GOAL 5, TEXAS HIGHER EDUCATION COORDINATING BOARD:

EXPLORING THE PROFESSIONAL DEVELOPMENT OF

FACULTY WHO TEACH UNDERSERVED LEARNERS

IN DEVELOPMENTAL COURSES AT A TWO-YEAR

POST-SECONDARY INSTITUTION

IN SOUTHWEST TEXAS

A Record of Study

by

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DOCTOR OF EDUCATION

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ABSTRACT

Using a quantitative method, this study explored the professional development activities, educational levels of faculty teaching developmental courses, and demographic profiles of faculty and students in developmental courses at a Southwestern community college. This study was framed around Malcom Knowles’ Adult Learning Theory. Data were collected from faculty and administrators to get a snapshot of what was going on with professional development for faculty teaching developmental courses to underprepared adult post-secondary learners. Archival data were retrieved from a Southwestern community college and the Texas Higher Education Coordinating Board.

The data revealed the demographic profile and educational levels of faculty teaching developmental courses to underprepared adult learners at a two-year post-secondary institution. The data also identified the types of professional developmental activities faculty teaching developmental courses participate in for professional development. In addition to data about faculty, the data also revealed the demographic profile and outcomes of students in developmental courses at a two-year post-secondary institution.

Ongoing professional development is required in faculty members, so that they may in turn facilitate the learning of underprepared adult learners. Professional development for faculty teaching development education courses must be framed with the Adult Learning Theory. With the increasing number of underprepared adult learners entering higher education, faculty must be prepared to meet this challenge.
DEDICATION

This study is dedicated to the loving memory of my late parents, Matthew (Sugar Boy) and Loretta (Jack) Woodson, and my wonderful friend and colleague Janet; without their guidance, none of this would have been possible.
ACKNOWLEDGEMENTS

My deepest gratitude is expressed to my wife, Rosa, for her constant support, motivation, inspiration, and love. Your faith in me pushed me toward the finish line. I am especially grateful to my late parents, Matthew (Sugar Boy) and Loretta (Jack) Woodson. Your sacrifices have always been for the gains of my growth, and you have given me wings to fly higher than I ever thought I could. I thank my son, Zy’Sean, and my brothers and sisters, Matthew Jr., Leroy, Shirley, Douglas, Tommy, Larry, and Alisha, for their encouragement and support.

I especially thank my advisor, Dr. Valerie Hill-Jackson, for her constant dedication, energy, kindness, encouragement, and guidance. You are more than an admirable educational leader, but you are a true example to humanity. I am grateful to Dr. Boettcher, Dr. Madsen, and Dr. Walters for serving on my graduate committee with gentle guidance and unwavering support.
Contributors

This work was supervised by a record of study committee consisting of Professor Dr. Valarie Hill-Jackson, my Chair, of the Department of Teaching, Learning, and Culture and Professors Dr. Jean Madsen, Dr. Lynne Walters, and Cynthia Boettcher, my committee members of the Department of Teaching, Learning, and Culture.

All work for the record of study was completed independently by the student.

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CHAPTER I
INTRODUCTION

In January 2015, President Obama announced America’s College Promise, a proposal to make two years of community college free. Free tuition will undoubtedly increase enrollment at community colleges, bringing students who would not otherwise have attended college as well as those who would have attended other institutions. According to the American Association of College and Universities (AAC&U, 2015), the President’s proposal will likely bring a new set of academic programming and support needs. Community colleges may need to improve facilities, expand faculty, and expand administration to meet the increased demand. Four-year institutions are likely to see a drop in freshman and sophomore enrollment. However, the potential surge of transfer students following the first several years the proposal, may also create a new set of challenges, particularly for faculty of four-year institutions.

According to the American Association of College and Universities by 2020, an estimated 35% of job openings will require at least a bachelor’s degree, and 30% will require some college or an associate’s degree. Over 40% of college students are enrolled at one of America’s more than 1,100 community colleges that offer students affordable tuition, open admission policies, and convenient locations. They are particularly important for students who are older, working, need remedial classes, or can only take classes part-time. For many students, they offer academic programs and an affordable route to a four-year college degree.
The Problem Space

President Obama described the community college as the key to the future of the U.S. economy and the instruments to shape and educate those who have traditionally been left behind: underserved minorities, low-income students, working adults, and those who were underprepared for college learning (Hagedorn, 2010). In January 2015, the President unveiled the America’s College Promise proposal to make two years of community college free for responsible students, letting students earn the first half of a bachelor’s degree and earn skills needed in the workforce at no cost. This proposal will require everyone to do their part: community colleges must strengthen their programs and increase the number of students who graduate, states must invest more in higher education and training, and students must take responsibility for their education, earn good grades, and stay on track to graduate. If all states participate, an estimated 9 million students could benefit. That is why President Obama’s America’s College Promise proposal is a game-changer.

Preparing Developmental Learners at Community Colleges at the National Level

Despite many efforts, new research from the American Association of Community Colleges (2014) suggested that more than 60% of students entering college for the first time are underprepared for academic success. The report, The Condition of College and Career Readiness 2012, found that 25% of the more than 1.6 million high school students who took the American College Testing (ACT) Exam in 2012 fell short of the organization’s benchmarks for college readiness in all four major subject areas: English, reading, mathematics, and science. Likewise, the American Association of
Community Colleges in 2014 reported only 28% tested as college-ready in same four major subject areas.

The Association of American Colleges and Universities (2002) reported that about half of students entering our colleges and universities are academically underprepared—lacking basic skills in at least one of the three fundamental areas of reading, writing, or mathematics. AAC&U’s Greater Expectations report also noted that students lacking academic preparedness also fail to do well in college for a variety of other reasons, such as lack of self-confidence, appropriate study behaviors, and skill in navigating an institution’s bureaucracy. In their study, respondents similarly identified the underprepared student as one of the most important educational problems facing faculty and professional development. Murray (as cited in Amey, 1999) goes on to say that “given the change in student clientele, it is increasingly clear that traditional approaches to teaching and learning are inappropriate for many, if not most, of these students” (p. 41).

Professional development programs can remind teachers to emphasize their expectations for students, help familiarize new instructors with student resources offered by the college or university (e.g., basic skills courses, tutoring, supplemental instruction), and highlight the range of effective strategies available for teaching and facilitating the learning of all students. According to Sorcinelli et al. (2006), “the changing environment for teaching, learning, and scholarship was identified as the third pressing challenge for faculty and institutions, a challenge resonant with implications for professional development” (p. 6).
In recent years, the Carnegie Foundation for the Advancement of Teaching has made a commitment to teaching and learning by working with faculty, campuses, and disciplinary associations. Several lines of work at Carnegie have contributed to the understanding of the scholarship of teaching, notably projects exploring the peer review of teaching, the use of teaching and course portfolios, and how teaching and learning differ among the disciplines. Professional development programs have been part of this conversation by, for example, offering seed grants, and campus conversations about course-focused research projects centered on teaching and learning.

**Preparing Developmental Learners at Community Colleges at the State Level**

Since 2010, the Texas Higher Education Coordinating Board (THECB) has reported that the number and proportion of underprepared students in the state of Texas has been increasing. In an interview for the *Texas Tribune* published by the *New York Times*, Chavez (2012), a THECB spokesman, said of the ACT scores, “The majority of Texas students do not leave public schools ready for college. Less than one in two students met the state’s *college readiness* standards in math and verbal skills on ACT Exam in 2010” (para. 3). Chavez went on to say that nearly half of all students who enroll in community college immediately after high school are not college-ready in at least one academic area, but that statistic changes when you include four-year universities. In fall 2008, 31% of students who enrolled in public higher education institutions—both community colleges and four-year universities—immediately after high school were not ready in at one academic area.
The rate is even lower for students who enrolled in four-year universities right out of high school. Only about 14% of those students were not college-ready in one or more academic areas. Include freshman university students who have been out of high school for longer, and the not-ready rate rises to about 28%. Add community college students who have been out of high school for a few years, and that figure jumps to 38%.

In another interview, Chavez (2011), in an article in the *Austin-American Statesman*, said, “Community colleges traditionally serve students who are less prepared” (para. 15).

One of the greatest challenges facing higher education in the state of Texas has been improving the academic preparedness of students enrolling in higher education. According to the THECB (2014), 41% of students enrolled in Texas public higher education are enrolled in at least one developmental education course. The ability to perform college-level coursework is an important factor in the successful completion of college. Students entering higher education prepared to do college-level work graduate at twice the rate of students that do not.

The state of Texas, which was the location of this study, required professional development for faculty and provided Carl Perkins funds for the Texas State Leadership Consortium for Professional Development to coordinate professional development project activities for Texas two-year colleges. Regardless of the emphasis placed on professional development, surveys from THECB have revealed a lack of perceived effectiveness in professional development programs. The THECB (2011) survey of all Texas public community colleges concluded the faculty perceived that the programs were not very effective and felt that there should be more emphasis on teaching skills.
The Problem of Practice

Context. Hills Country Community College (HCCC, a pseudo name for this college and all reports relating to this college) opened its doors with an initial enrollment of 2,068 students in the fall of 1967. One of the greatest challenges facing HCCC has been improving the academic preparedness of students enrolling in higher education. Unless otherwise exempt or waived, all degree-seeking students registering at a Texas public college or university must take the Texas Success Initiative (TSI) Assessment. The Texas Success Initiative is a program designed to determine if a student is ready for college-level coursework in the general areas of mathematics, reading, and writing. This program also helps determine what type of course or intervention will best meet the student's needs and to assist in becoming better prepared for college-level coursework.

The Dean of Intuitional Effectiveness (IE) is responsible for analyzing and reporting student outcomes to the Texas Higher Education Coordinating Board. During the 2010-2013 academic years, HCCC IE reported that more than 60% of HCCC students scoring below the minimum Texas Success Initiative (TSI) Entrance Examination have increased from 56% to 62%. At HCCC, students scoring below the minimum scores are placed in developmental education courses. As the percentage of students enrolled in developmental courses increase, so has the percentage of faculty assigned to teach developmental courses.

While over 60% of students needing developmental courses has resulted in an increased need for instructors to teach developmental courses, the HCCC Faculty Senate has not done anything to address this issue. According to the HCCC Faculty Senate By-
Laws, faculty must participate in a minimum of 14 hours of professional development activities each academic year. Yet, the HCCC Faculty Senate Bylaws do not stipulate that faculty must participate in professional development activities that help them to prepare to teach underprepared students. Even though HCCC Faculty Senate’s Bylaws mandate that faculty participate in a minimum of 14 hours of professional development activities, the problem is that HCCC instructors assigned to teach developmental courses perceived that they are not offered professional development that will prepare them to teach underprepared students. According to the Kellogg Institute (KI), instructors teaching developmental courses need to participate in professional development that prepares them to teach low-skilled students. Professional development should focus on math, reading, and writing required in college-level courses. The KI also recommends a minimum of 24 hours of professional development activities for instructors each academic year. The Kellogg Institute of the National Center for Developmental Education (NCDE) is the nation’s longest running professional development program for developmental educators and learning skills specialists.

Table 1.1 includes the actual professional development hours for 2010-2013 and the Kellogg Institute of NCDE’s recommended hours and areas of focus for professional development for faculty assigned to teach development courses for underprepared students. The Kellogg Institute is not a governing body; however, it is recognized nationally as the nation’s leading advanced professional development program for faculty assigned to teach developmental courses. To date, over 1,380 developmental
education professionals have attended the Kellogg Institute’s signature professional development program.

Table 1.1

*Actual Professional Developmental (PD) Hours for HCCC Faculty Assigned to Teach Developmental Education Courses and Recommendations from the Kellogg’s Institute, 2010-2013*

<table>
<thead>
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<th>Academic Years</th>
<th>Actual (HCCC)</th>
<th>PD Hours</th>
<th>Recommended (KI)</th>
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<tbody>
<tr>
<td>2010 – 2011</td>
<td>12 hours*</td>
<td></td>
<td>18 hours</td>
</tr>
<tr>
<td>2011 – 2012</td>
<td>12 hours*</td>
<td></td>
<td>20 hours</td>
</tr>
<tr>
<td>2012 – 2013</td>
<td>12 hours*</td>
<td></td>
<td>24 hours</td>
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*Only 4 of the 12 hours are required for teaching/instructional activities.*

*Source.* HCCC Faculty Senate and National Center for Developmental Education.

Table 1.2 indicates the total number of instructors at HCCC and the percentage of faculty teaching developmental courses. Between 2010 and 2013, the percentage of faculty assigned to teach developmental courses had risen by 12%. In addition, the number of instructors assigned to teach developmental courses had increased from 465 to 720, which is a significant increase in the number of instructors assigned to teach developmental courses. Again, HCCC Faculty Senate did not address the issues of preparing faculty to teach developmental courses. It is important to note that HCCC operates at 26 sites on military installations in the continental United States, Alaska, and Hawaii. In addition, HCCC operates campuses in Europe and the Pacific Far East.
<table>
<thead>
<tr>
<th>Academic Years</th>
<th>Total Number of Faculty</th>
<th>Faculty Assigned to Teach Developmental Courses</th>
<th>Percentage of Faculty Assigned to Teach Developmental Courses</th>
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<tr>
<td>2010 - 2011</td>
<td>2017</td>
<td>465</td>
<td>22%</td>
</tr>
<tr>
<td>2011 - 2012</td>
<td>2021</td>
<td>540</td>
<td>26%</td>
</tr>
<tr>
<td>2012 - 2013</td>
<td>2035</td>
<td>720</td>
<td>34%</td>
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Source: HCCC Institutional Effectiveness Report.

While professional development for faculty in public two-year colleges is required by the state of Texas, in order to comply with THECB policies, HCCC requires its faculty to participate in professional development each academic year. Dr. Suanne Morales-Vale, Ph.D., Director, Developmental and Adult Education for the Texas Higher Education Coordinating Board, reported that unfortunately, professional development in terms of requirements or recommendations are under the purview of each institution and are thus institutional specific (S. Morales-Vale, personal communication, August 5, 2015).

Also, HCCC must adhere to the Southern Association of Colleges and Schools–Commission on Colleges’ (SACS-COC) guidelines regarding faculty professional development: “The institution provides ongoing professional development of faculty as teachers, scholars, and practitioners” (Southern Association of Colleges and Schools, 2010, p. 28). Dr. Morales-Vale noted, “SACS-COC in their guidelines on faculty development does not make any specific requirements for faculty on a statewide level, because it would not be feasible since so many factors come into play” (S. Morales-Vale, personal communication, August 5, 2015).
Stakeholder Groups and Values

The stakeholders for this particular problem are community college faculty assigned to teach developmental courses, students enrolled in developmental courses, and community college administrators. Both faculty and students are the main stakeholders for this problem. However, faculty is the main stakeholder, because the effectiveness of their faculty development has a direct influence on the success of students enrolled in developmental courses. If faculty assigned to teach developmental courses are prepared to teach underprepared post-secondary learners, then the expectations for student success are high. On the other hand, if faculty assigned to teach developmental courses are not prepared to teach underprepared post-secondary learners, then the expectations for success are low.

At HCCC, three-quarters of the instructors teach developmental courses: math, reading, and writing. Over 60% are part-time and work at more than one college. They are less likely to have office hours (or offices), and they are not required to have any teaching experience at all, only a bachelor’s degree. For underserved students taught by a full-time instructor, the situation may not be much better. Faculty teaching developmental courses spend the greatest portion of their professional time devoted to teaching.

HCCC faculty teaching developmental courses also interact with students in a variety of other ways such as campus activities to formal and informal advising. They also serve on committees and provide service to the college in a number of ways that vary from place to place. However, it is the central role of teaching to underserved adult
students where faculty have the least preparation. According to Smittle (2003), developmental courses demand more from their instructors than other courses. Faculty teaching developmental courses require a particular set of competencies and skills. Today, HCCC consists of administrative units referred to as campuses: The Central Campus, the Continental Campus, the Europe Campus, the Fort Hood and Service Area Campus, the Navy Campus and the Pacific Far East Campus. Of these, the Central, Fort Hood and Service Area campuses operate within the state of Texas. While some campuses, like the Navy Campus, offer programs only for military personnel, others enroll military, civilian, and incarcerated students. Because HCCC is spread out around the world, some classes are offered in unique locations. For example, during the height of the Gulf War, HCCC offered many classes in heavily fortified areas of Iraq and Afghanistan. As a result, civilian instructors were deployed to these areas and navy vessels to teach courses to U.S. military personnel. Because of these unusual circumstances, some instructors did not have access to resources and professional development opportunities did not exist.

**Research Questions**

The overarching question for this study was: “How have professional development instructional strategies at a Southwestern community college prepared faculty for teaching in developmental courses to underserved post-secondary learners?”

1. What is the demographic profile and level of education of faculty members teaching developmental math, reading, and writing courses to underprepared adult learners at a Southwestern community college?
2. What is the demographic profile and academic outcomes of students in developmental math, reading, and writing courses at a Southwestern community college?

3. What types of activities do faculty teaching developmental math, reading, and writing courses at a Southwestern community college participate in for professional development?

**My Role**

As a Manager of Instructional Development at HCCC, I manage a staff of instructional designers and course developers who are responsible for assisting faculty with course development. In my role as manager, I am responsible for providing faculty with resources to create syllabi, handouts, and assessments. My role within the institution affords me the opportunity to review the types of activities that faculty teaching developmental courses participate in for professional development.

**Purpose of the Study**

The purpose of this study was to evaluate faculty perceptions of professional development practices offered by a Southwestern community college for faculty assigned to teach development courses to underprepared students. Another purpose was to assess the relative perceived value of these practices as viewed by faculty assigned to teach developmental courses.

**Significance of the Study**

Given the importance of faculty professional development nationally in higher education, the resulting descriptive information from this study of community college
faculty assigned to teach developmental courses could assist community colleges in preparing their faculty to teach underprepared post-secondary learners. This study, therefore, examined and evaluated faculty perceptions of professional development practices for faculty assigned to teach developmental courses by utilizing a quantitative method approach (Creswell, 2013).

This study may contribute to positive change for community colleges by providing current research data that may be used by community college administration to develop future opportunities to influence policy on professional development to teaching and student achievement. Therefore, faculty professional development and training will result in a well-prepared faculty who is capable of supporting underprepared post-secondary learners and helping to increase students’ achievements. A more general implication of this study was the need for instructors to participate in professional development that prepared them to teach underprepared post-secondary learners. Professional development could focus on standards of proficiency in reading, writing, and math required in college-level courses, as well as the cognitive and affective patterns of underprepared students.

At HCCC, the implications for not preparing their faculty to teach underprepared students can result in students’ repeat failures and lack of success in college, and recurring academic failure often leads to attitudes that can make learning more difficult.

**Definition of Terms**

To further the reader’s understanding, the following terms are defined.
**Developmental courses:** Are pre-college level coursework that remedies deficiencies in content-area knowledge and skills required before college students attempt college-level coursework (Boylan & Bonham, 2007). Developmental courses in the broadest sense address the cognitive, affective, and social needs of students who need further preparation before beginning college-level coursework. They include (a) instruction in content areas such as math, writing, and reading; (b) instruction in learning skills and metacognition; and (c) student support services such as tutoring, mentoring, academic support labs, and supplemental instruction.

**Culturally responsive teaching:** Is a pedagogy that recognizes the importance of including students’ cultural references in all aspects of learning (Ladson-Billings, 1994).

**Developmental education faculty:** Full-time and part-time instructors assigned to teach developmental reading, writing, math, and study skills courses (Bustillo & Parker, 2012).

**Instructional practices:** Are teaching practices, often called pedagogical practices. However, with the recent distinction between andragogy, adult teaching, and learning practices, as opposed to the more traditional term pedagogy, child teaching, and learning practices, using the term instructional practices rather than pedagogical practices broadens the term to include the field of andragogy (Knowles, 1980).

**Professional development:** Is the continuous process of acquiring new knowledge and skills that relate to one’s profession, job responsibilities, or work environment (Watts & Hammons, 2002).
Two-year institution: Refers to colleges that are designed for students to complete their first two years of college, primarily community colleges (Vaughan, 2013).

