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Faculty funds of knowledge: sources of knowledge for teaching in community college faculty

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Flower, Patricia Lyn

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Faculty Funds of Knowledge: 
Sources of Knowledge for Teaching in Community College Faculty

A dissertation submitted in partial satisfaction of the 
requirements for the degree Doctor of Education

in

Teaching and Learning

by

Patricia Lyn Flower

Committee in Charge:
Professor Amanda Datnow, Chair
Professor James Levin
Professor Jeffrey M. Rabin

2012
The Dissertation of Patricia Lyn Flower is approved, and it is acceptable in quality and form for publication on microfilm and electronically:

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Chair

University of California, San Diego

2012
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I have been fortunate to have shared this graduate path with an exceptional cohort: Doug Easterly, Heather Michel, Tina Rasori, Suzi Van Steenbergen, and Judy Wilson. You each have been a supportive colleague throughout this journey. I look forward to all of the great things you will accomplish.

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Vita

EDUCATION

June, 2012  University of California, San Diego  San Diego, CA
Doctor of Education in Teaching and Learning
Dissertation – *Wisdom of Practice: Teacher Knowledge of Community College Faculty*

December, 1986  San Diego State University  San Diego, CA
Master of Science in Animal Behavior
Thesis – *Positional Behavior in a Group of Pygmy Chimpanzees, Pan paniscus*

December, 1978  Illinois State University  Normal, IL
Bachelor of Science in Biology

TEACHING EXPERIENCE

2004 - Present  Professor of Biology  San Diego, CA
San Diego Community College District

1991 – 2004  Lecturer in Biology  San Diego, CA
University of San Diego

1989 - 2004  Adjunct Instructor, Biology Department  San Diego, CA
San Diego Community College District

2000 – 2001  Adjunct Instructor, Biology Department  San Diego, CA
Grossmont College

1985 - 1989  Teacher, Biology Department  Carlsbad, CA
Carlsbad High School

1983 – 1984  Graduate Teaching Assistant  San Diego, CA
San Diego State University

1979 – 1981  Teacher, Bloomington Junior High School  Bloomington, IL
# RELATED EXPERIENCE

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# RESEARCH EXPERIENCE

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# PRESENTATIONS

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<td>Monterey, CA</td>
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<td>1986</td>
<td>Jane Goodall 25 Years at Gombe</td>
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PUBLICATIONS

Journal Articles:


Illustrations:


ABSTRACT OF DISSERTATION

Faculty Funds of Knowledge:
Sources of Knowledge for Teaching in Community College Faculty

by

Patricia Lyn Flower

Doctor of Education in Teaching and Learning

University of California, San Diego, 2012

Professor Amanda Datnow, Chair

This study takes a socio-cultural theoretical approach to better understanding the career pathways to full-time teaching at the community college. Building on Shulman's (1987) conceptual model of teacher knowledge, this case study explores the formal and practical life experiences that have contributed to the faculty funds of knowledge that have shaped the teaching practice of Arts and Humanities, Behavioral Sciences, and Natural Sciences and Mathematics faculty at a single community college. A survey of 60 academic, full-time faculty and interviews with a subset of 15
of these faculty formed the basis for the data collected. The faculty interviewed reflected a range of disciplinary expertise, teaching experience and ethnicity. The study reveals that there was not one common pathway to becoming a community college professor. Moreover, the pathways differed along social and developmental dimensions; they were characterized by both private and career transitions that occurred throughout the faculty's lifetimes. Although formal experiences contributed to faculty knowledge for teaching, less formal, more pragmatic experiences had a greater influence on practice. The experiential knowledge that faculty accumulated over time influenced their general pedagogical skills and understanding of the context of the community college and the characteristics of its diverse student population. Life experience was also shown to contribute to the pedagogical content knowledge of faculty and their ability to make course content accessible and relevant to their students. Also discussed are the implications for further research, policy, and practice involving the role of life experience in the development of the knowledge for teaching in community college faculty.
Chapter I: Introduction

Overview

As a consequence of their societal mission of open access to higher education, community colleges have the most diverse student body in higher education - diverse in terms of academic ability and previous academic preparation, socioeconomic status, and demographic characteristics of gender, age, and ethnicity (Cohen & Brawer, 2008). Since 1901 when the first two-year college, Joliet Junior College, opened its doors, educators have debated the most appropriate qualifications for those individuals that teach at these schools. In spite of the increased role of community colleges in higher education across the country, there is a significant lack of research regarding its faculty. In the face of the claim that the strength of these colleges is in their faculty (Baker, Roueche & Gillett-Karam, 1990), very little work has been done to provide insight into the preparation of these academic professionals as teachers and the career pathways that led them to community college teaching.

This lack of information is problematic in light of the fact that community college faculty teach 40% of all undergraduates, and, in particular, a high percentage of underrepresented groups (Horne & Nevill, 2006). Many of the students they teach will aspire to transfer to four-year colleges at some point. What is more, there continues to be an increasing trend in the number of four-year college graduates that take courses at a community college as part of their baccalaureate education (Townsend, 2001). With this information at hand, it is even more imperative that community college faculty are ‘the expert pedagogues’ referred to by Berliner (1986).
equipped with a ‘pedagogy of substance’ that Shulman (2004) contends is necessary to bridge content knowledge with the lives, cultures, and aspirations of their students.

This study arose out of a self-perceived need to examine the development of the knowledge for teaching or wisdom of practice in community college faculty. The research community by working with practitioners should develop codified representations of the practical pedagogical wisdom of capable faculty (Shulman, 1987). Emerging studies of the wisdom of practice of community college faculty at various stages of their careers can contribute to the documentation of principles of good practice. These faculty have had few opportunities to articulate the extent of their practical knowledge base for teaching. This study contributes to the understanding of the craft knowledge of community college faculty (Grimmett & MacKinnon, 1992) by focusing on the “wealth of teaching information that very skilled practitioners have about their own practice…[a] deep, sensitive...contextualized knowledge” (Leinhardt, 1990, pp. 18-19) derived from the “wisdom of practice” (Shulman, 1987). This study allows faculty voices to be heard in the larger community to which they belong. With those voices, the study seeks to identify the experiences in various socio-cultural contexts that contribute to the funds of knowledge that comprise the wisdom of practice of community college faculty.

The Early Years: the Junior College becomes the Community College

Considering the limited research on the preparation of two-year college faculty, it is surprising to find that researchers during the 1940’s -1950’s, when the junior college was in its nascent stages, were primarily concerned with the academic and professional preparation of its faculty. Although this literature is dated, it provides a glimpse into the origins and staying power of community college career
characteristics. For many of these early researchers (Colvert, 1952; Dolan, 1952; Eckert, 1948; Garrison, 1941; Koos, 1948) whose work appeared at that time in the *Junior College Journal*, the publication of the organization representing two-year colleges (currently the American Association of Community Colleges), the suitable preparation of junior college faculty was an issue of considerable importance.

For most of the first 70 years of the two-year college, the typical faculty member had had prior high school teaching experience. An early study by Eells (1931) indicated that 80% of junior college faculty had previously taught at the secondary level. The call for the professional training of two-year college faculty in these early years was most likely due to this close association of the junior college with secondary schools, whose teachers received formal preparation in teaching. This trend of graduate-level trained individuals being promoted from the ranks of high school teachers continued for the next five decades (Bushnell, 1973; Koos, 1948; Fields, 1962; Medsker, 1960). More recently, Keim (1989) reported that slightly over one half (55%) of community college faculty has had some public school teaching experience. In studies two decades apart, DeBard (1995) determined from questionnaire data that the number of English faculty that community colleges drew from secondary schools dropped to 26% in the 1993-94 academic year from nearly 54% in 1973. Despite this decline in the number of faculty having high school teaching experience, these researchers point to the advantage of being certified to teach at the secondary level. They assert that the professional coursework and preservice training required to teach high school contributed to the teaching practice of college faculty. Moreover, one researcher, (Eckert, 1948), reported that there was a consensus among early researchers that junior college faculty should be capable of
applying their subject matter knowledge in a variety of situations and contexts. This statement appears to be a harbinger of Shulman’s (1987) ideas about pedagogical content knowledge and the knowledge of educational context that would follow 35 years later.

Research in subsequent decades up to the present changed its primary focus from the preparation of teachers to issues such as faculty demography, workload, and the part-time and full-time instructor dichotomy at what became eventually known as the “community college” (Gleazer, 1994). Reference to this new identity was first made in the 1947 President’s Commission on Higher Education (the Truman Commission), and reflected that it was an institution intended to meet the educational needs of the surrounding community. Also significant was the advocacy of the Carnegie Commission on Higher Education (1970) for the establishment of a community college within commuting distance of every adult. These commissions, together with the Higher Education Act of 1964 (and the Educational Amendments of 1972 to the act that promoted statewide planning and provision of higher education throughout the nation), enabled community colleges to be rapidly established and more closely associated with four-year schools. A response to the surge in demand for higher education was an increased role of community colleges in providing the first two years of college.

Although demographic studies (Cohen & Brawer, 1977, 2008; Outcalt, 2002; Provasnik & Planty, 2008) provide useful insight into community college faculty, the findings are all too often drawn from the extremes of national survey data or discipline-specific studies (DeBard, 1995; Fugate & Amey, 2000). Major and Palmer (2006) contend that past surveys have provided only gross indicators of community
college faculty characteristics, attitudes, and practices, leaving the underlying causes of faculty behavior and practice open to speculation. She calls for ethnographic research that could provide interpretations of actual faculty experience.

Compounding the above, as recently as thirty years ago there was a confidence among administrators that college and university faculty only needed expertise in their disciplines in order to be good teachers (Major & Palmer, 2006). If subject mastery was the single yardstick by which effective teaching was measured, why study the quality of college instruction? It follows that there is relatively little literature dedicated to the improvement of teaching in higher education, particularly at the community college. However, in the midst of this time period, Shulman (1987) proposed his conceptual framework involving teacher knowledge at the K-12 level. This framework is now being used as basis for understanding the teaching practices of post-secondary faculty. Thus, research into the teacher knowledge of post-secondary faculty has begun to come full circle. Current concerns over teacher knowledge are returning to early opinion regarding the qualifications of post-secondary faculty, particularly those teaching at the community college.

**Teacher Knowledge as a Conceptual Framework**

In the past three decades, administrators in higher education have come to realize that content knowledge alone does not make for quality instruction. This newfound awareness has resulted in several studies (Fernandez-Balboa & Stiehl, 1995; Jang, Guan, & Hsieh, 2009; Major & Palmer, 2006) that have recognized the value of Shulman’s ideas, particularly that of pedagogical content knowledge and its application to post-secondary instruction. Clearly teaching at any level of education is a highly complex activity that draws on many forms of knowledge. Shulman’s (1987)
model identifies several components that contribute to overall teacher knowledge. This study focuses on five of the seven components of teacher knowledge: content knowledge, general pedagogical knowledge, pedagogical content knowledge, knowledge of learners and their characteristics, and the knowledge of educational context.

Shulman (1987) defines content knowledge as the full understanding of subject matter coupled with a broad liberal arts education. General pedagogical knowledge, characterized by instructional strategies and classroom management, plays a central role in the distribution of content. The epistemological concept of pedagogical content knowledge merges the traditionally separated knowledge bases of content and pedagogy. Shulman (1987) characterizes pedagogical content knowledge as “the capacity of a teacher to transform the content knowledge he or she possesses into forms that are pedagogically powerful and yet adaptive to the variations in ability and background presented by the students” (p. 15). Understandably, the knowledge of learners, their abilities, and backgrounds influences faculty pedagogical content knowledge. What may useful and relevant to one group of students in a given semester may not be to those enrolled in subsequent semesters. Moreover, teaching and learning play out in specific contexts; in this case a single community college and its surrounding community. With these things in mind, it is clear that Shulman’s framework of teacher knowledge provides the concepts and terminologies that are fundamental to the understanding of the wisdom of practice in community college faculty. Having such a conceptual framework offers new ways of identifying, describing, and interpreting the experiences that have shaped the practice of community college faculty.
Research Rationale

It seems as though I have always been a teacher in some capacity or another. However, similar to the majority of my colleagues, my pathway to community college teaching has been indirect and somewhat circuitous. During my years as an undergraduate, I was awarded a teaching assistantship in a botany laboratory. As a result of my first teaching experience, the desire to postpone graduate school and the need for steady employment, I fulfilled the requirements for a 6-12 teaching credential as I completed my B.S. in Biology. At the completion of my student teaching experience at an acclaimed high school in the suburbs of Chicago, I realized that I enjoyed teaching. While my husband was in graduate school, I taught seventh grade biology in a small college town for two years. The following year found me anticipating in-state residency in California and securing a position as an Educator with the Zoological Society of San Diego. My responsibilities included leading tours and fieldtrips for groups that ranged from Boy Scouts earning a merit badge to medical professionals in town for a convention. In the summer months I taught weeklong sessions to primarily middle-school students. My five years in this position coincided with my pursuit of a M.S. in Zoology. During this time, I set my sights on teaching college. Despite my other responsibilities, I accepted a human anatomy graduate teaching assistantship, for I was told that such experience would be a sure ticket to a position at a community college. I supplemented my income by leading a Zoological Society-sponsored expedition to the South Pacific as a field naturalist as I completed my thesis.

Upon my graduation, employment in the teaching sector was bleak. I was fortunate, however, to find a long-term substitute position at a local high school. The
position eventually became a full-time position, in which I taught marine biology for three years. Wanting to gain entry into the world of post-secondary education, I left full-time employment to begin part-time or adjunct teaching at various two- and four-year colleges. After a year of “freeway flying” working as a “road’s scholar”, I was awarded a lecturer position at a small private university where I taught biology majors for over 13 years. During that time, I continued teaching as an adjunct instructor at various community colleges. My persistence eventually paid off and I began teaching in my present capacity as a full-time community college professor seven years ago. Due to my varied background, I find myself well-prepared to be both perceptive and appreciative of the various formal and pragmatic experiences that can contribute to the funds of one’s knowledge of teaching that in due course leads to a wisdom of practice.

My personal experience as a community college faculty member and interactions with my colleagues have led me to realize that despite their lack of formal training, many community college faculty are indeed capable teachers. Now, one would expect their strong content knowledge base given their advanced degrees, but what to make of their knowledge of general pedagogy, pedagogical content knowledge, and, further still, their knowledge of the educational context of the community college? Did they just acquire that knowledge along the way as they crafted and further honed their classroom practice?

In comparison to K-12 teachers, individuals usually become professors because of their knowledge of a discipline, not because they know how to teach it. They become professors when they are employed by institutions of higher education and assigned classes to teach (Edgerton, 1990). Nonetheless, despite their lack of
formal teaching preparation, many faculty seem to attain the skills and knowledge to become exceptional teachers (Fernandez-Balboa & Stiehl, 1995). However, current research provides little insight into what contributes to the "know-how" that comprises teacher knowledge in community college faculty.

For that reason, there is no better time than now to investigate the current state of the preparation of community college faculty and the opportunities that are afforded to these faculty in place of formal training. At present, community colleges are in the midst of a transition brought about by the recent and impending retirements of large numbers of faculty. Many of those now retiring have worked at community colleges since the 1960’s or 1970’s, a time during which new community colleges opened at the rate of almost one a week (AACC, 2010). The rate of retirement is predicted to have both negative and positive consequences. The retirement of such large numbers of dedicated faculty will undoubtedly result in a significant knowledge drain as the collective wisdom of these people, gained through many years of experience, leaves with them. Conversely, the departure of so many people during the next few years offers the chance to revisit earlier ideas about the training of community college faculty.

My interest in the development of the knowledge for teaching in community college faculty was further heightened by two pilot studies. I conducted a video-elicitation project, in which I explored how a colleague of mine made sense of how she learned to teach. I observed and videotaped a thirty-minute portion of one of her lectures. A week later we met for a semi-structured post-interview. From her narrative I learned about the different formal and informal experiences that contributed to her knowledge for teaching, particularly her general pedagogical knowledge.
For a second pilot study, I chose to construct an online survey of a small sample of community college faculty. The purpose of the study was to investigate the career pathways that lead individuals to community college teaching. Most of the faculty surveyed reported that they had been adjunct community college instructors prior to their current full-time teaching position at the community college. Others had also taught at the high school and graduate levels. Faculty also cited non-teaching experiences that were stopovers in their pathway to community college teaching. These experiences included non-academic work experiences in industry and business.

I sensed from the pilot studies that the pathways to community college teaching are as varied and unique as each of the faculty themselves. The reality is that the pathways to community college teaching are not easily discernable and that they are, indeed, quite convoluted. It appears that the experiences that contribute to the wisdom of practice of community college faculty are wide-ranging. The personal and professional experiences of faculty contribute to the development of images of teaching that influence their actions and decision-making in the classroom. According to Clandinin (1986), personal practical knowledge is essentially the experiential knowledge of teachers.

Based on a review of the extant literature and the completion of the aforementioned pilot studies, together with my personal experiences as a community college professor and my interactions with colleagues, the following research questions and sub-questions emerged:

- What forms of knowledge comprise the wisdom of practice in community college faculty?
- What types of lived experiences influenced the formation of faculty wisdom of practice?
  - Of these experiences, which have contributed to the knowledge of general pedagogy in community college faculty?
  - What role did faculty experiences serve in the development of their understanding of the educational context and the diverse student population of the community college?
  - What experiences enabled faculty to make course content accessible and relevant to students' lives, and how do these experiences contribute to faculty pedagogical content knowledge?

The above research questions were addressed by a mixed methods study that employed both quantitative and qualitative measures. The quantitative portion of the study consisted of an on-line survey of the Arts and Humanities, Behavioral Sciences, and Natural Sciences and Mathematics faculty in a mid-sized community college in southern California. The qualitative portion of the study consisted of the personal narratives of 15 faculty who taught a range of academic disciplines. In short, the study was designed to gain an understanding of the nature of the wisdom of practice of community college faculty and to take a closer look at the career transitions that have contributed to the experiential knowledge of these faculty. Although the complexity of teacher knowledge makes it difficult to represent it within a single overarching framework or theory (Fenstermacher, 1994), the life experiences and opportunities that contribute to the wisdom of practice of community college faculty can be examined by using the framework of socio-cultural theory.
Theoretical Framework: Socio-Cultural Theory

To fully appreciate the development of community college faculty as teachers we must explore not only their formal education, but the non-formal and informal experiential knowledge base that contributes to their pedagogical identities as well. Apps (1989) introduced both non-formal and informal learning as legitimate sources of adult learning; as equally important as learning provided in socially organized “formal, full-time study settings” (p. 277) such as academia. He defines non-formal education as sequences of learning that are also socially organized and goal-directed, yet not certified by formal credentials, such as on-the-job training. Informal education is characterized as socially constructed “serendipitous or self-directed individual learning” (p. 277) resulting from daily experience and everyday interactions. Clearly, learning, in its many forms, and the consequent development of individuals is a social and collaborative activity. To gain a deeper understanding of how learning that builds on real world experiences to form repositories of knowledge that community college faculty can tap into, I designed a study that was framed by socio-cultural theory and, more specifically, the perspectives of social constructivism and funds of knowledge. These theoretical lenses informed the study of community college faculty’s lives and the socio-cultural influence of a full range of life experiences on classroom practice.

Social constructivism. From the Vygotskian perspective, learning is social and occurs in both cultural and historical contexts. All fundamental cognitive activities take shape in a matrix of social history and form the products of socio-historical development. Cognitive skills and ways of thinking are not primarily determined by innate factors, but are the products of the activities practiced in the social institutions
of the culture in which the individual grows up (Luria, 1979). From a Vygotskian stance, the social constructivist lens examines knowledge as collectively constructed by individuals whose purpose is to share their expertise in order to construct and negotiate meaning (Wink & Putney, 2002). This view proposes that people create their own meaning and understanding, combining what they already know and believe to be true with new experiences with which they are confronted (Richardson, 1997). All individuals bring to the process of learning personal schemas that have been shaped by prior experiences, socio-cultural histories as well as personal beliefs, values, and perceptions. Knowledge is constructed when new experiences are encountered and mediated by reflection, inquiry, and social interaction (Lambert, 2002). Grimmett and MacKinnon (1992) identify what they refer to as the craft knowledge of teaching as the “know-how that is constructed by teachers…in the context of their lived experiences and work” (p. 396). Connelly and Clandinin (1988) see personal practical knowledge is “a particular way of reconstructing the past and the intentions of the future to deal with exigencies of a present situation” (p. 25). What is more, researchers (Connelly & Clandinin, 1988; Grimmett & MacKinnon, 1992; Raymond, Butt, & Townsend, 1991) see studying teachers’ lives as a means to understand the biographical influences that affect the socio-cultural construction of their wisdom of practice.

**Funds of knowledge.** The theoretical perspective of funds of knowledge is defined by Moll, Amanti, Neff, and Gonzalez (2001) as “the historically accumulated and culturally developed bodies of knowledge and skills essential for...individual functioning and well-being” (p. 133). In recent years, educational research, using a funds of knowledge perspective, has taken a look at the kinds of learning that take
place through the cultural and social contexts outside of schools. Such research (Gonzalez et al., 2005; Moll, 1990; Moll & Gonzalez, 2004) has historically highlighted the educational disparities among students from different cultural and socioeconomic groups. These studies have suggested that classroom practices do not build upon these students’ accumulated practical knowledge derived from their home and culture. According to Gonzalez et al. (2005), “the concept of funds of knowledge is based on a simple premise: people are competent and have knowledge, and their life experiences have given them that knowledge” (pp. ix-x). Based on this definition alone, one could argue that this concept could be extended to any group of individuals regardless of age. As people grow and develop they accumulate an increasing reservoir of experience that becomes an increasingly rich resource for themselves and others. From this perspective, one can think of these life experiences as assets to learning in adults and children alike. In the specific case of community college faculty, the skills and everyday practice that have been formed and transformed by socio-cultural historical circumstances comprise their funds of knowledge.

