mu_{\text{Other}} \)

All that is necessary for the null hypothesis to be rejected is that there is a difference in some way, expressed as

\( H_1: \) At least one of the population means is different from the others.

The correlations from SPSS are shown in Tables 16, 17, 18, and 19 representing Domains 1, 2, 3, and 4.

Table 16

*Correlation Between Academic Disciplines and Domain 1 Composite: Planning and Preparation*

<table>
<thead>
<tr>
<th></th>
<th>Behavior</th>
<th>BioNatSci</th>
<th>EnglishComm</th>
<th>Humanities</th>
<th>MathCompSci</th>
<th>ProfStuds</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>-0.0096</td>
<td>-0.0272</td>
<td>0.2173</td>
<td>0.0106</td>
<td>-0.2344</td>
<td>-0.1762</td>
<td>0.0177</td>
</tr>
</tbody>
</table>

While the actual means for each of the academic disciplines vary, the results of a test of homogeneity of variances, known as the Levene Test, must be examined. In this test, the null hypothesis and the alternative hypothesis are respectively

\( H_0: \sigma^2_{\text{Behavioral}} = \sigma^2_{\text{BioNatScience}} = \sigma^2_{\text{EnglishComm}} = \sigma^2_{\text{Humanities}} = \sigma^2_{\text{MathCompSci}} = \sigma^2_{\text{ProfessStudies}} = \sigma^2_{\text{Other}} \)

\( H_1: \) At least one of the variances is different from the others.

In this case, the Levene Statistic = 1.716 and \( p = .115 \). Because \( p > .05 \) at .115, the null hypothesis for equal means is not rejected and it is assumed the population variances are equal for the groups.
In addition, ANOVA tests for the null hypothesis that the means of the academic disciplines are equal, using an F test, which is the ratio of two variances with each variance represented as a mean square

\[ F = \frac{\text{Mean Square between Groups}}{\text{Mean Square within Groups}} \]

Or

\[ F = \frac{\frac{2.294}{.387}}{\text{Mean Square within Groups}} = 5.930 \]

The p-value in this case is .000, less than .05, therefore the null hypothesis that the means are equal is rejected, and that indicates that at least one of the academic disciplines is different from the others. It is possible to test all possible pairs of academic disciplines through Tukey’s post-hoc test. The results of this test show that Mathematics/Computer Science, and Professional Studies have a stronger negative correlation to Domain 1: Preparation and Planning than do the other academic disciplines, while English and Communications have a significantly stronger positive correlation (Yockey, 2011).

Table 17

*Correlation between Academic Disciplines and Domain 2 Composite: Classroom Environment*

<table>
<thead>
<tr>
<th></th>
<th>Behavior</th>
<th>BioNatSci</th>
<th>EnglishCom</th>
<th>Humanities</th>
<th>MathComSci</th>
<th>ProfStuds</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>.0444</td>
<td>-.1323</td>
<td>.1866</td>
<td>.0824</td>
<td>-.1132</td>
<td>-.3533</td>
<td>-.0604</td>
</tr>
</tbody>
</table>
The means for each of the academic disciplines are shown in Table 16. The results of the Levene Statistic = 8.681 and $p = .000$. Because $p \leq .05$, the null hypothesis for equal means is rejected and the population variances are not equal for the groups.

In addition, ANOVA tests for the null hypothesis that the means of the academic disciplines are equal, using an F test, which is the ratio of two variances with each variance represented as a mean square

$$F = \frac{2.436}{.539} = 4.521$$

The p-value in this case is .000, less than .05, therefore the null hypothesis that the means are equal is rejected, and that indicates that at least one of the academic disciplines is different from the others. Tukey’s post-hoc test determined that English and Communications have a significantly stronger negative correlation to Domain 2: Classroom Environment and Behavioral Sciences and Humanities have a stronger positive correlation than do the other academic disciplines (Yockey, 2011).

Table 18

*Correlation between Academic Disciplines and Domain 3 Composite: Instruction*

<table>
<thead>
<tr>
<th>Behavior</th>
<th>BioNatSci</th>
<th>EnglishCom</th>
<th>Humanities</th>
<th>MathComSci</th>
<th>ProfStuds</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>.0298</td>
<td>-.1560</td>
<td>.1247</td>
<td>.0215</td>
<td>-.0125</td>
<td>-.2284</td>
</tr>
</tbody>
</table>

The actual means for each of the academic disciplines are shown in Table 17. The results of the Levene Statistic = 3.742 and $p = .001$. Because $p \leq .05$, the null hypothesis for equal means is rejected and the population variances are not equal for the groups.
In addition, ANOVA tests for the null hypothesis that the means of the academic disciplines are equal, using an F test, which is the ratio of two variances with each variance represented as a mean square

\[ F = \frac{1.109}{.404} = 2.744 \]

The p-value in this case is .012, less than .05, therefore the null hypothesis that the means are equal is rejected, and that indicates that at least one of the academic disciplines is different from the others. Tukey’s post-hoc test determined that Professional Studies has a significantly stronger negative correlation to Domain 3: Instruction and English and Communications has a significantly stronger positive correlation than do the other academic disciplines (Yockey, 2011).

Table 19

*Correlation between Academic Disciplines and Domain 4 Composite: Professional Responsibilities*

<table>
<thead>
<tr>
<th></th>
<th>Behavior</th>
<th>BioNatSci</th>
<th>EnglishCom</th>
<th>Humanities</th>
<th>MathComSci</th>
<th>ProfStuds</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>.0020</td>
<td>-.1103</td>
<td>.0071</td>
<td>.0795</td>
<td>-.1002</td>
<td>.0183</td>
<td>.1279</td>
</tr>
</tbody>
</table>

The means for each of the academic disciplines are shown in Table 18. The results of the Levene Statistic = .812 and \( p = .560 \). Because \( p > .05 \), the null hypothesis for equal means is not rejected and the population variances are equal for the groups.

In addition, ANOVA tests for the null hypothesis that the means of the academic disciplines are equal, using an F test, which is the ratio of two variances with each variance represented as a mean square

\[ F = \frac{.546}{.228} = 2.398 \]
The p-value in this case is .027, less than .05, therefore the null hypothesis that the means are equal is rejected, and that indicates that at least one of the academic disciplines is different from the others. Tukey’s post-hoc test determined that Biology and Natural Sciences and Mathematics/Computer Sciences have a significantly stronger negative correlation to Domain 4: Professional Responsibilities and the Other disciplines (ranging from health sciences to developmental courses) have a significantly stronger positive correlation than do the other academic disciplines (Yockey, 2011).

**Carnegie Classification and Danielson’s Framework for Teaching Analysis**

One-way ANOVA was used to test for correlations for the question: Is there a relationship between community college size and population served, defined by Carnegie Classification, and the frequency of contingent AS/GE faculty’s planning, preparation, and instructional activities defined by Danielson’s domains? The null hypothesis states that the mean of Danielson’s domain composite scores is equal for all Carnegie Classifications (abbreviated), expressed as

\[ H_0: \mu_{RUSM} = \mu_{RUME} = \mu_{RULA} = \mu_{SUSI} = \mu_{SUMU} = \mu_{URSI} = \mu_{2yu4} \]

The null hypothesis to be rejected if there is a difference in some way, expressed as

\[ H_1: \text{At least one of the population means is different from the others.} \]

The correlations from SPSS are shown in Tables 20, 21, 22, and 23 representing Domains 1, 2, 3, and 4.
While the means for each of the Carnegie Classifications vary, the results of Levene Test must be examined. In this test, the null hypothesis and the alternative hypothesis are respectively

\[ H_0: \sigma^2_{RUSM} = \sigma^2_{RUME} = \sigma^2_{RULA} = \sigma^2_{SUSI} = \sigma^2_{SUMU} = \sigma^2_{URSI} = \sigma^2_{2yu4} \]

\[ H_1: \text{At least one of the variances is different from the others.} \]

In this case, the Levene Statistic = .788 and \( p = .580 \). Because \( p > .05 \), the null hypothesis for equal means is not rejected and the population variances are equal for the groups.

In addition, ANOVA tests for the null hypothesis that the means of the academic disciplines are equal, using an F test, which is the ratio of two variances with each variance represented as a mean square

\[ F = \frac{\text{Mean Square between Groups}}{\text{Mean Square within Groups}} \]

Or

\[ F = \frac{.422}{.405} = 1.043 \]

The p-value in this case is .396, greater than .05, therefore the null hypothesis that the means are equal is not rejected, and that indicates that there is no difference among
the Carnegie Classifications. Because there is no difference among Carnegie Classification, there would not be differences between pairs of classifications and Tukey’s post-hoc test would not be necessary (Yockey, 2011).