Underserved learners: Refers to students whose academic skills fall below those needed to be successful in college including reading, writing, and math skills. The AAC&U refers to underprepared learners as students entering college lacking basic skills required for college-level courses. The AAC&U (2015) reported that “53% of students entering our colleges and universities are academically underprepared, i.e., lacking basic skills in at least one of the three basic areas of reading, writing or mathematics” (para. 3).
CHAPTER II
LITERATURE REVIEW

Introduction

Professional development has been an ongoing movement in higher education in the last 30 years. Recent research studies in the last five years have indicated the need for high quality professional development for faculty in academia and for the creation of professional development programs to meet this need (Ludwig & Taymans, 2005). The central question: “How have the professional development activities at a Southwestern community college prepared faculty for teaching in developmental courses to underprepared post-secondary learners?” will guide this record of study.

The following section examines literature that is relevant to the study. Based on a review of related literature, no one theory serves to connect ideas of the study. However, several ideas formed the basis of a theoretical framework to understand the research. This concept was transformative learning. To explore this further, the literature revealed research regarding developmental courses in higher education, examined professional development in higher education, and explored research regarding the importance of professional development for faculty in community colleges.

Theoretical Framework of the Study

Adult Learning Theory

This study focused on professional development for faculty teaching developmental courses at a two-year post-secondary institution. Throughout the school
year, faculty are encouraged to participate in professional development. Community colleges rely on professional development to increase faculty’s skills and knowledge and improve performance in the classroom.

This study was framed within the adult learning theory of Knowles (1984). The adult learning theory focuses on the difference between how adults learn and how children learn. Knowles’ theory was based on a few basic assumptions about adult learners: (a) that adults are independent learners, (b) that adults carry with them a lifetime of experiences, (c) that adults must see an immediate application of the learning, and (d) that adults are more driven by an internal as opposed to an external need to learn.

Based on these assumptions, Knowles (as cited in Chan, 2010) identified four principles that should be considered when developing professional development or learning experience for adults:

- Adult learners should be involved in the planning of their learning. Before developing any professional development for faculty, poll the faculty to determine their professional development needs.
- Adult learners bring life experiences and knowledge to the learning experience. Many faculty may have experience in a career sector other than higher education. When developing professional development for higher education faculty, administrators should take into consideration the unique experience level of the individuals.
- Adult learners are problem-centered. Adult learners must have time to analyze, think, reflect, and assimilate the new knowledge they receive at any
professional development session. They prefer real world assignments with
task-oriented instruction that appeal to adult learners. They must experience
the learning, and once they have experienced it, they must apply it.

- Adult learners are relevancy oriented. This may be the most important factor
of developing any professional development. At the end of any professional
development or training session, adults want to walk away with something
that is relevant and practical.

Adult learning theory has been used in several professional development efforts.
For example, the principles of the adult learning theory were used in the design of a
three-day workshop that provided intensive professional development for community
college faculty (Johnson, Wisniewski, Kuhlemeyer, Issacs, & Krzykowski, 2012).
Feedback from participants in the workshop indicated that the experiences alleviated
faculty anxieties and allowed them to feel comfortable in the classroom. The importance
of developing professional development within the framework of the adult learning
theory was confirmed by DeNoyelles, Cobb, and Lowe (2012). According to
DeNoyelles et al. (2012), adult learning principles, including applying knowledge
immediately to the course and self-directed learning, were critical for the redesign of a
professional development course, titled Build Your Own Course. Above all, professional
development developed for faculty should be framed around Knowles’ (1984) principles
of adult learning. Faculty are adult learners with various problems and time demands,
past experiences with teaching or using tools, and different levels of motivation for
learning new approaches. One other thing to mention, faculty want to be involved in their learning, and it is important to them that they get learning that reflects their needs.

Most importantly, the aforementioned principles connect this study to the adult learning theory, because this study focuses on faculty professional development, in addition to the fact that Knowles (1984) assumed that *adult learners are experienced, problem-solvers, and relevancy oriented*, which ties in with the characteristics of the faculty in this study. Therefore, in making these assumptions, professional development for faculty teaching adults should be framed within the adult learning theory. For these reasons, faculty want professional development that meet their needs. Consequently, faculty teaching developmental courses to underprepared adult learners, should engage in professional development activities that are relevant and meet their needs for teaching underprepared adult learners. As a result, their professional development should be developed within the framework of the adult learning theory. Even more, professional development must provide faculty with a way to directly apply what they learn to their teaching.

**Characteristics of Underprepared Community College Students**

According to the American Association of Community Colleges (2014), between 42% and 58% of community college students, take at least one developmental education course. An often overlooked point is that there are a large number of underprepared students who enroll in college-ready colleges, who may or may not have previously enrolled in developmental courses (Perin, 2006), and it appears that there is a good deal of “hidden remediation” (Grubb et al., 1999, p. 104).
Although high schools are working hard to get every student ready for college, a significant and growing portion of high school graduates are placed into developmental courses when they enroll in higher education. The median age of community college students is 23 years; 58% of students are female, 42% are the first in their families to enter higher education; 59% are full-time students are employed part-time; 40% are part-time students employed full-time; 13% are single parents; and 12% have identified themselves as individuals with disabilities (American Association of Community Colleges, 2013). These statistics refer only to students who are earning college credits.

However, although developmental education courses do not bear college credit, students in these courses tend to take at least one college-credit course concurrent with developmental education courses. Also, community colleges serve disproportionate numbers of Spanish-speaking students: 58% of all Hispanic/Latina/o undergraduates attend these institutions, compared to 42% of White undergraduates (Snyder, Tan, & Hoffman, 2006). It has been reported that many students of Hispanic/Latina/o background are academically underprepared upon entry into college (Crisp & Nora, 2010). Although there are examples of outstanding outcomes (Alvarez, 2011), the number of students who lack proficiency in English is growing dramatically, and includes “Generation 1.5,” individuals with a non-English primary language who have attended schools in the United States and are fluent in informal but not academic English (Smith, 2010).
Along with demographic and language variables, it is also important to understand the emotional experience of academically underprepared students. In a similar way, Taboada, Tonks, Wigfield, and Guthrie (2009) noted:

Academic motivation is influenced by learners’ goals, predispositions, beliefs, attitudes, sense of control, level of interest, preference for challenge, involvement, self-efficacy, competition, recognition, grades received, quality of social interaction, and tendency to approach or avoid work and personal cost/benefit estimates. Also necessary for successful learning is self-regulation, or thoughts feelings, self-efficacy and behaviors initiated by the learner toward the achievement of academic goals. (p. 4)

Studies of underprepared students have revealed students’ high levels of anxiety, memories of academic failure, and perceptions that instructors hold low expectations based on race- or gender-based stereotypical preconceptions (Gardenshire-Crooks et al., 2010; Cox, 2009). Based on conversations I have had with community college faculty, teaching developmental courses suggests that students enrolled in developmental courses may be immature or angry about having been placed in a developmental course.

According to Dr. E. Wagner (personal communication, September 22, 2014), all of these factors can serve to inhibit performance in classroom learning. In addition, Hall and Ponton (2005) suggested that many students placed in developmental classes feel a stigma that is damaging to self-perceptions. Moreover, the researchers recommended that educators become aware of the effects of placement in developmental courses on student self-efficacy.
Importance of Professional Development for Faculty in Community Colleges

Research in professional development for faculty in community colleges highlights the fact that although there are varied definitions and a plethora of ways in which to conduct professional development, the need for community colleges to pursue comprehensive professional development programs is widely recognized and those reasons are at the core of its unique identity. According to Mundy, Kupczynski, Eilis, and Salgado (2013), “Post-secondary institutions often deal with a myriad of student types in their classrooms, including under-prepared adult learners” (p. 4). In order to effectively deal with underprepared students, instructors must be prepared to teach this special population. Both Outcalt (2002) and Murray (2002) emphasized the importance of professional development as a means of preparing faculty and imparting the skills and knowledge necessary to address needs of underprepared adult learners.

Smittle (2003) pointed out that one of the most attractive aspects of community colleges is the open admissions policy; but with open admissions comes underprepared students. Community colleges have one of the most diverse student populations. Neilson (1991) described four typical groups of students coming to community colleges where the first group is well-prepared and highly motivated and the remaining three groups are defined by the terms, underprepared, lacking motivation or experience, and having a low self-concept. In the atmosphere of putting the student and student learning at the center of what community colleges must do, faculty find that they must not only understand their own learning and teaching styles, but also understand the learning styles of their students and to teach to those various styles (Fulton & Licklider, 1998). Several studies
(Burnstad & Hoss, 2010; Fugate & Amey, 2000; Murray, 2002; Perin, 2013) noted the increasing pressure put on community college faculty and administrators to adapt to the needs of the diverse student population through revitalization of the classroom.

Most faculty teaching in the diverse arena of community colleges have minimal experience in teaching students who operate at both ends of the skill level continuum and with unique learning styles. Incoming faculty may be knowledgeable in their content area, but very few graduate schools adequately prepare them for teaching at the two-year college level (Bergquist & Phillips, 1975; Gibson-Harman, Rodriguez, & Haworth, 2002). Angelo (1994) contended that new instructors lack the necessary training in assessing student learning as well as the skill to diagnose teaching or learning problems. This can make the teaching process, as well as the learning process, ineffective (Shakelford, 1993). Making the transition from graduate student to professor can be difficult, but a professional development program that provides resources to orient new faculty could prove beneficial professionally, socially, and personally for the individual (DiLorenzo & Heppner, 1994). Fugate and Amey (2000) conducted a qualitative study on the career stages of community college faculty that supports this notion. Their research found that new faculty members felt that they benefited, or could have benefited, from a professional development program for faculty that provided them with information on the nature of the student population, institutional philosophy and priorities, practical classroom teaching advice, and assistance with the day-to-day issues that might arise in the classroom.
Part-time Faculty’s Complex Roles

Faculty members today are facing a growing array of changing roles and responsibilities that require them to engage in ongoing professional development. The set of tasks expected of faculty is intensifying under increasing pressure to keep up with new directions in teaching. For example, faculty members may need to develop skills in designing and offering online courses. Not to mention that some faculty members may need to keep up with emerging specialties in their fields as well as to engage in more interdisciplinary work. Consequently, all faculty will continuously need to learn new skills in an increasing technological workplace.

Closely related to the challenge of managing new and expanding faculty roles is the challenge of achieving balance in work and life. According to National Center for Educational Statistics (NCES) (2015), to meet the rising needs of students enrolled in developmental courses, part-time faculty have been pressed into service in large numbers. Part-time faculty have increasingly been relied upon to address the developmental education needs in community colleges. New faculty, especially, find it a daunting challenge to simultaneously achieve distinction as a scholar, teacher, and campus citizen. Faculty members also are concerned about how to achieve balance as they handle personal as well as professional commitments. Not surprisingly, concerns about balancing work and family are especially intense among women faculty who often face the press of biological clocks for childbearing at the same time as they are trying to start their careers and, in many instances, earn tenure. Professional development services
would be well served to include programming and coaching for managing time and work-family issues as well as the more traditional emphasis on teaching and learning.

**Incentives**

Administrators struggle with finding ways to attract faculty to professional development activities as well as identifying the right mix of professional development activities to improve faculty teaching and ultimately student learning. Lowenthal, Wray, Bates, Switzer, and Stevens (2013) conducted a study to examine the motivation of full and part-time faculty to seek professional development, obstacles to attending, as well as preferred formats across four institutions. The results of their study on what motivates faculty to participate in professional development, suggest that receiving a stipend was the most motivating factor for encouraging attendance. The next highest incentive, release time, was prevalent among full-time faculty. More importantly, the key to using professional development to improve teaching and learning does not solely lie on the shoulders of administrators; instead, it lies in how to get faculty to take advantage of professional development opportunities.

The literature in this section revealed that in order to meet the needs of underprepared adult learners, community college faculty must participate in ongoing professional development that will prepare them to teach underprepared students. This is also true for faculty at HCCC who are assigned to teach developmental courses to underprepared students. HCCC faculty must participate in ongoing professional development that will give them the knowledge, skills, and dispositions to better serve underprepared adult learners.
Developmental Courses and Learners in Higher Education

History of Developmental Courses in Higher Education

Colleges and universities have been providing developmental/remedial courses for underprepared students since the early 1800s (Pintozzi, 1987). At Yale University, in 1828, a developmental study program was in place for students with defective preparation. Defective preparation was described as subnormally ready for a normal course of study. According to Pintozzi (1987), “Colleges should provide whatever elementary instruction the schools fail to give, to assure the success of students” (p. 4).

In 1830, New York University (New York City) created an early prototype of an academic preparatory academy. This academic unit provided instruction in math, physical science, philosophy, and English literature (Dempsey, 1985). Subsequently, the University of Wisconsin at Madison in 1865 enrolled only 41 of 331 admitted students in “regular” college-level courses that counted toward graduation requirements (Arendale, 2002, p. 4). By 1876, more than 45% of all Vassar College students were enrolled in one or more developmental courses (Roberts, 1986).

In 1874, Harvard established the first American college freshman developmental English course in response to faculty complaints that too many students lacked competency for formal writing activities. As a result, the introduction of developmental courses into the formerly fixed curriculum was possibly due to permitting student choice of elective courses. Nationwide, it was estimated in 1894 that 40% of all first-year college students were enrolled in college preparatory courses (Ignash, 1997).
The widespread academic under preparation of students prompted an institutional response by most colleges to offer various forms of developmental courses for their students. Canfield (1889) found that nearly 80% of colleges in 1889 provided some version of a college preparatory program. This rate has remained stable for over 100 years (Arendale, 2010). Contrary to the common perceptions held by critics of developmental courses, the need for academic assistance in higher education is not new.

According to Kammen (1997), “Beginning in the 1980s historians began to develop a literature that focused on the role of collective memory with the historical record of culture in America” (pp. 199-200). Kammen (1997) believed that “historians’ distortions of memory occurred for a variety of reasons, not just for cynical or manipulative motives” (pp. 199-200). While there might have been a passing comment about the underprepared nature of the students, other classic higher education histories had no mention of developmental education programs that served them (Butter, 1900; Brubacher & Rudy, 1997). Kammen (1997) believed that during the 1980s, most historical accounts of U.S. higher education focused on administrative policies, governance issues, campus facilities, activities of the White male college presidents, and the governing boards. Kammen (1997) also noted that there was little discussion of the students enrolled at the institutions. Generally, the only issues that surfaced about students concerned social life and student discipline issues.

Kammen (1997) also suggested that many writers might have ignored historical accounts of U.S. higher education since primary source material was not available due to the colleges not retaining it for study by historians and researchers. Kammen (1997)
provided several reasons why during the 1980s some higher education historians ignored and others lightly recorded historical events concerning developmental education/courses in U.S. postsecondary education, Kammen (1997) noted:

Another potential cause may have been that it was a high priority or unconscious decision to focus on traditional topics and histories of the majority white male class and not those of women, students of color, and those of deprived academic and economic backgrounds. It also may have been due to the discomfort by some historians about the potential impact of its existence upon the institution of higher education since it suggests that colleges and universities were not effectively meeting the needs of its students. (p. 7)

In the 1990s, about three-quarters (78%) of higher education institutions that enrolled freshmen offered at least one developmental reading, writing, or mathematics course in fall 1995. Developmental courses were especially common at public two-year institutions (100%) and institutions with high minority enrollments (94%) (Arendale, 2010). Public four-year institutions also were important providers of developmental courses, with 81% providing at least one developmental reading, writing, or mathematics course (National Center for Educational Statistics (NECS, 1996).

The NCES (2003) reported that 42% of entering community college students enroll in at least one developmental course. In the 1990s, the National Center for Developmental Education (NCDE, as cited in Boylan, 1995) estimated a national participation head count of 2.2 million entering freshmen representing 23% of all undergraduate students (both two- and four-year) at that time. In another report issued
just prior to the era of this study, a national head count estimate was provided of 1.2 million students who participated in developmental education courses at community colleges nationally (Boylan & Saxon, 1999).

The current state of developmental courses as reported by the NCDE (2014); is as follows: 75% of all U.S. institutions offer developmental courses; 29% of all first-time freshmen enroll in one or more developmental courses; additional students participate in non-credit developmental activities and programs; mandatory placement is required in developmental courses by 75% of all U.S. institutions; some states are changing the format that developmental courses are available for students (e.g., paired/linked courses, adjunct instructional support).

Finally, it is important to mention that developmental courses are an important endeavor for community colleges. Developmental courses and services are provided by community colleges to assist students who are assessed as being underprepared for college academics. According to the NCES (2014), every community college in the United States offers developmental courses. The relative number of students referred to these courses may vary considerably by state, region, or institution enrollment trends change, and legislators and administrators make adjustments to policy and practice, developmental course enrollment taking trends vary over time as well.

**Texas Higher Education Coordinating Board**

The Texas Legislature created the Texas Higher Education Coordinating Board (THECB) in 1965 to provide leadership and coordination for the Texas higher education system and to achieve excellence for the college education of Texas students. With
respect to Texas, the THECB also exists to support and implement policy designed to improve developmental education practice and outcomes. Grable (1988) described a brief history beginning with the early 1970s where the Texas legislature mandated that colleges offer compensatory education programs to underprepared students. This mandate began a makeshift attempt by college program administrators to offer professional development for instructors teaching developmental courses in basic writing, reading, and mathematics to prepare students for the college curriculum. At that time, an estimated 30% of students were underprepared for college-level courses in at least one basic area (Saxon & Slate, 2013).

In order to prepare instructors to teach developmental courses for underprepared students, the THECB (2012a) developed the 2012-2017 Developmental Education Plan. It has been a collaborative process with contributions from many stakeholders. To engage institutional faculty and staff and seek their input on the development of this plan, the THECB established the Developmental Education Advisory Committee. The Advisory Committee advises the THECB staff on implementation of the legislation, including evaluating developmental education programs throughout the state of Texas. There are nine goals and objectives that provide the framework for achieving the vision of the 2012-2017 Developmental Education Plan (Appendix A). Goal 5 is to increase the preparedness of instructors assigned to teach developmental courses. The rationale for this goal is that instructors assigned to teach developmental courses tend to have limited training in teaching underprepared students. If developmental education students are to be successful, instructors must provide quality and effective instruction. This requires
that educators, policymakers, and researchers develop more integrated, targeted, and sustained approaches to professional development (THECB, 2012a).

Developmental Courses: Four-Year vs. Two-Year Colleges

Higher education has historically and increasingly provided developmental courses. Developmental courses are designed to prepare a student academically to do college-level work (Koch, Slate, & Moore, 2012). Generally, these courses are in reading, writing, and mathematics. As far back as the late 1800s, institutions of higher education had programs to prepare students for undergraduate work. At that time, developmental courses were considered pre-collegiate preparatory programs and, up until the late 1960s, were offered mostly at two-year colleges. By the early 1970s, many four-year colleges had begun to offer developmental courses as well, in response to changing enrollment patterns. Declining high school achievement levels of entering freshmen and the adoption of open admission policies by many public institutions of higher education (NCES, 2013). According to NCES (2014), over 75% of all higher education institutions enrolling freshmen offer developmental courses.

Reports published by the NCES (2013), stated policies or laws affect the developmental courses offered at many institutions. For instance, because of high admission standards, most four-year colleges do not offer developmental courses, whereas two-year colleges with open-admission policies provide an extensive developmental course sequences. The NCES also reported that these state policies either require or encourage institutions to offer developmental courses. Over 55% of public two-year colleges and 40% of public four-year colleges are affected by these laws.
However, as states struggle with limited resources for higher education, several state legislatures have considered policies to either limit the provision of developmental courses in their public four-year institutions or eliminate these courses from public four-year institutions and shift provisions of these courses to public two-year colleges.