Although there is no evidence in the literature regarding the role of faculty funds of knowledge in classroom practice, recent studies have emerged that suggest that faculty should be cognizant of their own funds of knowledge. In their study of community mathematical practice, Gonzalez, et al. (2005) realized that in order to make sense of the mathematical processes that were being tapped into by those families as the basis for the construction of buildings, gardens, and clothing, it was necessary that they (the researchers) activate their "own funds of knowledge" (p. 259). As a result the authors stated that they drew from the insights of Vygotsky’s
theory of socially mediated knowledge, which points to the reciprocal relationship between everyday concepts and those learned in school. In a very different study involving the preparation of rural teachers, Wenger and Dinsmore (2005) asserted that preservice teachers need to reflect on their own funds of knowledge in working with students whose lives may or may not be like their own.

As previously discussed, community college faculty possess academic training in their academic discipline, yet most lack formal training in general pedagogy. In short, they lack the insider’s knowledge of running a classroom. The question is, then, what experience do they draw upon in order to teach and meet the learning needs of diverse learners? Clearly teaching is a multifarious activity that draws on many forms of knowledge. One could argue that the experiential funds of knowledge of community college faculty impact their knowledge for teaching and contribute to their wisdom of practice. Accordingly, many of the elements of social constructivism and funds of knowledge are present in Shulman’s (1987) model of teacher knowledge. Together these perspectives will provide useful frameworks for this study.

**Organization of Dissertation**

In this chapter, I have identified the need for research into the nature of the knowledge for teaching in community college faculty. Moreover, I have argued for an inquiry into the character of the formal and experiential knowledge that accumulates during the career path to the community college and how that knowledge contributes to faculty wisdom of practice.

Chapter two reviews the contributions from the educational literature and from socio-cultural theory in understanding the development of the wisdom of practice in
community college faculty. Most importantly, I use the literature to build a provisional theory of the role of faculty funds of knowledge in the classroom practice of community college faculty. Chapter three describes the research methodology: the study design, the educational context of the study site, the data collection process, and the data analysis. Chapter four presents the career pathways of 15 faculty as informed by their individual narratives. In addition, in depth consideration is given to five themes that emerged from a cross-case analysis of the narratives, themes that represent the developmental transitions negotiated by the faculty as they moved from part-time to full-time community college teaching. Chapter five provides an analysis of the nature of the wisdom of practice of community college faculty using examples from the data. Moreover, the chapter is devoted to an examination of the contributions of the faculty's life experiences to their knowledge of general pedagogy, pedagogical content knowledge, and their knowledge of the educational context of the community college -student characteristics, in particular. In chapter six, I reiterate the findings of the study and tie them to the research questions and the theoretical frameworks that guided the study. Furthermore, the chapter discusses the implications for future research, policy, and practice involving the knowledge for teaching in community college faculty.
Chapter II: Literature Review

There are several bodies of literature that inform this research. The first concerns work that has examined the career pathways of college faculty and the significant life experiences that have influenced their practice. In order to understand the contribution of these experiences to faculty teacher knowledge it was necessary to study literature which investigates the components of the construct of teacher knowledge pertinent to this study: content knowledge, general pedagogical knowledge, pedagogical content knowledge, and knowledge of educational context. A discussion of the research into the further evolution of pedagogical concept knowledge as an epistemological concept and its recent application to the study of teacher knowledge in post-secondary faculty then follows. Final consideration is given to research into the concept of knowledge of educational context, which includes, among its broad definition, faculty understanding of the unique characteristics, aptitudes, abilities, and interests of their students.

Career Paths to Community College Teaching

According to Chen (1998), in the past sixty years, there has been much written on individual careers as life processes; a process that accompanies a person's entire life. One's career is composed of the following series of career developmental stages: growth, exploration, establishment, maintenance, and disengagement, throughout one's whole life. In his research into the general nature of what he refers to as "vocational lives in the world of work", Chen (1998) further suggests that during the course of career development an individual takes on different roles and deals with dynamic changes and transitions. These ideas are
extended further and more specifically to careers of college faculty by Reybold and Alamia (2008). The researchers characterize the career transitions, in this case, of 23 female faculty members at several universities, as being both social and developmental in nature. The authors state that academic transitions can be seen as developmental opportunities for faculty preparation for teaching and research.

Lindholm (2004) contends, that although there has been much investigation into how personal and environmental factors shape people’s career choices, very little theory or research has focused on the vocational development of college professors. She states that this is particularly true with respect to the influences that shape individuals’ decisions to pursue academic careers. Lindholm interviewed 26 tenured university professors as a means to understand how faculty recollected their career choice processes. Some of the themes that emerged from the faculty narratives included the need for autonomy, individual expression, and independence, in addition to the influences of undergraduate and graduate school experiences.

There was only one study that I was able to locate that focuses, specifically, on the career pathways in community college faculty. Fugate and Amey (2000) investigated the career paths of 22 liberal arts and vocational community college faculty. From the individual faculty interviews the authors were able to determine the general career paths recently hired faculty had followed. Most notable of their findings is that the vast majority of the faculty did not foresee an academic career as they entered higher education and that many felt that some kind of educational preparation would have been beneficial prior to assuming a teaching position. These studies further our understanding of the influences that can lead individuals to academic careers and the nature of the career transitions they negotiate along the
way. However, none of the studies focus on the life experiences that have specifically contributed to their teaching practice. The following section discusses a well-known framework, Shulman's (1987) Model of Teacher Knowledge, as a means to examine the role of formal and experiential knowledge in community college teaching.

Teacher Knowledge: Categories of the Knowledge Base for Teaching

In his argument that there exists an elaborate knowledge base for teaching, Shulman (1987) identified seven categories of teacher knowledge, which, although were originally defined for K-12 education, have been recently considered for their application to higher education (Shulman, 2004). Shulman identified the following components of teacher knowledge: content knowledge, general pedagogical knowledge, curriculum knowledge, pedagogical content knowledge, knowledge of learners and their characteristics, knowledge of educational contexts, and knowledge of educational ends, purposes, and values.

In his original framework, Shulman merged two separate aspects of teacher knowledge, content and pedagogy, into a third form of teacher knowledge, pedagogical content knowledge, in which teachers reflect on subject matter and find ways to adapt and tailor it to the needs of learners. He argues that teachers must transition “from being able to comprehend subject matter for themselves to becoming able to elucidate subject matter in new ways, reorganize and partition it, clothe it in activities and emotions, in metaphors and exercises, and in examples and demonstrations, so that it can be grasped by students” (Shulman, 1987, pp. 12-13). In order to understand the development of the concept of pedagogical content knowledge, it is necessary to take a closer look at the literature on both the content and general pedagogical knowledge of community college faculty.
Content Knowledge in Community College Faculty

Historically, researchers agreed that community college faculty needed subject matter expertise and deeper content knowledge than those teaching at the secondary level, particularly those teaching transfer courses (Cohen & Brawer, 2008). In the literature, there has been a long-held view that a master’s degree in a content area has been the typical preparation to teach at two-year colleges. Researchers explained that junior college instructors should be well prepared in a course of study that provided a breadth of view as well as a depth of insight necessary to teach general education and survey courses that were equivalent to those taught at four-year schools (Dolan, 1952; Garrison, 1941). More recently, Shulman (1987) echoed the sentiments that a teacher must have not only depth of understanding of the particular subject taught, but also a broad liberal education that serves as a framework for past learning and a means to facilitate new learning. He extends those ideas intended for K-12 education to post-secondary programs. In his essay on the doctorate as a teaching degree, Shulman (2004) contends that individuals who are planning to teach should know their field and its relation to the overall body of knowledge. Moreover, Shulman states that those anticipating teaching at the college level should be current with undergraduate education as a whole; something that he maintains these students learn little or nothing of. This reflects the long-held idea by many (Clark, 1987; Cohen & Brawer, 1977, 2008; Twombly, 2005) that a doctorate is too narrowly focused of a degree to be considered the most desirable for those planning teach at the community college.

Traditionally, and currently, doctorate degrees prepare individuals as researchers and not as teachers (Cohen & Brawer, 1977 & 2008; Eells, 1931;
Townsend & Twombly, 2009). In a survey of 1,458 junior college faculty, Koos (1941) reported that the majority (64%) of faculty teaching academic disciplines and transfer courses held master’s degrees while a small percentage (6%) held doctorates. (The remaining faculty, 30%, taught vocational courses, for which advanced degrees are not required.) This trend of most of community college faculty holding master’s degrees over doctorates remained the same for the following 60 years (Cohen & Brawer; Miller, 1997; Townsend & Twombly, 2009). Keim (1989) reported a moderate increase in the number of faculty with doctoral degrees. Although not identified, a reason for the slight increase in the number of community college faculty with doctorates maybe have been due to fewer employment opportunities at four-year schools and these individuals accepting positions at community colleges as a second career choice.

More recently, research has shed light on the ongoing debate regarding what level of degree should be required to teach at the community college. Prominent in the past few years, the issue appears to be prompted by the increased availability of individuals with doctorates and status concerns of two-year colleges rather than by necessary teaching qualifications to perform well (Twombly, 2005). In her quantitative study of faculty hiring at three community colleges, Twombly indicates that a master’s degree in a discipline is what faculty and administrators continue to define as necessary to teach academic and transfer courses in community colleges. More recently, the U.S. Department of Education (Provasnik & Planty, 2008) reports that the majority of community college faculty continue to hold a master’s degree (55%) over those with a doctorate degree (12%).
Resonant in the voices of a few administrators participating in Twombly’s (2005) study was the pressure from the district level to hire more individuals with doctorates in an effort to enhance the prestige of their institutions. However, from the institutional point of view, researchers argue that with the focus of the community college being on the first two years of college and its open door admission policy necessitate breadth in content knowledge and interest in students’ overall success (Clark, 1987; Cohen & Brawer, 2008; Twombly, 2005). They assert that individuals with doctorates are overspecialized, preferring research to teaching. Such specialization and research expertise is neither necessary nor consonant with the mission of the community colleges (Townsend & Twombly, 2009). Regardless, of the particular degree that leads to content knowledge, Twombly (2005) argues that it is also essential that community college faculty are cognizant of instructional strategies that are appropriate in teaching undergraduates. This component of teacher knowledge is identified by Shulman (1987) as general pedagogical knowledge.

**General Pedagogical Knowledge in Community College Faculty**

The general pedagogical knowledge that comprises a portion of a teacher’s knowledge base includes the organization and management of a classroom. Teacher activities that fall under the heading of instruction, such as presenting clear explanations, assigning and assessing student work, and effectively interacting with students through questioning and acknowledgement of student answers are a crucial aspect of pedagogy (Grossman, 1990). Although the features of effective K-12 instruction are already well-documented in the literature, there is a lack of research concerning the general pedagogy of community college faculty. This, however, has not always been the case.
Revisiting the historical literature, there was an apparent agreement among authors regarding the need for two-year instructors to have professional education coursework in order to gain general pedagogical knowledge. During the development of the junior college as a local alternative to four-year schools as a means to fulfill the first two years of college, the ideal instructor was identified as one that completed education courses in addition to discipline-specific graduate coursework. Pioneer researchers (Colvert, 1952; Dolan, 1952; Eckert, 1948) listed coursework in teaching methods and assessment as being necessary for effective junior college instruction. To this list, they added courses in late adolescent psychology and philosophy of education in order for faculty to gain an understanding of the particular needs typical of a young adult learner. In his survey study of nearly 900 junior college faculty, Dolan (1952) reported that faculty highly valued their coursework in education, with educational psychology identified as the most helpful in their preparation as teachers. This study sheds light on the then widely held view of the importance of professional coursework in teacher preparation of two-year college faculty. However, similar to researchers today (Cohen & Brawer, 2008; Grubb, 1999), Eckert (1952) pointed out the irony of the lack of preparatory coursework of college educators, when compared to the courses required in the training of K-12 teachers. In her essay on a preparation program for college teachers, she stated that despite the importance of such coursework, post-secondary educators were the only professional group for whom training was not explicitly designed for their teaching responsibilities.

Despite the recommendations of early research for the formal training of post-secondary faculty, interest in this aspect community college faculty has waned again, at the expense of the focus on issues that have been mentioned earlier in this paper.
However, concerns over the diversity and disparity in preparedness of students, which remain prevalent in community college research, appear to have led to a renewed interest in faculty knowledge of general pedagogy. Currently, researchers investigating the professional coursework preparation of post-secondary faculty concur with the findings of this initial research and call for graduate school faculty to re-examine the pedagogical training of prospective college faculty (Golde & Dore, 2001; Grubb, 1999; Townsend & Twombly, 2009).

At present, most community colleges rely on the instructor’s mastery of content and individual commitment to ensure high standards, because, unlike K-12, there are few external regulations (Cohen & Brawer, 2008; Grubb, 1999). In Grubb’s study of community college faculty at 57 campuses across the country, faculty noted how unusual it is that very few community colleges impose any requirements for preparation in teaching given the perception of the two-year college as a teaching institution. In this study, researchers observed and interviewed 257 faculty, 101 of whom taught academic subjects. Each instructor was observed for three to six hours and interviewed for one hour. Although observations were not audio- or videotaped, interviews were audio taped. This research led to rich qualitative data and insight into the lack of formal teaching preparation of community college faculty. Those faculty interviewed spoke of the sink or swim mentality of the community college and the widely held view that the teaching aspect of their profession will work itself out.

A study by Golde and Dore (2001) reported on graduate teaching assistantships and their potential role in the preparation of aspiring college faculty to teach. In a survey study of 4,114 doctoral students from 27 universities, the authors found that teaching opportunities not only varied in scope, but that the availability of
training on how to teach varies a great deal across disciplines. Opportunities to teach lecture sections or lead discussion sections are widely available in the social sciences and humanities, but less so in the sciences where students rarely have teaching assignments other than introductory lab instruction. Students in the study pointed to teaching as the major reason for pursuing an academic degree, yet found themselves filling in the gaps in their preparation to teach on their own time with little encouragement from their graduate program.

Overall, the study does indicate that a slight majority (58%) of students believe their programs have not prepared them to teach. However, ironically 84% of the students felt confident in their abilities to lecture as future faculty. The authors express some doubt that this confidence is justified. They contend that serving as a teaching assistant may not fully prepare a student “for running his or her own class” (p. 28). Golde and Dore (2001) admit that a major limitation of their research is that they measured students’ opinions and perceptions. Moreover, based on student responses, the authors suggested that students may glean teaching skills from being students and observing faculty.

**Pedagogical Content Knowledge**

Shulman (1987) argued that teacher training was largely based on knowledge of subject matter deemed important to student education; missing was an understanding of how subject matter was transformed into instruction and how content related to students’ knowledge. He identified this deficit as the “missing paradigm” and proposed his categories of teacher knowledge, primarily the concept of pedagogical content knowledge, to address this gap in teacher education.
After this consideration of the historical and present status of the content and general pedagogical knowledge of community college faculty, what is the current state of pedagogical content knowledge not only in this faculty population, but also as a framework for teacher knowledge?

Shulman and others have added to and modified the notion of pedagogical content knowledge over the years. In the following discussion, I will summarize the few studies that have investigated the nature and development of pedagogical content knowledge in college faculty. Studies involving secondary faculty have been included not only because of the paucity of work done on the post-secondary faculty, but because the studies offer insight into pedagogical content knowledge and provide useful models for thinking of post-secondary faculty teaching.

**Pedagogical Content Knowledge: Its Recent Evolution**

As initially defined, pedagogical content knowledge is the category of teacher knowledge most likely to “distinguish the understanding of the content specialist from that of the pedagogue” (Shulman, 1987, p. 8). It is a pedagogical understanding that distinguishes those who are mere subject “knowers” from those who are subject matter “teachers” (Berliner, 1986, pp. 9-10). In the years following the origin of the idea, several studies investigated pedagogical content knowledge at the secondary level across disciplines, including English (Grossman, 1990), math (Carpenter, Fennema, Peterson, & Carey, 1988), and science (Cochran, 1997; Hasweh, 1987, Van Driel, De Jong, & Verloop, 2002).

In her contrasting case studies of six novice English teachers, Grossman (1990) identified apprentice observation as a potential source of pedagogical content knowledge. She noted that three teachers without formal training when compared
with three teachers that had experience found it difficult to anticipate students’ prior knowledge and were less sure about what the students did and did not know. Grossman states that these teachers used memories of their own experiences as students to shape their expectations of learners.

Similar to Grossman (1990), Cochran, DeRuiter, and King (1993) argued for adding to the definition of pedagogical content knowledge to include knowledge of student prior knowledge, the conceptions and misconceptions. They also made the assertion that students’ learning strategies, developmental levels, and motivations should also be considered. A few years later, Shulman and Quinlan (1996) agreed that exceptional teachers “transform their own content knowledge into pedagogical representations that connect with the prior knowledge and disposition of their learners” (p. 417).

In a later essay Shulman (2004) refers to a “pedagogy of substance”, which is rooted in the subject matter itself as well as in a connection with the lives and culture of students (p. 133). This extension of Shulman’s definition of pedagogical content knowledge resonates with community college instructors, such as my colleagues and I, who face students with disparate academic abilities, life experiences, and career goals. Given the dissimilar characteristics of community college students, this expansion of the construct of pedagogical content knowledge can be readily applied to the context of the two-year college and its diverse student population. Later, I will discuss the applicability of pedagogical content knowledge to the community college and, moreover, its relationship to two other constructs identified in Shulman’s framework: knowledge of learners and their characteristics and educational context knowledge.
Also germane to community college teaching, is the need for an understanding of the possible constraints, primarily time, that place limitations on course content coverage. In his discussion of higher education, Shulman (2004) contends that an exceptional faculty member recognizes that not everything can be taught, but that he or she understands the subject matter deeply enough to be “selective, to be simplifying, to be structuring and organizing” (p. 131).

Although past research in higher education has not given great consideration to faculty pedagogical content knowledge, this attention has recently increased (Lenze, 1995). Researchers have now begun to examine college faculty members’ pedagogical beliefs, decisions, and judgments during teaching in a systematic way (Fernandez-Balboa & Steihl, 1995; Jang, Guan, & Hsieh, 2009). In all of the studies conducted on pedagogical content knowledge in post-secondary faculty the researchers have adopted the construct as defined in Shulman’s original framework.

In their 1995 study, Fernandez-Balboa and Stiehl explored the kinds of interpretative frameworks that university professors use in constructing and implementing their pedagogical content knowledge. Unlike the majority of previous studies in the K-12 setting, the authors were interested in professors’ metacognitive processes regarding their pedagogical content knowledge strategies.

To do so they analyzed the pedagogical content knowledge of ten professors across varied disciplines (science, business, education) at the same university. Of the participants, two of the faculty had had formal teaching training and all had taught between 15 and 31 years. Data were obtained from two-hour phenomenological interviews conducted with each faculty member. From the results five components of pedagogical content knowledge emerged: knowledge of a) subject matter b) students
c) numerous teaching strategies d) teaching context, and, e) one’s teaching purpose. In sum, professors believed that the mere transmission of subject matter is not the main purpose of their teaching. What is paramount is that the subject matter serves as a means for students to construct new knowledge. Although all of the participants agreed that subject matter is important, several faculty went on to explain that their content is not a static body of knowledge. It is constantly evolving and being re-created by students. The faculty considered the creation of a positive learning environment as a crucial part of their pedagogy, in which they attempted to establish relationships of new content with students’ prior knowledge while at the same time taking into consideration the varied backgrounds of their students. Based on the professors’ narratives it was apparent that they have concrete instructional strategies and a deep understanding of these strategies for students’ learning. These findings corroborate with those of Grossman (1990) in that the pedagogical content knowledge of these faculty combined knowledge of content, instructional strategies, and teaching contexts. The authors assert that the integration of the components of pedagogical content knowledge is a not linear process. These findings are consistent with Shulman’s portrayal of pedagogical content knowledge as a cyclical process that begins with reasoning, instruction, and after reflection upon instruction the return to reasoning. As a closing argument, the authors contend that outstanding teaching does not only appear in colleges of education, but can be observed across various academic disciplines.

Similar to the study above, Major and Palmer (2006) conducted a qualitative investigation of 31 faculty members participating in a campus-wide initiative to transform faculty pedagogical content knowledge by integrating problem-based
learning into their curriculum. Problem-based learning is an approach to learning in which complex and compelling problems serve as the catalyst for learning. The authors conducted individual semi-structured interviews with faculty in a variety of disciplines, including English, mathematics, biology, pharmacy, and education. Participants described their knowledge of teaching before and after the initiative, with particular attention on content and pedagogies. The authors found that prior to the transformation faculty frequently commented that their decisions about how to teach a particular subject were influenced most by how they had been taught, which was most frequently in a traditional lecture model. This finding echoes that of Grossman’s (1990) study of preservice English teachers. Major and Palmer (2006) reported that as a result of the initiative, faculty believed they gained a depth of knowledge in their content area and had changed their ideas about how to teach the content of their discipline and, therefore, further developed their pedagogical content knowledge.

Jang, Guan, and Hsieh (2009) took a novel approach to investigate the extent of pedagogical content knowledge in college faculty: they asked the students! Moreover, they employed a quantitative approach and found that the results of their study differed from the findings of Major and Palmer (2006). At the completion of several workshops, the authors conducted a pilot study of 16 novice faculty in order to examine their understanding of pedagogical content knowledge. They utilized a self-constructed questionnaire based on Shulman’s (1987) framework to survey the 16 novice faculty and 182 students in the university’s College of Humanities and Education. The authors’ main intent was to discuss the construction, validity, and reliability of their survey rather than inform about the degree of pedagogical content knowledge of the 16 novice faculty involved. However, the data that informs about
extent of pedagogical content knowledge in the novice faculty is of interest to this study. In response to the survey, students considered their professors’ subject matter knowledge to be extensive, yet they expressed that the majority of the professors were incapable of fully understanding students’ difficulties with the content and the extent of their prior knowledge. Moreover, the students responded that most professors adopted inefficient teaching strategies, which did not lead to student engagement or success in learning content. The authors concluded that student perceptions of their professors’ pedagogical content knowledge could inform the professional learning and reflective practice of college faculty.

It is apparent from these studies that much needs to be done in the area of pedagogical content knowledge development of post-secondary faculty, particularly community college faculty, for which there are no current studies. The qualitative methods employed by Fernandez-Balboa and Stiehl (1995) and Major and Palmer (2006), together with quantitative measures of Jang, Guan, and Hsieh (2009) could prove to be effective in assessing pedagogical content knowledge in both novice and experienced faculty and inform institutions on how to further develop this facet of teacher knowledge.

