PERCEPTIONS OF SECONDARY AND POSTSECONDARY FACULTY ON STUDENT COLLEGE READINESS

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PERCEPTIONS OF SECONDARY AND POSTSECONDARY FACULTY ON STUDENT COLLEGE READINESS

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DEDICATION

I dedicate this dissertation to my family, without whose support, I could not have persevered. My gifted mother, Edde Irene Neel, who gave me her passion for learning. My loving and talented daughter, Jennifer Selman, who pushed me forward and kept me laughing, even though my tears. To my inspirational and accomplished son, John Selman, who never gave up believing in me, no matter how impossible the task seemed. To Wallace Selman, who never quite understood why I chose this path, but supported me in his way, nonetheless. To my precious granddaughter, Charlie Marie Selman, who holds my heart in her hands. Her smile will always be my touchstone.

ABSTRACT

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Purpose

The purpose of this journal-ready dissertation was to identify the perceptions of secondary and postsecondary faculty on student college readiness. Additionally, an identification of the competencies and deficiencies as viewed by secondary and postsecondary faculty was made using the identified faculty perceptions resulting from literature reviews in study 1 and study 2. Study 3 focused on a phenomenological study of the perceptions and beliefs of secondary and postsecondary faculty on student college readiness.

Method

The literature review in this journal-ready dissertation included peer-reviewed journal articles and dissertations published in 2006-2015 and focused on the perceptions of faculty members on students' college readiness and associated competencies and deficiencies.

A phenomenological approach was chosen to explore the perceptions of secondary and postsecondary faculty perceptions of student college readiness.

Information was obtained from key participants in their respective educational environments through semi-structured interviews and focus groups. Faculty responses to three open-ended questions regarding their perceptions of student college readiness were recorded, transcribed, and analyzed using classical content analysis.

Findings

Findings in the literature revealed optimistic perceptions of student college readiness held by secondary faculty. Secondary faculty perceived students to be well prepared in content areas that included mathematics, science, and writing (Sanoff, 2006). Additionally, students were perceived by secondary faculty as possessing adequate learner qualities such as, motivation, goal setting, and social skills (Reed & Justice, 2014). Literature on postsecondary faculty perceptions of college readiness revealed student weaknesses in study skills, critical and analytical thinking, and the ability to generalize and reason.

Secondary and postsecondary faculty who were interviewed, held similar perceptions of student college readiness. Overall, faculty perceived most students as leaving high school and entering postsecondary education with some degree of underpreparedness in one of more of the following areas: academic skills, maturation level, and soft skills.

KEY WORDS: College readiness, Academic preparedness, Academic behaviors, Contextual knowledge, Social and emotional learning.

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CHAPTER I

INTRODUCTION

Pursuing postsecondary education is no longer a luxury, but mandatory for upward social mobility (Barnes & Slate, 2013). Jobs open to students with only a high school diploma are "only marginally better than those available to individuals without one" (Conley, 2010a, p. 3). Meeting college admission requirements is not homologous with being prepared to perform college-level work (Cline, Bissell, Hafner, & Katz, 2007). Only about one in four students who graduate from high school are able meet benchmarks indicating college readiness (ACT®, 2014). Extreme variances in the content knowledge and skills of high school graduates exist, yet all graduates are expected to be college ready upon entrance to postsecondary educational institutions (Conley, 2010a).

The cause of the lack of preparedness, according to some college readiness researchers, is the implementation of a federally initiated one-size-fits-all agenda for college readiness, resulting in students who either "do not graduate from high school or graduate, but are not academically prepared" (Barnes & Slate, 2013, p. 1). Although not all students who are preparing for college take the ACT® exam, ACT® is frequently used as one of several measures for evaluating students' progress toward college readiness (ACT®, 2013). Students have the option of taking the ACT®, the SAT® or both.

Benchmark scores are considered the minimum scores students may earn on the ACT® indicating probable success in college coursework. Students who meet the benchmarks, have been shown to persist and complete degrees as opposed to students who do not meet the benchmarks. The ACT® College Readiness Benchmarks are as follows: English, 18, Reading, 22, Mathematics, 22, and Science 23 (ACT®, 2014). Unfortunately, little

progress has been made in "aligning the expectations of high school with the academic requirements of college" (Adams, 2014, para. 15). Adams (2014) reported 26% of the students who graduated and took the ACT® met the college readiness benchmark scores in English, mathematics, reading, and science. Thirty-one percent of the tested graduates met none.