At most two-year colleges in Texas, developmental courses are required for students whose placement test scores suggest that they are underprepared for introductory college courses in writing or mathematics. Several researchers (Aycaster, 2001; Boylan & Bonham, 2007) have determined that 78% of universities that enroll freshmen and almost 100% of public two-year institutions in Texas offer developmental courses to underprepared students. Placement into developmental courses is based on a student’s individual needs and program requirements. Students who are required to take a developmental math or writing course must do so in their first two semesters and must earn a passing grade before enrolling in a credit-bearing math courses or first-year writing seminars. Developmental courses count as elective credits. Although developmental courses do not count towards a degree, they do count towards students’ full-time status, financial aid, and participation in varsity sports.

The following is a brief description of developmental reading, writing, and math courses offered at most public two-year colleges in Texas: Developmental Integrated Reading and Writing (DIRW) is a fundamental English language course designed to aid the student in acquiring the basic skills needed for college level reading and writing. This is accomplished through developmental education interventions that combine to effectively and efficiently prepare students to advance into college credit courses.
Developmental Mathematics I is designed to help students make the transition from arithmetic to algebra. This is accomplished through in-depth coverage of the fundamentals of whole numbers, fractions, decimals, percents, sign numbers, order of operations, prime factorization, greatest common factor, variable expressions, introduction to graphs, and linear equations (THECB, 2015).

According to a report from the Community College Research Center (CCRC) 2010 developmental programs typically provided multiple levels of developmental courses, which students took in a sequence. Depending on the level at which the students tested, they were referred to different sequences of developmental courses. In some cases, this meant a year or more of developmental courses. Furthermore, developmental courses typically followed a semester-based format.

Tables 2.1 and 2.2 display examples of developmental reading, writing, and math course sequences that most developmental students must satisfactorily complete before enrolling in college-credit courses. However, most students enrolled in developmental courses never complete the entire developmental course sequences. Bailey, Jeong, and Cho (2008) determined that less than 40% of students who were identified as requiring multiple developmental courses to address academic deficits actually completed the sequence.
Table 2.1

*Developmental Reading and Writing Course Sequences at Texas Two-Year Colleges*

<table>
<thead>
<tr>
<th>Developmental Reading</th>
<th>Developmental Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIRW 0305 Integrated Reading and Writing I</td>
<td>DSMA 0300 Developmental Reading I</td>
</tr>
<tr>
<td>DSRE 0300 Developmental Writing I</td>
<td>DSMA 0301 Developmental Writing I</td>
</tr>
<tr>
<td>DIRW 0313 Integrated Reading and Writing II</td>
<td>DSMA 0303 Developmental Writing I</td>
</tr>
</tbody>
</table>


Table 2.2

*Developmental Math Course Sequences at Texas Two-Year Colleges*

<table>
<thead>
<tr>
<th>Developmental Mathematics Courses</th>
<th>Developmental Mathematics Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSMA 0300</td>
<td>DSMA 0305</td>
</tr>
<tr>
<td>DSMA 0301</td>
<td>DSMA 0309</td>
</tr>
<tr>
<td>DSMA 0303</td>
<td>DSMA 0310</td>
</tr>
</tbody>
</table>


In addition to problems with students not completing developmental courses sequence is the fact that the same instructor is rarely assigned to teach developmental courses in the same sequence that are assigned to students. As Burgess and Samuels (1999) in their study reported:

The trend toward increasing use of part-time instructors is clearly evident in the community colleges. In addition to regular courses, many part-timers teach developmental and remedial courses. This creates a situation whereby the
students who need the most attention, help, and consideration are taught by the instructors’ least involved in the college, which impacts academic quality. (p. 1) Brothen and Wambach (2004) asserted that colleges and universities should continue to provide developmental courses since they provide students with opportunities for academic success, achievement of life goals, and better economic benefits.

**Student Progression and Retention through Developmental Course Sequences at HCCC**

In principle, only those students who pass the developmental course to which they were originally referred can pursue the next higher developmental or college-college course in a given subject area. However, many students enrolled in developmental courses at HCCC skip courses in the developmental sequence. Some referred students skip remediation entirely and enroll directly in the first college-level course in the relevant subject area.

Overall, at HCCC, 73% of students referred to developmental math, reading, and writing courses completed their sequences of developmental courses. Students who passed the highest-level developmental course in their referred sequence are defined as sequence completers (see Table 2.3). Of those students who were referred to remediation for math, 64% were sequence completers, reading 91.3%, and writing 84%.
Table 2.3

*HCCC Percentages of Students Completing Developmental Course Sequences, 2012-2013*

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Math</th>
<th>Reading</th>
<th>Writing</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010 - 2011</td>
<td>65%</td>
<td>92%</td>
<td>87%</td>
<td>75%</td>
</tr>
<tr>
<td>2011 - 2012</td>
<td>65%</td>
<td>94%</td>
<td>86%</td>
<td>74%</td>
</tr>
<tr>
<td>2012 - 2013</td>
<td>64%</td>
<td>93%</td>
<td>84%</td>
<td>73%</td>
</tr>
</tbody>
</table>

*Source.* HCCC Institutional Effectiveness Report.

**Professional Development for Faculty in Higher Education**

Quick (2008) asserted that providing professional development opportunities for faculty should be a priority for higher education institutions. According to the researcher, faculty should possess the necessary pedagogy to create responsive classrooms. This following section will reveal literature relevant to this study, history of professional development for faculty, principles of professional development for faculty, best practices for professional development for faculty. Lastly, previous literature on approaches for professional development for faculty will be discussed.

**History of Professional Development for Faculty**

All across the United States, community colleges and universities have had a long history of commitment to the development and success of faculty members related to their subject matter and research. Lewis (1996) pointed out that the sabbatical leave instituted at Harvard University in 1810 is probably the oldest form of professional development for higher education faculty. The primary goal of this program was to support faculty members’ development as scholars in their chosen fields.
“Professional development for higher education faculty, as we understand it today, began to emerge in U.S. higher education in the social and economic turbulence of the late 1950s and 1960s” (Rice, 2007; Sorcinelli, Austin, Eddy, & Beach, as cited in Gillespie & Robertson, 2010, p. 4). During this period, the student rights movement swept across higher education institutions in the United States, and students began to demand more control of what they studied. For example, racial and ethnic students wanted more ethnic studies programs (Gillespie & Robertson, 2010). Furthermore, students wanted to play a role in determining content of the curriculum, what courses to offer, and courses relevant to their life experiences.

A number of authors have suggested models for understanding the stages in the evolution of the research and practices in professional development for college faculty during the past several decades (Rice, 2007; Sorcinelli et al., 2006). In *Creating the Future of Faculty Development; Learning from the Past, Understanding the Present*, Sorcinelli et al. (2006) categorized the evolution of professional development into four past ages:

1. Scholar: The mid-1950s into the early 1960s. During this time, professional development was intended to improve scholarly competence.
2. Teacher: Spanned the mid-1960s through the 1970s and witnessed an extension to include faculty, instructional, and organizational components to the improvement of teaching effectiveness.
3. Developer: The 1980s. During this time, a number of professional development units emerged formally on campuses and resulted in a greater institutionalization of the role of faculty development.

4. Learner: The 1990s. The focus of teaching and instructional development moved from faculty professional development to a focus on student learning. This shift caused an interest in student-centered pedagogical methods such as collaborative approaches and problem and inquiry-based learning strategies.

Data gathered by Sorcinelli et al. (2006) indicated rapidly growing groups of individuals were responsible for faculty professional development activities on campuses. The majority of the individuals were identified as administrators and faculty developers. They were relative new to the field of faculty professional development, but most of them had held positions as faculty members.

**Professional Development of Faculty at Community Colleges in Texas**

Community college faculty are insufficiently prepared for their teaching role. According to Murray (2002), professional development for faculty could fulfill the need of preparing faculty to teach underprepared adult learners by providing appropriate learning opportunities. Research on faculty professional development of faculty at community colleges in Texas is slim. Murray (2001) conducted a national survey, which included community colleges in Texas, to ascertain the state of professional development at community colleges. Additional smaller studies aimed to look at the effectiveness of professional development methods (Angelo, 1994; Maxwell & Kazlauskass, 1992). In their studies, they concluded that faculty professional learning
opportunities tended to cluster into four categories: (a) gatherings on campus for flex
days, (b) department meetings, (c) informal conversations among colleagues, and (d)
formal conferences off campus. The conferences and workshops focused on topics
ranging from career management and quality of life, to curriculum, program and
knowledge/skill development (including instructional knowledge/skills).

In 2012, the Texas Community College Teachers Association (TCCTA)
conducted a professional development survey. In the TCCTA survey, faculty reported
that most professional development campus-wide activities tended to be diffuse and lack
coherence. Without a set of intentional goals guiding the professional development
work, the faculty experienced isolation and pursued areas of their own interest. The
participants also reported that flex days might feature an outside speaker or set of
speakers intended to motivate faculty at the start of a school year. Other researchers also
reported that professional development activities planned by administrators without
faculty input often garnered poor reviews (Kozeracki, 2005; Murray, 2002).

Department meetings scored somewhat higher, but were still variable and might
not include any professional learning. Typical meetings focused on administrative and
business issues rather than instructional or curricular matters (Murray 2002). None of
these activities were described as focused on teaching and learning.

In general, faculty professional development programs at Texas community
colleges were observed to be lacking clear connections to the goals and mission of their
institutions. Richardson and Wolverton (1994) studied higher-performing community
colleges, and noted that they tended to link professional development opportunities
systematically to institutional priorities, while the opposite was true in lower-performing community colleges. These studies began by looking at programs with good outcomes and then described the work they were doing that likely produced such high quality work. Burnstad and Hoss (2010) noted:

Many community colleges use a system of Professional Development Plan (PDP) or Individual Development Plan (IDP), in which faculty members state their wants and needs over time, ranging from one to five years depending on the community college review cycle. These plans must be tied to budget allocation so that needs are met both for the faculty member and the college as a whole. Such plans result in individual development as well as contribute to the growth of the learning organization, the academic division, and the department. (p. 8)

The need for ongoing professional development for post-secondary faculty is well documented, and this is especially true for faculty members at community colleges that are assigned to teach developmental courses. Galbraith and Jones (2006) posited that instructors teaching developmental courses are charged with utilizing the art of teaching to appeal to student intellect, emotion, philosophy, and personal goals.

**Principles of Professional Development for Faculty**

Although many university departments stress the importance of professional development to improve classroom teaching and student achievement, the K-12 teacher education field is the most experienced in the area of professional development programs. This is largely because they are responsible for preparing teachers working with diverse student and high-stakes accountability.
Today, most higher education institutions are following the lead of K-12 professional development programs. However, at present, most professional development programs at colleges and universities miss the mark. Smittle (2003) believed that one-time workshops were the most prevalent model for delivering professional development. Yet, workshops have an abysmal record of accomplishment for changing teacher practice and student achievement (Yoon et al., 2007). In the K-12 setting, the Common Core standards focus on teaching for critical thinking; therefore, most classroom instruction has to be strong in this area. Moreover, professional development needs to emphasize practices that will turn students into critical thinkers and problem solvers. It can then be concluded that colleges and universities can look toward K-12 program development program for guidance.

In order for most K-12 educators to be effective in the classroom, professional development today must be effective. It has to incorporate best practices and improve student learning. A report by Gulamhussein, *Teaching the Teacher; Effective Professional Development in an Era of High Stakes Accountability* (National School Board Association Center for Public Education, 2013) suggested that effective professional development abides by the following principles:

- The duration of professional development must be significant and ongoing to allow time for teachers to learn a new strategy *and* grapple with the implementation problem. In nine different experimental research studies of teacher professional development, *all* found that programs of greater duration
were positively associated with teacher change and improvements in student learning (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009).

- There must be support for a teacher during the implementation stage that addresses the specific challenges of changing classroom practice. Knight and Cornett (2009) found in a study of 50 teachers that those who had coaching along with an introductory workshop were significantly more likely to use the new teaching practice in their classes than those who only were only exposed to the workshop.

- Teachers’ initial exposure to a concept should not be passive, but rather should engage teachers through varied approaches so they can participate actively in making sense of a new practice. Professional development sessions that aim to make teachers aware of a concept have been shown to be more successful when they allow teachers to learn the concept in varied, active ways (Roy, 2005).

- Modeling has been found to be a highly effective way to introduce a new concept and help teachers understand a new practice.

- The content presented to teachers should not be generic, but instead grounded in the teacher’s discipline (for middle school and high school teachers) or grade-level (for elementary school teachers). A study by Blank, de las Alas, and Smith (2007) has shown that professional development that addresses discipline-specific concepts and skills has been shown to both improve teacher practice, as well as student learning.
In marked contrast with the K-12 sector of U.S. schooling, most faculty members of higher education institutions have traditionally come to their careers as teachers and managers of learning with little, if any, formal professional training or experience other than in the content of various disciplines and perhaps employment as graduate teaching assistants. According to Mundy et al. (2013), “A pressing need exists to provide faculty, especially novice faculty, with ongoing professional development opportunities to enable the scholar who teaches his subject to become a meaningful teacher of students, a true educator” (p. 2). Professional development for faculty then should focus on student learning, increasing student engagement, retention, and success, and this could be done by infusing proven instructional practices and pedagogical theories (Berg & Haung, 2004).

In an overview of professional development for community college faculty, Murray (2002) cited three principles that are related to professional development program effectiveness: community colleges must (a) link professional development to the community college mission, (b) have formalized evaluation plans and criteria, and (c) maximize faculty participation. Faculty are not eager to participate in professional development activities that they perceive to be irrelevant, inefficient, and unfocused (Murray, 2002).

Likewise, Smittle (2003) reviewed six principles of professional development for faculty teaching developmental courses. These include:

1. Faculty should make a commitment to teaching underprepared students.

Roueche and Roueche (1993) pointed out that teacher attitudes are probably
related to student achievement; no teacher should be arbitrarily assigned to teach a developmental course if he or she would rather not teach that class.

2. Faculty should have command and knowledge of the subject manner and ability to teach a diverse student population. Proficiency in subject matter is critical for developmental education teachers. Since underprepared students have generally been unsuccessful with traditional instructional methods and materials, instructors must be able to present the subject matter in different ways.

3. Professional development for faculty should address noncognitive issues that affect student learning. Underprepared adults in developmental courses often carry many nonacademic problems with them when they enroll in college.

4. Instructors must provide open and responsive learning environments. Students need to know that teachers recognize them as individuals.

5. Instructors must communicate high standards.

6. Instructors should engage in ongoing evaluation and professional development. Baiocco and DeWaters (1998) contended that professional development is the key to helping effective instructors manage change that is inherent in the 21st century. Effective instructors are constantly embracing change in their quest for improvement and also applying findings from evaluation outcomes to enhance teaching effectiveness and student success.

The principles for effective teaching presented by Smittle (2003) apply to all instructors. Further, in order for higher education to serve the needs of underprepared
students, quality teaching in developmental courses is imperative. Ongoing professional development for instructors assigned to teach developmental courses and the application of principles for effective teaching will help better prepare teachers to meet the needs of underprepared adult learners.

**Best Practices for Professional Development for Faculty**

Professors are considered experts in their area of study; they are scholarly. They have dedicated a lot of time and effort to studying a particular field and they share their interest with others through teaching and publishing articles in scholarly periodicals (Mundy et al. 2013). Despite strong backgrounds in their disciplines, faculty receive little or no professional development in the area of education (Burgstahler & Doe, 2006; McShannon & Hynes, 2005).

Professional development areas should include proven instructional practices and how best to incorporate and infuse pedagogical theories into undergraduate developmental courses to enhance student learning and increase student engagement. Mundy et al. (2013) cited research conducted by the Carnegie Mellon University in 2002 that included best practices for higher education faculty to engage underprepared students in their first year of college. These practices suggest that faculty should change their expectations of students as they transition from a structured high school system to a more independent lifestyle and college environment.

Professional development in undergraduate teaching and learning should include a wide variety of general education courses including but not limited to English/Language Arts, Mathematics, Science, Social Studies, and Cross-Disciplinary subjects.
Ongoing professional development should also include specific examples of applied learning theory in order to enhance teaching across various disciplines. Mundy et al. (2013) noted:

A generalized professional development module should take into account assessments, best practices for teaching undergraduate learners, engagement of students for retention and success, behavior of students, keeping up with students in the digital age including research on what is available and how to use it, social networking in education, best practices out of the classroom, using the internet for teaching and learning, and the Family Educational Rights and Privacy Act of 1974 (FERPA) and the legalities of teaching to college students. (p. 4)

Research Exploring Professional Development at Community Colleges

The literature on professional development at community colleges is oftentimes difficult to locate since, as previously discussed, multiple terms and definitions have been used to describe professional development for faculty. Because of this, several literature searches were conducted to identify relevant previous studies. The two main databases that were searched were ERIC and Dissertation Abstracts, although other databases were searched as well. Each was searched using several of the most common descriptor terms: faculty development, instructional development, and staff development.

Comprehensive research into professional development for faculty in community colleges seems to date from Centra’s work in 1976. This study, supported by a grant from the Exxon Education Foundation, investigated both two- and four-year institutions.

A number of studies by Murray investigated the elements of effective professional development for faculty found at different populations of community colleges. The first of these studies was published in 1995 and looked at Ohio’s two-year colleges. Murray (1998) then replicated this study with New York’s two-year colleges. This study was subsequently replicated three more times by Murray (1999, 2001), twice using national samples, and then again in Texas two-year colleges (Murray, 2000). Murray (1995, 1998, 1999, 2001) defined the six elements of effective faculty development as:

- Institutional support – climate that fosters and encourages faculty development;
- A formalized, structured, and goal-directed development program;
- A connection between faculty development and the reward structure;
- Faculty ownership;
- Support from colleagues for investment in teaching;
- A belief that good teaching is valued by administrators.
In each of Murray’s (1995, 1998, 1999, 2000, 2001) five studies, he found very little evidence of his first element of effective professional development that is providing institutional support or a climate that fosters and encourages faculty development. In fact, he found little evidence of a concerted effort to support and encourage professional development for faculty except in the national study that suggested that the chief academic officers believed in their faculties’ teaching ability.

Another study investigating the scope of faculty development programs was done by Grant and Keim (2002), utilizing a national sample of state-supported community colleges. Their study was designed to investigate current practices in faculty development, identify elements of planning, implementation, funding, and evaluation for development of both full- and part-time faculty in public community colleges, and to compare the status of faculty development programs among colleges of different sizes and accreditation regions.

Grant and Keim (2002) concluded that formal faculty development programs appear to be in 90% of public community colleges. They stated that these programs were open to both full- and part-time faculty and were formalized, structured, and comprehensive. This is in contrast to previous research, including Murray’s (2001) research that noted programs were not comprehensive and commonly consisted of a variety of individual practices not necessarily connected into an organized program.

Additionally, a study conducted by Gerstein in 2009, focused on the faculty in community colleges. Specifically, her study described the context for the faculty and students in community colleges and an examination of the issues surrounding faculty
preparation to teach developmental courses. Adjunct faculty taught the majority of developmental education courses and their role was explored as well. Typical professional development practices for community college faculty are described followed by a case example presenting two community colleges and the ways in which those faculties engaged in professional learning opportunities.

Finally, Gerstein’s (2009) research is concluded with a set of implications that is offered regarding the preparation of faculty to teach developmental courses. In brief, these studies have two critical areas of focus: (a) addressing the increasing numbers of underprepared students and (b) ongoing professional development for faculty as a means to improve learning outcomes for students.

**Approaches for Professional Development**

**Single approach.** In its simplest form, the concept of faculty development, according to Ebel and McKeachie (1985), is helping faculty members become more competent teachers and scholars. There is an important and recognizable problem, the need for more competent instructors and scholars, and a variety of possible solutions, for example, allowing instructors to participate in an in-service day, workshop, or perhaps a course at the local university. However, faculty development is a much more complex concept that has its roots in a variety of forms.

The traditional definition of faculty development has been synonymous with teaching improvement (Boice, 1984), research (Bland & Schmitz, 1990), and instructional development (Brawer, 1990). All institutions of higher education generally conduct some form of developmental activities for their employees to maintain vitality
and for renewal (Centra, 1985). This may be in the form of faculty development, professional development, staff development, instructional development, or organizational development.