Knowledge of Educational Context: The Community College and its Students

Of the three studies considered here, only Fernandez-Balboa and Stiehl (1995) considered the importance of the teaching context and its influence on the pedagogical content knowledge of faculty. Study participants spoke of knowing their students as learners and being cognizant of their different characteristics, such as level of maturity and academic preparedness. It is this knowledge of students and
their differing backgrounds that Shulman (1987) refers to as the knowledge of learners and their characteristics.

In my search of the literature, I was unable to find any studies that examined faculty knowledge of educational context. Shulman's broad definition of educational context extends from the mission and governance of a school district to the character of the school's community and culture. For the purposes of this study, I have chosen to combine the constructs of the knowledge of learners and their characteristics and the knowledge of educational context. My decision to do so is based on the nature of the community college's mission to serve the surrounding community, which is comprised of diverse learners defined by a wide range of demographic characteristics, aptitudes, abilities, and aspirations. In the following section, I will discuss community college students and their characteristics within the context of the community college.

In his model of pedagogical reasoning and action, Shulman (1987) further identifies the aspect of the transformation of subject matter, in which the teacher adapts and tailors academic concepts to particular student characteristics. He further advocates for “a pedagogy of substance, that is rooted in the subject matter itself as well as in connection with the lives and culture” of students. For that reason, community college faculty should possess specific knowledge about the characteristics of the student populations with which they work, as well as in the community as a whole. These student characteristics include age, developmental stage, language, culture, social class, and gender as well as ability, aptitude, and motivation.
Community college students range widely in age and, therefore, are at different developmental stages in their lives. Adult development theory (Gould, 1978) suggests that adults move through a series of developmental stages which include both periods of stability and transition. Traditional 18-22 year old students share developmental issues that characterize the transition from adolescence to young adulthood. On the other hand, adult students, ranging in age from the mid-twenties to 65 and over, are in a variety of developmental stages. In any given class, there are likely to be students in a variety of developmental stages. It is often these life transitions and developmental issues which have triggered their return to education (Aslanian & Brickell, 1988). Adult students not only want learning to be relevant to their lives, but they are often exploring new, alternative career paths. Learning for adults often involves reaffirming, reorganizing, and reintegrating one’s previous experiences (Smith, 1981). Being older, adults typically bring more life experiences to the classroom than the younger student. These experiences, while they can provide a foundation upon which to build new knowledge, can also create barriers to learning. As a result of their experience, adults have established attitudes, values, and beliefs that at times may be in conflict with what is being taught.

Since many community college students are adults, it is not surprising that their familial and work responsibilities surpass those of a traditional college student. Nationwide, 85% of community college students hold full-time or part-time jobs and 54% work full-time (Wilson, 2004). Many of these students are low wage earners, a group that includes many single parents. In a study by the National Center for Educational Statistics (Hoachlander, Sikora, & Horn, 2003) found that among
students who began their post-secondary study at community college, one in five had dependent children and one in 10 was a single parent.

In addition to accommodating students’ work and family responsibilities, community colleges are faced with students who are academically underprepared for college coursework. Due to weak preparation in high school and because many community college students are adults several years removed from high school, the need for remediation is high. Approximately 40% of community college students enroll in at least one basic skills course and many never advance to higher levels (Wilson, 2004).

The open admission policy of the community college, low tuition, flexible class scheduling, and proximity to one’s home have all contributed to the extensive enrollment of women and minority students (Townsend & Twombly, 2009). Nationally, in 2003-2004 more than 59% of community college students were female. In that same year, community colleges enrolled almost half of all African American, Hispanic, and American Indian students (Horne & Nevill, 2006). Almost 15% of community college students speak a language other than English in the home (NCES, 2003). Moreover, almost half of community college students are first generation college students, a status that is an indicator that a student may face particular academic and social challenges that could lead to attrition from college (Choy, 2002). Fewer first generation students (38%) seek to transfer to four-year programs while 52% of other students plan to transfer (CCSSE, 2003).

Understanding the context of the community college and the students they serve is arguably an important component of knowledge for teaching. An awareness
of students and their characteristics makes differentiated instruction and meaningful learning possible.

**Summary**

It is apparent from the literature that there has been little research devoted to the study of the nature and extent of the knowledge for teaching in community college faculty. There is a notable lack of understanding of how these individuals become the capable faculty of an institution that identifies teaching as its primary mission. The proposed study is an initial step in shedding light on the life experiences that have contributed to the wisdom of practice of community college faculty. By giving these faculty a voice, this study will provide insight into this little understood segment of the academy whose charge is to meet the learning needs of the majority of our country’s diverse and often underserved students.
Chapter III: Methodology

Study Focus

The purpose of the study was to build upon current theory and research regarding the development of the wisdom of practice in community college faculty as they transitioned through the varied career stages that led to full time teaching. Research studies investigating the characteristics of the knowledge base for teaching have been primarily conducted in the K-12 classroom (Cochran, 1997; Grossman, 1990; Hasweh, 1987; Van Driel, De Jong, & Verloop, 2002) and in recent years at the university level (Fernandez-Balboa & Stiehl, 1995; Jang, Guan, & Hsieh, 2009; Major & Palmer, 2006). The academic and vocational transitions to a career in teaching have been examined in university faculty, in general, (Lindholm, 2004; Reybold, 2003) and, more specifically, in university women faculty (Reybold & Alamia, 2008), and in community college faculty (Fugate & Amey, 2000). The study I designed was more comprehensive in its approach than the studies done to date. It explicitly examined the personal, interpersonal, formal, and less formal experiences that are negotiated by individuals as they travel their path to community college teaching and the influence of the experiences on their wisdom of practice.

To reiterate, the following research questions and sub-questions guided the study:

- What forms of knowledge comprise the wisdom of practice in community college faculty?
- What types of lived experiences influenced the formation of faculty wisdom of practice?
  - Of these experiences, which have contributed to the knowledge of general pedagogy in community college faculty?
• What role did faculty experiences serve in the development of their understanding of the educational context and the diverse student population of the community college?

• What experiences enabled faculty to make course content accessible and relevant to students’ lives, and how do these experiences contribute to faculty pedagogical content knowledge?

Research Design

To examine the wisdom of practice of community college faculty and the influence of academic, work, and informal experiences on that knowledge, a mixed method study was employed using both qualitative and quantitative research practices. An important feature of mixed methods research is its methodological pluralism, which often results in superior research compared to single method research. The goal of mixed methods research is to draw from the strengths and minimize the weaknesses of quantitative and qualitative approaches (Johnson & Onwuegbuzie, 2004). It is an appropriate methodological approach for this study in that it allows for the quantitative examination of the variables that contribute to the knowledge base of faculty as well as provides for a deeper understanding of the full range of experiences that influence classroom practice that only narrative inquiry can provide. As a qualitative measure, narrative inquiry, the method of gathering data via interviews, provided faculty with the opportunities to share their stories. Teachers’ stories are inextricably bound with teachers’ lives (Grimmett & MacKinnon, 1992). Faculty interviews provided insight into their practical knowledge and its contribution to their preparation as teachers. Interview questions focused explicitly on faculty knowledge of general pedagogy and the educational context of the community college in addition to the nature of their pedagogical content knowledge. An online
survey of full-time Arts and Humanities, Behavioral Science, and Natural Science and Mathematics faculty was designed provide a broad analysis of the contributors to teacher knowledge. Survey questions centered on academic and formal teaching preparation, certification, and teaching experience. Each of these measures and the sampling criteria along with a portrayal of the educational context of the study is described in the following section.

Research Context

The site of the study was a community college, Ocean View College (a pseudonym), located in southern California. Ocean View's campus is located in a suburban setting in a large metropolitan area and has an annual enrollment of approximately 12,500 students. The smallest campus in a three college district, it offers associate degrees and certificates in occupational programs that prepare students for entry-level jobs, and arts and sciences programs that transfer to four-year colleges and universities.

Students. The student population of Ocean View College is typical of many community colleges in southern California. The diverse ethnic and socioeconomic character of the students reflects that of the surrounding community. The ethnic diversity of the students attending Ocean View College is just slightly different than the diversity of adjacent neighborhood. At the time of the study, Ocean View students were 40% White as compared to the surrounding community population of 55%. The second largest ethnic group of students identified themselves as Latino (18%) closely followed by Asian/Pacific Islander students (15%); these percentages do reflect those of the surrounding community. The fourth largest ethnic group of students was
Filipino (9%), followed by African American (6%) and Native American (1%) groups. A small number identified themselves as another ethnic group (5%); the remaining students (6%) declined to report their ethnicity on the college admission form. There were slightly fewer female students (45%) than male students (55%), which may be reflective of the vocational programs offered at Ocean View that have traditionally been male-dominated occupations, especially public safety programs.

In Fall 2011, over one in five (23%) of Ocean View’s students were first generation college students. The greater majority (93%) of Ocean View’s students reported speaking English; 6% spoke a language other than English and the remaining 2% declined to answer. Most of Ocean View’s students (65%) are high school graduates; 6% possess a foreign high school diploma. A small percentage (7%) reported having already earned an Associate degree; twice as many students (14%) possess a bachelor’s or higher degree. Students receiving Disability Support Programs and Services account for 2% of the students.

Half (50%) of Ocean View students worked less than 40 hours per week whereas 27% worked full-time. An almost equal number (23%) reported that they do not work followed by the remaining 4% that did not report their employment status. A large majority (84%) of Ocean View’s students were enrolled part-time (less than 12 credits). Slightly less than one third (32%) received financial aid for the Fall 2011 semester.

Almost half of the students are young with many having graduated from high school in the last six years (49%). An additional 19% of Ocean View’s students were between 25 and 29 years old. As is typical for a community college, there are a fair number of older students as well. Students that are 30-39 years old comprised 17%
of the student population classes and those that are 40 years old or older made up the remaining 15% (SDCCD, 2011).

**Faculty.** Similar to many community colleges in California, Ocean View's full-time faculty are considerably outnumbered by its part-time faculty. During the timeframe of the project, Fall 2011 semester, there were 97 full-time faculty and 421 part-time faculty. Ocean View's full-time faculty do not reflect their students or the surrounding community in terms of their ethnicity. Most (62%) of Ocean View's faculty are White. The next largest faculty ethnic group is Latino (10%). Asians comprise 7% of the faculty, whereas African Americans represent 4% of the full-time faculty. Native American faculty comprise 1% of the faculty at Ocean View. Male faculty (57%) outnumber female faculty (40%). The remaining faculty declined to report their ethnicity (15%) and gender (3%).

**Study participants.** The focus of the study was on academic classroom faculty; 60 individuals of 97 Ocean View's full-time contract employees are teaching faculty. Vocational faculty, counselors, and library faculty, notwithstanding their contributions to student learning and to campus as a whole, were not included in the present study. This decision is primarily due to their specialized training which is quite different from that of the majority of the faculty that teach in the Arts and Humanities, Behavioral Sciences, and Natural Sciences and Mathematics.

Of the 60 academic teaching faculty 48 individuals responded to the survey. In terms of gender, the female respondents outnumbered males (52% versus 48%) although they make up (40%) less than half of the total 97 campus contract faculty. The ethnic composition of the campus faculty and that of the survey participants
(n=48) is presented in Table 1. It is important to point out that the faculty (n=97) population identified by the District (SDCCD, 2011) represents all contract faculty.

**Table 1**: Comparison of the Ethnic Composition of Campus Faculty and Survey Respondents.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Campus Faculty (n = 97)</th>
<th>SurveyRespondents (n = 48)</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>American Indian</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>White</td>
<td>62%</td>
<td>73%</td>
</tr>
<tr>
<td>Multi-ethnic/Other</td>
<td>0%</td>
<td>4%</td>
</tr>
<tr>
<td>Decline to State</td>
<td>15%</td>
<td>2%</td>
</tr>
</tbody>
</table>

**Description of Measures and Data Collection**

**Faculty interviews.** Faculty interviews were of a semi-structured nature, in which an interview guide based on the research questions was used to facilitate the collection of faculty interviews (Appendix A). The guide, a written list of questions and topics that were to be covered in a particular order (Bernard, 1995), provided me with a systematic process for data collection, since the interviews were conversational and allowed the participants to go beyond the bounds of the questions. Additionally, the guide ensured that all participants were asked the same core questions.

The goal of the questions was to encourage faculty to reflect on the experiences that have contributed to their wisdom of practice, as well as their interpretation and analysis of their teaching. Often narratives raise unexpected
questions, while providing expected questions to others. I anticipated that this would be the case in this study. In accordance with this viewpoint, Connelly and Clandinin (1988) state that narrative inquiry is one of the most informative ways in which teachers make sense of their work. Narrative inquiry encompasses the close examination of "the personal practical knowledge" of teachers and is a term "designed to capture the idea that allows us to talk about teachers as knowledgeable and knowing persons" (p. 25). Resonant with these thoughts is Grimmett and MacKinnon’s (1992) view that the study of teachers’ lives enables us to understand the biographical influences that affect the development of craft knowledge or which Shulman (1987) identifies as the wisdom of practice. For these reasons, I chose this qualitative method as a means to more fully appreciate the contribution of experiential knowledge to community college faculty knowledge of general pedagogy and the educational context of the community college in addition to the nature of their pedagogical content knowledge.

**Sampling criteria of faculty interview participants.** As interview participants, I purposefully chose 15 full-time community college faculty who teach in different disciplines in the Schools of Art and Humanities, Behavioral Sciences, and Natural Sciences and Mathematics at Ocean View College. The decision not to include vocational faculty was due to their specialized training which is quite different from that of the majority of the faculty that teach in the Arts and Humanities, Behavioral Sciences, and Natural Sciences and Mathematics. Moreover, the overall educational context of Ocean View is that of a non-vocational school with 67% of the student population enrolled in Arts and Sciences programs.
Using a stratified sampling technique I applied as selection criteria years of teaching at the community college and academic program. Faculty were placed into one of three categories of teaching experience: one to five years, six to fifteen years, and more than fifteen years of experience. In addition, faculty in the three academic schools were equally represented. Moreover, to ensure heterogeneity of the sample an effort was made to have the participant pool representative of the Ocean View’s faculty in terms of gender and ethnicity. The selection of 15 faculty was judged to be an adequate and manageable sample size as it allowed to make comparisons of the experiences and opportunities that contribute to the teaching practice of community college faculty in academic programs. A summary of the faculty, their pseudonyms and the described sampling criteria are shown in Table 2 below.

<table>
<thead>
<tr>
<th>Years Teaching</th>
<th>Academic Program</th>
<th>Degree</th>
<th>Gender</th>
<th>Ethnicity</th>
<th>Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>Arts &amp; Humanities</td>
<td>M.A.</td>
<td>male</td>
<td>white</td>
<td>Max</td>
</tr>
<tr>
<td>1-5</td>
<td>Arts &amp; Humanities</td>
<td>M.A.</td>
<td>male</td>
<td>Hispanic</td>
<td>Peter</td>
</tr>
<tr>
<td>1-5</td>
<td>Arts &amp; Humanities</td>
<td>M.A.</td>
<td>male</td>
<td>white</td>
<td>Graham</td>
</tr>
<tr>
<td>1-5</td>
<td>Behavioral Sciences</td>
<td>M.A.</td>
<td>female</td>
<td>white</td>
<td>Hazel</td>
</tr>
<tr>
<td>1-5</td>
<td>Behavioral Sciences</td>
<td>Ph.D.</td>
<td>female</td>
<td>Hispanic</td>
<td>Susanna</td>
</tr>
<tr>
<td>6-15</td>
<td>Arts &amp; Humanities</td>
<td>M.A.</td>
<td>female</td>
<td>white</td>
<td>Dianne</td>
</tr>
<tr>
<td>6-15</td>
<td>Behavioral Sciences</td>
<td>M.A.</td>
<td>female</td>
<td>Hispanic</td>
<td>Elena</td>
</tr>
<tr>
<td>6-15</td>
<td>Behavioral Sciences</td>
<td>M.A.</td>
<td>male</td>
<td>white</td>
<td>Henry</td>
</tr>
<tr>
<td>6-15</td>
<td>Behavioral Sciences</td>
<td>M.A.</td>
<td>female</td>
<td>white</td>
<td>Chris</td>
</tr>
<tr>
<td>6-15</td>
<td>Natural Sciences &amp; Math</td>
<td>M.S.</td>
<td>female</td>
<td>white</td>
<td>Pam</td>
</tr>
<tr>
<td>&gt; 15</td>
<td>Arts &amp; Humanities</td>
<td>M.A.</td>
<td>female</td>
<td>Hispanic</td>
<td>Savannah</td>
</tr>
<tr>
<td>&gt; 15</td>
<td>Natural Sciences &amp; Math</td>
<td>M.A.</td>
<td>female</td>
<td>white</td>
<td>Michelle</td>
</tr>
<tr>
<td>&gt; 15</td>
<td>Natural Sciences &amp; Math</td>
<td>Ph.D.</td>
<td>male</td>
<td>Pacific Islander</td>
<td>Charles</td>
</tr>
<tr>
<td>&gt; 15</td>
<td>Natural Sciences &amp; Math</td>
<td>J.D.</td>
<td>male</td>
<td>African American</td>
<td>David</td>
</tr>
<tr>
<td>&gt; 15</td>
<td>Natural Sciences &amp; Math</td>
<td>D.A.</td>
<td>male</td>
<td>white</td>
<td>Ben</td>
</tr>
</tbody>
</table>
Data collection took place over a seven month period from July through December 2011. Faculty interviews were conducted during this time period with the majority of the interviews collected during the fall months. Fewer faculty than initially anticipated were available for interviews during the summer months. This was primarily due to the cancellation of summer classes and the closing of the campus due to budgetary constraints. Therefore, 12 of the 15 interviews were conducted during the fall semester.

The interviews of the Arts and Humanities, Behavioral Science, and Natural Science and Mathematics faculty were audio-recorded interviews and on average approximately 70 minutes in length. Individual faculty were contacted in person and asked to participate in the study. During this preliminary meeting I explained the research project, its objectives, and the interview process. At that time, I obtained the faculty member’s oral consent to be interviewed and audio-recorded as well as assured them of their anonymity. The consent process was approved by UCSD’s Human Research Protections Program as the best means to protect the identity of the interviewees. The research project was also reviewed and accepted by Ocean View’s Research Committee. In appreciation of their participation faculty were each given a ten dollar gift certificate.

Faculty survey. For the quantitative portion of the study, 60 academic classroom faculty of Ocean View's 97 full-time faculty were contacted to participate in an online survey. As mentioned previously, the remaining 37 full-time faculty, represented by vocational faculty, counselors, and library faculty, were not a focus of this study. Included in the 60 academic faculty are the 15 faculty that were
interviewed who participated in the survey prior to their interview. Other faculty were recruited in person at department meetings and Academic Senate meetings. After each meeting a follow up email message was sent to each faculty member, which provided an explanation of the study and an assurance of their anonymity. The brief survey was created using Google Docs Forms and was comprised of questions that had multiple choice options, check boxes, and open-ended, interview-like questions that allowed faculty to write answers of no predetermined length (Appendix B). The first section of the survey included demographic questions, such as gender and ethnicity, as well as those that inquired about the academic discipline taught and degrees completed. These questions provided insight into the depth and breadth of faculty content knowledge by providing the percentage of faculty that possess doctoral degrees versus those with master’s degrees. In turn, these responses inform about pedagogical content knowledge, which is partially influenced by content knowledge. Moreover, the findings from this portion of the survey questions shed light on the assertion of some researchers that individuals with doctorates possess specialization and research expertise that are neither necessary nor consonant with the mission of the community colleges (Townsend & Twombly, 2009).

The second portion of survey focused on variables such as formal teaching preparation, certification, and teaching experience. These questions centered upon teaching experience and considered the grade levels taught and the years of teaching experience at specific grade levels. This section of the survey, together with previous set of questions, measured the probable influence these variables have on faculty general pedagogical knowledge. One could anticipate that formal training and teaching experience would contribute to a community college professor’s ability to
organize and manage a course, to choose from various instructional strategies, and to assign and assess student work; in other words, skills that contribute to general pedagogical knowledge. Additional survey questions made it possible to determine if the different types of teaching experience, such as graduate level assistantships, adjunct community college teaching, apprenticeships at the community college and tutoring vary in their contribution to faculty wisdom of practice. The final section of multiple choice questions inquired about experiences that could contribute to faculty knowledge about the characteristics of the student populations with which they work, which leads to their knowledge of educational context. This knowledge along with knowledge of content and general pedagogy contributes to faculty pedagogical content knowledge.

Data Reduction and Analysis

Faculty interview analysis. The first step of data reduction was having the interviews transcribed by a professional transcription service. Upon receipt of each transcribed interview, I compared the written transcript with the corresponding audiotape. This was done in order to become more familiar with the transcripts and to correct any errors that occurred during transcription. Moreover, by listening to the recording as I read through a transcript, I was able to not only see the words, but I was also able to hear the participant's voice again. Doing this gave me a better understanding of what was said and how it was said. Subsequent readings of the individual transcripts allowed for the creation of a schematic summary of each faculty member's pathway to becoming a full-time community college professor. Using pen and paper I drew the respective passages of the faculty through academic and vocational career transitions (see Appendix C). This process led to the identification
of numerous recurrent themes involving the academic, work, and informal life experiences that faculty described in response to the interview questions. These themes would form the basis of the analyses of the faculty's paths to community college teaching.

The faculty narratives were then analyzed using HyperRESEARCH (version 2.7). To begin, it was necessary to convert the transcripts that were in a Microsoft Word format into plain text files. These files then served as the sources of data that were analyzed by coding. The study naturally broke down into three basic units of analyses or cases. Each case represented one of the three components of teacher knowledge that were the focus of the study. The three cases were defined as GPK (general pedagogical knowledge), PCK (pedagogical content knowledge), and ECK (knowledge of educational context). In all three cases the 15 transcripts analyzed by a coding scheme. To do this it was necessary to develop a coding system of a priori and emergent codes that were based on the theoretical frameworks and questions that guided the study. Some of the emergent codes used included: tutoring experiences, influence of past professors, coaching sports, and work experience outside of academia. Each case had a distinct Master Code List (see Appendix D), however some codes, for example adjunct teaching, appeared in all three lists. During the coding process some codes were collapsed into a single code, for example K-6 and 6-12 teaching were combined into the code K-12 teaching, and some codes were deleted altogether. Once a case was coded, a Report was created. I chose to sort the Report by Code name, which provided all the incidences of text from the source files to be sorted according to each code. For example, in the GPK Report under the code heading Adjunct Teaching there was a list of the transcript
passages that referred to that specific code. The three Reports were then exported and saved as text files, which I then copied and pasted into Word documents. Once the reports were printed, I was then ready to interpret the findings, which are presented in chapter five.