Competencies in academic and non-academic (noncognitive) skills are crucial for college success. Academic competencies such as English skills, (i.e., narrative writing, grammar, and spelling) are considered essential. Equally important are mathematical competencies that encompass the ability to analyze data utilizing statistics, basic geometrical concepts, and most importantly, reasoning and problem solving skills (Olson, 2007). Noncognitive skills involve a wide range of attributes students need once they enter postsecondary education (Conley, 2005). Noncognitive attributes include a student's ability to adjust to the college environment, the capacity to assess their own strengths and weaknesses, and to set long term goals, as well as the capability to organize and lead others (Sedlacek, 2010). Noncognitive attributes can be developed in students in conjunction with cognitive skills and attributes, while mentoring, teaching, advising, and counseling students (Sedlacek, 2011). College readiness entails cognitive and noncognitive skills. A successful student is competent in both areas.

Typically, state standards serve as guidelines for secondary educators to ensure students are college ready. However, "state standards tend to lack attention to several key areas" resulting in students who are deficient in English, mathematics, or both when it comes to college readiness (Olson, 2007, p. 8). Deficiencies include inexperience with informational reading material, persuasive writing and research, data analysis and

statistics, and weaknesses in mathematical problem solving, and reasoning (Olson, 2007). Differences of opinion as to what constitutes college readiness as well as specific competencies and deficiencies underlie the complexity of defining the term. The determination of college readiness is multidimensional and involves the pursuit of a thorough understanding of student characteristics and skills as found in secondary and postsecondary educational settings coupled with the predictive value of the metrics inherent in its determination.

Statement of the Problem

Cline, Bissell, Hafner, and Katz (2007) emphasized the importance of postsecondary education by suggesting college ready students are more likely to be prepared for not only postsecondary education, but also for the required acquisition of skills to succeed in the workforce. Secondary and postsecondary educational systems must provide not only foundational knowledge, but tools needed for lifelong learning (Conley, 2010a). However, there appears to be a discrepancy between the concept of college readiness and reality (Adams, 2014). Barnes and Slate (2013) reported "there are students who have earned diplomas, but are graduating without the knowledge, skills, and metacognitive strategies needed to be successful at postsecondary institutions" (p. 1). A potential barrier to student success in transitioning from high school to college may be found in the absence of a shared vision of perceptions of college readiness between secondary and postsecondary faculty. However, little information exists related to the perceptions of secondary and postsecondary educators on student college readiness.

Literature Review

Although there are operational definitions of college readiness, there is not a nationally accepted definition. The metrics used to define college readiness often consist of the high school course level taken by students, student grades, and standardized test scores. Current definitions of college readiness "do not capture the many dimensions of readiness" (Conley, 2007b, p. 7). According to Porter and Polikoff (2012), because there is no common definition of college readiness, many researchers "choose not to define it at all" (p. 26). The challenge inherent in designing a common definition of college readiness is a result of the multidimensional aspect of college readiness (Porter & Polikoff, 2012). Some college readiness literature includes both cognitive and noncognitive dimensions of college readiness (Conley, 2010a, 2007a), whereas other literature focuses strictly on academic metrics such as grades and nationally standardized test scores (ACT®, 2014).

Basic definitions of college readiness have included "the level of preparation students must have to enroll and succeed in college-level coursework without remediation at 2-year and 4-year institutions, trade schools, or technical schools" (Moore, et al., 2010, p. 820). Conley (2010a, 2007a) expanded the term college readiness to include requisite skills, knowledge, and understandings to be successful in either the next sequence of courses or additional courses, but limits the institutions to those that offer baccalaureate degrees or permit transfer to a baccalaureate degree programs. College readiness, more broadly, refers to "a multidimensional set of skills, traits, habits, and knowledge" needed by students to enroll and succeed at the collegiate level (Arnold, Lu,

& Armstrong, 2010, p. 2). The requisite skills encompass psychosocial, academic, as well as practical skills facilitating student success in postsecondary settings.

According to Conley (2007b), little effort has been made to unify the multiple dimensions of college readiness. Limiting college readiness strictly to academic measures, eliminates the vast array of learning strategies and coping skills that are essential for success in college, many of which may not have been acquired in high school. Because college is different than high school the associated competencies for college are also different (Conley, 2007b). To operationalize a definition of college readiness, a distinction must be made between college readiness and academic readiness.