Table 21

Correlation between Carnegie Classifications and Domain 2 Composite: Classroom Environment

<table>
<thead>
<tr>
<th></th>
<th>RUSM</th>
<th>RUME</th>
<th>RULA</th>
<th>SUSI</th>
<th>SUMU</th>
<th>URSI</th>
<th>2yu4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>.0537</td>
<td>.0002</td>
<td>.1351</td>
<td>-.0358</td>
<td>.0161</td>
<td>.0065</td>
<td>-.1722</td>
</tr>
</tbody>
</table>

The means for each of the Carnegie Classifications are shown in Table 21. The results of the Levene Statistic = 2.000 and \( p = .064 \). Because \( p > .05 \), the null hypothesis for equal means is not rejected and the population variances are equal for the groups.

In addition, ANOVA tests for the null hypothesis that the means of the academic disciplines are equal, using an F test, which is the ratio of two variances with each variance represented as a mean square

\[
F = \frac{.505}{.557} = .905
\]

The p-value in this case is .490, greater than .05, therefore the null hypothesis that the means are equal is not rejected, and that indicates that there is no difference among the Carnegie Classifications. Because there is no difference among Carnegie Classifications, there would not be differences between pairs of classifications and Tukey’s post-hoc test would not be necessary (Yockey, 2011).
The means for each of the Carnegie Classifications are shown in Table 22. The results of the Levene Statistic = .944 and $p = .463$. Because $p > .05$, the null hypothesis for equal means is not rejected and the population variances are equal for the groups.

In addition, ANOVA tests for the null hypothesis that the means of the academic disciplines are equal, using an F test, which is the ratio of two variances with each variance represented as a mean square

$$F = \frac{.505}{.557} = .905$$

The p-value in this case is .490, greater than .05, therefore the null hypothesis that the means are equal is not rejected, and that indicates that there is no difference among the Carnegie Classifications. Because there is no difference between Carnegie Classifications, there would not be differences between pairs of classifications and Tukey’s post-hoc test would not be necessary (Yockey, 2011).

Table 23

*Correlation between Carnegie Classifications and Domain 3 Composite: Professional Responsibilities*

<table>
<thead>
<tr>
<th></th>
<th>RUSM</th>
<th>RUME</th>
<th>RULA</th>
<th>SUSI</th>
<th>SUMU</th>
<th>URSI</th>
<th>2yu4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>.0410</td>
<td>-.0170</td>
<td>.1109</td>
<td>-.0408</td>
<td>-.0384</td>
<td>.0639</td>
<td>.0324</td>
</tr>
</tbody>
</table>
The means for each of the Carnegie Classifications are shown in Table 23. The results of the Levene Statistic = 1.292 and \( p = .259 \). Because \( p > .05 \), the null hypothesis for equal means is not rejected and the population variances are equal for the groups.

In addition, ANOVA tests for the null hypothesis that the means of the academic disciplines are equal, using an F test, which is the ratio of two variances with each variance represented as a mean square

\[
F = \frac{.283}{.230} = 1.229
\]

The p-value in this case is .289, greater than .05, therefore the null hypothesis that the means are equal is not rejected, which indicates that there is no difference among the Carnegie Classifications. Because there is no difference between Carnegie Classifications, there would not be differences between pairs of classifications and Tukey’s post-hoc test would not be necessary (Yockey, 2011).

**Analysis of Responses to Open-Ended Question**

The final question was open-ended, allowing respondents to provide one or more different ideas or suggestions in their responses: If your institution could do one thing to help you improve your teaching, other than increasing compensation, what would you recommend? Although some participants provided more than one suggestion in their responses, 448 individual response statements were identified, tallied, and organized according to key words or concepts as displayed in Table 24. These were further grouped into broader patterns as shown in Table 25.
Table 24

*Responses to Question 41*

<table>
<thead>
<tr>
<th>Responses From Question 41 according to Key Words or Concepts</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to student records</td>
<td>3</td>
</tr>
<tr>
<td>Adjunct orientation and handbook</td>
<td>7</td>
</tr>
<tr>
<td>Appreciation for work; inclusion; respect</td>
<td>31</td>
</tr>
<tr>
<td>Assistant do to grading</td>
<td>1</td>
</tr>
<tr>
<td>Be given full time jobs</td>
<td>11</td>
</tr>
<tr>
<td>Benefits (health insurance)</td>
<td>3</td>
</tr>
<tr>
<td>Better advising for students (better quality of students)</td>
<td>19</td>
</tr>
<tr>
<td>Better scheduling courses (including location)</td>
<td>4</td>
</tr>
<tr>
<td>Consider non-tenure FT or longer term Employment</td>
<td>1</td>
</tr>
<tr>
<td>Distance Learning Support (certification)</td>
<td>5</td>
</tr>
<tr>
<td>Equitable treatment in resources provided</td>
<td>24</td>
</tr>
<tr>
<td>Greater freedom in teaching, choosing texts; less supervision</td>
<td>9</td>
</tr>
<tr>
<td>Improved class facilities</td>
<td>12</td>
</tr>
<tr>
<td>Improved communication</td>
<td>21</td>
</tr>
<tr>
<td>Improved observation, evaluation, feedback, including peer evaluation (2), midterm evaluation (2), and sharing student evaluations (2)</td>
<td>23</td>
</tr>
<tr>
<td>Improved procedures and systems</td>
<td>11</td>
</tr>
<tr>
<td>Improved technology in the classroom</td>
<td>9</td>
</tr>
<tr>
<td>Improved work facilities, office space</td>
<td>15</td>
</tr>
<tr>
<td>Incentives for longer term commitment</td>
<td>2</td>
</tr>
<tr>
<td>Inclusion in collective bargaining</td>
<td>1</td>
</tr>
<tr>
<td>Inclusion in department meetings, functions, curriculum; make mandatory (3)</td>
<td>26</td>
</tr>
<tr>
<td>Increase student support</td>
<td>8</td>
</tr>
<tr>
<td>Increase teaching assignment (more courses)</td>
<td>2</td>
</tr>
<tr>
<td>Increased instructional support</td>
<td>12</td>
</tr>
<tr>
<td>Increased interest and support from administration, including deans and supervisors</td>
<td>8</td>
</tr>
</tbody>
</table>
Most frequently mentioned (41 times) was a desire for greater collegiality and collaboration with full-time faculty and other adjuncts. “I would enjoy meeting with my colleagues [sic] to discuss techniques and strategies; however, we work in isolation and hardly ever see each other. I guess that comes with the territory when you are an adjunct” is a specific response that underscores the contingent AS/GE faculty’s desire to work more closely with colleagues. A more specific response called for inclusion in department meetings or other functions, including curriculum planning and discussion (26 times). In three of the 26 instances, respondents suggested that this kind of participation should be mandatory. Examples of adjuncts’ comments include: “Hold meetings after normal hours (after 5) or record them so adjuncts who have other full time
jobs can participate” and “Having one department meeting a year in the evening or at an alternative time as those of us who teach part-time in the evenings and teach full-time high school cannot attend during the day.”

A desire for professional development ranked highly with general professional development receiving 30 comments, six of which specifically identified training for adjuncts. There were 29 comments identifying professional development in pedagogy as something community colleges could do to improve contingent AS/GE faculty’s teaching.

Equitable treatment in resources provided was identified in 24 comments and improved communicated was cited in 21 responses.