**Faculty survey analysis.** The faculty survey, the quantitative portion of the study, was designed to supplement and extend the qualitative analyses of the faculty interviews. The analysis of the faculty survey utilized descriptive statistics to determine the frequencies of certain demographic characteristics and experiences that were expected to influence faculty wisdom of practice such as teacher certification, types and years of teaching experience, and internship opportunities. During the three months of data collection I was able to view online the number and type of faculty responses that were collected into a spreadsheet that was linked to the survey. Once the survey was closed for further responses the analysis of the survey data was possible by using the Summary of Responses option in the Forms menu of Google Docs Forms. The response summaries included the number and the percentage of faculty that chose a particular response in answering survey items 1-22. Further analysis was required of survey items 21 and 22 due to the opportunity to write in an "other" response in addition to those that were provided. For example, for both survey items almost one-fifth of the faculty wrote in responses that included tutoring, coaching sports, and influence of former professors, therefore it was necessary to tease out the "other" responses and count them by hand. This was possible by printing out the portion of the spreadsheet that indicated the responses to survey items 21 and 22, color code them, count them, and determine what percentage of the total responses each represented. The final open-ended survey
item, question 23, assessed the nature of the experiences that contributed to the participants' pedagogical content knowledge. The data was analyzed using HyperRESEARCH and a coding scheme similar to that used in the narrative analysis of the GPK, PCK, and ECK cases. This fourth case, Survey Question Summary, had its own Master List of codes (see Appendix D). Once the case was coded, a Report was created and printed using the same sort function as in the GPK, PCK, and ECK cases. The quantitative data collected from survey items 1-22 and the qualitative data collected by survey item 23 were used to corroborate the findings based on the GPK, PCK, and ECK cases; their interpretation is presented in chapter five.

In sum, both quantitative and qualitative analyses were used to identify relationships between the variables and faculty wisdom of practice as well as to come to an understanding of the theory underlying the relationships. The use of these methodologies and the resulting data permitted triangulation to further confirm or disconfirm relationships (Eisenhardt, 1989; Johnson & Onwuegbuzie, 2004). I triangulated the research by using mixed methodologies, multiple participants, and member checking, which allowed faculty to check the accuracy of the details in the transcripts. The multiple references to certain themes in the faculty narratives, which will be discussed in chapters four and five, gave me confidence that these were shared experiences among the faculty. Moreover, I checked survey responses against the themes and ideas that emerged from the faculty narratives; multiple references to similar ideas further allowed for the triangulation of the data. When participants repeat one another, on certain themes and ideas, such as comments about the influence of having both "exceptional and poor" professors on their teaching practice, the data becomes more reliable than if only one participant makes reference
to a concept or idea. Further information regarding the limitations of the study and ethical considerations together with a description of my positionality are in the sections that follow.

**Positionality**

The qualitative nature of this project requires that the readers be aware of my positionality regarding both the participants and context of this study. I am a full-time faculty member in the district that is comprised of Ocean View College and its three sister campuses. Therefore, the study participants are colleagues of mine. Despite the fact that we are all members of the same faculty, we seldom see one another and therefore do not forge the professional and personal relationships we wish we could. It important to stress that I do not personally know the majority of the faculty that were interviewed. What is more, for those I do know, I was not familiar with their personal career pathways that brought them to community college teaching. Therefore, my unfamiliarity with my colleagues’ personal backgrounds placed me in the role of a naïve, and therefore, less intimidating, interviewer. In addition, I do not hold a position of authority over any of the faculty that were interviewed. It is also important to point out that I often reflected upon whether my interpretation of the participants’ responses were shaped by my own philosophy and life experience. In order to counter any bias, I carefully framed my interview questions and seldom interjected comments other than the supportive "uh-huh" or confirming "right." I followed the advice of Bernard (1995) to "get an informant onto a topic of interest and get out of the way." This enabled faculty to reflect upon their experience and provide information they believed to be important. In my interpretation of the findings I sought
to maintain validity so the representations I constructed of the participants' "mental, conceptual, ideological, and emotional understandings" (Eisenhart, 2006, p. 574) were truly those of the faculty.

**Limitations of Study**

This study has several limitations. First, in some ways the generalizability of the study is limited by its small sample size. Due to time and resource constraints, the number of in-depth interviews was limited to 15 community college faculty. However, in the quantitative portion of the study, a larger sample of survey participants (n=60) provided an additional opportunity to determine the incidence of the various contributors influencing classroom instruction. Moreover, as with other qualitative research studies, the goal is not to generalize to a population but rather generalize to theory. Thus, this project aims to extend the theories of teacher knowledge and funds of knowledge with respect to the knowledge of practice in community college faculty.

A second limitation of the study, which further influences its generalizability, is that the interview and survey participants teach at a single community college, which is characterized by its own distinct educational context. By virtue of its distinctive set of defining characteristics, such as the composition of its students and faculty, its mission, and the demography and socioeconomic status of the surrounding community, Ocean View College is different from other community colleges. Therefore, one cannot make the assumption that the findings of this study can be generally applied to other community colleges. Nonetheless, the study's findings could inform future research and policy involving the preparation of community college faculty as teachers.
An additional limitation to the study is its focus on the wisdom of practice of full-time academic faculty, those teaching in the Arts and Sciences; the study did not include Ocean View's vocational or part-time faculty. Again, the decision not to include vocational faculty was two-fold: the training of these faculty is quite different from that of their academic colleagues and the overall context of Ocean View is one defined by the majority of its students being enrolled in the Arts and Sciences with their primary goal of transferring to a four-year university. Due to its emphasis on the career pathways that can lead to full-time community college teaching, the present study does not inform on the experiences that contribute to the teaching practice of part-time community college faculty. As such, the findings of the study must be closely examined for their representativeness of the community college faculty experience.

A final limitation of the study is the reliance on faculty self-reports for both the interview and survey data. Whenever self-reporting is used in research, there is always the possibility that participants may not respond accurately to questions, either because they cannot fully remember an experience or they answer in a way that portrays their abilities and knowledge in a positive light. However, a strength of self-report methods is that they allow participants to reflect on and describe their personal experiences, which was a primary aim of this study.

Summary

In this chapter I provided a description and rationale for the mixed method design of this study. Included was an explanation of the sampling strategy and a comprehensive portrayal the study sample; its size, demography, academic training, and teaching experience. In order to address the research questions involving the
nature of the faculty's wisdom of practice and, more specifically, their knowledge of educational context, it was essential to include a thorough depiction of the school site context, which was defined by its students, faculty, and the community it serves.

In order to gain an understanding of the nature and to measure the incidence of the life experiences that influenced teaching in community college faculty, I used two instruments: individual semi-structured interviews and an online survey of Ocean View's academic faculty. The former provided qualitative data; the later provided quantitative and qualitative data, ensuring triangulation and rich information about faculty knowledge for teaching.

The study's findings are organized in a couple of ways. In chapter four, I will describe the career pathways of the 15 faculty, the influences that shaped their decisions to become community college professors, and the cross-case themes that emerged from the analysis of the narratives. In chapter five, the general nature of the wisdom of practice in these faculty will be examined along the identification and detailed interpretation of how their life experiences have led to what Grimmett and MacKinnon (1992) refer to as the craft knowledge of teachers. In doing so, I address the research questions guiding this study.
Chapter IV: Pathways to Teaching at the Community College

Overview

Becoming a faculty member is a dynamic journey defined by various career transitions (Reybold & Alamia, 2008). There has been much written on how personal and environmental factors shape people's career choices, but very little theory or research has focused on the development of college professors (Lindholm, 2004). This is true not only in respect to the influences that shape one's decision to become a community college professor, but also concerning the experiences that have contributed to their teaching practice.

To that end, this chapter presents the findings on the assorted pathways that led 15 individuals to community college teaching. These faculty life stories provide a means for emergent themes to surface from which conclusions can be drawn. It is through these narratives that we come to understand how their lived experiences contribute to their wisdom of practice. It is an attempt to understand more thoroughly the diverse backgrounds and the funds of knowledge these faculty bring to their work in the community college classroom. Moreover, the discussion of these pathways focuses on how the participants decided to pursue a career in education and how they characterized their socialization and transition (Reybold, 2003) into community college instruction. The following vignettes by no means represent a complete retelling of the participants' stories. Rather each is a brief portrayal providing a glimpse into the life experiences that have influenced each individual's wisdom of practice, which has culminated in the teacher that he or she is today.

The analysis of the qualitative data led to the discovery of several archetypical pathways that made it easier to draw comparisons across the faculty narratives. In
Reybold's (2003) study of the transitions of doctoral students to the professorate, she assigned a specific name to the individuals that characterized each pathway (the visionary, the philosopher, the drifter, etc). In this study, by contrast, the faculty stories have been placed in categories based on common paths that emerged as the narratives were analyzed. To name a few, these journeys include those that began early on with a childhood desire to become a teacher or the influence of having a parent that was a teacher, the mid-academic career departure from the pressures of the university for the teaching focus of the community college, and the arrival to teaching later in life after a career in business. The faculty, their pseudonyms, and descriptors are provided in Table 2 on page 43.

**Faculty Pathways**

I always knew I would be a teacher. Most of the faculty in this study foresaw a career in teaching, however, not necessarily in the role of a community college professor. For two individuals, Susanna and Hazel, the aspiration to teach was developed at an early age. Susanna reflected that "I was drawn to teaching since I was very little" adding that she "saved up" her money to get a blackboard in order to teach her "imaginary" students. Hazel was "always the kid who wanted to lead the group." She would round up her friends and have "everybody sit down. Be quiet." She then announced "I am going to teach you something."

After additional opportunities to teach, including graduate and part-time community college teaching, Susanna and Hazel both began teaching full-time at Ocean View College; three and half and four years ago, respectively. However, the experience with graduate school and the resultant academic outcomes differed greatly for the two women. Susanna's ambition "to always teach at a four year
university" was realized when she earned a Ph.D. in Sociology and was granted a spousal hire at the same Texas university in which her husband taught history. An eventual move to southern California led to a full-time position for her husband and a transition period for Susanna, which she attributes to her pursuing a community college position. "I wasn't publishing as much as I needed to remain competitive at a four-year school and I started realizing that I really enjoyed the teaching more than the research." Hazel, on the other hand, shared, "I did not have a good experience as a graduate student. It was difficult to find mentorship. I was in a Ph.D. program, the environment of the four year university was something I was not fond of, so I left with my Master's in Anthropology." A fellow graduate student told her of an adjunct position at local community college and after teaching one course, Hazel found that she "really enjoyed it" feeling that it was a "good spot for me and I fit in."

Similar to Susanna and Hazel, Elena "always wanted to be a teacher...growing up I just loved school...so yeah, I am pleased as punch that I can be here doing school." Like her colleagues, her aspiration was a faculty position at a four year university. While pursuing a Master's in Educational Policy and Politics on the east coast, Elena shadowed teachers in "really rough places in the Bronx"; an experience that led to an internship at an educational policy research think tank in Washington, D.C. Elena summarizes that summer she spent in the "schools facing tough times" below,

Interviewing very underprivileged students...I think it gave me an appreciation for, you know, sometimes the tools that make you successful in school are being middle or upper class and white...just going into people's homes...the situations were sometimes scary, but I had a partner, the lead researcher, a black man, who was always with me...yeah, and that was 'Wow' probably a good idea.
Elena described herself as Hispanic and, although "shaped by her upbringing in a high socioeconomic area of southern California and her academic training at elite eastern universities", the above situation "taught her to see what those students go through" and led to her compassion for "the people who don't have any power." Soon after, Elena returned to southern California and applied to a doctoral program in Political Science; being accepted, instead, by a school on the east coast. Elena chose to defer admission to the program and appeal her application to the school in southern California. In the meantime, she had an "interesting experience" at a community college teaching students from both the inner city as well the surrounding high socioeconomic coastal areas. "So I was in the community college...I had exposure...but I went east to start my Ph.D...took my qualifying exams...got pregnant...that just put me on a path I thought I would never follow...realizing that there is more to life than doing research on voting rights." Determined to finish her dissertation she left again with her infant in tow and lasted five months before returning again to California. A second child followed and a need "to get the grey matter stimulated" her as much as a need for money. She turned again to part-time community college teaching, which after seven years led to a full-time position. For the past seven years Elena has taught political science to Ocean View's students who she regards as being "so smart...people don't believe me, but I know it's true. They have so much promise."

Followed our parents’ and favorite teachers’ footsteps into teaching. The influence of parents who taught and memories of favorite childhood teachers also played a role in the early interest of several faculty in becoming teachers. Henry often visited his mother's elementary school classroom and would "just kind of help out and
listen to the students." He was "exposed to a classroom setting that way." Peter commented, "in high school I might have guessed that I would be a teacher because I had a really good English teacher and because my father was one. I saw the value and pride in such an endeavor." Savannah identified her attachment to her teachers as the primary reason for pursuing a teaching career. An immigrant to the U.S. and a non-English speaker until age seven, she spoke of supportive teachers that helped her "navigate" through school making her feel that her background was not a "barrier" to her success. Savannah recollected, "I think I came to teaching because of the teachers that I had."

Of the three faculty described above, Henry had the most circuitous route to Ocean View. He came out of his undergraduate education wondering, "Okay, what do I do after this history degree?" Not relishing the idea of the many years required to earn a Ph.D. he decided on a Master's in Library Science, "because it was very short program and you're able to get out and get a job", which he did over the years at a number of different libraries; the most uncommon being a law librarian at a maximum security prison. At that time a fellow librarian told him, "You know, ideally, the best kind of librarian job is at a community college because it is one of the most enjoyable and least stressful. And, you know, it's good pay." Despite his colleague's encouragement, he moved on not to the community college, but to a position that provided all the library services to all the crime labs in the state. At the same time Henry, began his graduate degree in History. His eventual position as Ocean View's librarian was the result of attending a professional talk of the campus's former librarian. After three years as a librarian, Henry was approached to teach history by a
department chair in need of sabbatical replacement. That was 1998 and he has been "teaching ever since."

Peter grew up in the neighborhood surrounding Ocean View. A good student, but "never really seeing the larger value of education", he admitted his early lack of academic direction and as a result enrolled in a community college. He soon dropped out, transferred to an out-of-state four-year university only to return to a different community college after one term. Transferring again, this time in-state, resulted in a bachelor's degree and then an eventual Master's degree in Philosophy. Looking back Peter said, “I would not have guessed that I would teach college. He further reminisced when he spoke about his aspiration to teach at the community college:

> At a point it became clear that I wanted to go back to the pivotal time in my life, the limbo that was the early college years, and its safe house, the community college. To help students find that clarity and understanding... in an effort to get them pointed in the right direction. I chose community college teaching because I wanted to teach. I also chose it because it was a path that I, and several of my high school friends, followed with various degrees of success. Lastly, I liked the idea of working with this particular unique and diverse demographic.

From the above quote, it is apparent that Peter had, perhaps, if not his best collegiate experience, what he feels to have been his most formative years at the community college. This mind-set, coupled with his drive to assist students who reminded him of himself in his years after high school, led him directly to the community college in the form of an internship offered through a consortium of area community colleges. With completion of the year long program he began to teach part-time, eventually coming to Ocean View three years ago.

As previously mentioned, Savannah’s ambition to become a teacher was driven by her relationships with and admiration for her former teachers. Like Susanna
and Hazel, her goal was to teach at a four-year university. However, one summer she
taught Basic Writing part-time at a community college and found her niche. She
spoke of her fondness for the community college and its students.

   The community college is attractive to me because of the word
"community." I have been at the community college my entire in my
teaching career. I love the diversity...all backgrounds, all classes, all
everything.

Savannah counts herself fortunate that she was hired as a full-time English professor
"right of graduate school" at Ocean View twenty years ago.

   Undergraduate education majors. Several other faculty did not specifically
mention a childhood interest in teaching or point to parents and former teachers as
influencing their decision to become a teacher. However, one could argue that an
early interest in teaching developed in these individuals for they entered college in
pursuit of a career in education. Both Michelle and Chris completed undergraduate
degrees in education, which led to becoming credentialed to teach Kindergarten
through eighth grade. Michelle primarily taught middle school math in several states
as a result of being a Navy wife whose husband's duty stations frequently changed;
h her most memorable experience teaching at a newly integrated school in Mississippi.
Many years later, she reflects on that experience as being integral in her approach to
teaching the wide range of students she sees in the community college classroom,

   ...teaching in the middle school really made me understand
students...and how you have to get down to the basics and make it as
simple as possible. You can't be showing one example and go on to
the next leaving them totally confused. Once you realize that they
develop...they come in happy and enjoy math.

A mother of three young sons, she completed her Master's degree in Mathematics;
tutoring three to four middle and high school students each evening after she sent her
sons to bed. Military orders led the family to southern California and Michelle began her near thirty-year career as a community college professor; first as an adjunct instructor and later as a full-time professor at Ocean View College.

Credentialed to teach elementary education in three states, Chris began teaching at 21. It was not, however, in the traditional classroom. Instead, it was as early childhood teacher whose primary responsibility was to oversee the inception and early years of a daycare designed to meet the needs of young children and local seniors. Chris relates that it "was cutting edge" at the time to bring these two populations together. She left that position for a directorship at a 400 student childcare facility for the employee families of a major hospital in Rhode Island. At the same time she began her M.A. in Early Childhood Education. Relocating to Florida, she began to teach kindergarten in an inner-city school "just two exits" from an upscale area. She shared,

I could have gone the 'Palm Beach route' and made life a lot easier on myself. But no, I wanted to teach in those schools...it really humbled me as a person...trying to be the best teacher to 35...just me in a portable with no supplies...I learned on my feet very, very quickly. But it has taught me a lot about life coming from tiny Rhode Island...I would not trade it for anything. I learned better how to treat people, but more about myself.

Her seven years in that portable classroom with children who proudly presented dead rats for show and tell together with witnessing her fellow teachers leaving the profession "in droves" contributed to her doctoral research on teacher attrition. A move to southern California resulted in a second kindergarten teaching position, however, this time in a rural, one-school district. While there she heard of people teaching part-time at the county’s community colleges. She said, "Oh, I can do that. Let me go and try that out." In addition to keeping her day job, she taught two
community college classes in the evenings. She found that once, "I walked into the classroom, I absolutely loved it and the students loved the fact I was teaching children at the time so we had that relationship right away." Chris taught part-time at the community college for six years prior to teaching full-time at Ocean View's early childhood laboratory school six years ago.

**Our goal was to teach Community College.** For Ben, an Ocean View Biology professor for over twenty years, his longtime career goal was to teach at the community college level. While teaching as a graduate student he was offered a part-time position in an audio-tutorial biology lab at a local community college. It was the early 1980's, a time when a community college credential was necessary to teach; "It was an emergency credential...good for two years. For four years he "bounced around" at different schools "picking up "any class I could...to survive." Ben spoke of the impact that California Proposition 13 had on the community college; the funding cuts significantly reducing his teaching load. He then chose to pursue a Doctor of Arts degree, a three-year program that focused on subject matter mastery and undergraduate learning. "So I strengthened my biology background and took classes on Bloom's taxonomy...and pedagogy...so I got to do both things." After completing his doctorate and being unable to find a community college position in southern California, Ben began taking courses for a secondary education credential. He student taught in biology for three weeks when he came to realization that teaching high school was not a pathway he wanted to pursue. After a few additional years as an adjunct instructor, he became a full-time community college professor.

In pursuit of a Master's in Fine Arts degree, Dianne specifically chose to attend a prominent art institute where the graduate program included coursework in
education leading to a credential in community college teaching. She shared, "I knew by being an artist, I would not have a regular enough income to support myself and I knew I wanted teach..." For seven years, Dianne was employed in various positions, which included managing an art studio and teaching community sponsored workshops for children and rehabilitative art classes for adults. At the time she was applying, without much luck, to numerous community colleges. That was until a professor, whose class she had at a local community college years before, asked her to meet with a colleague of his regarding a commission for a fountain. Several semesters later, Dianne was asked to teach on the behalf of her former professor. She recollects, "They asked 'Can you take the Art Lecture Class?' And I said, 'I'll be glad to,' because I had my credential. And that was where I first started... just kind of eased into taking over... but, it was funny because I wasn’t the best student when I was his student...then I had to organize his class." That first experience led to another 18 years as adjunct instructor on the community college campus where she began her academic career. Nine years ago Dianne's career ambition was realized when she became a full-time faculty member of the Fine Arts Department at Ocean View College.

**Industrial aspirations.** Charles and Pam are colleagues in Ocean View's Physical Sciences Department, teaching chemistry and physics/geology, respectively. They shared similar ambitions as they entered undergraduate school, which was to eventually enter industry. Charles aspired to become a chemical engineer and Pam a geophysicist with an oil company. Despite their similar goals, the pathways that eventually diverted Charles and Pam away from industry and toward to community college teaching were quite different. To begin with, Charles grew up in Guam, one of
the five children of working-class parents that valued education as a means to "make it in this world." With his graduation from high school an uncle in California sponsored him for a year in order for Charles to be granted in-state residency. In spite of his acceptance at universities throughout the state, he chose one in southern California because "it was the farthest south…the warmest and most like Guam." While studying for his doctorate, he had the opportunity to teach classes for his research advisor, which he recalls as "being kind of neat...helping students with the fundamentals...as well as 'owning' a course." A postdoctoral position led him across the country and despite doing "heavy duty research" he was impressed by the ability of his major professor "to simplify ideas into things students can understand." A second postdoctoral position landed him back in southern California and his first teaching experience at a nearby community college during the duration of his postgraduate work. Charles taught as a "Visiting Assistant Professor" at a small private four-year university for a brief time followed by additional part time community college teaching. Notwithstanding Charles' research acumen and interests, he admitted, "I did not think I was going to teach at a community college, although I sort of gravitated towards teaching and it gave me the best option in terms of teaching. You are not going to be publishing papers...most importantly; it is about putting the students first." Charles has begun his 16th year as a full-time Chemistry professor at Ocean View College.