Academic readiness includes cognitive, or content-centered skills, frequently measured by students' grades or grade point average (GPA), and scores on standardized tests such as the ACT® and SAT®. In its most basic form, academic readiness can be defined as the minimum qualifications necessary before colleges will consider the applicant (Porter & Polikoff, 2012). The inherent assumption when using only academic indicators for college readiness is that "students could be academically ready, but still not succeed because of non-academic factors" (Porter & Polikoff, 2012, p. 397). At best, college readiness is a complex term inclusive of both internal behavioral factors, and external environmental factors. There is no one standard that determines college readiness (Porter & Polikoff, 2012). There is a growing body of research indicating the importance of academic (cognitive) and non-academic (noncognitive) skills that are important to postsecondary success (ACT®, 2014). Barnes and Slate (2013) suggested college readiness is not a dichotomous term (ready or not) but lies on a continuum of readiness permitting students some measure of readiness. Conley (2010b) indicated "with

a new definition of readiness, the remedial label disappears entirely in favor of a continuum of strengths and weaknesses rendering the need for all students to require some form of improvement to a more or lesser degree" (p. 1). An understanding of each student's readiness allows students and stakeholders to "take steps to increase their readiness" and guide institutional responses at the state and national level (Conley, 2010b, p. 1).

Purpose

The purpose of this study was to identify the perceptions of secondary and postsecondary education faculty on college readiness. Additionally, an identification of the competencies and deficiencies as viewed by secondary and postsecondary faculty was made using the identified perceptions from secondary and postsecondary faculty resulting from literature reviews in study 1 and study 2. Study 3 focused on a phenomenological study of the perceptions and beliefs of secondary and postsecondary faculty on student college readiness.

Educational Significance of this Study

Not found in the literature is an explicit alignment between secondary and postsecondary perceptions of college readiness, nor is there a congruency of goals between secondary and postsecondary faculty. Through an understanding of faculty perceptions of college readiness and congruency in goals, a more effective approach might be identified as college readiness vernacular across secondary and postsecondary faculty is explicitly aligned. Improved congruency in language and goals regarding college readiness can assist professional educators in delineating a common meaning for college readiness. Coupled with the reforms aligning pre-kindergarten through

postsecondary education (P-16), the consideration of secondary and postsecondary perceptions of college readiness can help inform practice for the purpose of closing the college readiness gap. The findings of this study could be applied in making policies and decisions regarding increased college readiness.

Research Questions Study 1

The following questions form the basis for study 1:

- 1. What are the perceptions of secondary faculty members regarding student college readiness as provided in the literature?
- 2. What are student college readiness competencies and deficiencies as perceived by secondary faculty members as provided in the literature?

Research Questions Study 2

The following questions form the basis for study 2:

- 1. What are the perceptions of postsecondary faculty members regarding student college readiness as provided in the literature?
- 2. What are the college readiness competencies and deficiencies of college freshmen as perceived by postsecondary faculty as provided in the literature?

Research Questions Study 3

The following questions form the basis for study 3:

- 1. What are the perceptions and beliefs of secondary and postsecondary faculty on student college readiness?
- 2. How do the perceptions and beliefs of secondary and postsecondary faculty compare?

Definition of Terms

The following terms were defined to assist the reader in understanding the context of this study.

Academic behaviors. Also known as self-management, academic behaviors are behaviors demonstrating the ability to self-monitor, which is a form of metacognition. Examples of academic behaviors are the ability to manage time, organize materials and resources, and the ability to study effectively. Academic behaviors include a wide range of not specific to a particular content area, but necessary for academic success (Conley, 2010a).

College readiness. College readiness is defined by the ACT® (2007) as "the level of preparation a student needs to enroll and succeed without remediation in a credit-bearing general education course at 2-year or 4-year institution, trade school, or technical school" (p. 5). College readiness indicates a student has attained requisite knowledge, skills, and understanding to become successful in college-level courses (Conley, 2010a). Though it is a prevalent research topic, no commonly accepted definition for college readiness exists (Porter & Polikoff, 2012). Included with college readiness are the benchmarks indicating the probability of student success in first-year college course work (Conley, 2010a).

Contextual knowledge. Contextual knowledge is an understanding of how to navigate college as both a learning environment and a social system (Conley, 2007a). Contextual knowledge enables students to interact successfully with their peers and their professors. Additionally, students with contextual knowledge can self-advocate through

financial issues and their personal academic needs, as well as adjust to college life in general.

Social and emotional learning. Social and emotional learning is inherent in most, if not all educational settings. Social and emotional learning implies the ability to demonstrate collaboration and communication skills and may also include the ability to think critically as well as problem solve (Mishkind, 2014). School environments are social by nature. Because students must often collaborate to learn with their peers, social and emotional learning is an important to a student's educational success. Examples of social and emotional learning can include social responsibility, moral character, and behaving responsibly (Zins et al., 2007).