The single approach can be an effective method for engaging instructors teaching developmental courses in professional development activities that will enhance their teaching effectiveness and student success. Smittle (2003) noted, “Effective teachers are constantly embracing change in their quest for improvement and to enhance their teaching effectiveness and student success” (p. 6).

**Development approach.** Development implies the addition of some new element in order to grow. A lifelong process is multidirectional, involves both gain and loss, has plasticity, is shaped by its historical/cultural context, and is multiply influenced. Menges (1985) referred to the idea of development as “to become fuller, larger, better, that it is a natural process that is gradual and continual” (p. 181). Indeed, the National Council for Staff, Program, and Organizational Development (NCSPOD) (as cited in Burnstad & Hoss (2010) defined development as “a process of renewal, growth, change, and continuous improvement” (p. 22).

Found throughout the literature is the belief that development at an institution of higher education is an ongoing process that requires a long-term institutional commitment and not just a one-time “shot in the arm” activity (Mintz, 1999). Katz and Henry (1988) pointed out that the development of excellent teaching skills involves continuous learning, which is a lifelong process. Looking specifically at professional development in this manner also requires seeing it as the theory and practice of
facilitating improved faculty performance in a variety of domains, including the intellectual, the institutional, the personal, the social, and the pedagogical (Menges, 1985).

In order to meet the demands and needs of unprepared learners and faculty assigned to teach developmental courses, colleges and universities must provide faculty with ongoing professional development opportunities. Moreover, Mundy et al. (2013) suggested that faculty need to participate in ongoing professional development that will allow them to grow professionally and become an effective instructor.

**Three-dimensional approach.** Gaff (1975) in his seminal work, *Toward Faculty Renewal*, described three component dimensions of professional development: (a) faculty, (b) instructional, and (c) organizational. Others who have discussed a tri-component model are identified in Table 2.4 along with the terms used to label each component activity. As can be seen in Table 2.4, previous researchers have used a variety of terms to describe Component A (e.g., faculty, personal, staff) and Component B (e.g., instructional, program, professional), while describing Component C as organizational.

The three general areas laid out by Gaff (1975) seem to have been the guiding forces behind the definition created by the Professional and Organizational Development Network in Higher Education (POD, 2003), an organization representing some 1,200 members, where faculty development is considered an umbrella term that includes the three interrelated areas of faculty development, instructional development, and organizational development. Used in this way, the term faculty development refers to a
comprehensive collection of activities and practices employed for overall institutional improvement.

Table 2.4

**Three-Dimensional Approaches**

<table>
<thead>
<tr>
<th>Study</th>
<th>Component A</th>
<th>Component B</th>
<th>Component C</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCSPOD (1981)</td>
<td>Staff: Orientation Programs, Professional Development, Personal Development, Recognition/Appreciation Programs</td>
<td>Program</td>
<td>Organizational</td>
</tr>
<tr>
<td>Millis (1994)</td>
<td>Faculty</td>
<td>Instructional</td>
<td>Organizational</td>
</tr>
<tr>
<td>Professional and Organizational Development (2003)</td>
<td>Faculty: As Teacher, Scholar/Professional, Person</td>
<td>Instructional</td>
<td>Organizational</td>
</tr>
</tbody>
</table>

Ongoing professional and personal development keeps teachers fresh and creative and aware of new instructional strategies that will help their students’ progress. Teacher burnout, then, can occur when a teacher's is constantly dealing with difficult challenges. For example, the challenges of teaching underprepared adult learners.

According to Smittle (2003), “Effective teaching in developmental education is one of the most challenging jobs in the college teaching profession” (p. 1).

**Four-dimensional approach.** In addition to the three-dimensional approaches noted in the previous section, several researchers have identified four distinct components of professional development (Alstete, 2000; Brawer, 1990; California Postsecondary Education Commission (CPEC, 1988), Eble & McKeachie 1985; Grant &
Keim, 2002). In some cases, such as Alstete (2000), the fourth component of curricular development “overlaps with each of the preceding areas” (p. 3). In another case, Grant and Keim (2002) also identified four categories, but used the term curricular instead of instructional while Brawer (1990) and CPEC (1988) identified four clusters of professional development: (a) professional, (b) instructional, (c) curricular, and (d) organizational.

Consequently, this project included ongoing activities related to teacher-identified needs and tied to their practice. This approach represented a departure from traditional in-service programs and may prove to be a critical variable. Examining Table 2.5 one can clearly see that as with the three dimensional approach, Component C, organizational development, is an area agreed upon by researchers, is curricular, and is viewed as clearly separable from instructional.

Table 2.5

Four-Dimensional Approaches

<table>
<thead>
<tr>
<th>Study</th>
<th>Component A</th>
<th>Component B</th>
<th>Component C</th>
<th>Component D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brawer (1990)</td>
<td>Professional</td>
<td>Instructional</td>
<td>Organizational</td>
<td>Curricular</td>
</tr>
<tr>
<td>Alstete (2000)</td>
<td>Professional</td>
<td>Instructional</td>
<td>Organizational</td>
<td>Curricular</td>
</tr>
<tr>
<td>Grant &amp; Keim (2002)</td>
<td>Professional</td>
<td>Instructional</td>
<td>Organizational</td>
<td>Personal</td>
</tr>
</tbody>
</table>

The first area or component (Component A), according to Eble and McKeachie (1985) is faculty development, also designated as personal, professional, or staff development and is designed to improve student learning and improve teacher
competence. Practices may be release time, workshops, and seminars. Brawer (1990) referred to this area as professional development that “promotes the expertise of faculty members within their primary discipline” (p. 51). Alstete (2000) concurred with this definition of promoting faculty growth in skills, knowledge, and awareness.

Brawer (1990) identified instructional development as improving the effectiveness of a faculty member’s ability to teach and as defined by Alstete (2000), instructional development would involve updating courses, styles of instruction, as well as creating learning materials. Organizational development, according to Brawer (1990), “engages faculty members in improving their institution and its environment for teaching and decision-making” (p. 52). Alstete (2000) pointed to this component as creating an atmosphere where new practices can be implemented and faculty can develop.

The fourth general area is curriculum development and focuses on evaluating and revising curriculum (Brawer, 1990). It involves the creation of new instructional materials (Alstete, 2000; Eble & McKeachie, 1985). An example of this professional development approach would be a profession-related conference that offered breakout sessions on various topics, such as teaching strategies, curriculum, and instruction.

After carefully reviewing the four approaches for professional development, the most effective approach for HCCC faculty may be the *Four-Dimensional Approach*. Because this approach focuses on the four areas of professional development: (a) personal development, (b) instructional development, (c) organizational development, and (d) curriculum development. Together, all the four areas will develop the
knowledge, skills, and disposition that will help instructors be prepared to teach underprepared adult learners.
CHAPTER III
METHODOLOGY

A preliminary review of the methods for collecting information from human subjects determined that the methods proposed for this study did not meet the federal definition of human subjects’ research with generalizable results. As the proposed information gathering methods are within the general scope of activities and responsibilities associated with my current position, I was not required to seek human subjects’ approval. Please see Appendix B, which is a copy of the email communication regarding the IRB’s decision regarding the study.

This chapter outlines the methodology that responds to the primary research question: “How have professional development instructional strategies at a Southwestern community college prepared faculty for teaching in developmental courses to underserved post-secondary learners?” This chapter describes quantitative research, reliability, validity, confidentiality, ethical concerns, timeline, and limitations of the design.

Quantitative Paradigms

According to Shulman (1986), research on education has and will continue to produce growing bodies of knowledge. This knowledge growth does not naturally occur, rather, “It is produced through the inquiries of scholars - empiricists, theorists, practitioners - and is therefore a function of the kinds of questions asked, problems posed, and issues framed by those who do research” (p. 3). Shulman (1986) explained
that there are diverse communities involved in research on teaching and these communities can be divided into two general categories of study: (a) quantitative research and (b) qualitative research.

A quantitative approach defined by Creswell (2003) “is one in which the investigator primarily uses post-positivist claims for developing knowledge (i.e., cause and effect thinking, reduction to specific variables and hypotheses and questions, use of measurement and observation, and the test of theories)” (p. 19), employs strategies of inquiry such as experiments and surveys, and collects data on predetermined instruments that yield statistical data.

Quantitative research relies primarily on the collection of data and involves analysis of numerical data. The researcher tests hypotheses and theory with data. The most common research objectives in quantitative research are description, explanation, prediction, and testing specific hypotheses. According to Denzin and Lincoln (2011), the data collection process involves collecting quantitative data based on precise measurement using structured and validated data collection instruments. For example, the researcher utilizes instruments that include closed-ended items, rating scales, and behavioral responses.

The primary purpose of this study was to address the central question, “How have the professional development activities at a Southwestern community college prepared faculty for teaching in developmental courses to underprepared post-secondary learners?”
1. What is the demographic profile and level of education of faculty members teaching developmental math, reading, and writing courses to underprepared adult learners at a Southwestern community college?

2. What is the demographic profile and academic outcomes of students in developmental math, reading, and writing courses at a Southwestern community college?

3. What types of activities do faculty teaching developmental math, reading, and writing courses at a Southwestern community college participate in for professional development?

I also sought to understand the depth of teacher learning as a result of engaging in professional development. To address the complexity of these issues, this study employed a pragmatic worldview that looked to many approaches to meet the needs and purpose of the research (Creswell & Creswell, 2007). Also, quantitative research was used to examine the cause-and-effect of relationships (Creswell, Plano Clark, Gutmann, & Hanson, 2003). Creswell (2015) offered the following definition:

Quantitative research is describing a research problem through a description of trends or a need for an explanation of the relationship among variables. In quantitative research, the investigator identifies a research problem based on trends in the field or on the need to explain why something occurs. For example, a parent involvement study describing the level of parent involvement in secondary-level schooling and more interested in examining the relationship between four factors—parents’ role construction, self-efficacy, perceptions of
teacher invitations and perceptions of adolescent invitations—as predictors. (p. 212)

**Study Design**

**Data Sources**

The use of archival data and site documents in this study had many advantages. According to Flintermann (2014), archival data is quickly accessible, low costs, and can come from many sources. Also, another data source utilized in this study was a site document. According to Ahmed (2009), “The use of documents in quantitative research can be helpful in validating surveys” (p. 11). Documents as evidence can also provide the researcher with a wealth of rich and detailed information. In addition, Creswell (2015) agreed that documents can be a valuable source of information in a research. They are also ready for analysis with the necessary transcription that is required with observational or interview data. This study utilized archival and document sources because of the availability of the sources and the researcher had immediate access to the data. Furthermore, Mogalakwe (2010) demonstrated in his review of literature, that information from archival and document sources that data can be used to yield new insights into a particular research.

To begin the ROS, archival data were retrieved from three public datasets:

- Hills Country Community College (HCCC) Professional Development Survey
  - Archival data
  - Part I, Instructors’ Demographic Questions
- Part II, Telephone Interview Questions

- Texas Higher Education Coordinating Board (THECB) Developmental Education Program Survey (DEPS)
  - Archival data
  - Professional Development Activities

- HCCC Institutional Effectiveness Report; this is an annual report that consists of student-level data reported to the THECB.
  - Over three academic years
  - Academic progression of student
  - Broken-down into two section (only student data used for this study)

Figure 3.1 displays the guiding questions for this study along with the two surveys and cite document for answering each guiding question. First, the HCCC PDS, Part I, was used to answer guiding question 1 on the demographic profiles and educational levels of faculty teaching development courses to underprepared adult learners in a post-secondary institution. Then, the HCCC Institutional Effectiveness Report was used to answer guiding question 2, about the demographic profiles and outcomes of students in developmental courses. Lastly, both the HCCC, Part II, and the THECB DEPS were used to answer guiding question 3 relating to the activities that faculty teaching developmental education participated in for professional development. These source documents were used to answer the three guiding questions of this study.
For the purpose of this ROS, archival data from the THECB DEPS II and HCCC telephone interviews were collected and analyzed. These organizations and surveys provided me with accurate and current data on professional development activities offered to HCCC faculty assigned to teach development courses to underprepared adult students. Moreover, these data were used to explore professional development activities for faculty assigned to teach developmental courses to underprepared adult students at HCCC.

Although the terms archival and secondary data were sometimes used interchangeably in the literature, they are defined differently. Archival data come from examination of primary source documents such as letters, newspaper articles, or school or medical records (Wicke & Silver, 2009). Also, archival data were originally generated for reporting or research purposes and are often kept because of legal requirements, for
reference, or as an internal record. For instance, state-supported higher education institutions in Texas are required to gather faculty data and submit these data to the THECB on an annual basis as part of the state regulatory framework. Collecting and analyzing archival data often requires the complex and time-consuming process of tracking down original records and transcribing these documents to create a workable dataset. Hox and Boeije (2005) defined secondary data as data that have been collected and made available by a primary source. Secondary data are often collected for a specific purpose but can also be used to address questions in other fields of research. In addition, general repositories of data exist to aid researchers with factual statistics about a population of interest.

On the contrary, Hox and Boeije (2005) defined primary data as “data that are collected for the specific research problem at hand, using the procedures that fit the research problem best” (p. 593). In other words, primary data are information that a researcher must gather because no one has compiled and published the information in a form accessible to the public. On every occasion that primary data are collected, new data are added to the existing bank of research knowledge.

Primary data are raw information collected by researchers for a specific purpose. Secondary data are information obtained by studying the reports of other researchers. When researchers conduct primary research, they are collecting data in response to a specific question, or in accordance with a specific objective. They may conduct surveys or focus groups. They may run experiments, or record direct observations about a test subject. They may hold interviews and ask questions about the specific issues their study
is designed to address. When researchers conduct secondary research, however, they do not collect any original data of their own but rely instead on the survey results, interview recordings, or experimental outcomes collected by others.

Furthermore, according to Simon and Goes (2013), secondary data consist of data that were collected for a different purpose, but can be repurposed for use in a different study. These data may be publicly available for students to use, such as census, statistical agencies, federal agencies, academic publications, and trade associations. An advantage of using archival data for my study was that there were no turndowns by participants, no missing data, and no pleading requests to participants asking them to help me (Jones, 2010). However, I had to spend far more time on preparing and cleaning the archival data to fit my purpose of this study. Another advantage was that because I used archival data, the data had already been collected, so conducting the study took less time and required fewer people and resources. On the contrary, Smith (2007) argued that by using archival data, the researcher cannot control for variables, data may be missing and or limited, and oftentimes the data are correlational and one cannot determine causality. As Table 3.1 depicts, archival data research offers several advantages and disadvantages in comparison to primary research. According to Flintermann (2014), “Besides the advantages of archival data, there are also some shortcomings” (p. 10).
### Table 3.1

**Advantages and Disadvantages of Archival, Primary, and Secondary Data Research**

<table>
<thead>
<tr>
<th>Types of Data</th>
<th>Definition</th>
<th>Advantages</th>
<th>Disadvantages</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary</strong></td>
<td>A collection of original primary data collected by the researcher.</td>
<td>Specific purposes, Researchers collect the data themselves</td>
<td>Takes a lot of time. Risk of obtaining biased or inaccurate data.</td>
<td>Original data collected by independent, and or private researcher(s) for research purpose.</td>
</tr>
<tr>
<td><strong>Secondary</strong></td>
<td>Data that have been already collected by and readily available from other sources</td>
<td>Less effort, Time saving, Understanding problem, Basis for comparison</td>
<td>Lack of quality control, Incomplete data, Inappropriateness of data</td>
<td>Data that has been already and recorded by someone else and readily available from other sources. Data collected for another purpose.</td>
</tr>
<tr>
<td><strong>Archival</strong></td>
<td>Data generated for reporting or research purposes</td>
<td>Quickly accessible, Low cost, Different sources</td>
<td>Quality of sources, Quality of data, Data may be biased, Researcher</td>
<td>Reporting data collected by organizations or educational agencies made available to the public for reporting purpose and is mandatory.</td>
</tr>
</tbody>
</table>
Hills County Community College Professional Development Survey

The data came from HCCC PDS, Part I, conducted by the HCCC’s human resources and institutional departments to augment the analysis. The methods used by HCCC to collect data consisted primarily of telephone interviews and open-ended questions. The HCCC DPS, Part I, was the primary data source for the study. In addition, I used the results from the DEPS conducted by the THECB. Because of my current duties and responsibilities as an instructional development manager for the college, my position allowed me unrestricted access to HCCC faculty surveys and the THECB institutional database. The data collected from the DEPS were stored in the THECB institutional database. The THECB institutional database is a collection of information organized to provide efficient retrieval. The collected information could be in any number of formats (electronic, printed, graphic, audio, statistical, and combinations). Database records and files are organized to allow retrieval of the information. Queries are the main way users retrieve database information.

The HCCC PDS was created in 2008 by the HCCC Faculty Senate Professional Development Committee. The purpose of the survey was to access faculty opinions toward professional development opportunities and overall teaching environments at HCCC. A panel of HCCC instructors assigned to teach developmental courses and administrators was used to secure the content validity of the survey instrument.
The survey was modeled after the THECB DEPS; however, it was more focused on the instructors, whereas the DEPS II was focused more on the institution. The survey consisted of 12 questions, such as instructors’ background information, course information, and professional development. It was divided into two parts. Part I consisted of six questions concerning instructors’ demographic information, and Part II consisted of questions concerning instructors’ professional development opportunities. For instance, Figure 3.2 shows actual questions in Part I, questions that asked about the instructors’ demographic information, gender, experiences in teaching, level of education, and subject matter expertise. The demographic information provided additional insight about who was teaching developmental courses.

Part II of the survey consisted of in-depth semi-structured telephone interviews with faculty assigned to teach developmental courses. Instructors’ personnel files were used to validate the information obtained during the interviews. The participants were asked for consent to access their personnel records.

The participants received the interview questions via email prior to the scheduled calling time and were informed that the interview was transcribed verbatim. Respondents had an opportunity to review and, if necessary, correct the contents of the interview after it had been transcribed. The process for retrieving archival data from the HCCC Professional Development Survey was:
**Demographic Information**

Directions: In filling out the demographic information, please be as exact as possible.

1. How many years have you taught full-time at the community college level?

2. Have you ever worked as a part-time faculty member at the community college level?  
   Yes  No  
   If “Yes,” how long did you teach part-time? Years

3. Have you ever worked in business or industry?  Yes  No  
   If “Yes,” how long did you work in business or industry? Years

4. What is your age?

5. Gender (Circle one)  M  F

6. What is your highest level of education? (Circle one)  
   Certificate or Diploma
   Associate
   Bachelor’s
   Master’s
   Master’s and working on Doctorate
   Certificate of Advanced Graduate Studies or Education Specialist

*Figure 3.2 Sample Questions from HCCC Professional Development Survey (2015).*

1. Selected the HCCC Portal, click on the *WebAdvisor* button.

2. Logged on to Web Advisor with my userid and password.

3. Click the *Faculty Services* option, and then select Reports.

4. Click on *Academic Reporting* to bring you to the supplemental banner reporting tool area.

5. Selected an option under the heading *Section Analysis Reports*. I created reports by department or by subject. These reports were exported in Excel format.
6. Selected HCCC Professional Development Survey; selected the other search parameters for the particular survey I wanted to download.

7. Exported the data from the HCCC PDS, Parts I and II.

The HCCC Professional Development Survey, Parts I and II, were developed in 2010 by the HCCC Faculty Senate to meet the requirements of the THECB. After initial development, the survey was assessed for reliability. There were two approaches to assess reliability for this survey. First, for the fall semester, faculty members who completed the survey were asked if they wished to participate in a retest to measure the reliability of the survey. Participants were given a month to return the second survey. However, not the entire faculty agreed to participate in the retest survey.