Table 25

*Grouped Responses to Question 41*

<table>
<thead>
<tr>
<th>Improved Student Services</th>
<th>N =</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better advising for students (better quality of students) placement</td>
<td>19</td>
</tr>
<tr>
<td>Increase student support</td>
<td>8</td>
</tr>
<tr>
<td>Smaller class size</td>
<td>11</td>
</tr>
<tr>
<td><strong>Subtotal for this group</strong></td>
<td><strong>38</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Increased Instructional Support</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to student records</td>
<td>3</td>
</tr>
<tr>
<td>Assistant do to grading</td>
<td>1</td>
</tr>
<tr>
<td>Distance Learning Support (certification)</td>
<td>5</td>
</tr>
<tr>
<td>Improved technology in the classroom</td>
<td>9</td>
</tr>
<tr>
<td>Increased instructional support</td>
<td>12</td>
</tr>
<tr>
<td>Better scheduling courses (including location)</td>
<td>4</td>
</tr>
<tr>
<td>Category</td>
<td>Count</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Equitable treatment in resources provided</td>
<td>24</td>
</tr>
<tr>
<td>Improved class facilities</td>
<td>12</td>
</tr>
<tr>
<td>Improved procedures and systems</td>
<td>11</td>
</tr>
<tr>
<td>Mentoring</td>
<td>7</td>
</tr>
<tr>
<td>Adjunct orientation and handbook</td>
<td>7</td>
</tr>
<tr>
<td>Improved observation, evaluation, feedback, including peer evaluation,</td>
<td>23</td>
</tr>
<tr>
<td>midterm evaluation, and sharing student evaluations</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal for this group</strong></td>
<td><strong>118</strong></td>
</tr>
</tbody>
</table>

| Collaboration, Collegiality, Inclusion, and Respect                     |       |
| Appreciation for work; inclusion; respect                              | 31    |
| Inclusion in department meetings, functions, curriculum; make mandatory| 26    |
| Increased interest and support from administration, including deans    | 8     |
| and supervisors                                                        |       |
| More collegiality and collaboration with full-time faculty, other      | 41    |
| adjuncts                                                               |       |
| Opportunities for committee service                                    | 1     |
| Greater freedom in teaching, choosing texts; less supervision          | 9     |
| **Subtotal for this group**                                            | **116**|

<p>| Increased Benefits or Work Assignments                                |       |
| Be given full time jobs                                               | 11    |
| Benefits (health insurance)                                            | 3     |
| Consider non-tenure FT or longer term Employment                      | 1     |
| Improved work facilities, office space                                | 15    |
| Incentives for longer term commitment                                 | 2     |
| Inclusion in collective bargaining                                    | 1     |
| Increase teaching assignment (more courses)                           | 2     |
| Paid office hours                                                     | 1     |
| Tuition discounts (or free) for family members                        | 5     |
| Tuition reimbursement for advanced course work                        | 8     |
| Opportunities to teach different courses                              | 2     |
| Pay for conference attendance                                         | 15    |
| <strong>Subtotal for this group</strong>                                            | <strong>66</strong>|</p>
<table>
<thead>
<tr>
<th>Professional Development Opportunities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Development — General; Specifically for adjuncts (6)</td>
<td>30</td>
</tr>
<tr>
<td>Professional Development in disciplines</td>
<td>7</td>
</tr>
<tr>
<td>Professional Development in pedagogy</td>
<td>29</td>
</tr>
<tr>
<td>Professional Development in technology</td>
<td>14</td>
</tr>
<tr>
<td>Schedule courses earlier so there is more time to prepare</td>
<td>5</td>
</tr>
<tr>
<td>Share webinars, send articles via email</td>
<td>1</td>
</tr>
<tr>
<td><strong>Subtotal for this group</strong></td>
<td><strong>86</strong></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Improved communication</td>
<td>21</td>
</tr>
<tr>
<td>Less paperwork and legalism</td>
<td>3</td>
</tr>
</tbody>
</table>

**Summary**

The findings outlined in this chapter indicate that there are a few correlations between the instructional practices identified in Danielson’s Framework for Teaching and the specific characteristics of community college AS/GE contingent faculty. Specifically, there are no correlations between community college contingent AS/GE faculty’s teaching experience and Danielson’s Framework for teaching, nor are there correlations between institution size and population served defined by Carnegie Classification and the Framework. The correlations found were between community college AS/GE contingent faculty and the academic disciplines they teach and Danielson’s Framework or the community college AS/GE contingent faculty and their engagement in professional development. In addition to the survey responses to questions that were derived from Danielson’s Framework, participants also provided responses to one, open-ended question that solicited information about what their institutions could do support
improved instruction. These responses, which were organized into response patterns, were also used to provide information for the summary, conclusions, and recommendations in Chapter 5.
Chapter Five

Summary, Conclusions, and Recommendations

The purpose of this study was to determine if correlations or relationships exist between the professional characteristics of community college contingent AS/GE faculty and institution size and population served, and the planning, preparation, class environment, instruction, and professional development activities used by contingent AS/GE faculty in community colleges. Using constructivist theory as the theoretical framework for this research and Danielson’s Framework for Teaching (1996) as the conceptual framework and practical application of this theory, four research questions were posed:

1. Is there a relationship between community college contingent AS/GE faculty’s academic discipline and the frequency of planning, preparation, and instructional activities defined by Danielson’s domains?

2. Is there a relationship between community college contingent AS/GE faculty’s teaching experience, and the frequency of planning, preparation, and instructional activities defined by Danielson’s domains?

3. Is there a relationship between the frequency of community college contingent AS/GE faculty’s engagement in professional development activities and the frequency of contingent faculty’s planning, preparation, and instructional activities defined by Danielson’s domains?

4. Is there a relationship between community college size and population served, defined by Carnegie Classifications, and the frequency of
contingent AS/GE faculty’s planning, preparation, and instructional activities defined by Danielson’s domains?

**Population and Sample**

Contingent faculty teaching courses in the Arts and Sciences or general education divisions in public community colleges was the target population for this study because of the nature of instruction for courses in these disciplines. For this study, community colleges were as defined as public, Associate’s degree-granting institutions as defined by the Carnegie Classifications™ and the following categories were used: Associate's--Public Rural-serving Small; Associate's--Public Rural-serving Medium; Associate's--Public Rural-serving Large; Associate's--Public Suburban-serving Single Campus; Associate's--Public Suburban-serving Multi-campus; Associate's--Public Urban-serving Single Campus; Associate's--Public Urban-serving Multi-campus; Associate's--Public 2-year colleges under 4-year universities. These categories represent 951 community colleges, of which 32% of the institutions were contacted for participation in this study, and 47 agreed to participate.

**Analysis**

To determine the relationships, Pearson correlation was used for those questions that involved continuous independent variables and continuous independent variables. Analysis of variance (ANOVA) was used for those questions that involved a categorical, independent variable and a continuous dependent variable. A final open-ended question allowed respondents to provide one or more different ideas or suggestions about how their institutions could support improved teaching. These responses were tallied and organized according to patterns for analysis.
This chapter provides a summary of the findings and the conclusions based on this data. The implications from this study address issues discovered through the research process. Possibilities for future research are presented in this chapter.

**Summary and Conclusions**

After analyzing the survey responses from 640 community college contingent AS/GE faculty from 47 different institutions across the nation that represent seven Carnegie Classifications for institutional size and population served, a limited numbers of correlations were found.

There were no correlations between community college contingent AS/GE faculty’s teaching experience and the four Domains, nor were there any correlations between community college size and population served, defined by Carnegie Classifications, and the four Domains. Professional Development Engagement and Academic Discipline are the only variables that correlate to the Framework domains.

There was a significant positive correlation between Professional Development Engagement and Domain 1: Planning and Preparation which included specific activities identified in the survey included the use of: different instructional strategies; varied resources; learning resources for students; individual class and unit planning; assessment planning; a variety of formative assessment formats; scoring guides and/or rubrics; explanations to students about how their learning will be assessed; assessment data to plan future instruction.

There was also a significant positive correlation between Professional Development Engagement and Domain 3: Instruction which was defined in the survey by: clearly identifying or explaining the purpose for individual lessons; clearly
identifying how individual lessons fit into broader learning; connecting content to students' knowledge and experiences; creating appropriate instructional activities and assignments; monitoring students' progress; providing timely and consistent feedback; providing opportunities for my students to assess their own work; accommodating students' questions; trying different approaches to teaching material that students have difficulty learning.

There was a significant positive correlation between Professional Development Engagement and Domain 4: Professional Responsibilities, which included such activities assessing effectiveness of instruction with evidence; considering ways to change or improve future instruction; maintaining accurate and effective records of students' work; engaging in supportive, collegial professional activities with colleagues; participating in non-instructional activities; maintaining honesty, integrity, and confidentiality; participating in department and institutional meetings or activities; complying with institutional regulations.

The frequency of engagement in professional development activities, described as participation in workshops, conferences, and webinars, would likely have a positive correlation with Domains One, Three, and Four though this should not be construed to be a causal relationship; which would be impossible to determine from this study and it analysis. Rather, the level of interest and engagement in professional growth would correlate to an interest in and dedication to improved or enhanced preparation, planning, instruction, and professional responsibilities for teaching and student learning.

In addition to the positive correlations between Engagement in Professional Development and the Domains, there were also some correlations between academic
disciplines of community college contingent AS/GE faculty and the Framework for Teaching Domains. There was a positive correlation between English/Communications and planning and preparation and classroom instruction; a positive correlation between Behavioral Sciences and Humanities and classroom environment; a positive correlation between Other disciplines, which varied widely from developmental education to medical and health aide training, and professional responsibilities. Conversely, there was a negative correlation between Mathematics/Computer Sciences and Professional Studies and preparation and planning; a negative correlation between English/Communications and classroom environment; a negative correlation between Professional Studies and instruction; a negative correlation between Biology/Natural Sciences and Mathematics/Computer Sciences and professional responsibilities.