Pam began her pathway to the community college with hopes of going into industry and "exploring for oil in exotic places." A geophysics major, she was a graduate research assistant, which was monetarily a "better gig" than being a teaching assistant. That experience together with a degree led to a position as a
research associate for a firm that had a contract with the Environmental Protection Agency (EPA), which to her surprise, involved teaching. In retrospect, she realized that the position helped her with "teaching in general", which was the result of going "to different EPA sites, and teaching two-day classes on geophysics to project managers "who - we'd be lucky if they even had a degree in science." Feeling as though she needed a break from academia, she began working in retail until a friend told her of an adjunct position at a nearby community college. After four semesters the position became full-time and Pam taught general education science courses, such as geology and oceanography, at the Midwestern school for two years. A career move for her husband resulted in relocating to southern California and returning to "freeway flying," or working as an adjunct instructor at several community colleges in order to make ends meet. After a few years and no prospect of full-time work Pam was encouraged by her husband to "get a high school credential or go into real estate." Gratefully, this "thing came up" three miles from her house, which led Pam to teaching geology and physics at Ocean View for the past nine years.

Community College was “sort of default” rather than a goal. Max's career goal was to be a performing musician. He explained, "I did not work my whole life in education. I worked in a factory...in bars...I was a musician. I went to graduate school not to get a job, but to further my knowledge and experience with music at a deeper level...that's why I never wrote the dissertation." However, in the recounting of his story it is very apparent that Max has been a teacher most of his life; beginning with a class he taught as an undergraduate through the years that led to his full time position at Ocean View. That was four years ago at age 55. He began formal music training at "about age 20...not as a child." Out of a perceived need to "catch up with
other people" he devised games he would play in a car with no radio. He uses these same tools to teach his community college students "to learn to listen and critically evaluate sound." During his academic career, which included two master's degrees and an unrealized Ph.D., he taught in a variety of educational settings. The one that stands out for Max is his experience teaching "some of the finest young musicians on earth" at a prestigious arts academy in the mountains of southern California. During his four year tenure he would meet daily at a local coffee house with "a bunch of teachers"; one who was a Professor of Education at the nearby university. The professor mentored master teachers at the school and based on Max's statement, "Stuart got to know me and we would talk about things," it appears that he mentored Max as well. Following this experience of teaching high school-aged prodigies, Max headed to a large university in the South in pursuit of a doctorate. While there he taught World Music to over 200 students, including "the entire football team...that was a good time." Returning to southern California for a second master's degree he found himself in class with a fellow student who also happened to be the "music guy" at a local community college. After seeing a presentation Max had given to the class, he asked him, "Have you ever taught at a community college?" To that Max answered, "No, but yeah I need to make some money." The student/community college professor, after hearing the answers to his questions about Max's philosophy and methods of teaching music, said, "Great, you're hired." So this began Max's "freeway flying" between far flung campuses and his eventual career at Ocean View.

Similar to Max, Graham came to full-time teaching at the community college later in his career earning his "first full-time paycheck in my life in my whole life...I was 60 years old." That was at Ocean View four years ago. For thirty-five years he was a
freelance graphic designer. For that same length of time he was a community college adjunct instructor. As with many of his colleagues making ends meet before that "full-time paycheck," he taught at several campuses; the most etched in his mind was a teaching position on a military transport ship bound for Japan. Graham reminisced about that summer teaching art to enlisted men; the classroom being the chain room where the anchor was stored. He summed up this experience and the ways it has contributed to teaching his current students,

I don't think a day goes by that I don't think about the stuff I learned being with those guys...I had every kind of person you could imagine. You have to teach one person at a time. The chain room...not a normal place to teach...sirens would sound and everyone would run off...so I learned as a beginning teacher to be flexible.

When asked, almost forty years later, why he pursued full time community college teaching, Graham replied, "It is interesting, clean indoor work that pays well... it is basically the same as what I was doing for a living, but applying it differently."

Just as in the case of Graham, David was a business owner before he began teaching community college. However, that is where the similarity in their pathway ends. Unlike Graham and, in fact, the majority of the faculty interviewed, David did not teach as a graduate student nor part-time in a community college. His entry into teaching and education was as a seminar leader involved in a program "that bridged the gap" between what students in the paralegal program and the world of work. Realizing the inadequacy of his own paralegal education coupled with completing his M.B.A, David founded a school that provided paralegal program graduates with "hands-on practical understanding" of business and the law; something that he continues to provide his community college students. The eventual selling of his business led him to Ocean View twenty years ago, where he was hired to teach
business and to develop a paralegal program. After several years, David took a yearlong sabbatical leave and completed law school. The law, his personal understanding of it, and its influence on his teaching approach and career is a recurrent theme in his narrative. At one point, he recollects that his perspective on teaching "has always been from my lack of understanding of law from the beginning and I know now that when my students walk in the door they are looking through the same lens I had...so I try to make it as practical for them as possible." In the midst of his story, David shares a second influence law had on his pathway to community college teaching. A long way from law school, but one that also played out in the courtroom, his pathway to college was in part the result of being caught by long arm of the law and "finding himself like most African-American boys who'd gotten in trouble and in a legal system...totally ignorant of what is going on." In spite of the apparent serious nature of the experience, David found the process "very enlightening" and remembers being "quite impressed" with his attorney and, especially, her assistant, a soon to be paralegal. This formative experience opened up an academic and career path he admits seemed unlikely when he was young.

**Cross-Case Themes**

As compelling as they are, these narratives cannot be left to stand themselves as evidence. Erickson (1986) wrote that “interpretive connections are made across vignettes and between vignettes...” (p. 50). Eisenhart (2006) refers to interpretive commentary as “‘glue’ added by the researcher” which provides the rationale for “asserting that there are certain relationships among the concepts as defined by the examples." (p. 571).
First and foremost based on an across comparison the 15 faculty narratives, it is apparent that there is no direct, predictable passage to becoming a community college professor. Represented by the faculty stories is a wide array of pathways; each personal journey as distinctive as every one of the individual faculty members. Along the way faculty transitioned through a series of academic and vocational experiences that can be seen as both social and developmental in nature. As Baldwin (1990) noted, faculty members develop throughout their career. Reybold and Alamia (2008) state that "the academic journey is neither static nor dispassionate...faculty work is characterized by mobility within and between institutions" (p.109). In the case of community college faculty one could also argue that more often than not the dynamic movement can include transitions from academia to the workplace and back again.

Most convincing of the narratives is that, regardless of the route, in almost every case, the faculty landed their first and often subsequent part-time teaching positions at the community college serendipitously. Many faculty shared that their first job at a community college was the result of a friend telling them of an opening at a local campus or a happenstance meeting with a department chairperson in need of a sabbatical or medical leave replacement. The entire faculty identified the primary reason for accepting the position was driven by a need for a job; an interest in teaching at the community college was secondary. However, once setting foot in the lecture room they found themselves embracing the community college, its mission, and, in particular, its students. And so began their individual pursuit of a full-time teaching position, which for some came early in their career; for others much later.
Early Experiences Teaching at the Community College

With the arrival at the community college came common challenges that were met either head on, with much trepidation, or a combination of both. Emerging from the narratives are recurrent themes in the faculty's descriptions of their initial and early experiences with community college teaching. These include the arrival at the community college as a part-time instructor and receiving little or no support from campus personnel; an unsettling entry into the classroom that several faculty referred to as "being thrown to the wolves." The next theme revolved around the growth in faculty confidence as they transition from courses in which they share teaching responsibility to courses where they are solely accountable for instruction. A third theme entailed the forging of relationships between the novice part-timers and mentoring colleagues, which provided for the exchange of ideas and teaching materials, which led to further confidence in the classroom. A subsequent theme involved the role of adjunct teaching as a proving ground for part-time instructors that may or may not lead to an offer of a full-time position. The final theme is adjunct teaching and its part in the development of a community college frame of mind, which is defined by the personal philosophies of education of the faculty as viewed through the lens of the educational context of the community college, its students and its mission.

Thrown to the wolves. Reflecting on their first community college teaching experience, seven of the faculty spoke of it as being nerve-wracking and found themselves floundering in front of their students. They were often assigned evening and weekend classes, which made support from other faculty and administrators close to non-existent. Isolated from the campus community, their "trial by fire"
introduction to community college teaching resembled what Grubb (1999) found in his study of community college faculty; many of whom saw the irony, given the perception of the college as a teaching institution, that few of them had been formally prepared to teach.

Relying on other metaphors, Hazel described an early teaching experience as being "thrown to the wolves"; Chris referred to her first adjunct experience as being a "leap and not of faith...just immersion." Others described facing their first classes with feelings of inadequacy; their confidence shaken. Savannah walked into her first lecture only to walk back out wondering, "Can I really do this? I know my subject matter...no one taught me how to teach." Similarly, Elena spoke of her teaching of a night class as a "disaster" and went on to say, "I can't believe that this how you learn (to teach), right?" Echoing these sentiments, Pam commented, "the first day as an adjunct nobody tells you what to do; nobody tells you anything. You just show up and 'Oh, my God, what do I say'?” Attempting to cover 24 chapters of chemistry in 16 weeks, Charles, a post-doc at the time, found students "in revolt" and complaining to the department chair until he "tempered the pace" in response to his "audience."

Charles had been hired one week before the semester began; not unusual for community colleges that often fill adjunct positions up until the first day of class. Unlike his colleagues, David did not have part-time teaching experience prior to coming to Ocean View's Business Department. Due to the few business courses offered his first semester he was assigned to teach a couple of math classes, which he remembers as "the scariest thing I had to do in my entire life." David's solutions were to stay a chapter ahead of his students and organizing his students into groups to encourage peer learning. Looking back, he was amused that years ago "out
of necessity ...I stumbled across collaborative learning solely because I had no choice." Similar lessons of those first experiences and the resourcefulness and tenacity of these faculty were best summed up by Hazel, "At least in the beginning, you know you are going to get through it and that you'll develop the skills necessary to create something substantial out of this first 'wolves' experience...and you just have to be the kind of person that thrives on that."

**Incremental steps leading to confidence.** Using the "thrown to the wolves" metaphor, Ben explained how he avoided such a fate. His first experience teaching at a community college was in an audio-tutorial lab where he fielded students' questions as they listened to tapes and filled in answers in a workbook. He refers to the experience as a "nice first step because I didn't have to present (lecture)." The following semester an assignment to teach a discussion session was "another incremental step," which enabled Ben to become more at ease with teaching. He described how leading the review session contributed to his growing confidence in his teaching, "Although it was teaching, it wasn’t really running a class yet. So I got to warm up slow instead of being thrown to the wolves." In time he would teach a lab section and eventually a combined lecture and lab course for non-majors.

Even though they were not fortunate to share the extent of Ben's experience of "incremental steps" to confidence, other faculty, such as Peter, were gradually eased into teaching at the community college. His introduction to teaching his first course as a part-time instructor was less intimidating due to his involvement in an internship program run by a consortium of county community colleges. A year-long program, it included, in the second semester, the opportunity to teach a course under the watchful eye of full-time faculty member. Peter's lecture section covered topics
one week behind those discussed in the mentor's class. This enabled him to read ahead and, by attending the mentor's class, observe the veteran professor's teaching and seemingly effortless skills in making the otherwise "abstract, dry" subject of logic into "something very practical and valuable in a daily sense."

The concept of "shadowing" a full-time colleague was mentioned by others as a means to build one's confidence in their teaching. It was also the most frequent response to the interview question, "What advice would you give to someone that is thinking about a career as a community college professor?" For these faculty, shadowing or "sitting in" in a few classes prior to teaching led to getting a "feel for the interaction and atmosphere of the classroom" and becoming familiar with the student "clientele" of the community college. Attending colleagues' classes provided insight into "how detailed you need to prepare in order to teach for an hour and a half." Faculty also found that compiling twice as much material as necessary to teach a class meeting as "the best means to get over your nervousness of teaching."

**Mentors and friends along the way.** Though not officially assigned a mentor as in Peter's case, the majority of faculty spoke of individuals that generously provided assistance and support during the first years of adjunct teaching. For some, like Savannah and Peter, administrators provided mentorship; in both cases their respective deans, having subject matter expertise in the same fields as the novice part-time instructors, dispensed both valuable advice and encouragement. Savannah recalls, "I think of that first experience...he taught me that you need to teach students how to navigate college, not just your subject matter." Peter pointed out the benefit of having a dean who studied philosophy just like himself: "It is different when he evaluates you...it is not as just your dean seeing the process, but he actually knows
the material so it's like having another expert to talk to." For most of the faculty, like Graham, Max, and Ben, full-time faculty and fellow adjunct instructors assisted by being significant sources of ideas about teaching and course materials. Graham recalls, "As an adjunct, a guy I learned a lot about teaching from was a retired Navy SEAL and art professor. He had an ability to make students individually buy into...commit themselves to do what they were supposed to be doing...he did this without a lot of lecturing." Max recollects how his first department chair, who just happened to also be a fellow student in a graduate level music class, provided him with "all his teaching materials...tests...everything." When asked if this individual was a mentor, Max answered, "Absolutely, he taught me how to teach at the community college." A ceramics professor from Dianne's M.F.A. program willingly provided assistance by outlining her 3-D Art course and sharing many of his assignments. As Ben was taking incremental steps toward the responsibility of teaching an introductory biology lecture and lab course he relied to a great extent on his fellow part-time instructors. During his first adjunct experience in the audio-tutorial lab he would "interact with other new instructors on how to present things." Ben further described the impact the exchange of ideas with colleagues had on his early experiences teaching at the community college:

I was working with a couple of other people and I was influenced by them...kind of mentors. Not old pro mentors, but instructors who were a little ahead of me...they helped me with my teaching approach...it got me confident.

A proving ground leading to full-time teaching. What is clear from the faculty narratives is that having community college teaching experience often made a difference between getting or not getting an interview when a full-time position
became available. Prior teaching experience was essential for being offered their current position as well. This was true for all participants with the exception of David whose primary responsibility was to develop and teach courses in Ocean View's Business Department's paralegal program. In applying for full-time positions, faculty were well aware that having been an adjunct instructor could be advantageous, if one had a good record, or disadvantageous if one did not. Graham summarized his colleagues' thoughts about the potential benefits as well as the precariousness of being an adjunct instructor: "As an adjunct you have to cautious...being an adjunct is a very dangerous life lived. You can get not asked back at any moment." In her study of the hiring practices of three community colleges, Twombly (2005) found that many community college administrators view good part-time faculty members as a pool of potential tenure-track hires. In the application screening process individuals with prior teaching experience at a two-year college were chosen over those with a higher degree and university teaching experience. If an individual could provide evidence of teaching effectiveness at the community college level, such as favorable student evaluations, their chances of being hired full-time would further increase. Despite the competitive edge these qualities may provide a potential candidate for a full-time position, faculty in this study expressed that there was a limit on the length of time one is an adjunct and the chances of being hired for a tenure-track position. As semesters pass, the likelihood of a faculty member going from part-time to full-time diminishes over time. Elena best summed up this reality, "When this job opened up I told myself seven years as an adjunct...you either get this or you're done."

Twombly (2005) also found that community colleges tend to hire from within a region; those knowledgeable about the community and its students have advantage
over those who are unfamiliar with the educational context of campus. In this regard, adjunct teaching is a proving ground not only for teaching acumen, but a test of one's understanding of the mission of a particular community college and the characteristics of the students it serves. Dianne recalled being asked during an interview about her ability to teach the school's diverse students. She answered, "Well, I have been teaching 10 years here...I know the student body...I know these people." Elena spoke of her "getting to know the District and the students" as a result of her seven years as an adjunct instructor.

**A community college frame of mind.** An unexpected outcome of the faculty interviews was the candid expression of the participants' philosophy of teaching and their perceptions of their role as community college faculty relative to the central mission of the community college. During the interviews faculty were not directly asked about their personal philosophy of teaching. However, a good portion of the narratives focused on what faculty believed were their primary responsibilities to their students, the campus, and the community as a whole. Several mentioned their obligation to prepare students for transfer to four-year universities and the academic rigor of upper-division courses. Elena spoke of having to "do my job which is to prepare people to take upper division political science classes, and you know, not be at any disadvantage of having Intro with me." For Susanna, a main aim of her sociology course was to provide her students with the necessary foundational understanding of the content and "thinking skills should they want to pick up another book in sociology they could." When Charles spoke of his philosophy of teaching, he emphasized on "putting student learning first." For him "it's about them; always about them." He sums up his beliefs below,
If you don't have student learning as your first priority, then you are not here for the right reason. You guide them so that they could understand the fundamentals, so they can be successful for the next level and ultimately meet their college and career goals.

Henry reflected that, "There are students you enjoy working with; others that you are not going to like. But they each deserve your respect and a chance to succeed. If you are not here for the student, then you shouldn't be here."

Overall, the narratives depicted the genuine concern the faculty had for their students' overall academic and personal success. Faculty spoke of providing their students with a world view with an emphasis on the value of education. Hazel spoke of her job as an anthropology professor is to "change the way that they [her students] see the world." Peter shared that he has always felt that his "responsibility wasn't just to teach my subject, but to motivate them and have them realize the purpose of an education."

Chris perceived herself as being an advocate for her students", with whom she builds "rapport" and, in turn, forms trusting relationships. As a result of such relationships, several faculty spoke of the risk of knowing too much about their students' lives and the emotional toll it takes on their professional lives. Their stories of finding homes for students that were living in cars and providing other basics such as food were sobering.

One's responsibility to the campus and its mission was also apparent as faculty shared their philosophical views. David stated that, "A part of our teaching is understanding the place you work at...you're not going to necessarily understand it when you arrive. One needs to get involved; people should know they have a legacy...that they have to carry the school forward." Savannah spoke of the
community college’s mission to "serve the people" and continued to describe it as a "stabilizing force in our society." In final consideration, is Max's philosophy of education that recognized society, not the student, as the primary client of the community college. He described his views below,

Society is my client. I do not look at the students as my clients. I am trying to get these people ready to work with my client. I was hired as an expert in my field according to societal standards; I can recognize when they are learning in my field and evaluate their learning. Those are the reasons I was hired; to get students ready to go out and work with society.

It was evident from their narratives that the faculty had deeply held personal philosophies of teaching. However, just as noteworthy, they had a clear understanding of and a steadfast commitment to the mission of the community college.

Summary

This chapter examined a variety of pathways that led to teaching at the community college as told by the narratives of 15 faculty. A main focus of the chapter was the portrayal of the faculty's characterizations of their decisions to enter teaching and the career transitions they negotiated on the way to a tenure-track position at the community college. A second focal point of the chapter was the interpretation of five themes that emerged from a cross-case analysis. These themes represent the social and developmental stages the majority of the faculty progressed through, as part-time or adjunct instructors, from an often disconcerting introduction to teaching to eventual self-confidence and a better understanding of the context of the community college, which is characterized by its mission as a teaching-centered institution. This
understanding of the context of the community college and its students as well as how best to meet their learning needs is explored in chapter five.

The next chapter begins with a discussion of the nature of the wisdom of practice in community college faculty. What then follows is an in-depth analysis of the contributions of faculty life experiences to their wisdom of practice.
Chapter V: The Nature and Development of the Wisdom of Practice of Community College Faculty

Overview

Nearly twenty-five years ago, Shulman (1987) identified the characteristics of good teaching or what he referred to as teacher knowledge. In Shulman's original framework, an effective teacher is one with a thorough understanding of content, an adeptness at running a classroom, an awareness of the diverse needs of students, and the ability to engage their students by making content accessible and relevant to their lives. In K-12 teaching, a large share of this knowledge is gained by formal means, such as teacher education. Because few faculty in this study had formal teaching preparation, I argue that the knowledge base for teaching in community college faculty is obtained by less formal, more pragmatic means. The qualitative and quantitative analyses of the faculty narratives and survey and their interpretation support this argument. Due to its largely experiential nature, the community college faculty knowledge for teaching does not fit neatly into Shulman's original conceptual framework of teacher knowledge. Rather these skills that are derived from life experience contributed to what Shulman (2004) later referred to as the wisdom of practice of faculty or knowledge derived from practice. By further examining this concept through a theoretical lens, I contend that these largely intuitive and experiential skills acquired less formally in varied social and historical contexts comprise the funds of knowledge of community college faculty.

In the following section, I analyze the nature of the wisdom of practice in community college faculty. Later in the chapter, I discuss the influence of faculty funds of knowledge on three facets of teaching practice: general pedagogical
knowledge, pedagogical content knowledge, knowledge of students and their characteristics within the context of the community college.

**The Nature of the Wisdom of Practice of Community College Faculty**

**Content knowledge: Ph.D. verses master’s degree.** An attribute of a capable teacher is a comprehensive understanding of one's subject matter; content knowledge that is characterized by both breadth and depth. Shulman (1987) referred to this component of teacher knowledge as content knowledge. The faculty in this study had a range of academic preparation. The survey data (n= 48) shows that the majority (63%) of the faculty have a master's in their teaching discipline with the remaining 38% of the faculty teaching with a Ph.D. or another form of terminal degree, such as a D.A., M.F.A. or J.D. Slightly over one quarter (27%) of the faculty had a second advanced degree. These degrees were in addition to the degree in the discipline they teach; for some it was an Ed.D., but for the majority it was an additional master's degree. Of the 15 faculty who were interviewed and also participated in the survey, eight had a master's degree in their discipline; seven had a terminal degree such as a Ph.D., D.A., J.D., or M.F.A. At Ocean View the number of faculty that had a terminal degree in their academic field is higher (38%) than the 12% reported nationally by the U.S. Department of Education (Provasnik & Planty, 2008). This may partly due to Ocean View's location in a metropolitan area that is home to four doctoral granting institutions. In many cases, with the completion of their graduate program, many individuals chose to stay in the area as it is a desirable place to live. One might expect an increase in community college faculty with Ph.D.s to approach or surpass the number of faculty with master's degrees in the next few decades. This is probable due to the large numbers of individuals with Ph.D.s either
choosing the community college as primary career choice or as a second choice as a result of not being hired at four-year universities. However, the one factor that will most likely have an impact on the ratio of faculty with master's degrees to those with Ph.D.s is the impending retirement of many faculty hired in the 1960's and 1970's, many of whom have a master's degree. For the time being, individuals with master's degrees in an academic discipline continue to be hired over those with doctorates not only in Ocean View's District (SDCCD, 2011), but also by community colleges nationally (Provasnik & Planty, 2008; Twombly, 2005). The preference for faculty with master's degrees has been examined by several researchers (Clark, 1987; Cohen & Brawer, 2008; Townsend & Twombly, 2009; Twombly, 2005), who concur that the specialization and research focus of doctoral programs is not consonant with the teaching mission of the community college. These sentiments are echoed by Ben, who has served on many faculty search committees: "We've had a lot applicants...you know Ph.D.s...post-docs, who have recently taught upper division and graduate courses...they don't remember the non-majors, so they don't connect."