Fortunately, the sample size was large enough to provide a real estimate of the reliability of the survey. Based on the results, the two surveys showed strong correlations between test and re-test. This method is referred to as test-retest reliability method. According to Litwin (1995), the test-retest reliability is measured by having the same respondents complete a survey at two different points in time to see how stable the responses are.
Texas Higher Education Coordination Board DEPS

The purpose of using the DEPS was to get a better understanding of the history of the professional development opportunities for the faculty at HCCC. The DEPS was designed to better understand how students were performing in developmental courses across Texas and at individual institutions. The survey gave educators a snapshot of what was and was not happening in developmental courses across the State of Texas. DEPS identified differences in program structure and student support between institutions of higher education. These data provided all stakeholders with information to improve developmental courses across Texas. DEPS identified differences in program structure and student support between institutions of higher education. These data provided all stakeholders with information that can be used to improve developmental education programs across the state.

Data for the THECB DEPS was composed by the THECB via interviews, field notes, and participant observations. Logic branching was used in this survey. For example, if the respondent selected yes to a question, the survey automatically jumped to the next relevant question. Participants were not required to provide personal or sensitive data on the THECB DEPS. Administrators of developmental education programs at all state-supported two-year and four-year higher education institutions in Texas were required to participate in the THECB DEPS. The THECB DEPS contained items of different formats: multiple choice, asking for one option or all that apply, dichotomous answers like “Yes” and “No,” self-assessment items, measured on the 7-point Likert-type, and open-ended questions.
A panel of instructors teaching developmental courses was used to secure the content validity of the survey instrument. The questionnaire consisted of 173 questions, which was organized into five sections. However, for this study, I focused on Section 5, Faculty Development that consisted of 27 questions.

The DEPS consisted of five main sections:

1. General Information
2. Academic Advising
3. College Readiness Assessment
4. Course Information
5. Faculty Development

The fifth section of the survey asked questions related to instructional professional development and participants’ experiences in it. It included selection questions related to the types of professional developmental activities, requirements for participating in professional development activities, teaching techniques or strategies for teaching developmental courses, and participant experiences in professional development programs. Some of the questions were measured on a Likert type scale from “Strongly disagree” to “Strongly agree” and provided data regarding how instructional professional development programs, faculty, and institutional-related factors impacted underprepared students’ success. This scale provided data to answer the overarching research question: How have the professional development activities at a Southwestern community college prepared faculty for teaching in developmental courses to underserved post-secondary learners?
The THECB DEPS is web-based and accessed through the THECB Portal, which is sent to all two- and four-year state-supported higher education institutions in Texas identified by the THECB. One of the advantages of a web-survey is that participants’ responses will automatically be stored in a database and can be easily transformed into numeric data in Excel or SPSS formats. Last known working email addresses were available for all the potential participants in the study. An informed consent form was posted on the web as an opening page of the survey. If participants agreed to participate in the survey, they were prompted to click on the button below, saying, “I agree to complete this survey,” thus expressing their compliance to participate in the study and complete the survey.

In addition, the THECB DEPS helped to identify differences in faculty professional development and training between institutions of higher education in Texas. Dr. Hunter Boylan and the National Association of Developmental Education (NADE) based the THECB DEPS on years of extensive research. Actual THECB DEPS questions are displayed in Figure 3.3.

<table>
<thead>
<tr>
<th>Question</th>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Are developmental education faculty required to take professional development?</td>
<td>Y</td>
</tr>
<tr>
<td>7</td>
<td>Does your institution have professional development training specifically for mathematics developmental educators?</td>
<td>Y</td>
</tr>
<tr>
<td>8</td>
<td>Does your institution have professional development training specifically for reading developmental educators?</td>
<td>Y</td>
</tr>
<tr>
<td>9</td>
<td>Does your institution have professional development training specifically for writing developmental educators?</td>
<td>Y</td>
</tr>
<tr>
<td>10</td>
<td>Is there an institutional policy encouraging the following teaching techniques or strategies in developmental education courses?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. Mastery learning</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>B. Critical thinking</td>
<td>N</td>
</tr>
</tbody>
</table>

*Figure 3.3. Actual Questions from the THECB DEPS II (2015).*
**Reliability.** The DEPS was developed from old Developmental Education Plans. Four Texas post-secondary institutions (2 universities, 2 community colleges) were given early versions and piloted the DEPS. The DEPS II was approval by the THECB Data/Research Committee. The DEPS information website was developed. Colleges’ and universities’ leadership were asked to provide a point person to complete the DEPS. DEPS training sessions were conducted with all institutions two weeks prior to the start of the survey (Live Meeting). Question and Answer sessions were conducted at the time of training. A Frequently Asked Questions section was added to the DEPS website based on training sessions and all questions asked to staff. All institutions were provided with a DEPS email address and staff contacts to answer questions during the survey process.

**Data analysis.** In order to analyze the quantitative data, descriptive statistics were used via Microsoft Excel Statistics. Most of Excel statistical procedures are part of the Data Analysis tool pack, which is in the Tools menu. It includes a variety of choices including simple descriptive statistics, $t$-tests, correlations, 1- or 2-way analysis of variance, regression, etc. The quantitative dataset was small consisting of no more than 100 participants, thus Microsoft Excel Statistics were used. Microsoft Excel Statistics can be used to analyze descriptive statistics. Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures.

The researcher used quantitative statistics for three purposes: (a) to determine demographic profiles and educational levels of faculty teaching developmental math, reading, and writing courses; (b) to determine the demographic profiles of and outcomes
of students in developmental math, reading, and writing courses; and (c) to determine what professional activities faculty teaching developmental courses participate in for professional development. Quantitative descriptive statistics reports were used to report frequencies and percentages from two surveys and one report. This study used descriptive statistics (averages, percentages), vs. advanced statistics (e.g., correlation, variance, etc.) to describe and summarize data about HCCC faculty and students in developmental courses, because this study did not involve complex relationships among variables. Another reason was the fact that this study involved the use of archival data. The HCCC DEPS, Part I, the demographic section of the survey, used frequencies to obtain demographic profiles and educational levels of the faculty. The THECB DEPS and HCCC DPS, Part II, used frequencies to identify what professional development activities faculty participated in for professional development. Figures and tables were used to illustrate the results section of this study.

Barker, Pistrang, and Elliott (2002) acknowledged that descriptive statistics were valuable to understanding a phenomenon of interest. Suter (2006) defined descriptive research as inquiry based on describing the characteristics of a population that deter from generalizing or testing statistical hypothesis. Salkind (2008) explained that descriptive statistics organize and describe the collection of data termed data set or just data. Quantitative descriptive statistics report results as percentage, mean, median, incidence, and prevalence (Barker et al., 2002).

The primary purpose of using quantitative descriptive statistics was to construct descriptions of the datasets. In addition, the data gathered from the surveys can be used
for descriptive purposes or for examining relationships between variables. The HCCC PDS telephone interviews were most appropriate for this study since they were used to gather descriptive data, which reflect the utilization of professional development opportunities that focus on engaged practices in developmental courses in two-year higher education institutions in Texas. The THECB DEPS, which guided this study, was designed in questionnaire format to include Likert scale items and open-ended questions.

**Using Site Documents**

The use of documents or site sources may not be very popular when it comes to mainstream research; however, the use of documents in research is not new (Ahmed, 2009). According to Ahmed (2009), this *research method* is “often marginalized or when used, it only acts as a supplement to the other general social research methods” (p. 19). Documentary research method refers to the analysis of documents that contains information about the phenomenon we wish to study (Bailey, 1994). The documentary research method is used in investigating and categorizing physical sources, most commonly written documents, whether in the private or public domain (Payne & Payne 2004). Mogalakwe (2010) argued that the “use of documentary sources in social research is just as good and sometimes even more cost effective than social surveys, in-depth interviews or participant observation” (p. 44).

**HCCC Institutional Effectiveness Report**

Each Texas state-supported community college that is certified by the commissioner of higher education to be eligible for and which may receive appropriations made by the legislature are required to report student-level data to the
THECB. In order to meet the requirements of the Texas State Legislature for reporting student-level data to the THECB, the HCCC Institutional Effectiveness Report was created. The initial data collection for the report started in the fall of 1999 and the first report was submitted to the THECB in the fall of 2000. The report consisted of student-level data that was used to track the academic progress of students enroll college-credit and developmental courses at HCCC. These data were used by the THECB to track student-level data in public or other participating private higher education institutions in Texas, or who enter the workforce. Figure 3.4 displays an image of a student demographic chart from the HCCC Institutional Effectiveness Report.

### Demographics of Student Enrolled in Developmental Reading, Writing, and Math

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>639</th>
<th>619</th>
<th>529</th>
<th>- 17.2%</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>336 (52.6%)</td>
<td>213 (34.4%)</td>
<td>152 (28.7%)</td>
<td>- 54.8%</td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>135 (21.1%)</td>
<td>190 (30.7%)</td>
<td>161 (30.4%)</td>
<td>19.3%</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>104 (16.3%)</td>
<td>153 (24.7%)</td>
<td>157 (29.7%)</td>
<td>51.0%</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>38 (5.9%)</td>
<td>21 (3.4%)</td>
<td>19 (3.6%)</td>
<td>- 50.0%</td>
<td></td>
</tr>
<tr>
<td>International</td>
<td>24 (3.8%)</td>
<td>10 (1.6%)</td>
<td>13 (2.5%)</td>
<td>- 45.8%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>2 (0.3%)</td>
<td>32 (5.2%)</td>
<td>27 (5.1%)</td>
<td>1250.0%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>271 (42.4%)</td>
<td>368 (57.6%)</td>
</tr>
<tr>
<td></td>
<td>255 (41.2%)</td>
<td>364 (58.8%)</td>
</tr>
<tr>
<td></td>
<td>258 (48.8%)</td>
<td>271 (51.2%)</td>
</tr>
</tbody>
</table>

### Figure 3.4. A Snapshot of a Student Demographic Chart from the HCCC Institutional Effectiveness Report.

**Reliability.** The HCCC Institutional Effectiveness Report was developed in 1999 to meet the requirements of the Texas State Legislature for reporting academic progress of students. The data collected were reported to the THECB and eventually submitted to the National Center for Educational Statistics. According to the Dean of HCCC
Institutional Effectiveness Department, during the initial stages of developing the report, to ensure consistencies, the report was tested and retested. The initial report was created in the fall of 2000 and again in the fall of 2001, using the same data and the results were the same. The test/retest method is a simple and conservative method of testing reliability. According to Shuttleworth (2009), the test-retest reliability method was one of the simplest ways of testing the stability and reliability of an instrument over time.

**Data analysis.** In order to analyze quantitative data on student outcomes at HCCC, descriptive statistics were used via Microsoft Excel Statistics. Most of Excel statistical procedures are part of the Data Analysis tool pack, which is in the Tools menu. It includes a variety of choices including simple descriptive statistics. Access to student-level data from the HCCC Institutional Effectiveness Reports were obtained from the Dean of HCCC Institutional Effectiveness Department. Data consisted of students demographic profiles and outcomes in developmental reading, writing, and math courses. Also, data on Texas Success Initiative exams were also made available. These data were exported from the 2010-2013 reports.

Microsoft Excel Statistics can be used to analyze descriptive statistics. Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures.

The researcher used quantitative statistics for two purposes: (a) to determine demographic profiles of students in developmental math, reading, and writing courses and (b) quantitative descriptive statistics reports were used to report frequencies and
percentages of academic outcomes of the students by using data from the HCCC Institutional Effectiveness Reports.

As noted above, the primary purpose of using quantitative descriptive statistics was to construct descriptions of the datasets. In addition, the data gathered from the reports can be used for descriptive purposes or for examining relationships between variables.

**Setting**

The Hills Country Community College (HCCC), located in the Southwestern Hills Country of Texas, serves approximately 9,000 students. HCCC is a two-year, open admissions institution that provides educational opportunities to students locally, nationally, and international. The institution’s primary goal is to prepare students for transfer to bachelor’s degree programs or to move directly into the workforce through the earning of an associate degree, certificate, or the completion of short-term training programs.

The student population was 62.3% men, 37.7% women, 41.3% White, 24.8% Black, 16% Hispanic, and 14.6% Other. The types of degrees awarded were 53% Associate of Arts, Certificates 240, Associate of Applied Science, and Associate of Science. Just like the rest of the nation, HCCC student population is becoming increasingly diverse. Although, the student population at HCCC is diverse, the demographics of its faculty are not reflective of its students. Student demographics at HCCC are similar to other community colleges of its size and physical location. For the most part, HCCC students are not 17- to 18-year olds straight out of high school. Within
the past five years, a majority of students have been between the ages of 18 to 21. While
HCCC learners are represented in all age brackets, a significant amount were between
the ages of 22 and 29; this group made up 31% of the HCCC student population in fall
2014.

Over the course of the past five years, the majorities of HCCC students have
been male and have comprised nearly 60% of the total enrollment from fall 2010 to fall
2014. HCCC utilizes categories set forth by the U.S. Department of Education for
reporting purposes. Over the past five years, the majority of HCCC have students
identified as White (in fact, over half the total enrollment from fall 2010 onward). The
second largest racial/ethnic group is Hispanic or Latina/o, and the third is Black/African
American (THECB, 2014).

HCCC along with other colleges nationwide is grappling with the problem of
how to educate students who come to campus significantly underprepared for college-
level work. In most cases, instructors hired to teach developmental courses have little-to-
no experience and no training on how to teach. Kolodner (2016) pointed out “that at the
K-12 level, how to improve teacher quality has been a decade-long, often nasty, debate”
(para. 4). However, at the college level, the effort to improve disastrously low success
and graduation rates for students assigned to developmental classes has centered on
restructuring courses, adding counseling services, and boosting financial aid. The role of
the instructors has been little discussed. Furthermore, Kolodner (2016) emphasized a
2010 study, in which only 20% of students who enrolled in a developmental math class
made it to a college-level math class and only 37% of developmental English students moved on.

HCCC is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS) to award associate degrees and certificates of completion. Credits earned at HCCC are transferable to other institutions in accordance with policies of the receiving institutions. HCCC offers a comprehensive array of associate degree, vocational-technical, adult continuing education, and high school programs in delivery formats that address virtually every need.

Participants

The target audiences for this ROS are the faculty assigned to teach developmental courses and the staff assigned to the HCCC Developmental Education Department. Study participants included part- and full-time community college faculty assigned to teach developmental math, reading, and writing courses between 2010 and 2013. The researcher defined the faculty as those instructors who were regularly assigned to teach developmental reading, developmental writing, developmental math, and study skills courses. All faculty members assigned to teach developmental courses had at least a bachelor’s degree and some experience in teaching secondary school. The participants regularly taught a minimum of three-credit-hours of developmental courses out of their 15-credit-hour course load during at least one semester.

The target participants are faculty assigned to teach developmental math, reading, or writing courses. Specifically, developmental courses, gender, ethnicity, and years of experience in teaching developmental courses of the participants are presented
in Table 3.2. Developmental courses at HCCC have a statewide, performance-based curriculum, so the competencies for each subject area are the same regardless of who teaches the course. However, instructional strategies will vary for one instructor to the next. The study sample allowed for a variety of perspectives from instructors assigned to teach developmental math, reading, and writing over a three-year period.

Table 3.2

| HCCC Faculty Assigned to Teach Developmental Math, Reading, and Writing Courses from 2010-2013 |
|-------------------------------------------------|---------------------------------|---------------------------------|
| Math                                            | Reading                         | Writing                         |
| Gender                                          | 24 Males                        | 1 Males                         | 8 Males                        |
| 25 Females                                      | 9 Females                       | 7 Females                       |
| Ethnicity                                       | 34 White                        | 3 White                         | 12 White                       |
| 10 African American                             | 6 African American              | 3 African American              |
| 3 Hispanic/Latino                               | 1 Hawaiian Pacific Island       | 1 Hawaiian Pacific Island       |
| 1 Hawaiian Pacific Island                       | 1 Two or More                   |                                |
| Years of Experience                             | 1 – 12 years                    | 2 – 20 years                    | 2 – 20 years                   |
| Teaching Developmental Courses                  |                                 |                                 |                                |

Source. HCCC Institutional Effectiveness (n = 74).

Ethical Concerns

Ethical issues do not arise out of honest errors by the researcher or differences in interpretation; rather, they are related to the intent to deceive others or misrepresent one’s work (Roberts & Allen, 2010). Examples of such include, but are not limited to, attempts by the researcher to enhance the significance of his or her research or
intentionally interpreting results that support the researcher’s opinions or biases (Roberts & Allen, 2010). Texas A&M’s IRB requires doctoral students completing their dissertations or records of study to complete certification in the National Institute of Health (NIH) Human Subjects Training. I have completed the certification and the certificate was filed with the IRB chair and NIH certificates are valid for five years.

**Timeline of Record of Study**

In response to the research question: How have the professional development activities at a Southwestern community college prepared faculty for teaching in developmental courses to underserved post-secondary learners? data collection and interpretation were over one period of time. The data were collected from the DEPS II and HCCC Telephone Interviews during a one-phrase approach. Figure 3.5 displays an outline of the timeline of data collections, analysis, and interpretation. The majority of the data used came from the DEPS II. In summary, data were collected from the following surveys:

- THECB DEPS
- HCCC DPS Part II, questions from the HCCC Telephone Interviews

Once the data collection and interpretation of the study was complete, then I merged the results and presented my findings to the committee.
Figure 3.5. Timeline of Data Collections, Analysis, and Interpretation.

**Limitations**

There were four limitations to this Record of Study. First, the study involved only one public two-year college in Texas. Secondly, the study was on professional development activities sponsored and funded entirely by the college budget, including state and federal monies, grants, and local funds that flow through the college. Third, the study was about professional development activities for faculty assigned to teach developmental courses. However, some instructors teaching developmental courses were exempt from professional development, because of their status with the college.
Lastly, because I collected archival data from surveys developed and conducted by other organizations, this presented another limitation to this study. Because I did not gather my own information, first-hand, I was totally dependent on someone else’s efforts. Primary researchers may have been biased or may have used questionable methods to collect data; this could have been risky for me to base my report on such data.

Although the purpose of the DEPS and HCCC survey was to gather data on the characteristics of a target population, there were two factors that could have possibly violated the study. The first was a sampling error and the second was bias (Fowler, 2009). In this particular study, the participants included HCCC faculty teaching developmental courses. Accordingly, data were collected only from the sample who actually took the surveys and not from every individual member teaching developmental courses at HCCC. The second error of bias that could have possibly occurred was that the representative sample of instructors teaching developmental courses responding to the survey might have been different from the target population as a whole.

Qualifications of the Researcher

Background

I have 14 years of experience in postsecondary education. These include over 12 years in the classroom and 10 years as a mid-level administrator. I hold a Bachelor of Science in Education from Wayland Baptist University and a Master of Education in Educational Psychology from the University of Oklahoma. My current research interests include professional development for faculty who teach developmental education.
courses. My goal is to improve faculty professional development in order to more effectively assist underprepared students in higher education.

I am an instructional development manager at the community college of study and oversee some developmental education programming, including professional and curriculum development. I am knowledgeable about developmental education and culturally responsive practices, and I did not supervise any of the participants in this study.

**Journey to the Problem Space**

My Record of Study was directed by the department chair for the developmental studies program, Dr. Edward Wagner. Dr. Wagner was responsible for the overall operations of the entire developmental studies program and supervised the developmental math, reading, and writing faculty and staff of the Developmental Studies Program at Central Texas College (CTC) in Killeen, Texas. The problem with the Developmental Studies Program at CTC was the fact that it lacked an effective instructional professional development and training program that supported the needs of underprepared college students. In addition, there were no professional development and training programs specifically for faculty assigned to teach developmental courses to underprepared adult students. Currently, faculty professional development activities for HCCC faculty assigned to teach developmental courses do not focus on standards of proficiency in reading, writing, and math required in college-level courses, as well as the metacognitive, cognitive, and affective patterns of underprepared students.
Field-Based Mentor

The mentor for Internship II was Dr. John Doe, department chair at Hills Country Community College. He is a developmental math instructor for over 20 years and a counselor for 5 years. He has the role of providing professional development for faculty assigned to teach developmental courses, as well as reporting data to the THECB. He was an outstanding mentor and because of his years of experience in developmental education programs, he was able to pass along to me some valuable insight on teaching unprepared adult students.
CHAPTER IV

PRESENTATION OF THE DATA AND FINDINGS

Background

This chapter presents the results of the quantitative study that explored the professional development experiences for faculty teaching developmental courses. This quantitative study aimed to answer the overarching research question: How have the professional development activities at a Southwestern community college prepared faculty for teaching in developmental courses to underserved post-secondary learners? Three guiding research questions were used in order to answer this question:

1. What is the demographic profile and level of education of faculty members teaching developmental math, reading, and writing courses to underprepared adult learners at a Southwestern community college?