**Domain One: Planning and Preparation Correlations**

Danielson (1996) explains that Domain 1: Planning and Preparation revolves around instructional design “beginning with a deep understanding of content and pedagogy and an understanding of the students and what they bring to the educational encounter” that is used to create “sequences of activities and exercises that make it accessible to students.” (p. 26-27). Specific activities identified in the survey included the use of: different instructional strategies; varied resources; learning resources for students; individual class and unit planning; assessment planning; a variety of formative assessment formats; scoring guides and/or rubrics; explanations to students about how their learning will be assessed; assessment data to plan future instruction.

The study found a positive correlation between Domain One and English/Communications and a negative correlation between Domain One and
Mathematics/Computer Science and Professional Studies identified as Business and Social Work, which could lead to a consideration of what differences exist among the disciplines. One possible explanation may lie in the nature of the disciplines with Mathematics and Computer Sciences requiring a more prescribed, defined, and structured approach to presentation of material and the creation of scaffolded learning experiences. This view somewhat reflects the research findings of Carrell and West (2010), who investigated course-sequence analysis at the Air Force Academy. While their study addressed a longer period and larger range, it still speaks to the issue of scaffolded, prescriptive learning sequencing in mathematics. The same principle can be applied to instruction in Computer Science. While on the surface, it might seem that this would result in a positive correlation with Domain One characteristics, the prescriptive nature and sequence of teaching and learning would result in the opposite for preparations and planning. Conversely, English/Communications does not require such strong, linear, structured approach to presentation and learning of material, but does utilize varied resources, rubrics and/scoring guides, varied formative assessment formats, and possibly more diverse instructional strategies. While these are not definitive, they are possible explanations when considering what might account for different correlations, though these do not explain the negative correlation between Domain 1 and Professional Studies.

**Domain Two: Classroom Environment Correlations**

Classroom Environment in Domain 2 consists of a “comfortable and respectful classroom environment that cultivates a culture for learning and creates a safe place for risk-taking. The atmosphere is businesslike, with non-instructional routines and procedures handled efficiently” which “creates an atmosphere of the importance of
learning and the significance of the content (Danielson, 1996, p. 28). Specific activities that in the survey defined Domain Two include engaging in friendly, respectful interactions with students; displaying genuine enthusiasm in class; conveying high expectations of students; stating clearly standards of student conduct; maintaining an atmosphere where students feel safe and supported in their learning. The study found a positive correlation between Behavioral Sciences and Humanities and classroom environment, and a negative correlation between English/Communications and classroom environment. The nature of the disciplines in Behavioral Sciences would seem to naturally lend themselves to a positive correlation with classroom environment, the same might possibly be true of Humanities, which included Art, Drama, Humanities, Music, Philosophy in this study. Disciplines that foster the development of students’ creativity would likely do so in a safe, positive environment. This same type of atmosphere might be expected in English/Communications, though the study determined a negative correlation between this discipline area and Domain Two.

**Domain Three: Instruction Correlations**

Domain 3: Instruction “contains the components that are at the fundamental heart of teaching – the actual engagement of students in content…” and “…the primary mission of schools: to enhance student learning.” Domain 3 presents a “vision of students developing a complex understanding and participating in a community of learners” (Danielson, 1996, p. 29). Instruction was defined in the survey by these activities and practices: clearly identifying or explaining the purpose for individual lessons; clearly identifying how individual lessons fit into broader learning; connecting content to students' knowledge and experiences; creating appropriate instructional
activities and assignments; monitoring students' progress; providing timely and consistent feedback; providing opportunities for my students to assess their own work; accommodating students' questions; trying different approaches to teaching material that students have difficulty learning. The study resulted in a negative correlation between Instruction and Professional Studies, which were identified as Business and Social Work in this study. There does not appear to be any divergence between these disciplines and the activities described in Domain 3 to account for the negative correlation.

**Domain Four: Engagement in Professional Responsibilities Correlations**

Engagement in professional responsibilities for Domain 4 is characterized as those activities “associated with being a true professional educator” with skills whereby “highly professional teachers distinguish themselves from less proficient colleagues.” The characteristics of Domain 4 identify those “educators who go beyond the technical requirements of their jobs and contribute to the general well-being of the institutions of which they are a part” (Danielson, 1996, p. 31). More specifically, those activities are defined in the survey as attending professional conferences and workshops in my discipline and in pedagogy (teaching and instructional methods); assessing the effectiveness of instruction by looking for evidence to support that judgment; considering and recording suggestions to change or improve instruction for the next time the lesson is taught; maintaining accurate and effective records of students' completion of work; engaging in supportive and collegial professional activities with colleagues; participating in non-instructional activities, such as athletic events, musical performances, art shows, at one’s institution; maintaining honesty, integrity, and confidentiality in professional interactions; participating in department and institutional meetings or
activities when invited; complying with institutional regulations. There was a positive
correlation between Other disciplines, which varied widely from developmental
education to medical and health aide training, and professional responsibilities. At face
value, it might appear that the other disciplines involve updating content knowledge
through workshops, seminars, and conferences, but the Domain 4 activities are much
more varied and encompassing. With this in mind, there is no clear evident possible
explanation for the negative correlation between Biology/Natural Sciences and
Mathematics/Computer Sciences and professional responsibilities. This could be because
the meaning and practice of professional responsibilities varies greatly between K12
educators and instructors in community college, especially those who are contingent
AS/GE faculty, engaged part-time and often on a short term in many cases.

Open-ended Responses from Question 41

Despite their limited engagement with an institution, the open-ended responses
show that community college contingent AS/GE faculty want to be better integrated into
the academic life of their institutions. This is supported by the data in Table 24 in the
Collaboration, collegiality, inclusion, and respect group.

When looking at the Question 41 responses grouped together, Increased
Instructional Support was the category with the greatest number of responses (118) and it
shows a diversity of responses (12 different responses; tied with Increased Benefits or
Work Assignments in terms of number different responses). These data support the
findings of the recent study by (Street, et al., 2012), which found that contingent faculty
frequently have limited instructional support for teaching including everything from
adequate time for preparation to facilities that are inadequate or inappropriate for instruction.

In addition, contingent AS/GE faculty strongly indicated a desire for professional development, whether it be general (30 responses) with application to adjuncts (6 comments) or professional development in pedagogy which was cited in 29 comments. One comment stated, “Offer opportunities for staff development and/or opportunities to learn more about teaching adults, because my career focus was teaching adolescents.” This reflects the low mode and mean pattern previously identified in this chapter: “I attend professional conferences and workshops in my discipline” (2 and 2.099) and “I attend professional conferences and workshops about pedagogy (teaching and instructional methods) (2 and 1.826). When AS/GE contingent faculty responded with ratings in these areas and specifically cited a desire for professional development, there is a functional starting point for recommendations based on this investigation. Professional development also rated highly in the Professional Development opportunities group responses, shown in Table 24.

This could be paired with contingent AS/GE faculty’s requests for improved observation, evaluation, and feedback (23 comments), and more specifically peer evaluation mentioned twice, which, if done in a supportive and non-threatening way, corresponds to the desire for increased collaboration and collegiality. Contingent AS/GE faculty also expressed a desire for mid-term evaluations (2) and that student evaluations should be shared (2). Both of the requests could be accommodated easily in most institutions.
Another response set that ranked highly was the desire for greater appreciation of their work, increased inclusion, and respect. In this area, contingent AS/GE faculty has some highly expressive comments, but one very succinct statement encapsulated by saying, “Become a visible member of the faculty, instead of ‘invisible’.” This lack of appreciation and respect might have also been reflected in the perception that resources for contingent AS/GE faculty are not available or not provided in an equitable manner (24). This also is consistent with the previously cited observation by Roueche, Roueche, & Milliron (1996) that states “that few college administrators are aggressively and systemically directing their colleges' efforts toward integrating part-time faculty” (p. 39).

Finally, contingent AS/GE faculty very clearly expressed a desire for more and improved communication (21 responses). While there are innumerable possibilities for interpreting those statements, one in particular is noted, “Immediate feedback and direction if problem arises.” This practice of immediately addressing problems seems to make good sense in any case, about any situation.

**Recommendations for Research**

Quantitative inquiry on a bold, national scale can provide information about specific variables, their relationships and interactions, and their prevalence in larger populations; it can also be somewhat inconclusive. Further research is warranted considering the paucity of correlations from the study, the comments shared by the survey participants, and the high percentage of community college courses that are taught by contingent AS/GE faculty.