Regardless of the particular degree, researchers and hiring committees are in agreement that community college faculty should not only be proficient in their chosen discipline, but also should have a thorough understanding of the scope and academic rigor of the courses they teach. Based on their responses to the interview questions and the classroom examples they provided, it was apparent that the faculty in this study had these skills. For example, faculty, though they teach majors courses that are equivalent to those at a four-year university, realized that they need to temper the pace and depth of content coverage in their general education courses.
General pedagogical knowledge. An obvious source of general pedagogical knowledge is formal teaching preparation. Similar to those seen in K-12 teachers, general pedagogical skills of community college faculty include the abilities to plan a course, create a syllabus, and construct student assignments and assessments. A small percentage of faculty surveyed reported that they currently have or at one time held an elementary teaching credential (4%). Nineteen percent of the faculty indicated that they currently have or have had a secondary teaching credential. Nearly one half (45%) of the respondents hold a lifetime community college credential, which was required to teach at a California community college until 1988 (Hawthorne, 1994). The requirements for the credential was the completion of a master's degree in an academic field and an additional nine units of coursework that focused on the history and mission of the community college, the characteristics and learning needs of diverse adult learners, instructional strategies, and curriculum development.

Clearly, teaching experience is an invaluable means by which to improve one's knowledge of general pedagogy. The faculty in this study taught in a range of settings: K-12 classrooms, graduate school, and the community college as part-time instructors. One quarter of the faculty responded that they had taught at the Kindergarten through eighth grade levels, with the majority (82%) of them having taught there for five years or less. Almost a quarter (22%) of the faculty taught high school for either five years or less (56%), six to ten years (22%), or more than ten years (22%). The foremost type of experience was as an adjunct instructor at the community college level; 91% of the faculty reported that they had taught part-time for five years or less (62%), six to ten years (31%), or more than ten years (7%). Though
it is not instruction occurring in a classroom setting, tutoring warrants mentioning in that almost one half (51%) of the faculty responded that they had such experience.

Further examination of the data shows that three individuals reported having both a secondary education and community college credential. These individuals along with those that reported having only a single subject credential taught high school prior to coming to the community college, which was the norm in the early days of the community college (Bushnell, 1973; Koos, 1947; Fields, 1962; Medsker, 1960).

Later in this chapter, I examine the influence of having or having had a credential, whether it be an elementary, secondary, or community college credential, on the general pedagogical knowledge of these faculty. In addition, I discuss the contribution of other experiences, such as K-12 and adjunct teaching, the influence of observing the teaching of former professors, and professional development, to the faculty's knowledge of general pedagogy.

**Pedagogical content knowledge.** The epistemological concept of pedagogical content knowledge was represented by Shulman (1987) as an amalgam of the knowledge of both content and general pedagogy. It is the way in which subject matter is transformed for instruction, which is made possible when faculty reflect on course content and find ways to adapt and tailor it to the needs of their students. In their narratives the faculty in this study provided extensive evidence of their pedagogical content knowledge. They often spoke of bridging the gap between what their students are learning in school and what they need to know in the real world. Whether it was a math student determining the final price of a sale item from which an additional 20% was taken off or an anatomy student's skill in identifying the lower leg
muscles of a balancing cyclist waiting for the light to change outside their car door, faculty knew that such examples breathe life into their content and further engage their students. The sources of these and other examples of pedagogical content knowledge will be examined later in this chapter.

**Knowledge of education context of the community college and its students.** Two final components of Shulman's (1987) framework considered in this study are the understanding of the characteristics of one's students and the knowledge of the educational context in which an individual finds her or himself teaching. Similar to those teaching at any level of education, it is essential for community college faculty to possess specific knowledge about the characteristics of the student populations with which they work within the context of the campus community. These characteristics include age, developmental stage, language, culture, social class, and gender as well as ability, aptitude, and motivation. It appears that the knowledge of students and educational context are among the most dynamic aspects of teacher knowledge. One could argue that the ever changing student population of a community college has somewhat of a ripple effect that leads to the further adaptation and refinement of faculty general and pedagogical content knowledge. It is apparent, based on their responses to the interview and survey questions, that the faculty brought to their current positions an understanding of the needs of diverse learners. However, for many it was no more than a nascent form of knowledge gleaned from working with diverse peers in graduate school, studying abroad, or their own experiences growing up as an ethnic minority. For others it was an understanding afforded by years of working with diverse students at community college campuses as an adjunct instructor. Later in the chapter, the contribution of
the aforementioned experiences to the knowledge of students and their characteristics within the context of the community college will be discussed.

**The Development of the Wisdom of Practice in Community College Faculty**

The preceding portion of the chapter provided an analysis of the nature of the wisdom of practice in community college faculty. This portion of the chapter will provide an analysis of the contributions of faculty experiences to the following components of teacher knowledge: general pedagogical knowledge, pedagogical content knowledge, and the knowledge of students and their characteristics within the context of the community college.

**Experiences Leading to General Pedagogical Knowledge**

Analysis of the quantitative and qualitative data indicate that a wide range of life experiences contributed to the development of general pedagogical knowledge in community college faculty. Survey questions 21 and 22 addressed the experiences that contributed to the knowledge of general pedagogy in community college faculty. The first of these questions (number 21) asked faculty to choose from a list the experiences that contributed to their course planning, classroom management, and student assessment. The question allowed for multiple answers, with the majority of the participants that responded to this question (n = 44) choosing two experiences from the list. Nine individuals chose one contributor from the list; 14 individuals chose three. The list of contributors included: adjunct teaching, graduate teaching, K - 12 teacher preparation, and community college teaching internships. In addition, the survey allowed respondents to write in experiences not on the list in a box labeled “other.” Other experiences that faculty identified as having influenced their
knowledge of general pedagogy included: tutoring experiences, coaching sports, graduate courses in pedagogy, influence of former professors, workshop attendance, and work experience outside of academia. The 94 faculty responses are summarized in Figure 1 below.

![Figure 1](image_url)

**Figure 1:** Formal and less formal experiences contributing to the knowledge of general pedagogy in community college faculty

As shown in Figure 1, adjunct and graduate teaching experiences were identified as the largest contributors to general pedagogical knowledge followed by K-12 teacher preparation. Of those that faculty provided in the "other" category, tutoring experiences were the most frequently identified followed by an equal percentage of responses for coaching sports and community college teaching internships. The remaining "other" contributors were also represented equally in the total 94 faculty responses.

The second question (number 22) asked faculty to choose from those responses given in the previous question the contributor that most greatly contributed
to their knowledge of general pedagogy. The 39 responses to the question are summarized in Figure 2 below.

Figure 2: Formal and less formal experiences identified by faculty as being the greatest contributor to their knowledge of general pedagogy

Similar to what is shown in Figure 1, Figure 2 shows that the first contributors (adjunct, graduate, and K-12 teaching, and tutoring) were chosen most frequently by faculty as influencing their knowledge of general pedagogy. The single difference is that coaching sports surpassed community college internships as a main contributor. This is due to all three individuals that indicated coaching sports as a contributor in question 21 also choosing it as the greatest contributor in question 22. Only one of the three individuals who had identified community college internships as a contributor also acknowledged it as the greatest contributor. The remaining contributors to general pedagogical knowledge: graduate coursework in pedagogy, the influence of former professors' teaching, professional development, and non-
academic work experience were equally represented in Figure 2 as they are in Figure 1. In sum, overall teaching experience (K - college) was the greatest contributor to general pedagogical knowledge followed by less formal means, such as professional development and non-academic work experience.

In the following section, the influence of each of these contributors on the faculty's general knowledge of pedagogy is analyzed. This will lead to a greater understanding of the extent of the formal and experiential knowledge that faculty have accumulated along their path to full-time community college teaching.

**Adjunct teaching.** As indicated in Figure 2, adjunct community college teaching was seen by faculty as the greatest contributor (33%) to their general pedagogy. Of the faculty who were interviewed and had taught part-time, all referred to adjunct teaching as an opportunity to develop their course development, class preparation, and content delivery skills. Describing their first few semesters of teaching at the community college, Pam, Ben, and Susanna spoke of spending hours on preparing lectures, which included writing out probable answers to questions that they anticipated students may ask. As Pam put it, “At that point, I wasn’t going to come up with them off of the top of my head.” For an hour and half lecture, Ben spoke of having prepared over two hours of information “ready to go just in case.” All of the faculty viewed each opportunity to teach the same course or a new course as providing a means to further hone lectures, assignments, and student assessments.

**Graduate teaching assistantships.** Fifteen percent of the survey responses identified having been a graduate teaching assistant as being the greatest contributor to their general pedagogical knowledge. Of the 15 faculty interviewed, four spoke of
their graduate teaching experience as having influenced their practice, although eight faculty had shared that they had been graduate teaching assistants. The indication that teaching at the graduate level had not made a considerable contribution to the practice of all eight faculty concurs with Golde and Dore’s (2001) study, in which 58% of the students surveyed believed their programs did not prepare them to teach. The authors found that the scope of graduate teaching experiences differed greatly across disciplines, with some students teaching lectures while others were only responsible for leading discussion sections. It may be the same for the faculty in this study; the degree of the influence of being a graduate teaching assistant on classroom practice could be dependent upon the nature of their experience.

For example, Charles found that the teaching of general chemistry lectures coupled with supervising undergraduate research afforded him with “several insights in terms of how to approach teaching.” Elena spoke of her graduate teaching of several different political science courses as "really good training" and credited her supervising professors that "cared about teaching and taught me how to teach" as influencing her general pedagogy. Similarly, Ben acknowledged that his graduate teaching of an undergraduate biology course for non majors prepared him to teach years later a community college course that was similar in scope and academic rigor.

Susanna acknowledged the co-teaching of a Race and Ethnicity course with a full-time professor as allowing her to observe "how to put a course together and what parts to present." She learned how to facilitate group activities and discussions, two strategies she uses in sociology courses. Susanna’s teaching responsibilities included lectures on the Latino experience, which the professor would sit in on and later provide feedback on her teaching.
**K-12 teaching.** Teaching at the K-12 was ranked third among the greatest contributors to faculty knowledge of general pedagogy, represented by 13% of the responses. This is interesting given that 44% of the surveyed faculty reported that they had taught at the K-12 level, in some cases for more than ten years, prior to teaching at the community college. However, one faculty's admission that it was "quite a jump from teaching children to adults" leads one to think that the pedagogical skills honed in the K-12 classroom are not readily transferable to the community college, particularly less so when one has taught at the K-8 level, which 25% of the faculty responded they had.

On the other hand, Michelle credited her experience as a middle school math teacher as a main contributor to her knowledge of classroom instruction. Faced with a classroom of sixth grade students at very disparate levels of preparedness and abilities, she devised teaching strategies that allowed her to teach arithmetic to one half of the students and algebra to the second half of the students. Many of these strategies she currently employs in the teaching of her community college math classes, particularly lower division courses. Chris spoke of how she used the experiential knowledge she gained as a kindergarten teacher in the teaching of her early childhood courses. She explained, "I can draw them out at any time...the students like to hear how I handled different situations." Her examples led to the development of her students' "own tool belt" equipped with different tools or strategies "because each child is different and one cannot have only one tool." Max, who taught at a music academy for secondary students and substitute taught for several years with an emergency teaching credential credited these experiences to having
contributed appreciably to his knowledge of running a classroom and working with students with varying degrees of preparedness and aspirations.

**Tutoring experiences.** Working as a tutor either privately or in association with a school was the most frequently entered experience in the "other" survey category as shown in Figure 1. It follows then that it is not surprising that tutoring experiences were identified by 10% of the responses and was ranked as the fourth greatest contributor to faculty general pedagogical knowledge in Figure 2. Four of the faculty that were interviewed spoke at length about the influence of being a tutor had had on their general instruction. Savannah shared that as a tutor she was able to "figure out different ways of reaching different people." The application of this skill in her community college classroom was apparent when she went on to say, "...it is not a one-size fits all...in my developmental courses it is like re-creating 32 tutoring sessions." Michelle acknowledged that tutoring middle through high school students in her home "equaled" her formal training to teach grades 6-12. The experience of working one-on-one with students gave her insight into "how little students understand in math" and the need to "make it as simple as possible." Much in the same way, Charles spoke of tutoring as a means of personally "getting down to the fundamentals in order to relate to their level." Ben found that tutoring at a community college helped in bettering his understanding of "the thought processes or missing gaps that students have" than if he would have "had if I had just jumped in and was doing lecture."

**Coaching.** As indicated by Figure 2, coaching sports as a main contributor to pedagogical knowledge was represented in 10% of the faculty's responses. One
might anticipate that past or current coaching experience would play a key role in the teaching of physical education courses. However, only one of the faculty members that identified coaching as a main contributor taught health education courses; the other faculty taught in the Arts and Humanities. Of those faculty interviewed, Peter, spoke of how coaching influenced his teaching practice. He described skills that were indispensable on the playing field: knowledge, practice, and an appreciation for one's opposition, which were transferable to his lectures where student discussions and debates are the norm. Dianne recounted how the teaching of a martial arts summer course, in which students used "live swords," played a part in the refinement of her teaching methods. The experience led to her knowledge of how to "not only organize and facilitate a course, but to make sure, by being in charge, things run smoothly and no one gets hurt." The development of her "persona of being in charge" is imperative in an art studio where she oversees a large number of students that often use table saws and other potentially hazardous equipment. Moreover, what is very interesting is how she transferred the teaching strategies of a very different cultural discipline to her studio art classes. She described her adaptation of the Japanese martial arts instructional model below,

The way they teach is very visual...they do not talk on the mat. They demonstrate, you watch, you try to do what was shown as the teacher walks around and corrects the different partners. And so now, when I'm teaching, at the beginning of class I do the demonstration and then I go around and individually assist the students...it's mostly hands-on. I ask do you want me to show you or do you want to watch me show somebody else? – some say, 'No please don't touch my work just show me', which I understand, no hurt feelings.

**Teaching internships.** Of the faculty surveyed, nine percent responded "yes" to item 20, which inquired about their participation in teaching internships at the post-
secondary level. Of these four faculty members, three wrote "internship" in the "other" category of survey item 21 and one identified it as a major contributor to their knowledge of pedagogy (survey item 22). Although not reflected in the responses to survey items 21 and 22, two other faculty, in response to the open-ended survey item (23), wrote that their participation in internships required by either their graduate degree or community college credential contributed to their teaching practice.

Of the interviewed faculty, Peter was the only one who had participated in a community college teaching internship. The experience included workshops on syllabus construction, classroom management, and instructional strategies useful in meeting the needs of diverse learners. As useful as these workshops were, it was the classroom training that Peter acknowledges as greatly influencing his instruction. Similar to a K-12 student teaching experience, it involved observing his mentor teaching followed by his teaching of a class, which, in turn, was evaluated by his mentor. Although Ben did not participate in an internship, he spoke of their value when asked, "What advice would you give someone that is thinking about a career as a community college professor?" In response, he suggested participation in such a program in order to "get a feel for the [classroom] interaction and how detailed you have to prepare for lectures."

The remaining experiences that faculty identified as "other" contributors to the knowledge of pedagogy - graduate coursework in pedagogy, influence of former professors, professional development, and work experience outside of academia - were each represented by 5% of the total faculty responses as indicated by Figure 2.

**Graduate coursework in pedagogy.** Two surveyed individuals responded that courses in pedagogy as a graduate student were the greatest contributor to their
general pedagogical knowledge. Similarly, Susanna recollected that the prerequisites for a teaching a lecture as a doctoral student were the experience of "one teaching assistantship under your belt" and concurrently taking a course in pedagogy. She described the course as being one taught by a sociology professor that had been formally acknowledged by the university as an outstanding teacher. In addition to instruction on how to construct syllabi and student assessments, the course covered course preparation, scope and academic rigor. Moreover, the course included opportunities for being video-taped while giving a "mini" lecture and being assessed by her professor and peers. Understandably, Susanna credited this experience as being invaluable in her preparation as a teacher. The most memorable take away regarding class management was "leave your ego at the door." It is one message that still resonates in her teaching practice.

A faculty member responded in the survey that she had an experience similar to Susanna's. As a graduate teaching assistant she also was required to take courses in general pedagogy and how to specifically teach her discipline, which is speech. Additional monthly meetings covered how to "create goal-oriented group exercises and meaningful tests." She went on to say, "This was the best preparation, bar none, that one could have received."

On the other hand, as previously discussed, the community college credential program of the 1980's included courses in community college pedagogy. Although 45% of the faculty responded that they had a community college credential, only one individual indicated in the open-ended survey question (question 23) that the courses had helped in their teaching practice. This could be due to the faculty's view of the
courses being of little consequence to their teaching practice or that the courses' significance have faded over the past two decades.

**Influence of former professors.** Faculty referred to their incompetent teachers they had as students as often as they described the teachers that struck them as being exceptional and inspirational. In response to survey question 21, one individual wrote, "In fact, the bad professors were just as inspirational as my good professors in shaping my pedagogy (i.e. I try not to replicate their teaching)." When asked if she had formal training to become a teacher, Savannah answered, "I would say that my preparation has been informal because I learned it via observation of my teachers. Both great and not so great. So, I learned how to teach from both of them." Hazel echoed these sentiments when describing the influence of her former professors on her teaching practice, "In graduate school some were great teachers; some were not." She continued in saying that she drew from their examples of instruction in determining how to teach or how not to teach. The following open-ended survey response also illustrates the influence former professors' teachings skills has had on the faculty's general pedagogical knowledge,

> The greatest contribution to my teaching prior to getting a full-time college teaching job was the professors who taught me in graduate school. To be specific, I do my best to emulate the excellent professors, and I also do my best to avoid the bad habits of professors who I did not consider good teachers.

> The influence of former teachers on the practice of any teacher cannot be underestimated. By way of this "apprenticeship of observation" university and college teachers "educate future teachers every time they represent their subject matter” (Shulman, 2004, p 121). Shulman (2004, p.134) goes on to say that "arts and
sciences education is, in its own way, one of the most successful examples of teacher education." The preceding examples are in agreement with Shulman's (2004) assertion of the role of the "arts and sciences as normal schools" (p.134). Moreover, they have provided an understanding of the influence of former teachers on general pedagogy of community college faculty. Later in this chapter, the influence of the practice of former teachers on faculty pedagogical content knowledge will be discussed.

**Professional development.** Charles, Pam, and Savannah attributed their attendance at educational seminars and involvement in professional associations as having been central to their initial and continued teaching practice. Charles spoke of his involvement in a summer program offered by a state association targeted at community college faculty. The program allowed faculty to exchange ideas about teaching and the opportunity to network with individuals in other academic disciplines. Charles described a discussion with a nursing instructor, in which they compared ideas of how his introductory chemistry course could best meet the needs of her students. Pam, another Ocean View physical scientist, faced with having to teach physics after years of teaching geology and oceanography, attended National Science Foundation sponsored workshops on the teaching of physics. She shared, "I learned so much...I had no idea of what gear to buy...I did well in physics, but didn't teach in grad school. I had no idea how to teach a physics course." Through the workshop experiences and sharing of ideas with colleagues she learned how to develop, implement, and teach a community college transfer level physics course.

Savannah credits her involvement with a local professional writing project and the "dialogue" she has had with "other teachers who care about teaching" in
influencing her general pedagogy. She spoke of how the members of the group would discuss their classroom teaching practices. More importantly, Savannah recognized the opportunities to teach a lesson and receive feedback from the group as being invaluable to her teaching practice.

**Work experience outside of academia.** Of the faculty who were interviewed, only Graham and David had extensive work experience outside of academia; both of their teaching strategies were workplace bound. A sole proprietor of a graphic arts company for over 35 years before he began teaching full-time, Graham shared how his professional experiences with clients as varied as artists, museums, and healthcare providers had influenced the teaching of his community college students. In his words, his instructional strategies are to teach his students to gauge, "What is going to work technically...what is going to work in the eyes of the client." Similarly, David spoke of using "meaningful and applied" homework assignments as means to address legal situations students may encounter with clients.

**Experiences Leading to Pedagogical Content Knowledge**

The final survey question (question 23) was open-ended and asked faculty to describe the experiences that they had prior to full-time community college teaching that they drew upon to make course content understandable and relevant to their students. The original intent of the question was to determine the experiences that contributed to the pedagogical content knowledge of community college faculty. However, many faculty answered the question by providing experiences that have led them to an understanding of the diverse student population that characterizes a community college or, in other words, their understanding of educational context.
Because of this, it was difficult to disentangle the pedagogical content knowledge survey data from the knowledge of educational context survey data. For example, in response to the question, one faculty member provided an example of working in industry where they had to "explain science to non-scientists" (pedagogical content knowledge) while another faculty member answered the question by writing "I draw upon my personal life experiences, especially as a Latina, child of immigrant parents, and the first to go to college" (knowledge of educational context). For heuristic purposes I will attempt to separate these two components of teacher knowledge, although it is apparent that they are interrelated. Experiences that contribute to faculty pedagogical content knowledge will be discussed in the following section followed by an examination of those experiences lending themselves to an understanding of diverse learners within the context of the community college. In both sections, just as in the case of the previous discussion of general pedagogical knowledge, survey responses will be complemented by responses from the faculty narratives.

**Influence of former professors.** In a previous section it was seen how the teaching practice of former professors made a lasting impression on the faculty in this study by influencing their general pedagogy. The influence of professors together with the experiences faculty had as students in undergraduate and graduate education appeared to have also shaped their pedagogical content knowledge. Eleven survey participants responded that they had drawn from the pedagogical content knowledge of their professors by currently employing many of the same analogies and metaphors in their own classes. Charles remembered a professor's uncanny ability of using metaphors to transform very complex content into a form that was more accessible to his students. He continued to explain that he tried to emulate his
professor's style to clarify content when he sensed his students struggling with a concept. Similarly, Hazel spoke of modeling the teaching behaviors of an anthropology professor she had in undergraduate school. One of the behaviors was the practice of illustrating a point by sharing his own personal experiences, which would result in "everyone just sitting up, being drawn in and thinking like 'that's so cool'."