2. What is the demographic profile and academic outcomes of students in developmental math, reading, and writing courses at a Southwestern community college?

3. What types of activities do faculty teaching developmental math, reading, and writing courses at a Southwestern community college participate in for professional development?

To answer these questions, the researcher used the transformation-learning framework.

The literature from Chapter II suggested that developmental courses were most likely to positively impact student success and retention when they are taught by faculty
who how adults learn (Riley, Bustamante, & Edmonson, 2016). When in fact, most faculty teaching developmental courses are experts in their subject matter; yet, “they lack the pedagogical expertise to meet the diverse needs of developmental students” (Mundy et. al, 2013, p. 2). According to Elliott and Oliver (2016), higher education institutions can improve both quality and effectiveness of developmental education courses by establishing high instructional expectations and providing faculty with professional development to meet those expectations. Transformation learning is both theory and practice that provides faculty with specific strategies to engage underprepared learners. Professional development programs can provide pedagogical workshops and support as instructors develop instructional strategies to engage students, broaden their use of assessments, and improve learning. Cohen and Brawer commented (as cited in Elliott and Oliver, 2016) on the “rapid increase of students from diverse backgrounds arriving in college classrooms, and these trends have implications for community college instructors including the need to teach students who possess different learning styles” (p. 86).

It is essential that faculty teaching developmental courses engage in ongoing professional development. Faculty improvement is usually the result of an effective professional development program. However, professional development activities alone are not the sole reason for faculty improvement. Professional development must meet the needs of the instructors and the students they teach. Berg and Haung (as cited in Mundy et. al., 2013) stated “professional development areas should include proven instructional practices and how to best incorporate and infuse these pedagogical theories into
undergraduate general education courses to enhance student learning, increasing student engagement, retention, and success” (p. 2). Some faculty think they can do little about student success; they believe that no matter what type of instructional strategies they employ in their classrooms, some students will succeed and some will not. In making this comment, Perez, McShannon and Hynes (2012) argued, “Faculty cannot make students come prepared for class, or even to come to class. However, faculty can change their own behavior in an effort to increase student success” (p. 379).

Presentation of Data

The purpose of this study was to explore the professional development of faculty assigned to teach developmental courses to unprepared adult learners at a community college. Two surveys: The Hills County Community College (HCCC) Professional Development Survey (PDS), Parts I and II, and the Texas Higher Education Coordinating Board (THECB) Developmental Education Program Survey (DEPS) were used to identify the types of activities that faculty teaching developmental courses participate in for professional development. In addition, the demographic profiles of faculty and students and outcomes of students in developmental courses were used. Both surveys were quantitative in nature, and most importantly, they can provide data on faculty teaching development courses at HCCC.

According to Creswell (2015), “In quantitative research, the researcher identifies a research problem based on trends in the field or on the need to explain why something occurs” (p. 13). Also, Creswell (2016) stated that with, “quantitative research questions, you ask specific, narrow questions to obtain measureable and observable data” (p. 13).
Both the HCCC PDS and THECB DEPS consisted of specific and to the point questions. Both surveys were based on factors related to demographics and educational levels of faculty teaching developmental courses.

Figure 3.1 in Chapter III displays the guiding questions along with the two surveys and a site document that answered the guiding question of this study. First, the HCCC PDS, Part I, was used to better understand guiding question 1; the answer identified the demographic profiles and educational levels of faculty teaching developmental math, reading, and writing courses to underprepared adult learners. Also, the answer revealed who was teaching development courses. Part I of the HCCC PDS included six questions that provided general demographic information for the study regarding faculty gender, age, educational attainment, and years of experience teaching developmental courses at the post-secondary level.

The purpose of the HCCC PDS, Part I, is to report faculty demographics as required by the THECB. The survey is usually available to faculty in March and closes in April of every school year. Faculty are not required to participate in the survey; however, THECB requires that HCCC must make the survey available to all faculty members. Even if faculty participate in the survey, they are not required to answer any questions. Data from the survey are also used to determine state and federal funding for faculty support. As a result, HCCC encourages all faculty to participate in the survey.
Then, the HCCC Institutional Effectiveness Report was used to better understand the answer to guiding question 2, the demographic profile and outcomes of students in developmental math, reading, and writing courses. This question revealed the academic outcomes of students in developmental math, reading, and writing courses.

Lastly, guiding question 3 identified the types of activities that faculty teaching developmental courses participated in for professional development. Both the HCCC, Part II, and the THECB DEPS were used to better understand the answer to guiding question 3. This question identified the types of activities faculty teaching developmental math, reading, and writing participated in for professional development. For the HCCC PDS, Part II, instructors were contacted via a telephone call.

Telephone interviews were conducted with faculty members throughout the college. At the beginning of the interview, instructors verified their name and contact information. The interview consisted of six questions that were partially open-ended questions. The interviews provided faculty the opportunity to identify the types of professional development activities they participated in for professional development, both by selection and open answer. The interview questions were asked by staff from the HCCC Human Resources Department, and responses were entered into a personnel database. The telephone interviews lasted from 15 to 20 minutes.

By the end of April 2016, faculty had completed the HCCC PDS, Parts I and II. In addition to faculty completing the HCCC PDS, the Department Chair for HCCC Developmental Studies was responsible for providing responses to the THECB DEPS. The department chair had completed and submitted DEPS responses to the THECB. The
semi-structured interviews included six questions on their professional development experiences within the following areas: (a) professional development activities for faculty teaching developmental courses, (b) institutional support for faculty teaching developmental courses, and (c) certification from the National Association of Developmental Education.

The annual, THECB DEPS was designed to better understand how developmental education is being managed across the state and at individual institutions. The survey gave educators a snapshot of what is and is not happening in developmental education programs across the State of Texas. The THECB DEPS identifies differences in program structure and student support between institutions of higher education.

These data provide all stakeholders with information to improve developmental education programs across the state. The THECB DEPS provided both descriptive and trend information regarding the practices and delivery of programs and services for underprepared students. There are six sections on the DEPS, and one entire section is dedicated to faculty professional development. The DEPS faculty development section requires respondents to provide contact information, professional development training sessions, and information on developmental education faculty and staff.

According to the THECB (2015), the DEPS is a questionnaire style survey with forced choice and closed-ended questions. Logic branching is used in this survey; for example, if the respondent selects yes to a question, the survey will automatically jump to the next relevant question. No sensitive data are collected on the DEPS and it is password protected. All Texas public community and technical colleges and four-year
universities that offer developmental courses can participate in the DEPS. Institutions are required to provide a single institutional contact person; in most cases, this person is the department chair of the institution’s Developmental Studies Department. Data were collected from the contact person via the THECB DEPS portal. Questions were based on certain actions or behaviors that affect an institution’s developmental education program.

Findings

Demographics of Instructors Teaching Developmental Courses at HCCC

Guiding question 1. The first guiding question investigated the demographic profile and level of education of faculty members teaching developmental math, reading, and writing courses. The purpose of this question was to identify who is teaching developmental courses to teach underprepared adult learners. One major theme emerging from the data were the absence of institutional policies encouraging faculty to utilize teaching techniques or strategies specifically for unprepared adult learners. As noted earlier, data from the HCCC PDS Part I were used to analyze this first guiding question. Figure 3.2 in Chapter III shows actual questions in HCCC DPS, Part I, questions that ask about the instructors’ demographic information, gender, experiences in teaching, level of education, and subject matter expertise. The demographic information provided additional insight about who was teaching developmental courses.

Part I of the survey of faculty demographics and background data pertinent to the study participants. Demographics and background characteristics included ethnicity,
education attainment, gender, age, and years of experience in teaching at the college level. Figure 4.1 presents the demographic background variables of the instructors teaching developmental courses at HCCC. White faculty members represented 66.2% of the instructors teaching developmental courses at HCCC. African American faculty members represented 25.6% of faculty. Hawaiian Pacific Island faculty members represented 2.7% of faculty. Hispanic or Latino faculty members represented 4.0% of faculty. Two or more (identified as being of more than one race) faculty members represented 1.3% of faculty. Analysis of the gender of the population showed that females made up almost 55% of the faculty teaching developmental courses at HCCC.

Figure 4.1. Demographics of HCCC Instructors Teaching Developmental Courses (n = 74), (HCCC Institutional Effectiveness Report, 2015).
Table 4.1 represents the years of faculty teaching experience. Years of teaching experience is based on the total number of years teaching at the college level. Of the 74 faculty members teaching developmental courses, 34% of full-time instructors had 10 to 19 years of experience. While 28% of part-time instructors had only 1 to 4 years of experience. Full-time instructors who averaged more than 10 years teaching at the college level were more experienced than part-time instructors were. Conversely, part-time instructors were actually more experienced in total teaching years than full-time faculty.

In terms of degrees held by faculty members, Table 4.2 presents the distribution of the highest degrees earned for faculty teaching developmental courses at HCCC. Of the 74 instructors teaching developmental courses, 3% had an associate, 11% had a bachelor’s, 67% had a master’s, and 15% had some sort of doctorate. One thing to note, even though all of the 74 instructors had degrees, none of them had any type of training on teaching developmental courses to adults. This is consistent with reports that more community college faculty members hold a master’s degree than any other degree (Texas Higher Education Coordinating Board, 2015). It is interesting to note, that the 3% of the faculty who held only an associate degree, were primarily assigned to the computer labs. However, the college considers them as instructors.
Table 4.1

*Age and Number of Years Teaching at College Level of HCCC Faculty Teaching Developmental Courses*

<table>
<thead>
<tr>
<th>Number of Years Teaching</th>
<th>Part-time</th>
<th>Full-time</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 years or more</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>30 to 39 years</td>
<td>4%</td>
<td>8%</td>
</tr>
<tr>
<td>20 to 29 years</td>
<td>9%</td>
<td>21%</td>
</tr>
<tr>
<td>10 to 19 years</td>
<td>22%</td>
<td>34%</td>
</tr>
<tr>
<td>5 to 9 years</td>
<td>26%</td>
<td>22%</td>
</tr>
<tr>
<td>1 to 4 years</td>
<td>28%</td>
<td>12%</td>
</tr>
<tr>
<td>First-year instructor</td>
<td>10%</td>
<td>2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;25</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>26 - 35</td>
<td>7</td>
<td>9%</td>
</tr>
<tr>
<td>36 - 45</td>
<td>16</td>
<td>21%</td>
</tr>
<tr>
<td>46 - 55</td>
<td>21</td>
<td>28%</td>
</tr>
<tr>
<td>56 - 65</td>
<td>19</td>
<td>25%</td>
</tr>
<tr>
<td>66 or older</td>
<td>9</td>
<td>12%</td>
</tr>
</tbody>
</table>

*Note. Sample size (N = 74).*

*Source. HCCC Human Resources Department (2015).*
Table 4.2

*Highest Degrees Earned by HCCC Faculty Teaching Developmental Courses*

<table>
<thead>
<tr>
<th>Degree Held</th>
<th>Number</th>
<th>Percentage of Instructors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate degree</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>8</td>
<td>11%</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>49</td>
<td>67%</td>
</tr>
<tr>
<td>Doctoral degree (PhD., Ed.D.)</td>
<td>11</td>
<td>15%</td>
</tr>
</tbody>
</table>

*Note.* Sample size (*N* = 74).

*Source.* HCCC Human Resources Department.

Because over 60% of HCCC students require developmental courses, as a result, over 34% of HCCC faculty are assigned to teach development courses. As of 2014, the full-time faculty at HCCC consists of 164 instructors and 80 adjunct instructors; of the 244 instructors, over 60% are assigned to teach students enrolled in developmental courses. Table 4.3 indicates that the total number of instructors at HCCC and the percentage of faculty teaching developmental courses. Between 2010 and 2013, the percentage of faculty assigned to teach developmental courses had risen by 12%. In addition, the number of instructors assigned to teach developmental courses had increased from 465 to 720, which is a significant increase in the number of instructors assigned to teach developmental courses. Again, HCCC Faculty Senate did not address the issues of preparing faculty to teach developmental courses. It is important to note that HCCC operates at 26 sites on military installations in the continental United States, Alaska, and Hawaii. In addition, HCCC operates campuses in Europe and the Pacific Far East.
Table 4.3

Percentage of HCCC Faculty Assigned to Teach Developmental Courses for 2010-2013

<table>
<thead>
<tr>
<th>Academic Years</th>
<th>Total Number of Faculty</th>
<th>Faculty Assigned to Teach Developmental Courses</th>
<th>Percentage of Faculty Assigned to Teach Developmental Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010 - 2011</td>
<td>2017</td>
<td>465</td>
<td>22%</td>
</tr>
<tr>
<td>2011 - 2012</td>
<td>2021</td>
<td>540</td>
<td>26%</td>
</tr>
<tr>
<td>2012 - 2013</td>
<td>2035</td>
<td>720</td>
<td>34%</td>
</tr>
</tbody>
</table>


Discussion. In this section, the discussion turns to the demographic profiles and education levels of faculty members teaching developmental math, reading, and writing courses to underprepared adult learners. The breakdown of the total population (N) of faculty assigned to teach developmental courses was 74 part- and full-time instructors. A breakdown of the faculty teaching developmental courses is shown in Figure 4.1.

At first glance, these descriptive findings would suggest that faculty at HCCC teaching developmental courses are likely to be a White female, master’s degree, 46 to 55 years of age, and over 10 years of teaching experience at the college level. Yet, according to the data, students enrolled in developmental courses are most likely to be African American or Hispanic males.

In a recent study, Jenkins (2015) suggested that “many of the problems that impact the success rates of international and native students of color is that White professors’ cultural beliefs and pedagogies often clash with students with differing cultures” (p. 196). When it comes to the low success rates African American and Hispanic students, many researchers will agree it is the result of the lack of diversity among college professors.
The data appeared to suggest that education and teaching experience varied among the faculty. A closer look at the data indicated that faculty teaching developmental courses have educational attainment ranging from associate degree to doctorate. Of the 74 instructors, 3% had associate degrees; 11% had bachelor’s degrees; 67% had master’s degrees; and 15% had doctorates. Results from the quantitative data indicated that faculty teaching developmental courses are not as diverse as the students they serve. Community college faculty differs from other higher education institutions in a variety of ways. The literature suggested that both full-time and part-time faculty were slightly more than 50% female and both groups were overwhelmingly White. The result of this study confirmed that the same is true for faculty teaching developmental courses at HCCC.

**Student Demographics and Outcomes in HCCC Developmental Courses**

**Guiding question 2.** Guiding question 2 of this study identified the demographic profile and academic outcomes of students in developmental math, reading, and writing courses at a Southwestern community college. The HCCC Institutional Effectiveness Report was used to answer guiding question 2. Figure 4.2 displays an image of a student demographic chart from the report.

Figure 4.3 represents the demographics of students in developmental courses at HCCC. The information is broken down into two areas; ethnicity and subject. For developmental math, the percentages are 45% African American, 35% Hispanic/Latino, 19% White, and 1% are Asian. For developmental reading, the percentages are 44% are Hispanic/Latino, 32% African Americans, 23% White, and 3% are Asian. For
developmental writing, 44% are Hispanic/Latino, 32% African American, 12% White, and 5% are Asian.

**Demographics of Student Enrolled in Developmental Reading, Writing, and Math**

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>639</th>
<th>619</th>
<th>529</th>
<th>- 17.2%</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>336</td>
<td>213</td>
<td>152</td>
<td>(52.6%)</td>
<td>(34.4%)</td>
</tr>
<tr>
<td>African American</td>
<td>135</td>
<td>190</td>
<td>161</td>
<td>(21.1%)</td>
<td>(30.7%)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>104</td>
<td>153</td>
<td>157</td>
<td>(16.3%)</td>
<td>(24.7%)</td>
</tr>
<tr>
<td>Asian</td>
<td>38</td>
<td>21</td>
<td>19</td>
<td>(5.9%)</td>
<td>(3.4%)</td>
</tr>
<tr>
<td>International</td>
<td>24</td>
<td>10</td>
<td>13</td>
<td>(3.8%)</td>
<td>(1.6%)</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>32</td>
<td>27</td>
<td>(0.3%)</td>
<td>(5.2%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>271</td>
<td>255</td>
<td>258</td>
<td>(42.4%)</td>
<td>(41.2%)</td>
</tr>
<tr>
<td>Female</td>
<td>368</td>
<td>364</td>
<td>271</td>
<td>(57.6%)</td>
<td>(58.8%)</td>
</tr>
</tbody>
</table>

*Figure 4.2. A Screenshot of Data from the HCCC Institutional Effectiveness Report, 2015.*

*Figure 4.3. Demographics of Students Enrolled in Developmental Courses at HCCC (HCCC Institutional Effectiveness Report, 2015).*
Figure 4.4 represents the outcomes of students in developmental reading, writing, and math. HCCC students average below the 80% THECB completion rate in developmental reading, writing, and math. Most HCCC students in developmental courses are non-traditional students, working students, and single parents (HCCC Institutional Effectiveness, 2015). Data may show that faculty may not be adequately prepared to teach developmental courses.

Figure 4.4. HCCC Students’ Outcomes in Developmental Courses at HCCC (HCCC Institutional Effectiveness Report, 2015).
Table 4.4 displays 2010-2013 TSI student data reported by HCCC IE to THECB.

The minimum TSI Entrance Exams for math, reading, and writing scores are 350, 351, and 363, respectfully. During 2010-2013, the percentage of HCCC students scoring below the minimum TSI exams has increased 6%.

Table 4.4

Percentage of HCCC Students Scoring Below the Minimum TSI Exams for 2010-2013

<table>
<thead>
<tr>
<th>Academic Years</th>
<th>Minimum TSI Entrance Exam Scores</th>
<th>% Students Scoring Below TSI Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Math</td>
<td>Reading</td>
</tr>
<tr>
<td>2010 - 2011</td>
<td>350</td>
<td>351</td>
</tr>
<tr>
<td>2011 - 2012</td>
<td>350</td>
<td>351</td>
</tr>
<tr>
<td>2012 - 2013</td>
<td>350</td>
<td>351</td>
</tr>
</tbody>
</table>

*Note.* The minimum TSI Entrance Exam scores are established by THECB.


When students arrive to enroll at HCCC, almost all are asked to take the TSI Entrance Exams. Based on these assessments, students are either categorized as *college-ready* and can enroll in college-level classes in the relevant subjects, or they are considered *developmental* students and are referred to academic services designed to raise their skills up to college standards. Table 4.5 shows the academic years, total student enrollment and the percentages of students enrolled in developmental reading, writing, and/or math courses. For instance, in the summer/fall 2010 semester, 25.9% of HCCC students enrolled in a developmental math course, by the end of the summer 2013 semester that number had increased to 64.4%. Overall, the highest percentages of students are enrolled in developmental math courses.
Table 4.5

Percentage of Students Taking Developmental Courses in Reading, Writing, and Math at HCCC for the Academic Years 2010-2013

<table>
<thead>
<tr>
<th>Academic Years</th>
<th>Total Enrollment</th>
<th>Reading (%)</th>
<th>Writing (%)</th>
<th>Math (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010 - 2011</td>
<td>22,744</td>
<td>56.3</td>
<td>47.1</td>
<td>59.9</td>
</tr>
<tr>
<td>2011 - 2012</td>
<td>21,341</td>
<td>25.4</td>
<td>33.7</td>
<td>61.8</td>
</tr>
<tr>
<td>2012 - 2013</td>
<td>20,806</td>
<td>22.2</td>
<td>23.1</td>
<td>62.4</td>
</tr>
</tbody>
</table>


Table 4.6 shows success rate (i.e., students earned pass or satisfactory grades) for students that completed developmental reading, writing, and math courses from 2010-2013. These calculations are based on total enrollments from summer 2010 through summer 2013. As the data in Table 4.6 indicates that from 2010 to 2013 over 63% of students at HCCC were enrolled in at least one developmental course. With more than 60% of students enrolled in developmental courses, faculty will need to be prepared to teach them. According to Mundy et al. (2013), the best way to prepare faculty to teach underprepared students is through ongoing professional development.