In pursuing the application of Danielson’s Framework for Teaching in postsecondary settings, the first recommendation is that an additional study (or studies)
should be conducted in all segments of higher education: full-time faculty, part-time faculty, contingent faculty; in four-year institutions and two-year institutions; both public and private colleges and universities. This would provide the necessary data to determine whether this limited study produced anomalous results that exist in only one segment of contingent faculty in community colleges or if the results are consistent with all segments of postsecondary education. The results of further studies would provide a foundation for a revised “framework for teaching in higher education” that would embody best practices for that level of instruction.

The second recommendation for research is a reconsideration of Danielson’s Domain 4: Professional Responsibilities for better application in higher education, particularly for contingent faculty. This would include further study of the body of literature regarding professional responsibilities in higher education, as well as additional studies about the nature of and desire for “inclusion” of contingent faculty in the academic life of an institution as well as collegial and collaborative engagement in the community.

A third possibility is the development and addition of a fifth domain of practice in higher education that addresses the increasing popularity of online courses, teaching, and learning. Educators at all levels have found that there are significant differences between “on ground” and online classes, and to that end, a significant body of literature and research has developed about these practices. While virtual schools exist in K-12 education, the increasing offerings for online courses in higher education is a prime consideration for the development of a fifth domain that concentrates on the effective, efficacious, and successful practices of online teaching and learning.
A fourth recommendation of future research is the potential for increased analysis of validity and reliability of this survey instrument and the survey process in general.

**Recommendations for Practice**

Based on the findings of this study, community college AS/GE academic administrators have a small starting point to consider relationships between contingent faculty’s academic disciplines, professional development engagement, and specific activities related to the preparation and planning of instruction, classroom environment, instruction, and professional responsibilities. As previously noted, these correlations are limited, but may be the foundation for further consideration of plans and programs related to the use of contingent faculty in AS/GE courses.

These recommendations for practice may be particularly important because experience or seniority is often the basis for assignment of courses to contingent faculty. In addition, experience and/or seniority are also often used for full-time faculty’s course assignments. This study determined that there is no significant correlation between contingent faculty’s teaching experience and the application of Danielson’s activities in any Domain.

The literature provided in Chapter 2 shows that there is increasing interest in and concern with the shift from a teaching to a learning paradigm (Angelo & Cross, 1993; Barr & Tagg, 1995; Chickering & Gamson, 1987; J. Q. Easton & Guskey, 1983; T. R. Guskey, 1986; T. R. Guskey, et al., 1984; T. R. Guskey & Monsaas, 1979; McKeachie, 1954; McKeachie & Kulick, 1975; Pryor, 2010, August 30; U. S. Department of Education, 2006). At this time, the most effective responses to this concern might well be those that are closest to home, with community colleges addressing the assessment of
the student learning, teaching effectiveness, best practices in the classroom, and faculty support in their own institutions. This is especially true in light of the community college’s mission toward providing more open and unrestricted education in which Cross notes “the gap between student abilities and educational offerings will be narrowed by moving education toward learning needs” (p. 76).

Another recommendation might be a critical analysis of student learning in an individual institution and an implied need to have a model, goal, or standard of teaching that results in improved student learning. Based on contingent AS/GE faculty’s desire for improved observation, evaluation, and feedback (23), including peer evaluation (2), midterm evaluation (2), and sharing student evaluations (2), the goal of teaching for learning could be a strategic initiative for a community college that is seeking that kind of transformation. In light of the research and mandates for accountability in learning for higher education, this could be a different approach to defining success for students and institutions (Center for Community College Student Engagement, 2010; Smith, 2012; U. S. Department of Education, 2006).

Based on the participant responses from this investigation, institutions should elicit their contingent faculty’s responses to what could be done, beyond compensation, to help improve their teaching. Increased instructional support was the area in which AS/GE contingent faculty provided the most responses to Question 41. While there is some cost associated with improved technology in the classroom, improved class facilities, and providing equitable treatment in resources, these conditions are also directly associated with student learning. Better scheduling of courses, improved procedures and systems, adjunct orientation and handbooks, mentoring, and improved
observation, evaluation and feedback, including peer evaluation, midterm evaluation, and sharing student evaluations involve minimal cost to potentially achieve considerable benefit for students. In addition, AS/GE contingent faculty clearly expressed twelve different ways to support them through increased benefits or work assignments, a desire to be hired full-time was not the most common response; rather, improved work facilities, office space, and payment for attendance at conferences were most commonly cited. Although there is a cost associated, addressing these issues is recommended to provide a degree of greater professional productivity whenever possible. That also presumes that an institution is providing resources for learning and teaching, noting that many adjuncts (24) indicated inequity in resources allocation.

Certainly, the least expensive and possibly most effective recommendation garnered from the open-ended responses is increased communication with contingent faculty. This would facilitate improved professional relationships and performance and would help to meet contingent faculty’s desire for inclusion and respect, but also could foster and encourage increased interest and support from administration, including deans and supervisors and more collegiality and collaboration with full-time faculty and other adjuncts. Practically, inclusion in department meetings and opportunities for committee service would provide a more complete understanding of and by “faculty” by including such a substantial portion of them.
American Association of Community Colleges. (2011). Community colleges past to present, from
http://www.aacc.nche.edu/AboutCC/history/Pages/pasttopresent.aspx

American Association of Community Colleges. (2012a). Fast Facts, from
http://www.aacc.nche.edu/AboutCC/Pages/fastfacts.aspx

American Association of Community Colleges. (2012b). Students at community colleges, from
http://www.aacc.nche.edu/AboutCC/Trends/Pages/studentsatcommunitycolleges.aspx

American Association of University Professors. (n.d.). AAUP: Contingent Faculty, from
http://www.aaup.org/AAUP/issues/contingent/


Center for Community College Student Engagement. (2010). The heart of student success: Teaching, learning, and college completion (CCCSE findings). Austin, TX: The University of Texas at Austin, Community College Leadership Program.


Community/31387/


Mendelowitz, S. (1998). The over-use and under-pay of part-time faculty in America's colleges. Champaign, IL.


Riley, N. S. (2011). *The faculty lounges: and other reasons why you won't get the college education you paid for.* Lanham, MD: Ivan R. Dee


Sandford, B. (2002). *A national assessment of the activities, perceived instructional needs and appropriate methods of delivering professional development for part-time technical and occupational education faculty in the community colleges of the united states (Doctoral dissertation)*. Doctor of Philosophy, The Ohio State University, Columbus, OH. Retrieved from [http://www.ohiolink.edu/etd/](http://www.ohiolink.edu/etd/)

Sartain, L., Stoelinga, S. R., & Krone, E. (2010, June 2010). Rethinking teacher evaluation: Findings from the first year of the excellence in teaching project in Chicago Public Schools


Strange, C. C. (2012, January). "The times are changin' and other tales of higher education". Lecture conducted from Lourdes University. Sylvania, OH.


Street, S., Maisto, M., Merves, E., & Rhoades, G. (2012). Who is Professor "Staff," and how can he teach so many classes? : Center for the Future of Higher Education.


Appendix A

Danielson’s Domains

**Domain 1: Planning and Preparation**
- Demonstrating Knowledge of Content and Pedagogy
- Demonstrating Knowledge of Students
- Setting Instructional Outcomes
- Demonstrating Knowledge of Resources
- Designing Coherent Instruction
- Designing Student Assessments

**Domain 2: Classroom Environment**
- Creating and Environment of Respect and Rapport
- Establishing a Culture for Learning
- Managing Classroom Procedures
- Managing Student Behavior
- Organizing Physical Space

**Domain 3: Instruction**
- Communicating with Students
- Using Questioning and Discussion Techniques
- Engaging Students in Learning
- Using Assessment in Instruction
- Demonstrating Flexibility and Responsiveness

**Domain 4: Professional Responsibilities**
- Maintaining records of progress of student learning
- Developing relationships with colleagues
- Participating in and contributing to the institutional mission
- Serving the profession
- Enhancing content knowledge and pedagogical skill
Appendix B

Initial Email Contact to Chief Academic Officers

Subject: Dissertation Survey Participation Request

Dear (Insert Title and Name)

Two facts:

- Community colleges serve almost half of the students who are pursuing postsecondary educational opportunities today
- Two-thirds of community college instructors are employed as contingent or adjunct faculty

led me to my dissertation research—An Analysis of Instructional Practices of Contingent Faculty in Community Colleges.

Your community college has been chosen to participate in a survey that will assure institutions of varying sizes and locations are represented in this study.