Theoretical Framework

Congruity theory (Osgood & Tannenbaum, 1955) was used in framing this investigation. Congruity theory suggests that if individuals harbor two conflicting viewpoints, they may experience a pressure to change their views (Osgood & Tannenbaum, 1955). Congruity theory as it was applied to this study, facilitated the understanding of the multiple realities of secondary faculty and postsecondary faculty regarding students' college readiness. According to congruity theory, pressure towards attitude change is generated by incongruity. It was through literature reviews in study 1 and 2 that congruity in the perceptions of secondary faculty and postsecondary faculty members regarding college readiness was examined. In study 3, qualitative data on the perspectives of secondary and postsecondary faculty on student college readiness was collected, analyzed, and compared. Congruity theory (Osgood & Tannenbaum, 1955) was used to frame the inconsistency of perspectives on college readiness between secondary and postsecondary

faculty. Until secondary and postsecondary faculty are aware of the dissonance in the perspectives of college readiness, there will be no reason for them to change their thinking on this topic further exacerbating the problem of college underpreparedness.

Delimitations

College readiness literature was used in this study. The literature analyzed was delimited to a period of 10 years (i.e. 2006 - 2015). Only literature for U.S. 4-year and community colleges was included. Information related to cognitive skills and preparation was be delimited to SAT® and ACT® mathematics skills, Texas Essential Knowledge and Skills (TEKS) mathematics skills, and overlap between the two as compared to college readiness skills regarding mathematics. Participants were delimited to science, mathematics, and/or reading/writing faculty with five or more years of classroom experience in an accredited public, Texas state high schools, 4-year universities and/or community colleges.

Limitations

Several limitations were present in this dissertation. First, there was no nationally agreed upon definition of college readiness. Secondly, there was no evidence provided in the literature that explicitly examined the alignment between secondary and postsecondary perceptions of college readiness. An additional individual limitation included researcher bias (Onwuegbuzie & Leech, 2007). As a secondary professional educator for the last 25 years, my perspective of college readiness efforts may not have been objective. Through the acknowledgement of my perceptions, researcher bias was minimized. Additional study-specific limitations were noted within respective chapters.

Organization

Three studies were used to examine the perceptions of secondary and postsecondary faculty on college readiness. In Study 1, a review of the literature was performed to synthesize the perceptions of secondary faculty on student college readiness. In Study 2, a literature review was performed synthesizing the perceptions of postsecondary faculty on student college readiness. Study 3 consists of a phenomenological study of the perceptions and beliefs of secondary and postsecondary faculty on student college readiness.

This dissertation consists of five chapters. Chapter I includes an introduction and overview of college readiness, Chapter II consists of Study 1, in which literature examining the perceptions of secondary faculty on college readiness was reviewed.

Chapter III, consists of Study 2, in which the syntheses of literature on the perceptions of postsecondary faculty on student college readiness are presented. Chapter IV contains Study 3 and consists of a phenomenological study of the perceptions and beliefs of secondary and postsecondary faculty on student college readiness. Chapter V contains a discussion of all pertinent ramifications of the three studies and recommendations for practice and future research studies.

CHAPTER II

PERCEPTIONS OF SECONDARY FACULTY ON STUDENT COLLEGE READINESS

This dissertation follows the style and format of Research in the Schools (RITS).

Abstract

Literature, consisting of peer-reviewed journals published between the years 2006 – 2015, was analyzed using classical content analysis for the purpose of identifying the perceptions of high school faculty perceptions on student college readiness and the associated competencies and deficiencies. Optimistic perceptions of student college readiness held by high school teachers were found in the literature. High school teachers perceived students to be adequately prepared in content areas that included mathematics, science, and writing (Sanoff, 2006). Additionally, high school teachers found students to be motivated, able to set goals, and socially adept (Reed & Justice, 2014).

KEY WORDS: College readiness, Academic preparedness, Academic behaviors, Contextual knowledge, Social and emotional learning.