Discussion. In this section, the discussion will point to the demographic profiles and academic outcomes of students in developmental math, reading, and writing courses. The data support the literature in this study that students in developmental courses are mostly African American and Hispanic males.

The results of this study revealed that there is a disparity between faculty teaching developmental courses and the students they serve. The majority of the students were African American and Hispanic males, when in fact, less than nine instructors were
African American or Hispanic males. It is important to understand the cultural identity of faculty teaching developmental courses and the students they serve.

Table 4.6

_HCCC Success Rates for Students in Developmental Courses vs. Students in Non-Developmental Courses, Academic Years 2010-2013_

<table>
<thead>
<tr>
<th>Academic Years</th>
<th>Success Rate of Students in Non-Developmental Courses (%)</th>
<th>Success Rate of Students in Developmental Courses (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010 - 2011</td>
<td>83.0%</td>
<td>64.0% 63.1% 68.1%</td>
</tr>
<tr>
<td>2011 - 2012</td>
<td>82.0%</td>
<td>56.1% 68.3% 64.9%</td>
</tr>
<tr>
<td>2012 - 2013</td>
<td>81.0%</td>
<td>48.1% 67.8% 68.1%</td>
</tr>
</tbody>
</table>

*Note.* Success rates were calculated based on total enrollments from summer 2010 through summer 2013.


The literature in this study suggested that the median age of community college students was 23 years; 58% of students were African American or Hispanic males, 42% were the first in their families to enter higher education, and 12% had identified themselves as individuals with disabilities (American Association of Community Colleges, 2013). Gerstein (2009) stated, “The representation of black and Hispanic students in community colleges is slightly higher than in the general population” (p. 4). Riley et al. (2016) reported that “while community colleges in the U.S. are becoming more ethnically, linguistically, and economically diverse; meanwhile, faculty is becoming more homogeneous” (p. 35).
According to Rodesiler and McGuire (2015), “community colleges are characterized by demographic changes in several areas. Enrollment of racially and ethnically diverse students has nearly doubled over a 20-year period” (p. 24). Moreover, Riley et al. (2016) noted that “depending on geographic location, community colleges provide likely places where students might come in contact with diverse populations” (p. 35).

Snyder et al. (2006) reported that community colleges serve disproportionate numbers of Spanish-speaking students: 58% of all Hispanic/Latina/o undergraduates attend these institutions, compared to 42% of White undergraduates. It has been reported that many students of Hispanic/Latina/o background are academically underprepared upon entry into college (Crisp & Nora, 2010). Although there are examples of outstanding outcomes (Alvarez, 2011), the number of students who lack proficiency in English is growing dramatically, and includes “Generation 1.5,” individuals with a non-English primary language who have attended schools in the United States and are fluent in informal but not academic English (Smith, 2010). “Post-secondary institutions often deal with a myriad of student types in their classrooms, including under-prepared adult learners” (p. 4). Consequently, to effectively deal with underprepared students, community colleges must prepare instructors to teach this special population. Murray (2002) argued that it is important that community colleges utilize professional development as a means of preparing faculty to teach underprepared adult learners.
Guiding question 3. Guiding question 3 addressed the types of professional development activities for faculty teaching developmental courses. What types of activities do faculty teaching developmental math, reading, and writing courses at a Southwestern community college participate in for professional development? The purpose of this question was to identify the professional development activities offered to faculty teaching developmental math, reading, and writing courses. Data from the HCCC PDS, Part II, and the THECB DEPS were used to analyze this guiding question 3. Figure 4.5 indicates some of the actual questions from the HCCC PDS, Part II.

<table>
<thead>
<tr>
<th>Professional Development Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in Professional Development Activities</td>
</tr>
<tr>
<td><strong>Telephone Interview Questions</strong></td>
</tr>
<tr>
<td>1. What professional development activity have you participated in during the last 12 months?</td>
</tr>
<tr>
<td>1.1 When did you participate?</td>
</tr>
<tr>
<td>1.2 Who else participated?</td>
</tr>
<tr>
<td>1.3 What determines your participation in an activity?</td>
</tr>
<tr>
<td>2. Describe some of the characteristics/features of activities that were beneficial to you? Describe some of the characteristics/features of activities that were not beneficial to you?</td>
</tr>
<tr>
<td>3. Of the activities that were of greatest benefit to you, what were the benefits (changes) that resulted from that. Do you feel your students benefit from your participation? If yes, how?</td>
</tr>
</tbody>
</table>

*Figure 4.5. Actual Questions from the HCCC PDS, Part II. (HCCC Institutional Effectiveness Report, 2015).*
Table 4.7 is an analysis of the types of professional development activities HCCC faculty teaching developmental courses participated in for professional development hours. In the HCCC PDS, Part II, telephone interview, participants were asked to respond to the type of professional development activities they participated in and counted toward professional development hours. The topics were of general interest that did not specifically relate to teaching developmental courses, but more to department or business-related topics. Of the 74 instructors, more than 65 instructors participated in conflict resolution (87.8%), group meeting (100%), time management (87.8%), graduation ceremonies (100%), or community services (100%) as professional development activities. Less than 60 instructors participated in leadership (20.2%), student advising (16.2%), testing centers (2.7%), or student activities (81%). The data appeared to identify the types of professional development activities for faculty teaching developmental courses at HCCC to teach underprepared adult learners.

Questions 1-5 (Appendix A) of the THECB DEPS were directed to the Department Chair of HCCC Developmental Studies Chairperson (Chair). Since these questions were posed as forced choice and closed-ended questions, responses were identified by common topics across the responses. These questions were to determine if an institution provided professional developmental to prepare faculty to teach developmental courses to underprepared adult learners.
Table 4.7

*Professional Development Experiences by Type of Activity (n = 74)*

<table>
<thead>
<tr>
<th>Professional Development Activity</th>
<th>Number of Instructors that Participated</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflict resolution</td>
<td>65</td>
<td>87.8</td>
</tr>
<tr>
<td>Leadership</td>
<td>15</td>
<td>20.2</td>
</tr>
<tr>
<td>Time management</td>
<td>65</td>
<td>87.8</td>
</tr>
<tr>
<td>Group meetings</td>
<td>74</td>
<td>100</td>
</tr>
<tr>
<td>Student Advising</td>
<td>12</td>
<td>16.2</td>
</tr>
<tr>
<td>Student Activities</td>
<td>60</td>
<td>81</td>
</tr>
<tr>
<td>Testing Centers</td>
<td>2</td>
<td>2.7</td>
</tr>
<tr>
<td>Graduation Ceremonies</td>
<td>74</td>
<td>100</td>
</tr>
<tr>
<td>Community Services</td>
<td>74</td>
<td>100</td>
</tr>
<tr>
<td>Conferences</td>
<td>35</td>
<td>47.2</td>
</tr>
</tbody>
</table>

*Note.* Data retrieved from THECB DPS.

The responses came directly from the DC, because the THECB strongly advised that the individual identified as the institution’s contact person should be the only person entering data. The most common topics across the response included: professional development and training for faculty teaching developmental math, reading, and writing. Table 4.3 represents the questions from the THECB DEPS and responses provided by HCCC DC. The results show that the HCCC does not provide professional development and/or training specifically for faculty teaching developmental math, reading, and writing courses. What is more interesting is that as an institution, HCCC does not have
in place institutional policies on encouraging teaching techniques or strategies for faculty teaching developmental courses. Elliott and Oliver (2016) hypothesized that faculty involvement in, and the application of, professional development activities had a substantial impact on instructors’ effectiveness. Consequently, students’ success and instructors’ effectiveness are impacted.

Table 4.8 displays HCCC Department Chair responses to questions 5, 6, and 7 from the THECB DEPS. The questions were designed to identify the professional development activities for faculty teaching developmental courses. These questions are forced choice and closed-ended questions, choices are Yes with details and No without details. Question 5 asked if the HCCC had an institutional policy encouraging certain teaching techniques or strategies in developmental education courses. The department chair responded No to the question. Question 6 asked if the HCCC developmental education program had been certified by the National Association for Developmental Education (NADE).

The NADE is a nationally recognized association that prepares and certifies higher education faculty to teach developmental courses to underprepared adult learners. The response to question 6 was No. Question 7 asked if representatives of HCCC ever attended a NADE workshop on NADE certification. The response to question 7 was No. The Developmental Studies Department Chair responses to THECB DEPS questions 5, 6, and 7 were No. In view of the fact that HCCC responded No to questions 5, 6, and 7, consequently, very little-to-no professional development was offered utilizing culturally
responsive or transformation teaching strategies for faculty teaching developmental
courses.

Table 4.8

*Responses to Questions 5, 6, and 7 of the THECB DEPS*

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Is there an institutional policy encouraging the following teaching techniques or strategies in developmental education courses? If yes, give examples.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Mastery learning</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>b. Critical thinking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Learning strategies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Active learning techniques</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Classroom assessment techniques</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Other (please list)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 6. Has your developmental education program been certified by the National Association for Developmental Education (NADE)? | X |

| 7. Have representatives of your institution ever attended a National Association for Developmental Education (NADE) workshop on NADE certification? | X |

*Note.* Responses were provided by the HCCC Department Chair Developmental Studies Department.


Table 4.9 includes the actual professional development hours for 2010-2013 and the Kellogg Institute of NCDE recommended hours and areas of focus for professional development for faculty assigned to teach development courses for underprepared students. The Kellogg Institute is not a governing body; however, they are recognized
nationally as the nation’s leading advanced professional development program for faculty assigned to teach developmental courses. To date, over 1,380 developmental education professionals have attended the Kellogg Institute’s signature professional development program.

Table 4.9

Actual Professional Developmental (PD) Hours for HCCC Faculty Assigned to Teach Developmental Education Courses and Recommendations from the Kellogg’s Institute, 2010-2013

<table>
<thead>
<tr>
<th>Academic Years</th>
<th>PD Hours</th>
<th>Actual Hours (HCCC)</th>
<th>Recommended Hours (KI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010 - 2011</td>
<td></td>
<td>12 hours*</td>
<td>18 hours</td>
</tr>
<tr>
<td>2011 - 2012</td>
<td></td>
<td>12 hours*</td>
<td>20 hours</td>
</tr>
<tr>
<td>2012 - 2013</td>
<td></td>
<td>12 hours*</td>
<td>20 hours</td>
</tr>
</tbody>
</table>

*Only 4 of the 12 hours are required for teaching/instructional activities.

Source. HCCC Faculty Senate and National Center for Developmental Education.

The literature suggests that developmental courses are most likely to positively impact student success and retention when they are taught by faculty that participate in professional development activities are designed specifically for teaching underprepared adult learners (Boroch et al., 2010). Yet, most instructors who are assigned to teach developmental courses lack the pedagogical expertise to meet the diverse needs of adult learners (Elliott & Oliver, 2016). According to Mundy et al. (2013), “Post-secondary institutions often deal with a myriad of student types in their classrooms, including under-prepared adult learners” (p. 4). In order to effectively deal with underprepared students, instructors must be prepared to teach this special population. According to
Rutschow and Schneider (2011), most faculty assigned to teach developmental courses are often adjunct, and they tend to teach in isolation of their institutions.

Discussion. In this section, the discussion points to the types of professional development activities that faculty teaching developmental math, reading, and writing courses participated in for professional development. As a means for validating and expanding on the quantitative results from the HCCC Professional Development Survey, Part I, the THECB DEPS forced choice and closed-ended questions, survey questions 5, 6, and 7 (Appendix C) were included with the HCCC PD Survey, Part I. Analysis of the faculty responses revealed one major theme: faculty are not prepared to teach developmental courses to underprepared diverse adult learners. Winkle-Wagner and Locks (as cited by Riley et al., 2016) stated, “at a time when diversity is essential in higher education settings more studies are needed to explore the types of professional development activities for faculty and student outcomes might be related” (p. 36).

HCCC provides faculty with opportunities to participate in professional development activities; yet, the types of professional development activities may not be specifically for faculty teaching developmental math, reading, and writing courses. Furthermore, the head administrator for the Developmental Studies Department responded to the THECB DEPS that there was no institutional policy encouraging teaching techniques or strategies in developmental education courses. Under those circumstances, the institution’s lack of support for providing faculty teaching developmental courses with specific professional development will affect student learning. According to Murray (2001), “In order to provide successful faculty
development programs, colleges must have strong administrative support, including appropriate rewards for participation” (p. 44).

The data from the THECB DEPS also suggested that faculty teaching developmental courses may not participate in professional development that utilize:

a. Mastery learning
b. Critical thinking
c. Learning strategies
d. Active learning techniques
e. Classroom assessment techniques

Also, the responses to the DEPS survey question 5, if there was an institutional policy encouraging the following teaching techniques or strategies in developmental education courses, the response N indicated that there was no HCCC policy encouraging faculty to utilize teaching techniques or strategies that are specifically designed for students in developmental courses. Another response answered the survey question: Have representatives of your institution ever attended a National Association for Developmental Education (NADE) workshop on NADE certification? The response N implied that there were no faculty members at HCCC certified by the NADE or had ever attended a NADE workshop.

In fact, the Department Chair (DC) for HCCC Developmental Education indicated in the THECB DEPS that the institution does not provide specific professional development for faculty teaching developmental math, reading, and writing. In fact, the DC also indicated on the THECB DEPS that the institution does not have a
department/unit that educates faculty on teaching techniques and/or strategies. These results provide confirmatory evidence that identifies the types of professional development activities for faculty teaching developmental courses. Elliott and Oliver (2016) argued that faculty involvement and participation in professional development activities had an impact of the effectiveness of instructors’ teaching in the classroom. Mundy et al. (2013) believed this is especially true for faculty teaching development courses.

Likewise, in their recent work, Han et al. (2014) identified professional development as an opportunity for faculty to tie the subject matter to real world benefits and applications. In addition to professional development, Han et al. (2014) mentioned that faculty “having access to professional organizations and relevant up-to-date research in the field as a key element to appeal to different adult learners, it’s often best to include a variety of different instructional design models and theories into your course” (p. 304).

The literature in this study showed that Knowles’ (1980) adult learning theory established assumptions about how adults learn. Additionally, the literature indicated that the main theoretical premise behind the adult learning theory is that adult learners acquire new information and build upon existing knowledge if they are encouraged to explore a topic on their own.

Smittle (2003) emphasized six principles of professional development for faculty teaching developmental courses:
1. Faculty should make a commitment to teaching underprepared students.
2. Faculty should have command and knowledge of the subject matter and ability to teach a diverse student population.
3. Professional development for faculty should address noncognitive issues that affect student learning.
4. Instructors must provide open and responsive learning environments.
5. Instructors must communicate high standards.
6. Instructors should engage in ongoing evaluation and professional development.

Smittle (2003) stated that the principles for teaching developmental courses can apply to all instructors, not just faculty teaching developmental courses. In making this comment, Mundy et al. (2013) argued that the application of principles for effective teaching will help prepare faculty to meet the needs of underprepared adult learners.

**Summary**

This study centered on a two-year higher education institution professional development for faculty teaching developmental courses to underprepared adult learners. Chapter IV provided the data collection methods and analysis of the faculty teaching developmental courses. The responses indicated that the majority of faculty teaching developmental courses were White females between the ages of 46-55. Most faculty members had over 10 years of experience in teaching at the college level and all had participated in professional development opportunities. Furthermore, the data revealed that even though all faculty members had participated in professional development
opportunities, however, faculty may not have participated in professional development that would assist them on how to serve underprepared adult learners.
CHAPTER V
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

Goal 5 of the THECB of the 2013-2017 Texas Developmental Education Plan is to increase the preparedness of developmental educators. The foundation for improving professional development for faculty teaching developmental courses has already been put in place by the state of Texas. Texas is taking an approach that will improve development education delivery by pursuing instructional strategies that will boost college completion rates. The Texas Higher Education Coordinating Board (THECB) is committed to providing improved and more efficient avenues to success for academically underprepared students through the Texas Success Initiative (TSI) system.

The purpose of this quantitative study was to explore the professional development for faculty who are assigned to teach developmental courses to underprepared adult learners. According to Creswell (2015), “Research problems best studied using the quantitative approach are those in which the issue needs to be explained” (p. 76). This study was an attempt to address the issue of professional development at a two-year higher education institution for faculty teaching developmental courses to underprepared adult learners. The central question: “How have the professional development activities at a Southwestern community college prepared faculty for teaching in developmental courses to underprepared post-secondary learners?” guided this record of study. In this chapter, an overview of research is
presented followed by a summary of findings. Practical implications are discussed and a brief discussion on future research is presented prior to the concluding thoughts for this research study.

Quantitative data were retrieved from two surveys: Hills County Community College (HCCC) Professional Development Survey (PDS), Parts I and II, and Texas Higher Education Coordinating Board (THECB) Developmental Education Program Survey (DEPS). Data were organized in Microsoft Excel and analyzed in the Microsoft Excel Data Analysis where descriptive statistics were performed.

**Summary of Findings**

This study explored the professional development activities for faculty assigned to teach developmental courses to underprepared adult learners at a two-year institution of higher education. A brief summary of the quantitative datasets are presented in this section.

**Demographic Profile of Faculty and Students in Developmental Courses**

The results of the HCCC PDS, Parts I, II, and the THECB DEPS, through data analysis, responses from the two surveys answered the overarching research question: How have the professional development activities at a Southwestern community college prepared faculty for teaching in developmental courses to underprepared post-secondary learners? The data from both surveys indicated that faculty teaching developmental courses utilized instructional strategies in their classrooms. However, the types of activities that they participate in for professional development may not be designed specifically for teaching underprepared adult learners in developmental courses. The
results of this study determined that a Southwestern community college professional development does not prepare faculty for teaching in developmental courses to underprepared post-secondary learners.

Guiding question 1. What is the demographic profile and level of education of faculty members teaching developmental math, reading, and writing courses to underprepared adult learners at a Southwestern community college?

- White faculty members represented 66.2% of the instructors teaching developmental courses at HCCC. African American faculty members represented 25.6% of faculty. Hawaiian Pacific Island faculty members represented 2.7% of faculty. Hispanic or Latino faculty members represented 4.0% of faculty. Two or more (identified as being of more than one race) faculty members represented 1.3% of faculty. Analysis of the gender of the population showed that females made up almost 55% of the faculty teaching developmental courses at HCCC.

The HCCC PDS, Part II, asked faculty to identify the activities that they participate in for professional development. Of the 74 instructors who responded to the survey, 4% employed Socratic Seminars; 2.7% Experiential Activities; 16.2% Team Projects; 20% Role-playing; and 60.8% Peer-assisted Learning. These results imply that faculty teaching developmental courses do employ instructional strategies that utilize culturally responsive teaching practices.
Guiding question 2. What is the demographic profile and academic outcomes of students in developmental math, reading, and writing courses at a Southwestern community college?

- For developmental math the percentages are 45% African Americans, 35% are Hispanic/Latino, 19% White, and 1% are Asian. For developmental reading the percentages are 44% are Hispanic/Latino, 32% African Americans, 23% White, and 3% are Asian. For developmental writing 44% are Hispanic/Latino, 32% African Americans, 12% White, and 5% are Asian.

The THECB DEPS asked the Department Chair (DC) of Developmental Studies to identify to what extent HCCC offers professional development that utilized culturally responsive pedagogy to faculty teaching developmental courses. The DC responded No to questions that asked if HCCC offers professional development and training that is specifically designed for teaching development reading, writing, and math courses. In addition, the DC replied to the THECB DEPS that HCCC does not have an institutional policy that encourages faculty to participate in professional development that utilized culturally responsive teaching or transformation strategies.

Guiding question 3. What types of activities do faculty teaching developmental math, reading, and writing courses at a Southwestern community college participate in for professional development?