This will involve contingent faculty responding to a short (40 questions), anonymous survey about planning, instruction, classroom environment, and professional responsibilities.

I hope that you will agree to your institution’s participation and in doing so you, or your designee, will

- **Respond YES** to this email asking for your institution’s participation;
- **Forward, via email distribution list**, a message to your Arts & Sciences (or General Education) adjunct/contingent faculty, directing them to the online survey (message provided after agreement to participate).

You will also receive a follow-up letter with more information. I would be happy to send you a copy of the first chapter (overview) of my dissertation and/or share an executive summary of my findings when this study is complete.

Thank you in advance for considering this request.

Sincerely,

Carol Schwartz
Doctoral Candidate
Higher Education Administration
Appendix C:

Initial Letter Contact to Chief Academic Officers

Doctoral Candidate
Higher Education Administration
University of Toledo
Toledo Ohio
carol.schwartz@rockets.utoledo.edu

June 13, 2012

Insert <Address Block>

Dear <Title Name>:

Community colleges have traditionally welcomed a tremendously diverse group of students who reflect a wide range of academic abilities and preparation; today, community colleges serve almost half of the students who are pursuing postsecondary educational opportunities. In 2009, President Barack Obama speculated that community colleges “could play a key role in helping boost the ailing economy for years to come.”

At the same time, two-thirds of community college instructors are employed part-time by their institutions and the number and percent of these faculty members, also known as contingent or adjunct faculty, has risen consistently over the past 45 years.

The convergence of these two phenomena led me to my dissertation research—An Analysis of Instructional Practices of Contingent Faculty in Community Colleges—in which I am asking contingent faculty from community colleges across the nation to respond to a short (40 questions) survey about planning, instruction, classroom environment, and professional responsibilities.

Your community college has been chosen to participate in this survey in a stratified random sample that will assure that institutions of varying sizes and locations are represented in this study. I hope that you will agree to participation, and in doing so will

- Respond YES to a follow-up email asking for your institution’s participation;
- Forward, via email distribution list, a message to your Arts & Sciences (or General Education) adjunct/contingent faculty, directing them to the online survey (message provided after agreement to participate);
- Forward via email distribution list, a follow-up message to your adjunct/contingent faculty, reminding them to complete the survey.

If you would like more information about my dissertation, I would be happy to send you a copy of the first chapter (overview). Also, I will be happy to share an executive summary of my findings when this is complete.

Thank you in advance for considering this request.

Sincerely,

Carol Schwartz
Appendix D

Follow-up Email Contact to Chief Academic Officers

Subject: Dissertation Survey Participation Request Follow-Up

Recently, I sent a request for your institution’s participation in survey that is part of my dissertation. While you are considering this request, I would like to assure you that

1. My research is **IRB approved as EXEMPT** by the University of Toledo (#107880) because of the minimal risk to and anonymity of participants. I would be happy to email my institution's IRB approval form, which includes the survey.

2. The results of data **collected are not identifiable by individual or by institution.** All data is aggregated by institution **size and population served** (Carnegie classification).

3. Administrative participation is limited to you or your designee **copying and pasting text into an email message** to be **forwarded via email distribution list** to your Arts & Sciences (or General Education) adjunct/contingent faculty (teaching **Spring and/or Summer terms**). The text directs the adjuncts to a website where they respond to a survey, which should take no longer than 10 minutes to complete. Those who complete this survey by July 15 can enter a drawing for gift cards to a national restaurant chain or a national coffeehouse chain.

THANKS so much for your time and willingness to consider this possibility. It means a great to me in my research.
Appendix E

Instructional Practices Survey

Dear Adjunct/Contingent Faculty Member:

Your community college has agreed to participate in a dissertation survey and is distributing this message to you for your response.

I am asking adjunct/contingent faculty to respond to a short (41 questions), anonymous survey about your planning, instruction, classroom environment, and professional responsibilities. This electronic survey will take no more than 10 minutes of your time.

Your participation in this study is voluntary and confidential. There are no known risks to participating and you have the right to stop participating at any point in the survey. Please do not include your name or any other identifying information. All means of identifying electronic source data have been disabled.

You can start the survey by clicking this link

Or by pasting the address below into a web browser:

In appreciation for your participation, you have an opportunity to enter a drawing for a gift certificate to a national restaurant chain or a national coffeehouse chain. There is a link at the end of this survey (to a website that is independent of/not connected to this survey) where you can submit your entry information.

The drawing will be open to all who complete and submit the survey by July 15, 2012. Contact information can be submitted at that connected website and winning participants will be notified by email.

Sincerely,
Carol Schwartz
Doctoral Candidate
Higher Education Administration
Appendix F

Instructional Practices Survey

Instructional Practices Survey (original)
Survey Introduction

Dear Adjunct Faculty Member:

You are invited to participate in a dissertation research study entitled, *An Analysis of the Instructional Practices of Community College Contingent Faculty*, which is being conducted at the University of Toledo under the direction of David Meabon, Ph.D. and Carol Schwartz, M.Ed. As you may know, the number of adjunct (or contingent) faculty in community colleges has been increasing and it appears that trend will continue in the future. The purpose of this study is to look for patterns or correlations in the instructional practices of this specific segment of community college instructors.

This study consists of an electronic survey that will take no more than 15 minutes of your time. The only direct benefit to you if you participate in this research may be that you will learn more about the instructional practices of community college adjunct faculty. Others in higher education who are concerned with community college instruction or faculty issues might also benefit from this research.

Your participation in this study is voluntary and confidential. There are no known risks to participating. Your refusal to participate will not affect your relationship with the University of Toledo, and you have the right to stop participating at any point in the survey. Your reply will be held in the strictest confidence, so please do not include your name or any other identifying information on the questionnaire. All means of identifying electronic source data have been disabled.

By completing this survey, you are implying your consent to participate in this study. If you consent to participate, please complete the questionnaire that follows by clicking on the “Next” button at the bottom of this page.

If you have questions or concerns at any time regarding this survey or wish to be informed of the results, please contact Carol Schwartz at carol.schwartz@rockets.toledo.edu, or Dave Meabon at david.meabon@utoledo.edu. If you have questions beyond those answered by the researchers or about your rights as a research subject, the Chairperson of the SBE Institutional Review Board may be contacted through the Office of Research at 419-530-2844.

Thank you for your time and assistance in this research.

Sincerely,

David Meabon, Ph.D.
Principal Investigator

Carol Schwartz
Ph.D. candidate

IRB #107880
In appreciation for your participation, there will be an opportunity to enter a drawing for gift certificates to a national restaurant chain or a national coffeehouse chain at the end of the survey period. There will be a link at the end of this survey to a website that is independent of/not connected to this survey. The drawing will be open to all who complete and submit the survey by July 15, 2012. Contact information can be submitted at that connected website and winning participants will be notified by email.

Next

50%
Instructional Practices Survey (original)

Survey Questions

You may choose not to answer any individual question, but please be aware that every response provides more data to for this study.

If you decide to change an answer, click on check mark to "deselect" that response and then click on your new answer choice.

After you click the Submit button at the bottom of the page, there will be a gentle reminder if you skipped any responses. If skipping a question was an error, you can go back and respond to the question.

If you intentionally passed on a question, just click the Submit button again.

1. Which of the following best describes the academic content area in which you teach at this institution? If you teach in more than one area, choose the one that indicates your primary teaching discipline.

☐ Behavioral and Social Sciences Sciences (Psychology, Criminal Justice, Criminology, Anthropology, Economics, Geography, History, Political Science, Sociology)

☐ Biological and Natural Sciences (Anatomy, Biology, Physiology, Astronomy, Chemistry, Earth Science, Environmental Studies, Physics, Physical Science)

☐ English and Communications (English, Communications, Composition, Literature, Foreign Language)

☐ Humanities (Art, Drama, Humanities, Music, Philosophy)

☐ Mathematics and Computer Science (Math, Statistics, Computer Science)

☐ Professional Studies (Business, Social Work)

☐ Other (please indicate discipline) ________

2. How many terms have you been teaching in community colleges? (Total number of terms, though not necessarily continuous)

________

3. Do you have a degree in Education?
4. In addition to your work at this community college, do you teach (or have you taught) in a K-12 setting?

☐ Yes  ☐ No

5. How many professional development activities (workshops, conferences, webinars) do you participate in each year?

☐ 0  ☐ 1  ☐ 2  ☐ 3  ☐ 4+

Your experience in community college teaching may cover a number of different institutions and courses. For this survey, please limit your responses to your experience at the institution from which you received this survey. Also, focus your attention on one class and respond to the questions as the instructor of that one class for the purpose of this survey.