CHAPTER II

PERCEPTIONS OF SECONDARY FACULTY ON STUDENT COLLEGE READINESS

Introduction

One of the primary goals of the American school system is to lay the foundation for college success (Bailey & Karp, 2003). Without some form of postsecondary education, finding a reasonably well-paying job is unlikely. Jobs open to individuals with only a high school diploma "are only marginally better than those available to students without one" (Conley, 2010, p. 3). Standards, designed to facilitate student preparation, have emerged over the last five years (Yamamura, Martinez, & Saenz, 2010). However, how well high schools prepare students for college, is under scrutiny and has become a highly-publicized issue. Disagreement exists as to whether colleges and universities should offer remedial, or what is also called, developmental education for underprepared learners at the postsecondary level (Abstetar, 2013).

Critics, such as Kirst (2004), posit a lack of communication and common goals between K-12 and the postsecondary systems is responsible for the lack of student preparedness. He blames a disconnection between the K-12 system and the postsecondary system for the "undermining of students' college aspirations" (p. 51). The focus of the K-12 system is the results of state mandated assessments differing in content from what is needed for college entrance and appropriate placement (Kirst, 2004). According to Kirst (2004), "students are simply not getting the information they need about what it takes to succeed in higher education" (p. 51). Successful high school students are often required

to enroll in remedial education courses as they enter college (Bailey & Karp, 2003). Harvey, Slate,

Moore, Barnes and Martinez-Garcia (2013) suggested high schools "need to develop more comprehensive measures of student readiness" and address the needs of first-generation college students to help close the college readiness gap (p. 187).

More than two thirds of the students who are enrolling in college are not college ready based upon "high school graduation, high school course taking, and basic reading skills" (Porter & Polikoff, 2012, p. 395). Numerous reasons for student underpreparedness for college are identified in the current literature. These reasons include differences between what is taught in high school versus what college faculty expect students to know and be able to do, disparities between economically disadvantaged and economically advantaged students, and a host of non-curricular variables including peer influences, familial influences and expectations, as well as environmental conditions that do not favor or support academic study. Seventy percent of American high school graduates attend college, but a large percentage of these students do not persist past the freshman year (Venezia & Jaeger, 2013). Statistics such as these indicate that a lack of college readiness is an important factor in poor persistence rates (Porter & Polikoff, 2012).

Heller (2012) identified the most critical mission for K-12 education as preparing students for postsecondary education. However, complications arise when attempts are made to define what the term *college readiness* means, how it is best measured, or what actions schools must take to prepare students for college. Simply earning enough credits to qualify for graduation does not mean a student is prepared for college-level work.

Hence, the utilization of indicators measuring the degree of college readiness students have attained becomes a critical task for educational professionals.

During the last few decades, the SAT® and ACT® have become an integral part of the college application process (Heller, 2012). The SAT® and ACT® have been only moderately useful in predicting students' first year college grades, which according to Heller (2012), is all they are designed to do. College readiness experts suggest looking at a much broader range of indicators encompassing both cognitive and noncognitive student characteristics (Conley, 2010; Heller, 2012).

Statement of the Problem

In a report issued by the National Center for Education Statistics (NCES; 2004) suggested that many high school graduates lack proficiency in content knowledge and the critical thinking skills necessary for college-level work. The gap between what is expected in college and the skills students have acquired in high school leads to high percentages of student enrollment in remedial education. For example, according Arnold, Lu and Armstrong (2012), approximately one-third of students at 4-year institutions and more than two-fifths of those at 2-year institutions enrolled in remedial education.

Gigliotti (2012) posited that having to enroll in remedial education courses was associated with an increase in the time for degree completion and a decrease in graduation rates. To understand the readiness gap and the expectation gap, it is essential for secondary and postsecondary faculty to be aware of one another's expectations and efforts toward student college readiness.

Purpose

The primary purpose of this study was to examine the perceptions of secondary education faculty regarding college readiness as described in the literature. The secondary purpose of this study was to examine student competencies and deficiencies pertaining to college readiness. Through a review of the literature, a synthesis of what is known regarding faculty perceptions of student college readiness and student competencies and deficiencies was presented.

Educational Significance of this Study

Understanding current faculty perceptions of college readiness can help inform educational practices through the identification of expectations. It is critical for secondary and postsecondary faculty to share common, realistic expectations of what it means to be college ready to foster student success. A solution to the lack of a common definition of college readiness between secondary and postsecondary faculty was offered in this study. School administrators, teachers, and lawmakers might use the findings from the literature review when considering policies and decisions regarding increased college readiness.

Research Questions

The following questions form the basis for study 1:

- 1. What are the perceptions of secondary faculty members regarding student college readiness as provided in the literature?
- 2. What are student college readiness competencies and deficiencies as perceived by secondary faculty members as provided in the literature?