From the above example, it is evident that Hazel's professor, whom she referred to as the class's very own Indiana Jones, used a proven method of engaging one's students - tell them a story. Due to the prevalence in the faculty narratives of story-sharing as a means to snag student interest or to further illustrate a concept, I chose to divide this example of faculty pedagogical content knowledge into the following three sections: Tapping into Personal Experiences as a Student, Borrowing from Students' Experiences, and Stories From the Past with Relevancy Today.

**Tapping into personal experiences as a student.** Several faculty responded in the survey that they drew upon their experiences as students, who often, like their own students, struggled as they were first learning concepts and course content for the first time as sources of pedagogical content knowledge. One individual explained, "much of the experience that helps me teach physics was actually learning physics as a student." This is similar to Max sharing with his students the mental and musical games he played with himself as he learned to play music and Michelle teaching her students the mnemonic phrases that she used as a student in order to remember the order of operations in mathematics. Aware of the daunting challenge of remembering numerous artists and their works facing her students, Dianne tells them how as a student she managed to distinguish one artist
from another by knowing the personality of an artist or the context in which they painted. She gave the example of an artist well known for his "rosy cheeked" subjects, whose coloring was due to drinking in tavern, a favorite haunt of the artist. Several faculty mentioned that sharing their personal stories as college students made them appear "more human" in their students' eyes.

**Borrowing from student life experiences.** One of the most interesting sources of faculty pedagogical content knowledge to emerge from the interviews was the faculty's use of past or current students' experiences in the clarification of a concept or as a means to demonstrate the relevancy of course material. They believed that this led to the further engagement of the students with the content. Susanna spoke of relying on the use of past students' experiences to imbue timeliness and relevancy into her courses more so with each passing semester. She said, "I take those stories...they are not mine, I give the student credit...and use them semester after semester. I like the idea that I am using students as sites of knowledge. I realize know that I am using it as a learning tool." Hazel recounted a time when covering a unit on ethics in anthropology led to a lecture discussion centering on social scientists that are embedded in military troops and equipped with firearms. After much debate the general consensus among students was that such a situation was not right. That was until four veterans who had recently returned from the Afghanistan spoke up. Hazel recalls one saying, "Let me talk to you about my experience with this. I have seen people's lives being saved because these people were there with us [and] understanding what was going on in the field." She went on to say, "It was amazing for all of us. I continue to use that example in my classes from semester to semester." Hazel saw this sharing of student experiences as making not
only content relevant to her students, but as a way of fostering community in the classroom.

**Stories from the past with relevancy today.** Several of the faculty who were interviewed spoke of putting themselves in their audience and thinking, "Okay, what would fascinate me and capture my attention?" Henry shared, "When I teach history I think what are some the juicy, you know, dirt and scandal that are going to get students excited?" One of the several examples he provided is summarized below,

We were covering Prohibition...well, who doesn't like gangsters and Al Capone? It keeps them entertained, but you use the story to teach the facts about prohibition...why it passed in the first place, why was it hard to enforce, and why it didn't work. Then you relate past policy to today's prohibition of marijuana...something they are voting on today.

Dianne's statement, "If you tell them a little story, it will help them remember," echoes Henry's sentiments. She went on to provide an example she uses when the class is covering color, "Picasso's painting of the old man with the guitar...his blue period...but, he was more *poor* than depressed. As an *artist*, not a critic, I know blue paint is the cheapest color you can buy and it goes the farthest, too."

In addition to the use of stories, one's own or those borrowed from others, faculty believed that the use of everyday life experiences helped students to grasp a difficult concept or engaged them in learning. They also felt that sharing such stories contributed to "humanizing" themselves as professors and fostered a positive classroom climate.

**Using everyday life experiences.** Throughout the faculty narratives there are numerous examples of using every day events and experiences to greater ensure the relevancy of course content to their students' lives. Peter referred to his everyday
examples as "a bag of tricks or a toolbox" useful in teaching philosophy; Charles described "the tricks of the trade" that "he carries along and passes on to his students." He went to say, "I want them to see that chemistry is something they have to deal with everyday...the rate in which alcohol gets converted to vinegar in the body...every once in awhile they get pretty fascinated."

Ben related how he used photos of the U.S. President taken over the years instead of the textbook example to illustrate human aging. He believed seeing the "graying and aging" of the President was more relevant than "the old woman in the text that the student's didn't even know." Moreover, he shared how "my relatives...they are in my anatomy and microbiology lectures a lot. They remember that...they'll ask me next semester, 'How's your daughter'? I bring in that I keep bees...they all know I make beer." The brewing process is arguably the best way to explain anaerobic respiration to community college students.

Like Ben, Pam often turned to two of her hobbies to further explain course concepts. An avid rock climber, she describes climbing on sandstone verses climbing on granite as a means to help her geology students distinguish between the two types of rocks. She shared, "Yeah, I tell them that I used to climb on sandstone, but when it rains you fall off - ha-ha, as opposed to granite, you don't fall off. So it's a little more exciting than 'Let's learn about rocks!'" In her physics courses, solving problems involving gravity, lift, and vectors take on a new twist when she taps into her hobby of flying.

Graham spoke of his background in sports and music as a source of analogies in his teaching of graphics arts using computers. He shared, "Now, the hand gestures are a big part of operating a computer. You use your hands; left and
right either simultaneously or independently. All those skills are the same that students need in music and sports...in addition to practice, practice, practice."

It is evident from the above examples that the community college faculty in this study have extensive experiential knowledge that forms the basis of their pedagogical content knowledge. Their abilities to tap into "just the right" life story, analogy, or metaphor to further explain a concept or to encourage the engagement of their students is a testament to the depth and breadth of the understanding of their academic discipline. Just as they expressed the need to stay current in their content area the faculty often spoke of how necessary it is to have a "bag of tricks" that are relevant to today's students. Several faculty expressed that one of the most enjoyable aspects of their career is that "the students and the skills and experiences they bring to class are constantly changing." The understanding of one's students or "clientele" as many faculty referred as their classroom audience, their aptitude, skills, interests, and cultural background, is collectively known as what Shulman (1987) referred to as the knowledge of learners and their characteristics. Therefore, it can be argued that for community college faculty, relevant pedagogical content knowledge hinges on the faculty's dynamic understanding of the ever-changing student population that comes through the door semester after semester. In the following section, the main sources of this knowledge as identified by both survey and interview participants is analyzed.

**Experiences Leading to Knowledge of Diverse Students within the Context of the Community College**

**Experiences with diversity.** Twenty seven percent of the faculty who participated in the survey identified themselves as being an ethnicity other than white; 15% declined to state their ethnic background. Several of these faculty shared their
personal experiences of growing up in a bilingual home or as a multiethnic child in public schools in response to the survey question (question 23) that asked about life experiences that had contributed to knowledge of working with diverse students.

Of those who were interviewed, Savannah, Susanna, Elena, and Peter were Hispanic, Charles was a Pacific Islander, and David was African-American. Much like their surveyed colleagues, these six faculty spoke of their experiences growing up as ethnic minorities and the influence of this on their understanding of the diversity represented in their classrooms.

Savannah, a Latina, shared, "I've had experiences with teachers who, definitely, should have never been teaching...professors who never knew my name or wanted my perspective on the basis of my age, gender, or culture. When a student is made to feel invisible, that does nothing for self-efficacy." She has countered those negative experiences by creating a "culturally responsive curriculum and a positive learning climate where no one is marginalized." She further emphasized the importance of inclusiveness and cultural awareness, "Look at our students...they are the faces of diversity...they are from all over the world. Of course they have experiences that they can count as knowledge."

Susanna, growing up "as a child of Latino immigrant parents, the first to go to college," did not express that she had had the same marginalizing experiences of Savannah. She saw her upbringing as making her more accessible to her students; many of whom are "children of immigrants or immigrants themselves...the first to go to college." She discussed the importance of being responsive to the varied backgrounds of her students, "not just my ethnicity...this is a very diverse class from military to various ethnicities, religions." In teaching sociology she realized that her
understanding of the "other ethnic and cultural groups represented in her classes was no greater than that of faculty who are white." Susanna spoke of increasing her understanding of cultural groups other than her own by having students frequently share their life experiences. She acknowledged that students also benefitted by "connecting their lives to larger social processes", which Susanna hoped "makes the material more relevant." Other faculty said they stressed cultural relevancy in their course content. Cultural appreciation, however, was not a one-way street. Faculty encouraged students to learn about cultures other than their own.

Several survey responses echoed the sentiments of Savannah and Susanna. One faculty member wrote, "I draw on experiences that I had as a person growing up in a bilingual household with relatives who spoke little or no English." Another responded, "I am an immigrant and so have had some similar experiences as my students. I grew up in an urban multiethnic community and attended a multiethnic college."

Elena, a Latina from high socioeconomic background, did not mention any personal experiences that were similar to those described above. She spoke at length, however, of the experience of participating in research in urban areas in the Northeast as an education policy student and its pivotal role in the development of her compassion for people "without power." She has brought that same concern for the underserved together with a related appreciation of "what some of our students go through" to her classroom.

The narratives of Peter and David, a Hispanic male and African-American male, respectively, focused on not so much on their ethnicity, but on their experience as community college students. The two cannot be as easily separated as they may
seem; as minority students, Peter and David's assumed routes to a four-year degree was via the community college as it is for many of their students. Both spoke fondly of their community college experiences and saw as one of their greatest classroom roles as guiding those students that reminded them of themselves. Both Peter and David spoke of those roles, beyond their teaching responsibilities, as helping to get students "pointed in the right direction and provide them with confidence necessary to meet their goals." Toward the end of his narrative, David lamented of soon being the only full-time African-American faculty member remaining at Ocean View as a result of the recent and pending retirements of fellow African-American colleagues. He commented that faculty diversity is decreasing at a time when student diversity continues to grow.

Interestingly, although they are white, several faculty in response to question 23 shared that their knowledge of working with diverse students was a result of circumstances of their upbringing and experiences as students. Max spoke at length of growing up in the segregated South with the good fortune of having a mother that exposed him and his siblings to the lives of their housekeeper and others that lived in "Nigger Town in 1964." He explained, "we would pick up Lodi and her kids...we would play...and then take them home. My mother made damn sure we were exposed to that." Echoing Max, several survey respondents spoke of their exposure to and the resultant understanding of individuals different from themselves, which they gained from living in diverse metropolitan areas. As one faculty member put it simply, "I have been in public schools my entire life so I do not know any other way than a diverse student population."
Learning from diversity in the classroom. Similar to Max's childhood experiences, both Michelle and Chris taught in schools where they were exposed to the racial tension and the injustice of poverty of the integrated schools of the South. Chris spoke of teaching kindergarten at an inner-city school where corporal punishment was the norm as a "really humbling experience" and one that has led to a life of advocacy for her students, many of whom are single mothers, and their children, who attend Ocean View's child development lab school. Michelle's acknowledgement of her time teaching middle school math contributing to her knowledge of general pedagogy has already been discussed. However, based on her recollection of teaching at a school where "they put together the lowest economic blacks with the highest economic whites" and the "range of education in a single classroom was unbelievable", one could say that the experience prepared her for the disparity found in community college classroom.

As previously discussed, community college faculty are faced with diverse learners defined by a wide range of characteristics which include: age, developmental stage, language, culture, social class, and gender as well as ability, aptitude, level of preparedness, and motivation. The inter-related nature of many of these characteristics makes it difficult to talk about one and not another, such as in the case of Michelle's math students where ethnicity, socioeconomic status, and academic preparedness all played a role in the classroom. For ease of discussion, these student characteristics and the experiences that have led the faculty in this study to a greater understanding of their students will be considered together within the following educational contexts: Secondary school, Adult Continuing Education -
English as a Second Language, University, and Community College - Adjunct teaching.

**Secondary school.** Several faculty wrote on the survey of experiences with students that struggled with school due to their lack of preparedness for college. One responded that his ability to meet the many challenges in his developmental English classes was influenced by his "teaching grade 13 English at high school for dropouts in Toronto." A second individual's work in Title I¹ high school as a math resource teacher involved developing individualized instruction materials to meet the differentiated learning needs of students.

**Adult continuing education – English as a second language.** Faculty stated that the first and foremost hurdle to their students' success identified by faculty was the students' lack of proficiency in English. From their responses, it was apparent that this was a challenge that no previous experience, other than teaching ESL, has prepared them for. Two surveyed faculty together with Hazel, the anthropology professor, were the only faculty with such experience. One survey respondent wrote, "I got a great deal of teaching ESL students at continuing education sites." Hazel attributed the courses required for ESL certificate to her better understanding of how to meet the needs of non-native English speakers. Other faculty spoke out of concern for their students and how their struggles with English compromised their ability to learn course content. When she talked about her sociology students, Susanna had recognized that English "might be their second or third language" and had taken that into account in her classes. Similarly, others spoke of many of their

¹ Title I is a term used to refer to schools that receive federal funding because they serve large numbers of students eligible to receive free- or reduced-price lunches.
ESL students as being "very knowledgeable" and "already having an advanced degree from their home country." Henry spoke of his Chinese students in his history courses, "I've had people from all over Asia and oftentimes they know what is going on, but they are ESL...it is a challenge for me." To ease the stress on these students, he has offered that they "turn their papers in advance to see if they're on track...if not I work with them." From these examples, it is evident that faculty are learning alongside their students as they negotiate this barrier to student success.

**University teaching.** Almost one half of the surveyed faculty had experience teaching at the university level. Several commented that the level of preparedness and aptitude of the students was not unlike community college students. One respondent wrote, "I compare my teaching at community college to my work teaching math to seniors at a major university who could not pass the ELM (Entry Level Math) exam." Similarly, Susanna credited her teaching at an urban university that "was a commuter school with a wide range of students...diverse, first to go to college" in preparing her to teach at the community college.

**Community college – adjunct teaching.** Faculty identified adjunct teaching experiences in primarily southern California as one of the foremost experiences that best prepared them for teaching at the community college. By teaching part-time at campuses adjacent to the U.S.-Mexico border and elsewhere in the region, faculty became familiar with the culturally diverse students of the community college, such as first generation U.S. citizens with ties to Central America, Southeast Asia, Africa, and Eastern Europe. The following survey response highlights the role of adjunct teaching
experience in faculty developing an understanding of the distinct character of community college students:

Adjunct positions introduced me to a whole population of students with whom I never imagined I could relate to. It gave me an understanding of some of the attitudes that are shared by many students, such as the desire to learn and improve one's situation...that allow for success no matter where someone starts their educational career.

Noting the value of experiential knowledge, another faculty member responded "with each experience my practical knowledge of teaching diverse students increased." Faculty were especially aware that the student make up of their classes changed from semester to semester, a reality that was responded to by a willingness to adapt. A survey response read, "Each semester the syllabus changes as the students change." Likewise, interviewed faculty often referred to their adjunct teaching experience as giving them insight into the different challenges that confront their students. Elena found that with each semester the interaction with new students came new issues and challenges that led her to constantly improve the accessibility of her courses to everyone.

In addition to providing insight into the demographic diversity of community college students, adjunct teaching contributed to faculty understanding of the disparity in the level of preparedness for college. Almost all of the faculty admitted that when they first started adjunct teaching college, they were not prepared for the "older, highly intelligent, academically driven students" that were sitting among the 18-year olds that they had anticipated. Pam recalled, "in physics, for the most part, they are on the level of four-year school students." Charles, Ben, and Elena all spoke of students who excelled in their courses and have successfully gone on to graduate and professional schools. They also discussed the quandary of "balancing both
populations." One shared what a colleague had once said, "At the community college we have rocks and we have rocket scientists." Ben summed it up when he said, "It is a worry sometimes...you don't want to bore the sharp ones and you don't want to blow away the less strong ones."

As Ben and his colleagues reflected upon their journeys to the community college, it became evident that they were sharing several aspects of the sources of knowledge that had influenced their practice. In telling their stories they spoke frankly and ardenty about the "where" or the context in which they learned and the more revealing "how" and the "what" they learned from those experiences. In sum, these life stories provided valuable insight into the nature of the faculty's wisdom of practice or craft knowledge, which Grimmet and MacKinnon (1992, p. 387) believe represents faculty "apprehending the events of practice from their own perspectives as students of teaching and learning, much as a 'glue' that brings all the knowledge bases to bear on the act of teaching."

**Summary**

In this chapter, I described the findings from a mixed methods analysis of both quantitative and qualitative data. The chapter's initial focus was an analysis of the nature of the wisdom of practice in community college faculty. I detailed the character of each of the components of teacher knowledge that were considered in the study. A second focal point of the chapter was an in-depth analysis of the contributions of faculty life experiences to their wisdom of practice.

Using primarily quantitative, data I described the nature of content knowledge based on the faculty's range of academic preparation. Faculty with a master's degree in their academic discipline outnumbered their colleagues with a terminal degree,
such as a Ph.D. The preference for those with a master's degree is supported by the perception that these faculty have content knowledge that is characterized by both breadth and depth, qualities that are necessary to teach at the community college (Provasnik & Planty, 2008; Twombly, 2005).

Quantitative data provided insight into the types and extent of teacher preparation in the faculty. A majority of the faculty had or had in the past a teaching credential of some sort. A near majority of the faculty had a community college credential followed by fewer individuals with secondary and elementary education credentials. Survey data also indicated that teaching experience was an invaluable influence on the knowledge of general pedagogy of the faculty. An overwhelmingly number had taught as adjunct community college instructor followed by those who had also taught at the high school and elementary school levels.

For a more in-depth analysis of the contributions of life experiences, such as those discussed above and other less, formal experiences, to general pedagogical knowledge, I relied on both quantitative and qualitative findings. Survey and cross-case analyses indicated that the greatest contributor to faculty general pedagogical knowledge was teaching experience. These experiences ranged widely and, in order of significance, were adjunct, graduate level, and K-12 teaching. Other experiences that faculty acknowledged as contributing to their classroom practice included tutoring and coaching experience. As students, they accumulated knowledge of general pedagogy as a result of graduate coursework and by observing their professors as they taught.

A third component of teacher knowledge, pedagogical content knowledge, was found to be influenced by less formal means than content and general
pedagogical knowledge. Qualitative findings indicated that the influence of professors together with faculty's experiences as students had some of the greatest influence on their ability to adapt course content to their students' needs. Further experiential knowledge that resulted from interactions with colleagues and students served as additional sources of pedagogical content knowledge. Faculty indicated that the telling of stories - theirs' or those borrowed from others - and examples taken from everyday life were among some of the best ways of making course content accessible and relevant to their students.

As in the case of pedagogical context knowledge, experiential knowledge was the primary contributor to the faculty's capabilities of working with students characterized by demographic diversity and a wide range of academic preparedness, aptitudes, and aspirations. Experiences with diversity, either as a person of color or not, while growing up, as a student, or as a teacher all contributed to the faculty's insight into working with community college students. Of all of the life experiences shared by the faculty adjunct teaching was the greatest contributor to their knowledge of the characteristics of their students within the context of the community college. Teaching part-time in the community college context provided them with the most applicable and practical classroom experiences for working with the many types of students that fill their classrooms today.

The following chapter will summarize the findings in light of the research questions and theoretical frameworks that guided the study. In addition, the findings will be compared to those reported by other researchers in the field. Moreover, consideration will be made regarding the implications for future research, policy, and practice involving the teacher knowledge of community college faculty.
Chapter VI: Conclusion

Pathways have been central to this project, which began with the contemplation of my own personal journey to community college teaching and ended with the analysis of the circuitous paths of 15 community college faculty members. Along the way life experiences provided for an accumulation of knowledge, much of which was informally obtained; knowledge that would form a wisdom of practice, mine and that of my colleagues. To take a final look at the study's findings, I have divided this chapter into two major sections. First, I summarize the findings in relation to the research questions and the theoretical frameworks that guided the study. I then connect the findings to the prior research in the field. In doing so, I explain how the findings contribute to novel empirical insights and theory building with the respect to the wisdom of practice in community college faculty. Secondly, I discuss the implications for future research, policy, and practice involving the teacher knowledge of community college faculty.

Connections to Research Questions, Theory, and Literature

**Research questions.** The first research question centered on the forms of knowledge that comprise the wisdom of practice in community college faculty. Quantitative survey findings provided insight into the nature of faculty content knowledge. The findings indicate that the majority of the faculty had a master's degree in the academic discipline they teach, which remains the degree of choice at the community college level (Provasnik & Planty, 2008; Twombly, 2005) over a more specialized degree, such as a Ph.D. This is most probably due to the perceived depth and breadth of knowledge afforded by the degree, which is seen as being better
suited to teaching the first two years of college. Quantitative and qualitative data gave insight into the faculty’s knowledge of general pedagogy. The findings indicated that study participants had accumulated knowledge, by both formal and practical means, which contributed to their knowledge of course planning, implementation, and instruction. Lastly, rich qualitative findings provided a portrait of a faculty that had garnered an understanding of the context of the community college, its mission, and its students.

The focus of the second research question was on the types of lived experiences that influenced the formation of the faculty’s wisdom of practice. The findings in chapter four illustrated that the faculty’s pathways to the community college were as capricious as they were varied. Analysis of the narrative data revealed five emergent themes that represented the social and developmental stages the majority of the faculty transitioned through in their early years of teaching community college.

The second research question was further divided into three sub-questions, each taking a closer look at those experiences that contributed to the specific components of teacher knowledge considered in the study. The first sub-question focused on the sources of general pedagogical knowledge. It was found that formal experiences, such as teacher certification and graduate coursework in pedagogy influenced the general pedagogy of the faculty, however, not to the degree of practical experiences, such as K-12, graduate, and adjunct teaching. Other experiential knowledge was acquired by additional pragmatic means, including tutoring and coaching experience as well as work outside of academia.
The second sub-question centered on the role faculty experiences played in the development of their understanding of the diverse student population and the context of the community college. The qualitative findings showed that experiences with diversity, first as a student and later as a teacher, were influential in the faculty's ability to work with students characterized by a wide range of backgrounds. Prior part-time community college teaching stood out as the primary source of faculty understanding.