For the following series of questions, each choice refers to the number of times per term that you engage in this activity.

6. I use different instructional techniques or strategies when I teach different topics.

☐ 0 times  ☐ 1-3 times  ☐ 4-6 times  ☐ 7 or more times

7. I use varied resources for teaching.

☐ 0 times  ☐ 1-3 times  ☐ 4-6 times  ☐ 7 or more times

8. I direct students to varied learning resources.

☐ 0 times  ☐ 1-3 times  ☐ 4-6 times  ☐ 7 or more times

9. I plan units of instruction as well as individual class sessions.

☐ 0 times  ☐ 1-3 times  ☐ 4-6 times  ☐ 7 or more times

10. I plan how I will assess students’ learning when I plan instruction.
<table>
<thead>
<tr>
<th></th>
<th>0 times</th>
<th>1-3 times</th>
<th>4-6 times</th>
<th>7 or more times</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.</td>
<td>I use scoring guides and/or rubrics when I assess students' work and projects.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>12.</td>
<td>I assess students' learning in a variety of ways between tests and exams.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>13.</td>
<td>I explain to students how their learning will be assessed.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>15.</td>
<td>I engage in friendly, respectful interactions with students in the classes I teach.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>16.</td>
<td>I exhibit genuine enthusiasm for the content in the class I teach.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>17.</td>
<td>I convey high expectations of students in the outcomes, activities, and assignments for my class.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>18.</td>
<td>I clearly state the standards of conduct for students in the classes I teach.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
19. I work to maintain an atmosphere where students feel safe and supported in their learning in my class.

- 0 times
- 1-3 times
- 4-6 times
- 7 or more times

20. I clearly identify or explain the purpose for individual lessons in my class.

- 0 times
- 1-3 times
- 4-6 times
- 7 or more times

21. I clearly identify how and where individual lessons fit into the broader learning of my discipline in my class.

- 0 times
- 1-3 times
- 4-6 times
- 7 or more times

22. I connect the content of my teaching to students' knowledge and experiences in my class.

- 0 times
- 1-3 times
- 4-6 times
- 7 or more times

23. I design instructional activities and assignments that are appropriate for the students in my class.

- 0 times
- 1-3 times
- 4-6 times
- 7 or more times

24. I monitor students' progress in my class.

- 0 times
- 1-3 times
- 4-6 times
- 7 or more times

25. I provide timely and consistent feedback to the students in my class.

- 0 times
- 1-3 times
- 4-6 times
- 7 or more times

26. I provide opportunities for my students to assess their own work according to specific criteria and performance standards.

- 0 times
- 1-3 times
- 4-6 times
- 7 or more times

27. I accommodate students' questions when I am teaching.
28. I try different approaches to teaching material that students have difficulty learning.

<table>
<thead>
<tr>
<th>0 times</th>
<th>1-3 times</th>
<th>4-6 times</th>
<th>7 or more times</th>
</tr>
</thead>
</table>

29. I attend professional conferences and workshops in my discipline.

<table>
<thead>
<tr>
<th>0 times</th>
<th>1-3 times</th>
<th>4-6 times</th>
<th>7 or more times</th>
</tr>
</thead>
</table>

30. I attend professional conferences and workshops about pedagogy (teaching and instructional methods).

<table>
<thead>
<tr>
<th>0 times</th>
<th>1-3 times</th>
<th>4-6 times</th>
<th>7 or more times</th>
</tr>
</thead>
</table>

The response choices are different for the next series of questions. Continue to focus on one class (at the institution from which you received this survey if you teach at more than one community college) and respond to the question for that class.

Each choice refers to the frequency per term that you engage in this activity. If it helps to think of the choices in numbers, consider the following:

- **Never** is 0 times
- **Rarely** is 1-3 times
- **Occasionally** is 4-6 times
- **Frequently** is 7-9 times
- **Always** is every time

31. I write and use specific instructional outcomes for individual class sessions.

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Frequently</th>
<th>Always</th>
</tr>
</thead>
</table>

32. I plan instruction keeping the strengths and challenges of my students in mind.

<table>
<thead>
<tr>
<th>0 times</th>
<th>1-3 times</th>
<th>4-6 times</th>
<th>7 or more times</th>
</tr>
</thead>
</table>

33. I assess the effectiveness of my instruction by looking for evidence to support my judgment.

☐ Never  ☐ Rarely  ☐ Occasionally  ☐ Frequently  ☐ Always

34. I consider and record suggestions for how I could change or improve instruction for the next time I teach that lesson.

☐ Never  ☐ Rarely  ☐ Occasionally  ☐ Frequently  ☐ Always

35. I maintain accurate and effective records of students' completion of work.

☐ Never  ☐ Rarely  ☐ Occasionally  ☐ Frequently  ☐ Always

36. I engage in supportive and collegial professional activities with my colleagues.

☐ Never  ☐ Rarely  ☐ Occasionally  ☐ Frequently  ☐ Always

37. I participate in non-instructional activities (athletic events, musical performances, art shows, etc.) at my institution.

☐ Never  ☐ Rarely  ☐ Occasionally  ☐ Frequently  ☐ Always

38. I maintain honesty, integrity, and confidentiality in my professional interactions.

☐ Never  ☐ Rarely  ☐ Occasionally  ☐ Frequently  ☐ Always

39. I participate in department and institutional meetings or activities when invited.

☐ Never  ☐ Rarely  ☐ Occasionally  ☐ Frequently
40. I comply with institutional regulations.

- Never
- Rarely
- Occasionally
- Frequently
- Always

41. If your institution could do one thing to help you improve your teaching, other than increasing compensation, what would you recommend?

[SurveysGizmo]
Thank you for participating in this survey. Your responses are very important to this study. If you would like to enter the drawing for a gift certificate, please click on the link below, which will take you to a different website where you can submit contact information. You will need to enter the identifier below to assure that you completed the study.

Identifier: Rocket Blast

Click HERE to enter the drawing.
Appendix G

IRB Approval Document

To: David Meabon, Ph.D. and Carol Schwartz
   Department of Educational Leadership

From: Barbara K. Chesney, Ph.D., Chair
      Kamala London, Ph.D., Vice Chair
      Walter Edinger, Ph.D., Chair Designee

Signed: ________________________________ Date: 05/22/12

Subject: IRB #107880
   Title: An Analysis of Instructional Practices of Contingent Faculty in Community Colleges

On 05/22/12, the above research was reviewed and approved as Exempt (categories #1 & #2b) by the Chair and Chair Designee of the University of Toledo (UT) Social Behavioral & Educational Institutional Review Board (IRB). The requirement to obtain a signed consent/authorization for use and disclosure of protected health information form has been waived as this research is determined to be minimal risk and a signed consent/authorization document would be the only record linking the subject to the data. It was determined that this waiver for signed consent/authorization will not adversely affect the rights and welfare of the participants. This action will be reported to the committee at its next scheduled meeting.

Please Note: A consent form is not required for this study. However an Information Sheet regarding the study should be distributed to potential participants. This Information Sheet should include the name and telephone number of a contact person in case the subjects need additional information. It is also strongly encouraged that the study be explained verbally to potential subjects.

Items Reviewed:
- IRB Application Requesting Exempt Review
- Survey(s)

Designated as EXEMPT RESEARCH on: 05/22/12

Please read the following attachment detailing Principal Investigator responsibilities.
Investigator Responsibilities in Research Involving Human Subjects

A. Investigators must acknowledge and accept their responsibility for protecting the rights and welfare of human research subjects and for complying with all applicable federal regulations, as well as UT policies regarding research with human subjects. It is the responsibility of each investigator to know and understand those regulations and policies prior to initiating any such research.

B. Only a UT IRB can make the determination of Exempt Research after review of the proposed protocol. Investigators who intend to involve human research subjects will not make the final determination of exemption from applicable Federal regulations and must submit an application to the IRB.

C. Investigators are responsible for providing a copy of the UT IRB-approved informed consent document to each subject at the time of consent and after signing by the subject, unless the IRB has specifically waived this requirement. All documents and study records are to be retained for 3 years in a manner approved by the UT IRB. Investigators must also follow all additional records retention guidance (HIPAA, State laws etc.) as applicable to their research.

D. When applicable, Investigators must comply with the Health Insurance Portability and Accountability Act of 1996 (HIPAA). If consent or authorization is revoked by a subject, it is the responsibility of the P.I. to obtain the required signed document(s) and submit these to UT's Health Information Management Department as required by institutional policy in compliance with the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule Privacy Rule (45 CFR 164).

E. Investigators will promptly report proposed changes/modifications in previously approved human subject research activities to the UT IRB. The proposed changes will not be initiated without UT IRB review and approval, except where necessary to eliminate apparent immediate hazards to the subjects.