- Of the 74 instructors, more than 65 instructors participated in conflict resolution (87.8%), group meeting (100%), time management (87.8%), graduation ceremonies (100%), or community services (100%) as
professional development activities. Less than 60 instructors participated in leadership (20.2%), student advising (16.2%), testing centers (2.7%), or student activities (81%).

Faculty teaching developmental courses to adult learners are considered a crucial link between students and academic success. Mundy et al. (2013) argued that “higher education institutions often deal with under-prepared adult learners. Therefore, faculty teaching under-prepared adult learners, especially beginning faculty, need ongoing professional development opportunities to enable the scholar who teaches his subject to become a meaningful teacher of students” (p. 2). According to Perez et al. (2012), when faculty receive quality and continuous feedback it can provide the encouragement for the development of new teaching strategies that lead to increased student learning” (p. 380). Khoule, Pacht, Schwartz, and van Slyck (2015) believed that one of the most important topics for faculty in higher education is how to help students in developmental courses succeed.

When data were retrieved for this study, approximately 74 instructors were assigned to teach developmental courses to underprepared students. Of the 74 instructors: 66.2% White, 25.6% African American, 4.0% Hispanic/Latino, 2.7% Hawaiian Pacific Island, and 1.3% two or more than one race. On the other hand, of the 1,796 developmental students: 45% African American, 35% Hispanic/Latino, 19% White, and 1% Asian. The results indicated that most of the faculty teaching developmental courses were White; however, most of the developmental students were African American or Hispanic/Latino. The literature suggested that community college
students come from a varied and diverse background; they differ in nationality, race, age, socio-economic status, academic and work backgrounds, and intellectual stimulation (Riley et al., 2016). To support the diverse adult learners enrolled in community colleges, instructors need to learn how to maximize learning and reduce barriers that hinder the success of these students (Harris-Devereaux et al., 2010). Community college leaders increasingly are prompted to identify effective strategies to engage students in ways that cultivate their abilities to interact with a diverse student population (Riley et al., 2016).

**Overarching question of this study.** How have the professional development activities at a Southwestern community college prepared faculty for teaching in developmental courses to underprepared post-secondary learners?

- The results of this study determined that a Southwestern community college professional development activities do not prepare faculty teaching for teaching developmental courses to underserved post-secondary learners.

Even though faculty are required to participate in professional development, the professional development that they participate in, does not prepare them to teach development courses. Brothen and Wambach (2012) stated that the goals of developmental courses is to prepare underprepared students for academic success, achievement of life goals, and better economic benefits. In order for developmental education programs to be successful in the twenty-first century, faculty teaching developmental courses must be provided with appropriate professional development opportunities.
Implications

Implications of the Field of Study of Developmental Courses

According to Maki (2010), one implication of a college mission is to provide the framework to guide all actions that impact the institution, stakeholders, and shareholders. Professional development for faculty teaching developmental courses can yield positive gains in teaching practices and student learning. Both can be central to the institutional mission and goals. Current research seems to validate the view that faculty professional development activities have a significant effect on student academic achievement in community colleges. In their study, Elliott and Oliver’s (2016) finding supported the hypothesis that “faculty involvement in professional development activities has important effects on student academic achievement” (p. 93).

Implications on Faculty at HCCC

Based on the survey results, there are a number of implications for HCCC’s stakeholders. For the institution as a whole, it is an opportunity to better understand the connection between the professional development that is offered to faculty and student achievement. These results imply that if faculty teaching developmental courses receive professional development that is focused on teaching underprepared adult learners, they will be better prepared to assist their students in succeeding both in developmental and in core studies.

Furthermore, these results imply that administrators and leaders require a more holistic understanding of the dynamics of teaching developmental math, reading, and writing courses. Administrative leaders and faculty teaching developmental courses
should create a partnership toward developing efficient professional development opportunities that focus on instructional strategies for teaching underprepared adult learners.

Table 5.1 shows the responses from instructors when asked about use of instructional strategies employed in the classroom. Question 4 on the HCCC PDS, Part II, asked participants to respond to the teaching techniques and strategies they employed in the classroom. One-hundred percent of the 74 participants responded that they employ in-class debates, ice-breakers, and PowerPoint as teaching techniques and strategies. On the other hand, only 4% of the 74 participants responded to employing experiential activities and Socratic seminars as instructional strategies. Socratic Seminar is a formal discussion, based on a text, in which the instructor asks open-ended questions. Within the context of the discussion, students listen closely to the comments of others, thinking critically for themselves and articulating their own thoughts and their responses to the thoughts of others. Both experiential activities and Socratic Seminars are instructional strategies that can be used to engage students in active learning and are specifically targeted to underprepared students. According to Jensen (2015), Socratic Seminars in conjunction with other strategies has been researched and recommended for assessing and fostering critical thinking skills development.
Table 5.1

*Faculty Members’ Use of Instructional Strategies in the Classroom (n = 74)*

<table>
<thead>
<tr>
<th>Instructional Strategies</th>
<th>Frequency</th>
<th>Percent Employ in Classroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role-playing</td>
<td>15</td>
<td>20.2%</td>
</tr>
<tr>
<td>Experiential Activities</td>
<td>2</td>
<td>2.7%</td>
</tr>
<tr>
<td>In-class Debates</td>
<td>74</td>
<td>100.0%</td>
</tr>
<tr>
<td>Socratic Seminars</td>
<td>3</td>
<td>4.0%</td>
</tr>
<tr>
<td>Peer-assisted Learning</td>
<td>45</td>
<td>60.8%</td>
</tr>
<tr>
<td>Ice-breakers</td>
<td>74</td>
<td>100.0%</td>
</tr>
<tr>
<td>Team Projects</td>
<td>12</td>
<td>16.2%</td>
</tr>
<tr>
<td>PowerPoint</td>
<td>74</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

*Note. Data retrieved from HCCC PDS, Part II, Telephone Interviews:*

Mundy et al. (2013) cited research conducted by Carnegie Mellon University in 2002 that included best practices by instructors to engage underprepared students. These practices included the need for instructors to reflect on how they can improve their teaching strategies in order to help students succeed. Mundy et al. (2013) believed that adapting and modifying their teaching strategies increases the chance of student success in their courses.

According to the HCCC PDS, Part II, faculty respondents identified the types instructional strategies they employed in the classroom to teach developmental courses. Faculty responses indicated that they participate in a variety of instructional strategies. However, of the 74 faculty teaching developmental courses, only 3 indicated that they
utilized an instructional strategy designed to teach underprepared students in developmental courses.

For the HCCC developmental education program, the study offers an in-depth view of the professional development needs for faculty teaching developmental courses. Subsequently, educational leaders and administrators can design a Culturally Responsive Teaching (CRT) professional development and training program that will build on the strengths of professional development activities identified in the survey. In addition, the college can address any gaps in faculty knowledge and skills as they work toward a professional development program that is focused on CRT. By working together, administrators, leaders, and faculty can enhance professional development opportunities that will create a culture of engaged learning and academic success in the developmental reading classroom.

Research has suggested that experience-based learning, active learning, and reflective learning emerged as strategies being regarded the most effective in engaging student learning. According to Brussow and Wilkinson (2010), “The use of these strategies was not only associated positively with enhanced learning in general, but also linked to success in initial developmental courses involving the underprepared” (p. 379). Instructional strategy is a critical part of teaching developmental courses. A good strategy will improve students’ attitudes toward the subject, and enable the students’ understanding of the subject matter.

In his article, Jett (2013), an African American male mathematics professor, illustrated how he allows culturally responsive pedagogy to shape his instructional
strategies. Jett (2013) acknowledged that his “mathematics teachings is governed by culturally responsive pedagogy, he draws from the research on culturally responsive pedagogy and theories to culturally responsive teaching to guide his practices” (p. 110).

This study will have a profound impact on professional development for all faculty, especially faculty teaching developmental courses. The study will help faculty to become aware that to employ CRT strategies in the classroom, they need to participate in professional development that is centered on CRT strategies. In other words, engage students in learning that will connect their culture with the classroom. In order to do this, faculty must be knowledgeable and understanding of the needs of culturally diverse students.

The literature in this study suggests that colleges provide services to a culturally diverse cross-section of the U.S. population, including nontraditional students. If this study causes a shift in the way professional development is offered at HCCC, faculty teaching developmental students will benefit by seeing an improvement in students’ success and completion rates.

Colleges struggling with underprepared students can continue to point fingers or they can provide structure support to those in positions to make changes. Instructional strategies in developmental classes need to be revised to help developmental students be successful (Perez et al., 2012). Faculty and staff need necessary support to effectively work with students having developmental needs. Besides professional development for faculty teaching developmental courses, focus should also be on supports for advisors and counselors, too. Colleges need to carefully consider the background and experiences
of underprepared students when assessing the support those students need to succeed in credit-level courses. It may be necessary to have multiple developmental education strategies that are tailored to different student groups.

Change is not only difficult, it is expensive. Without funding and policies, it would be impossible for colleges to achieve the success they desire. Getting faculty to change the way they teach requires committed resources for professional development.

**Recommendations**

The overall attempt of the study was to explore how faculty at a Southwestern two-year public community college get professional development for faculty teaching developmental courses to adult learners. The results of the study determined that professional development instructional strategies at a Southwestern community college does not prepare faculty for teaching developmental courses to underserved post-secondary learners. Based on the results of the study, there are multiple recommendations to consider with regard to professional development:

1. Develop and implement a Culturally Responsive Teaching (CRT) professional development plan for faculty teaching developmental courses. Faculty need to understand what diverse students can bring to the classroom.

2. Require ongoing CRT professional development for faculty teaching developmental courses. Professional development opportunities focused on teaching diverse students should include both new and veteran faculty, continuous throughout the year as to encourage greater participation (Murray, 2002).
3. Establish an institutional policy encouraging the following teaching techniques or strategies in developmental education courses: Mastery learning, critical thinking, learning strategies, active learning techniques, and classroom assessment techniques. Research has demonstrated that successful developmental courses need programs that align with the mission of the institution and support systems for faculty (Smittle, 2003).

4. Establish a continuous improvement process that reviews faculty instructional practices and student outcomes. Evaluation can be an indicator of whether a faculty member’s teaching exceeds, meets, or fails to meet a specified standard (Elliott & Olivier, 2016).

5. Recruit and hire racially and ethnically diverse faculty to teach developmental courses. According to the American Association of Community Colleges (2014) more students from every color and creed are now earning college educations so college faculty should reflect that. While students can certainly learn from people outside their own sex, ethnicity and belief system, faculty with similar backgrounds provide stronger role models.

Opportunities for learning how to teach to a diverse student population and students with learning disabilities need to be included in the professional development offerings. Furthermore, these types of professional development should be delivered in a way that better meets the learning needs of the faculty; rather than a one-day workshop, the institution needs to consider methods such as professional learning communities, lesson studies, and faculty mentoring.
There have been positive results with providing professional development for faculty teaching developmental courses. It is suggested that administrators and policy makers contemplate the important role of professional development for faculty teaching developmental courses. The following are examples of successful professional development programs provided to assist leaders to make deliberate, informed decisions on what professional development instructional strategies that will assist faculty teaching developmental courses to underserved adult learners.

Perez et al. (2012) conducted an assessment that showed promise for linking professional development for faculty with improved learning outcomes. The Gaining Retention and Achievement for Students Program (GRASP) was implemented at a New Mexico community college in 2006. The GRASP involved conducting classroom observations once per week for 15 weeks and providing instructors with feedback and coaching on alternative strategies. As a direct result of GRASP, student success increased by 7.9% and was statistically significant for male and majority minority students.

In support of transforming developmental education in Texas, the THECB is undertaking a number of professional development initiatives. According to the THECB (2016), The Texas Success Initiative Professional Development Program (PD Program) will serve Texas public institutions higher education and other organizations that support developmental education reform efforts. The PD Program is a comprehensive statewide system for professional development that will include, but not limited to, data-driven, research-based professional development support and training for higher education.
faculty, staff, and administrators serving underprepared students at Texas public institutions of higher education (THECB, 2016, p. 35).

Additionally, the college should consider requiring that teachers participate in a certain number of professional development hours each school year and compensating them for their participation. A study was conducted by a two-year community college in New Mexico that created a pilot program aimed at faculty teaching developmental courses where incentive promoted by offering a Distinguished Teaching Chair award (Bramhall & Buyok, 2009). Both full-time and part-time faculty members attended four seminars on various pedagogical matters and were paid a stipend of $150 for successful completion. The director of the program also gave them a certificate of completion. Buy in was created by competition among staff to win the award because of promoting the award. All faculty members participating in this study indicated that they would participate more often in professional development if it was mandated by the college. In another example of faculty support and professional development, an initiative was implemented by a Florida community college where professional development for faculty teaching developmental courses was designed around research-based best instructional practices. Participants in the program were modestly compensated. Though instructor efficacy data were not examined, the participants reported satisfaction with the training (Levine-Brown, Green, Hess, & Cabral-Maly, 2007).

This change would require that the college create new policies and paradigms in regards to professional development and these must be supported by new and innovative professional development opportunities that enhance student success and retention at the
community college level. All faculty members must have the training they need to engage their students and implement effective change in the classroom and providing support and compensation for participation in professional development must be considered (Center for Community College Student Engagement, 2010).

**Suggestions for Future Research**

If community colleges are to attempt to change the way they educate students, teachers must be central to that change (Mundy et al., 2013). The colleges must begin to focus on providing instructors with opportunities to develop their skills and knowledge of classroom practices and teaching strategies through appropriate professional development offerings. The faculty of community colleges is critical to the success and survival of these institutions, especially in the context of the current economic crisis. If community colleges are to continue to offer educational opportunities for everyone, they must increase their student success and retention rates.

This study identified several areas for further study. Community college faculty should be surveyed nationally to identify teaching styles and teaching and learning strategies employed by the faculty. This information, obtained on a national level, would provide current data on the teaching practices of community college instructors and if those practices have an impact on student achievement and retention. Additionally, further research should be conducted concerning the professional development opportunities offered at community colleges. Currently, there seems to be a disconnect between the professional development offerings and the types of offerings teachers believe they should participate in to make a difference in the classroom. It would be
beneficial to conduct a national research study of professional development offerings at community colleges. This study should focus on those offerings that have been considered successful with making changes in the education provided at community colleges, along with those professional development offerings that faculty members believed were valuable and worth the time and effort faculty invested in attending. If the ultimate goal of community colleges is to improve teaching and learning within the institutions, there must be a renewed focus on developing successful professional development opportunities that meet the needs of the faculty of those institutions.


Community College Student Engagement. (2010). *Benchmarking & benchmarks: Effective practice with entering students*. Austin, TX: The University of Texas at Austin, Community College Leadership Program.


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APPENDIX A

Texas Higher Education Coordinating Board Developmental Education Program Survey II

1. Is there a unit at your institution that educates faculty on teaching techniques and/or strategies?

2. Are developmental education faculty required to take professional development?

3. Does your institution have professional development training specifically for mathematics developmental educators?

4. Does your institution have professional development training specifically for reading developmental educators?

5. Does your institution have professional development training specifically for writing developmental educators?

6. Is there an institutional policy encouraging the following teaching techniques or strategies in developmental education courses?
   
   a. Mastery learning
   b. Critical thinking
   c. Learning strategies
   d. Active learning techniques
   e. Classroom assessment techniques
   f. Other (please list)

7. Please name the top 10 professional education programs for developmental education faculty (in terms of the number of faculty who attended) and answer the following questions about them. Note: Only include programs that target D.E. faculty.

   a. Program 1 (Faculty Development of Developmental Educators)
      i. Name of program
      ii. Number of faculty who attended program
      iii. Describe program
   b. Program 1 (Faculty Development of Developmental Educators)
i. Name of program
ii. Number of faculty who attended program
iii. Describe program
c. Program 1 (Faculty Development of Developmental Educators)
i. Name of program
ii. Number of faculty who attended program
iii. Describe program
d. Program 1 (Faculty Development of Developmental Educators)
i. Name of program
ii. Number of faculty who attended program
iii. Describe program
e. Program 1 (Faculty Development of Developmental Educators)
i. Name of program
ii. Number of faculty who attended program
iii. Describe program

8. Are there regular meetings held where developmental education instructors from all subject areas?

9. How often are meetings with developmental educators held?
   a. Weekly
   b. Biweekly (every two weeks)
   c. Monthly
   d. Once a semester
   e. Annually
   f. It varies, there is no regular schedule

10. Are part time faculty/lecturers and adjunct faculty included in regular meetings?

11. Are instructors who teach introductory (first college-credit bearing) courses included in these meetings?

12. Are there regular meetings held where mathematics developmental education instructors are invited to discuss instructional strategies?

13. How often are meetings with mathematics developmental educators held?
   a. Weekly
   b. Biweekly (every two weeks)
   c. Monthly
d. Once a semester
e. Annually
f. It varies, there is no regular schedule

14. Are mathematics part-time faculty/lecturers and adjunct faculty included in these meetings?

15. Are instructors who teach introductory (first college-credit bearing) mathematics courses included in these meeting?

16. Are there regular meetings held where reading developmental education instructors are invited to discuss instructional strategies?

17. How often are meetings with reading developmental educators held?
   a. Weekly
d. Once a semester
e. Annually
f. It varies, there is no regular schedule
APPENDIX B

IRB Decision

From: Carol Stuessy <c-stuessy@tamu.edu>
Date: Fri, Jul 4, 2014 at 12:58 PM
Subject: IRB Decision
To: <brw@tamu.edu>
Cc: Mary Margaret Capraro <mmcapraro@tamu.edu>, "plarke@tamu.edu"
    <plarke@tamu.edu>,
    "vhjackson@tamu.edu" <vhjackson@tamu.edu>

Dear Billy,

    The IRB has determined that your proposed ROS plans do not require IRB
approval. Once the fall internship begins, you will be able to begin collecting
information to frame your problems as soon as we complete preparations to "frame"
your ROS problems. I would suggest that you re-read the documents associated with the
Cohort III Interim Report and begin reading your text for the internship: Cuban, L.

With my best regards,

Dr. Carol Stuessy, Director

Online Ed.D. in Curriculum and Instruction

Department of Teaching, Learning & Culture
APPENDIX C

HCCC Professional Development Survey

Part I: Demographic Information

Directions: In filling out the demographic information, please be as exact as possible.

1. How many years have you taught at the community college level? __________

2. Have you ever worked as a part-time faculty member at the community college level?
   ____ Yes ____ No
   If “Yes,” how long did you teach part-time? ______ Years

3. How would you classify yourself?
   a. African American
   b. Asian
   c. Hawaiian Pacific Island
   d. Hispanic/Latino
   e. Two or More
   f. White

4. What is your age? __________

5. Gender (Circle one) M F

6. What is your highest level of education?
   ____ Certificate or Diploma ____ Associate ____ Bachelor’s
   ____ Master’s ____ Master’s and working on Doctorate
   ____ Certificate of Advanced Graduate Studies or Education Specialist
   ____ Doctorate

Part II: Telephone Interview Questions:

1. Which professional development activity has had the greatest positive impact (benefit) on you?
a. Faculty Orientation
b. EEO Risk Management
c. Community Organization
d. Preservice
e. Graduation
f. Registration
g. Student Interest Club Sponsorship
h. Departmental Meeting
i. QEP Committee Member
j. Other _____________________________

2. Describe some of the characteristics/features of activities that were beneficial to you?

3. Of the activities that were of greatest benefit to you, what were the benefits (changes) that resulted from that? Do you feel your students benefit from your participation? If yes, how?
   a. Did you make any improvements to your curriculum?
   b. Did you use any different types of instruction?
   c. Were the students able to get better jobs, better grades?

4. Which teaching strategies did you utilized to engage student learning?
   a. Role Playing
   b. In-Class Debates
   c. Peer-Assisted Learning
d. Ice-breakers
e. Team Projects
f. Other _____________________________

5. As you have gained teaching experience, have you participated in more or less activities?
   Which ones?

6. Are there activities that were beneficial to you, but not your students and vice versa?