Finally, the third sub-question focused on the experiences that enabled faculty to make their course content accessible and relevant to their students' lives. Qualitative findings indicated that, similar to the faculty's knowledge of the students and context of the community college, their pedagogical content knowledge was more greatly influenced by less formal means of learning, such as their own undergraduate and graduate experiences and their daily social interactions with colleagues and students. Pedagogical content knowledge can be seen an aptitude or a talent that is being continually developed throughout one's teaching career. Each semester provides an opportunity for the collection of new anecdotes and stories to share. Moreover, the pedagogical content knowledge of faculty is further influenced by the currency of their understanding of the ever-changing student population and context of the community college.

**Theoretical perspectives.** In chapter one, I discussed the theoretical perspective of social-cultural historical theory, which served as the theoretical framework of this study. To gain a more thorough understanding of the lives of community college faculty and the social-cultural and historical context of the full
range of experiences that influenced their classroom practice, I specifically relied on the perspectives of social constructivism and funds of knowledge.

Funds of knowledge, as a theoretical framework, is valuable in understanding the "historically accumulated and culturally developed" (Moll, Neff, & Gonzalez, 2001, p. 133) pragmatic skills of community college faculty. In chapter one, I argued that the funds of knowledge perspective, originally conceived with children in mind, could be applied to learning in adults. The findings of this study support this argument. The reciprocal relationship between everyday practice and what was learned in school (Gonzalez, et al., 2005) was witnessed throughout the personal narratives of the faculty. As they engaged in practice, the faculty's knowledge was formed and reformed by the social-cultural historical circumstances of their journeys to community college teaching.

In addition, the study's findings substantiate the theoretical perspective of social constructivism. For all of the participants, learning was a social and collaborative activity. The development of their teacher knowledge occurred over time in a wide range of social contexts. It is evident from the faculty's narratives and open-ended survey responses that the pedagogical skills and pragmatic "know-how" that had shaped their teaching practice were products of activities practiced in social institutions (Luria, 1979). Through the lens of social constructivism, I viewed the teacher knowledge of community college faculty as being collectively constructed by individuals. As the faculty transitioned through the academic and vocational stages that led to the community college, they created their own meaning by combining knowledge constructed from new experiences along with past learning that had been shaped by prior experiences, personal beliefs, and values. Their knowledge for
teaching was constructed when new experiences were encountered and further mediated by reflection, inquiry, and social interaction (Lambert, 2002).

As faculty described their life course to the community college, they reflected on those experiences that most profoundly influenced their pedagogical knowledge and classroom practice. This knowledge, together with an understanding of diverse students within the context of the community, allowed the faculty to provide differentiated instruction designed to meet students’ needs. As the faculty looked back on those formative experiences, they reconstructed the social and historical contexts of the events, the emotions involved, and the accomplishments earned. Their reflective practice led them to better understand themselves as teachers and gave them insight into their own work in the classroom. As they reflected upon their careers, they expressed both genuine concern and admiration for their students, speaking often of their roles as student advocates and as partners in the overall mission of the community college.

As faculty recalled their life experiences, they emphasized the social, cultural, and historical contexts of each experience. The findings show that the faculty, through their interactions with others, formed bonds that resulted in the exchange of knowledge and the generation of new knowledge. The most influential interactions took place, initially, when they were students and, later, as they taught their own classes in variety of contexts. The source that most influenced their knowledge of general pedagogy and of the "clientele" of the community college was their part-time teaching at the community college, often stitching together a full-time teaching load by working in numerous districts. The faculty shared that much of what they know about teaching was through conversations with other faculty in their department, at
meetings of professional associations, and participation in workshops. It is apparent from the faculty's life stories that these experiences played an important role in the socio-cultural construction of their wisdom of practice.

The findings support the overwhelmingly experiential and practical nature of the teacher knowledge of community college faculty. Knowledge that is largely dependent upon skills that are for the most part intuitive and pragmatic, skills that were acquired in less formal, yet social contexts. In contrast to the teacher knowledge first described in Shulman's (1987) original conceptual framework, which has its basis in formal preparation, the knowledge of the faculty in this study was found to be derived from practice, such as teaching and other vocational experiences. These influences together with others that were more practical in nature contributed to what Shulman (2004) later identified as the wisdom of practice of faculty. In sum, the primary finding of this study is that experiential learning was the foremost source of the funds of knowledge that, in turn, comprised the faculty's wisdom of practice.

It is important to begin this portion of the chapter with the recognition that prior research into the career pathways leading to community college teaching is very limited. What is more, studies of the contributions of formal and less formal experiences on the wisdom of practice in community college, to the best of my knowledge, are non-existent. For that reason, it is necessary to rely on early accounts of the academic and professional preparation of those faculty who taught in what was then known as the junior college. Similarly, the absence of studies on both the knowledge of general pedagogy and the pedagogical content knowledge of community college faculty necessitated the consideration of research involving these categories of teacher knowledge in secondary and university faculty. In chapters four
and five, the findings of the study are connected to prior research in the field. In this section I will summarize those studies that best underscore their connections to the findings of this study.

It is clear from the findings that the majority of the faculty in this study aspired to teach, although not necessarily at the community college. Although this was not the case for the majority of faculty in the study by Fugate and Amey (2000), however the faculty pathways described by the authors paralleled those faculty in this study. Like many Ocean View faculty, several faculty had taught at the secondary and university level, however there was slight mention of prior community college teaching experience, neither full-time nor part-time. That certainly was not the case for Ocean View's faculty, almost all of whom had taught as adjunct instructors at the community college. Part-time teaching experience was found to be central to the faculty's conceptualization of their role as a teacher. The experience was found to contribute to their overall confidence in the classroom and largely lend itself to the development of their knowledge for teaching at the community college.

Also apparent from the findings was that the pathway to community college teaching is indirect and often not preconceived. The faculty's happenstance arrival at Ocean View was consistent with what was experienced by the faculty in Fugate and Amey's (2000) study of community college faculty. Similarly, the "accidental" nature of the occurrences that led to the development in the capacity for teaching as doctoral students transitioned to the professorate reported by Reybold (2003, p. 235) also concur with the findings of this study. However, these studies either made no mention of or gave limited consideration to the experiences that were collected along the different career pathways or their influence on teaching practice. In that regard, the
present study provides a clearer picture regarding the funds of knowledge that faculty brought with them as they began full-time community college teaching.

For the faculty in this study, formal experiences represented by K-12 teacher preparation, ESL certification, and graduate coursework in pedagogy played a role in their development of general pedagogical knowledge. Formal training as a high school teacher was seen as the most suitable preparation for a career at the two-year college in its early years (Colvert, 1952; Dolan, 1952; Eckert, 1948; Koos, 1948) up through more recent times (Bushnell, 1973; Fields, 1962; Medsker, 1960). Despite the influence of formal preparation in secondary education, it was the experiential knowledge garnered from part-time teaching that most greatly influenced the faculty's teaching practice in this study.

As discussed in chapter five, the majority of Ocean View's faculty teach in a discipline for which they hold a master's degree. Today, as years ago, this is seen as the preferred academic training for teaching at the junior or community college (Cohen & Brawer, 1977, 2008; Eells, 1931; Garrison, 1941). In addition to their discipline-specific coursework, several faculty completed courses in pedagogy as either graduate teaching assistants or in fulfillment of a community college credential. These findings echo the sentiments of early researchers (Colvert, 1952; Dolan, 1952; Eckert, 1948) that preparation for teaching at the two-year college should include coursework that would enable faculty to better work with adult learners.

The findings of this study point to the importance of a community college professor being capable of applying content matter to the lives of their adult students, a desirable trait which was alluded to early on by Eckert (1948) at the junior college level and more recently at the university level (Fernandez-Balboa & Stiehl, 1995;
Jang, Guan, & Hsieh, 2009; Major & Palmer, 2006). Similar to this study, Fernandez-Balboa and Stiehl (1995) personalized their research by using qualitative methodology. These authors found that faculty decisions about how to teach were influenced most by how they had been taught. These findings echo those of this study and those reported in Grossman's (1990) study of preservice high school English teachers. The need to create a positive learning environment by being cognizant of the level of maturity, academic preparedness, and varied backgrounds of their students was reported by the faculty in Fernandez-Balboa and Stiehl's study as being a crucial part of their pedagogy. As with faculty in the present study, Cochran, DeRuiter, and King (1993) found high school teachers took into account student learning strategies, developmental levels, and motivations when planning their instruction. The study findings validated a similar understanding of student characteristics was the case for community college faculty.

Implications

Implications for future research. Years ago, in response to my master's thesis, a committee member commented that a good study is one that ends by asking more questions than it has answered. I believe that to be true for this project as well. Much like the progressive transitions in the faculty pathways described in this study, one research experience often leads to new research endeavors. During the course of the study, several questions and potential extensions of this project came to mind.

To begin, one recommendation would be to broaden the range of community college faculty studied. For example, part-time faculty greatly outnumber full-time faculty, and, therefore, are responsible for teaching a large number of students. What
are the formal and experiential sources of the knowledge that guide the teaching practice of part-time faculty and do they differ from those of their full-time colleagues?

Another area for possible research would be an investigation into the career pathways of community college vocational faculty, who often have one foot in the high school classroom or industry and the other foot in the community college. Despite vocational education’s role in the overall mission in of the community college, the work of these faculty and the aspirations of their working class students are seldom considered in current education policy (Rose, 2012). Relative to the current study, several questions come to mind. In what ways do the journeys of vocational faculty to the community college differ from those of their colleagues that teach academic disciplines? Also, one would expect the considerable role of practical knowledge in their teaching practice, but what about the influence of formal training on their wisdom of practice?

Another promising extension of the current project would be to include observational studies to complement the quantitative and qualitative measurements already in place, much like Grubb (1999) carried out in his study of community college faculty. Video-elicitation as an additional qualitative data gathering tool would provide an even more thorough understanding of the nature of the classroom practice of community college faculty and the extent of their knowledge for teaching.

An additional research opportunity would be to expand the project to include the faculty of several different community colleges. Since teaching and learning play out in specific educational contexts, campuses, like the communities they serve, differ appreciably from one another. This is true not only between community college districts, but also within larger districts with multiple campuses; each characterized by
its distinct community setting, the demography of its students and faculty, and its mission as an institution. A study like such as this would allow for comparisons of career pathways and the development of teacher knowledge in a larger, more diverse group of faculty in a variety of educational contexts. In turn, this expansion would influence the generalizability of the project's findings.

Related studies could look at the effectiveness of both the former community college credentialing process and the more recently conceived community college teacher preparation and internship programs offered throughout the country. In California, a community college credential was mandated by the State from 1907, when the colleges were operated by local school districts, until 1990 (Woodyard, personal communication, March 30, 2012). The credential, together with a master's degree in academic discipline, was required to teach in public two-year colleges. The findings of this study indicated that almost one half of the faculty had a community college credential, however only one individual reported that it had influenced their teaching. A research project specifically focused the former credential would provide a clearer picture of its influence (or lack of influence) on community college teaching. Better still, a more timely study could examine the potential of the more recent certificate and internship programs, in which coursework requirements have been augmented by at least one semester of community college teaching, a practicum that was missing from the lecture-based former credential program.

It is apparent from the proposed directions for future research presented in the preceding section, that there remains much to be done regarding the roles of teacher knowledge and the wisdom of practice in community college teaching. In the following section, I discuss some implications of the study for policy and practice.
Implications for policy and practice.

District. Due to the philosophical commitment of the community college to serve all segments of society, districts are faced with hiring faculty members who have not only a thorough understanding of their academic discipline, but also a commitment to working with and empowering students with widely diverse backgrounds, ages, motivations, and aspirations. Consequently, Murray (1999) argues that hiring committees would be wise to look for these attitudes in potential faculty as well as their willingness to learn and grow as a teacher. Along with these characteristics, a district can build its own set of indicators of the qualities that have fostered successful faculty by determining the specific kinds of formal and experiential knowledge that future faculty should possess in order to be effective. Institutions should decide what prospective faculty need to have experienced and learned (Higgins & Hawthorne, 1994) on their pathway to community college teaching to provide evidence that they both enjoy and value working with diverse students.

Professional development. Professional development should begin as a new faculty member arrives on campus, often hitting the ground and running, and continue throughout the tenure of a faculty member's career. Due to the ever shifting population of the community college, faculty need to be willing to continuously reflect upon, evaluate, and adjust their teaching to the changing needs of their students. Professional development opportunities should be seen as both a personal responsibility of continued professional improvement and an institutional responsibility in supporting staff (Fugate & Amey, 2000). Faculty should engage in meaningful activities that lend to the further development in their wisdom of practice. In 1981,
changes in Title 5 legislation (AB 1149) allowed California community colleges to adopt a calendar that substitutes up to 15 days of faculty professional development activities for instructional days in an academic year. Ocean View College's District voted to adopt the 16-week instructional calendar in place of the former 18-week semester in 2002, which allows for five days or 20 hours to be dedicated to institutional, instructional, and student improvement. Unfortunately, all too often the time required by the State is fulfilled by faculty attendance at "welcome back to the semester" activities and bi-monthly department meetings. Seldom do these gatherings afford themselves to collegial discussions of teaching and instructional improvement. Instead, they can be seen as lost opportunities for the potential growth of faculty as teachers - teachers who are effective in making learning accessible and relevant to today's community college students.

Faculty. From the faculty in this study, we have learned that one's colleagues can be influential sources of teacher knowledge when it comes to the development of practice. However, it is well known that community college faculty are often isolated from one another (Grubb, 1999). They teach classes, hold office hours, and attend committee meetings yet seldom talk to one another about what truly matters - teaching. This isolation further prevents collegial interaction that may lead to new ideas about teaching or provide solutions to problems. When asked, "what advice would you give someone who has just been hired to teach at your community college?", several faculty stressed the importance of dialogue; the making an effort to talk to other faculty. Hazel's closing comment at the end of her interview sums this up best, "This was nice...to talk about teaching, because we get to so rarely." In short, the onus is on the faculty to become involved with one another for the sake of
collegiality and the overall improvement of teaching. Moreover, full-time faculty should extend this collegiality to their part-time colleagues and, by doing so, may help in alleviating the "fed to the wolves" experience that often occurs in the first semesters of teaching at the community college. In sum, a community college should be as much about being a community of faculty learners as it is a community of student learners.

**Conclusion**

An often fitting way to conclude a project is to return to the beginning and revisit its original intentions. A primary aim of this project has been to provide insight into the previously seldom studied career paths of community college faculty. An additional intention has been to arrive at a more thorough understanding of the formal and experiential sources of knowledge that faculty accumulated along their pathways and the influence of these experiences on their knowledge for teaching. A better appreciation of the funds of knowledge community college faculty bring to the classroom is paramount in assuring that quality teaching continues just past the open doors of this critically important sector of American education.
Appendix A

Faculty Interview Protocol

Thank you for agreeing to meet with me today. My study seeks to explore faculty perceptions of their preparation to teach at the community college. The focus of my project looks at the experiences - formal and informal, which have contributed to your teaching practice. Your responses are completely anonymous and your identity is only known to me. There are 11 questions and the interview should take approximately an hour to complete.

Interview Guide

1) How long have you taught at Ocean View?

2) What courses do you teach?

3) The career path of some faculty took them directly to teaching at the community college. However, other faculty have taken a more indirect pathway to their current position. Describe your career pathway to teaching at the community college.

4) What formal or traditional training, if any, have you had before you began teaching at the community college?

   How have these experiences influenced your teaching?

5) What other experiences outside of education have you had before you began teaching at the community college?

   How have these experiences influenced your teaching?

6) Is there anything in your own personal background that has shaped your knowledge of teaching?

7) Think back to your first course you taught at the community college.

   What was the course?

   How did these experiences help you prepare to teach the course?

   How did these experiences help you in teaching that first semester?

8) All of us have challenges teaching at the community college. What are some of the challenges that you have been faced with?

   What prior experiences helped you in facing those challenges?
9) What has surprised you the most in teaching community college students?

10) What advice would you give to someone that is thinking about a career as a community college professor?

11) Is there anything else that you would like to add or further discuss at this time?
Appendix B

Faculty Online Survey

You have received this email because you are a full time Arts, Humanities, or Sciences faculty member at Ocean View College. This survey is a portion of a doctoral research study examining the wisdom of practice of community college faculty.

The survey will be conducted online and will take approximately 15 minutes to complete. There are a total of 23 questions. Only the researcher will have access to password protected data and participants’ names. Email addresses and IP addresses will not be collected. There are no risks associated with this study and there will be no follow up survey or further contact for this research.

Participation is voluntary. If you agree to be in this study, but later change your mind, you may choose to leave the survey at anytime while taking it and your data will not be considered if it is not complete. There are no consequences of any kind if you decide you do not want to participate. You may decline to answer any question should you choose to do so.

Your responses will be confidential. Results from the survey will be aggregated to the group level and no names or identifiable information will be used. If you have any questions about this study, please contact Patricia Flower, the researcher at (858) 361-1396 or at pflower@ucsd.edu. You may also contact the dissertation chair, Dr. Amanda Datnow at the University of California, San Diego at adatnow@ucsd.edu. If you have any questions about your rights as a research participant, you may contact the Human Research Protection Program and Institutional Review Board at the University of California, San Diego at (858) 455-5050 as well as the Research Committee at Ocean View College.

Thank you for your time and participation. Although there are no direct personal benefits by participating in this study, I believe the research findings will contribute to research involving the wisdom of practice of community college Faculty. In addition, it may inform the planning and implementation of teaching preparatory programs for aspiring community college faculty as well professional development activities for faculty already at the community college.
Wisdom of Practice - Teacher Knowledge in Community College Faculty

This survey seeks to explore faculty perceptions of their preparation to teach at the community college. The survey looks at the formal and informal experiences, which have contributed to an individual's teaching practice at the community college. The survey will be conducted online and is comprised of 23 questions. It will take approximately fifteen minutes to complete. Thank you in advance for your participation.

1) Gender
- Female
- Male

2) Ethnicity  Please choose from the following list of ethnic and racial groups.

3) Academic Discipline  Please choose from the following list the academic discipline you teach for the majority of your course load.

4) How long have you been teaching?
- less than 5 years
- 5-10 years
- 11-20 years
- more than 20 years

5) How long have you been teaching at the community college, both part-time and fulltime?
- less than 5 years
- 5-10 years
- 11-20 years
- more than 20 years

6) How long have you been teaching students that are similar in terms of diversity to those that you are currently teaching?
- less than 5 years
- 5-10 years
- 11-20 years
- more than 20 years
7) What is the most advanced degree you have obtained in the discipline you teach?

Select One

8) If there are other advanced degrees you have obtained please check them below.

- D.A.
- Ed.D.
- M.D.
- J.D.
- P.A.
- N.P.
- Ph.D.
- Other

9) Do you hold a Community College Teaching Credential?

- Yes
- No

10) Do you have or have you ever held a Single Subject/Secondary Teaching Credential?

- Yes
- No

11) Have you taught at the high school level?

- Yes
- No

12) If you answered "yes" to the above question, how many years did you teach at the high school level?

- 5 years or less
- 6-10 years
- More than 10 years

13) Do you have or have you held a Multiple Subject/Elementary Teaching Credential?

- Yes
- No
14) Have you taught at the K-8 level?
☐ Yes
☐ No

15) If you answered "yes" to the above question, how many years did you teach at the K-8 level?
☐ 5 years or less
☐ 6-10 years
☐ More than 10 years

16) Have you taught as an adjunct instructor at the community college?
☐ Yes
☐ No

17) If you answered "yes to the above question, how many years did you teach as an adjunct professor?
☐ 5 years or less
☐ 6-10 years
☐ More than 10 years

18) Were you a teaching assistant while in graduate school?
☐ Yes
☐ No

19) Have you ever been employed as a tutor at any level of education?
☐ Yes
☐ No

20) Have you ever had a teaching internship, such one through SDICCCA or any other program, at the post-secondary level?
☐ Yes
☐ No

21) Many faculty can think of personal experiences that have contributed to their knowledge of teaching or their wisdom of practice. From the list below check the experiences you have had prior to full time community college teaching that have contributed to your course planning, classroom management, and student assessment.
22) Referring to the previous question, which of these experiences was the greatest contributor to your general pedagogical knowledge? (select one from previous list).

23) Community college faculty teach the most diverse students, in terms of age, aptitude, and cultural backgrounds, in post-secondary education. Describe the experiences you have had prior to full time community college teaching that you draw upon to make course content understandable and relevant to your students.
Appendix C

Representation of a Faculty Pathway to Community College Teaching.

Graduate Teaching Asst.

↓

M.S. Biology

→ Community College Credential

Coursework:
  * Mission of CC
  * Context
  * Pedagogy

Adjunct Community College Instructor 4 yrs.

→ taught:
  * tutorial
  * lab section
  * discussed teaching w/peers
  * became familiar w/"clientele" & instructional strategies

D.A. Biology

→ focus:
  * content
  * coursework in teaching undergraduates
  * cohort discussed teaching

Adjunct hiring freeze @ CC

→ did not complete credential

Ocean View Community College 7.20 yrs.
Appendix D

Code Lists for Cross-Case Analysis of Faculty Narratives and Final Survey Question:

<table>
<thead>
<tr>
<th>GPK Case</th>
<th>PCK Case</th>
<th>ECK Case</th>
<th>Survey Question</th>
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<td>Everyday experiences</td>
<td>Adjunct teaching</td>
<td>Adjunct teaching</td>
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<tr>
<td>Coaching experience</td>
<td>Experiences as a student</td>
<td>ESL teaching</td>
<td>ESL teaching</td>
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<tr>
<td>Graduate coursework</td>
<td>Influence of former professors</td>
<td>Experience with diversity</td>
<td>Experience with diversity</td>
</tr>
<tr>
<td>Graduate teaching</td>
<td>Non-academic work experience</td>
<td>K - 12 teaching</td>
<td>Graduate coursework</td>
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<tr>
<td>Influence of former professors</td>
<td>Personal interests</td>
<td>Tutoring experience</td>
<td>Graduate teaching</td>
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<tr>
<td>Internships</td>
<td>Telling stories from past/relevant today</td>
<td>University teaching</td>
<td>Influence of former professors</td>
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<td>Borrowing students’ stories</td>
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