F. Investigators are responsible for reporting progress of approved research to the UT IRB, as often as required, and in the manner prescribed by the IRB on the basis of risks to subjects, but not less than once per year.

G. Investigators will promptly report to the UT IRB any injuries or other unanticipated problems involving risks to subjects or others.

H. Annual Continuing Review is mandated for all human subject research by federal law. It is the responsibility of the Principal Investigator to have his/her own reminder system in place to initiate the continuing review process. The continuation of research after expiration of IRB approval is a violation of federal regulations. There are NO provisions for a grace period beyond the termination date. If IRB approval has expired, research activities must STOP and no new subjects may be enrolled in the study, until IRB review and approval has been obtained.

I. All Investigators are responsible for completing a Final Report Form. The date that you review and sign the Final Report Form must be on (or a few days after) the IRB approval period Expiration Date or your requested Date of Termination for the research. All forms related to human subject research, including the Final Report Form, can be found on the Research and Sponsored Programs web pages. http://research.utoledo.edu/forms.htm

J. No investigator will seek to obtain research credit for, or use data from, patient interventions that constitute the provision of emergency medical care without prior UT IRB approval. A physician may provide emergency medical care to a patient without prior IRB review and approval to the extent permitted by law (see Section 119(f)). However, such activities will not be counted as research nor the data used in support of research.

K. Investigators will advise the UT IRB, Research & Sponsored Programs Administration and the appropriate officials of other institutions of the intent to admit human subjects into another institution (e.g., into another hospital) who are involved in research protocols. When such admissions are a planned part of DHHS-supported research, those institutions must possess an applicable Human Research Assurance prior to involvement of such persons as human subjects in those research protocols at those institutions.

Department for Human Research Protections

Investigator Responsibilities
Appendix H

Initial Analysis: Measures of Central Tendency

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Which of the following best describes the academic content area in which you</td>
<td>Behavioral and Social Sciences (Psychology, Criminal Justice, Criminology,</td>
</tr>
<tr>
<td>teach at this institution? If you teach in more than one area, choose the one</td>
<td>Anthropology, Economics, Geography, History, Political Science, Sociology)</td>
</tr>
<tr>
<td>that indicates your primary teaching discipline. N= 155</td>
<td>Biovalent and Natural Sciences (Anatomy, Biology, Physiology, Astronomy,</td>
</tr>
<tr>
<td></td>
<td>Chemistry, Earth Science, Environmental Studies, Physics, Physical Science)</td>
</tr>
<tr>
<td></td>
<td>N= 65</td>
</tr>
<tr>
<td></td>
<td>English and Communications (English, Communications, Composition, Literature,</td>
</tr>
<tr>
<td></td>
<td>Foreign Language)</td>
</tr>
<tr>
<td></td>
<td>N= 145</td>
</tr>
<tr>
<td></td>
<td>Humanities (Art, Drama, Humanities, Music, Philosophy)</td>
</tr>
<tr>
<td></td>
<td>N= 61</td>
</tr>
<tr>
<td></td>
<td>Mathematics and Computer Science (Math, Statistics, Computer Science)</td>
</tr>
<tr>
<td></td>
<td>N= 96</td>
</tr>
<tr>
<td></td>
<td>Professional Studies (Business, Social Work)</td>
</tr>
<tr>
<td></td>
<td>N= 50</td>
</tr>
<tr>
<td></td>
<td>Other please indicate discipline)</td>
</tr>
<tr>
<td></td>
<td>N= 68</td>
</tr>
<tr>
<td>2 How many terms have you been teaching in community colleges? (Total number of</td>
<td>Range: 1-168</td>
</tr>
<tr>
<td>terms, though not necessarily continuous)</td>
<td>3 Do you have a degree in Education? Yes: N = 265 No: N = 374</td>
</tr>
<tr>
<td>4 In addition to your work at this community college, do you teach (or have</td>
<td>Yes: N = 313 No: N = 327</td>
</tr>
<tr>
<td>you taught) in a K-12 setting?</td>
<td>5 How many professional development activities (workshops, conferences,</td>
</tr>
<tr>
<td></td>
<td>webinars) do you participate in each year?</td>
</tr>
<tr>
<td></td>
<td>0: N= 74 1: N= 159 2: N= 156 3: N= 79 4+: N= 169</td>
</tr>
<tr>
<td>Survey Questions</td>
<td>N</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>I use different instructional techniques or strategies when I teach different topics.</td>
<td>636</td>
</tr>
<tr>
<td>I use varied resources for teaching.</td>
<td>638</td>
</tr>
<tr>
<td>I direct students to varied learning resources.</td>
<td>632</td>
</tr>
<tr>
<td>I plan units of instruction as well as individual class sessions.</td>
<td>632</td>
</tr>
<tr>
<td>I plan how I will assess students' learning when I plan instruction.</td>
<td>634</td>
</tr>
<tr>
<td>I use scoring guides and/or rubrics when I assess students' work and projects.</td>
<td>631</td>
</tr>
<tr>
<td>I assess students' learning in a variety of ways between tests and exams.</td>
<td>633</td>
</tr>
<tr>
<td>I explain to students how their learning will be assessed.</td>
<td>632</td>
</tr>
<tr>
<td>I use assessment data about students' learning to plan future instruction.</td>
<td>631</td>
</tr>
<tr>
<td>I engage in friendly, respectful interactions with students in the classes I teach.</td>
<td>632</td>
</tr>
<tr>
<td>I exhibit genuine enthusiasm for the content in the class I teach.</td>
<td>633</td>
</tr>
<tr>
<td>I convey high expectations of students in the outcomes, activities, and assignments for my class.</td>
<td>636</td>
</tr>
<tr>
<td>I clearly state the standards of conduct for students in the classes I teach.</td>
<td>637</td>
</tr>
<tr>
<td>I work to maintain an atmosphere where students feel safe and supported in their learning in my class.</td>
<td>637</td>
</tr>
<tr>
<td>I clearly identify or explain the purpose for individual lessons in my class.</td>
<td>639</td>
</tr>
<tr>
<td>I clearly identify how and where individual lessons fit into the broader learning of my discipline in my class.</td>
<td>638</td>
</tr>
<tr>
<td>I connect the content of my teaching to students' knowledge and experiences in my class.</td>
<td>638</td>
</tr>
<tr>
<td>I design instructional activities and assignments that are appropriate for the students in my class.</td>
<td>631</td>
</tr>
<tr>
<td>I monitor students' progress in my class.</td>
<td>633</td>
</tr>
<tr>
<td>I provide timely and consistent feedback to the students in my class.</td>
<td>632</td>
</tr>
<tr>
<td>I provide opportunities for my students to assess their own work according to specific criteria and performance standards.</td>
<td>628</td>
</tr>
<tr>
<td>I accommodate students' questions when I am teaching.</td>
<td>630</td>
</tr>
<tr>
<td>I try different approaches to teaching material that students have difficulty learning.</td>
<td>623</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>29</td>
<td>I attend professional conferences and workshops in my discipline.</td>
</tr>
<tr>
<td>30</td>
<td>I attend professional conferences and workshops about pedagogy (teaching and instructional methods).</td>
</tr>
<tr>
<td>31</td>
<td>I plan instruction keeping the strengths and challenges of my students in mind.</td>
</tr>
<tr>
<td>32</td>
<td>I write and use specific instructional outcomes for individual class sessions.</td>
</tr>
<tr>
<td>33</td>
<td>I assess the effectiveness of my instruction by looking for evidence to support my judgment.</td>
</tr>
<tr>
<td>34</td>
<td>I consider and record suggestions for how I could change or improve instruction for the next time I teach that lesson.</td>
</tr>
<tr>
<td>35</td>
<td>I maintain accurate and effective records of students' completion of work.</td>
</tr>
<tr>
<td>36</td>
<td>I engage in supportive and collegial professional activities with my colleagues.</td>
</tr>
<tr>
<td>37</td>
<td>I participate in non-instructional activities (athletic events, musical performances, art shows, etc.) at my institution.</td>
</tr>
<tr>
<td>38</td>
<td>I maintain honesty, integrity, and confidentiality in my professional interactions.</td>
</tr>
<tr>
<td>39</td>
<td>I participate in department and institutional meetings or activities when invited.</td>
</tr>
<tr>
<td>40</td>
<td>I comply with institutional regulations.</td>
</tr>
<tr>
<td>41</td>
<td>If your institution could do one thing to help you improve your teaching, other than increasing compensation, what would you recommend?</td>
</tr>
</tbody>
</table>