Academic Preparation

Texas is but one example of a state that is addressing the troubling issue of student college readiness. Like most schools in the United States, Texas schools serve an increasingly diverse student population, many of whom are not college ready. Texas has taken steps to improve alignment between secondary and postsecondary education for over a decade through the Texas College and Career Readiness Initiative (Conley, Hiatt, McGaughy, Seburn, & Venezia, 2010). For this reason, Texas qualifies as a suitable frame of reference when examining college readiness efforts.

Important changes to state requirements in Texas occurred during the 2011-2012 school year that affected college readiness efforts at the secondary level. The changes evolved from a collaboration between the Texas Legislature, the Texas Education Agency (TEA), and the Texas Higher Education Coordinating Board (THECB). Changes included more rigorous standards and assessments, an addition of high school college readiness standards, and increased high school campus accountability for student college readiness via the Assessment of Academic Readiness (STAAR) performance standards (Texas Education Agency, 2010).

There are many programs and initiatives designed to facilitate the transition from high school to college. Although initially designed to accelerate high-achieving students, more recently, transition programs have been used to "facilitate college access and success for middle performing or even lower performing students" (Bailey & Karp, 2003, p. 7). Transition programs include, but are not limited to, Advanced Placement (AP) courses, dual-enrollment courses, International Baccalaureate courses (IB), classes, and the Advancement Via Individual Determination Program (AVID). In addition, students

in all states are required by the No Child Left Behind Act (NCLB) of 2001 to test and pass exit-level exams in core classes such as mathematics, science, and language arts to graduate (Cimetta, D'Agostino, & Levin, 2010).

The Advanced Placement Program was developed in the late 1950s as a means for students to earn college-level credit while still in high school. Although the structure, designed by the College Board, has not changed since inception, the scope of AP has changed greatly (Klopfenstein & Thomas, 2009). The AP Program offers more than 30 courses over multiple subject areas all of which are designed to be equivalent to the corresponding college-level course. The College Board's AP Program benefits students by affording them an opportunity to participate in rigorous college-level work while still in high school and potentially earn college credit for their efforts. There is strong evidence for the link between successful AP experiences and college success. Results from a study by Hargrove, Godin, and Dodd (2008) provided support for the benefits of the AP Program in terms of student college grade point average (GPA), credits earned, as well as graduation performance.

Hargrove et al. (2008) quantitatively examined the performance of five cohorts of high school students through four years of public education from 1998-2001 and students who graduated from public high schools in Texas from 1998 – 2002 through their freshman year of college. Cohort analyses included approximately 40,000 for each year examined and included student demographic information and standardized test results (Hargrove et al., 2008). According to Hargrove et al. (2008), "the benefits of participating in both AP courses and exams, extended across all outcomes, and in particular, graduation rates, the critical standard for college success" (p. 48). The AP

Program is not without critics. Declines in AP quality due to increased access, using the best teachers to teach the AP courses causing the general education program to suffer, as well as fewer high-achieving students remaining in general education classes are a few of the voiced concerns (Thompson & Rust, 2007).

Another popular college-transition program is dual enrollment. The original purpose of the dual enrollment program was "to keep talented students challenged, help smooth the transition between high school and college, develop vocational readiness, and give students momentum toward a college degree" (Klopfenstein & Lively, 2012, p. 60). Currently, dual enrollment is a feature of high school curricula in areas where a community college is nearby. Dual enrollment and AP programs were designed to serve a different population of students and deciding between the two depends heavily upon the geographical location of the school and the student's educational goals and academic profile (Klopfenstein & Lively, 2012). Typically, dual enrollment course offerings result from articulation agreements between high schools and community colleges and are taught by college professors or qualified high school faculty. Students earn college credit upon fulfillment of the specific course requirements of the sponsoring community college (Klopfenstein & Lively, 2012). In short, dual enrollment is a college course, as opposed to an AP course, which is essentially an introductory course covering a broad range of topics specific to each course, designed by the College Board and taught on a high school campus by high school faculty. Students earn college credit by taking the appropriate AP course and scoring a 3 or above, although it is up to the applicant's college admissions committee to decide what score is acceptable. Dual credit courses offer high school credit to students simultaneously, upon successful completion.

The link between college success and the dual enrollment program was summarized by Klopfenstein and Lively (2012) in the following way, "students in dual enrollment courses earned a baccalaureate degree noticeably faster than demographically and academically similar students with AP experience" (Klopfenstein & Lively, 2012, p. 64). Possible explanations for these results include better preparation efforts on the part of dual enrollment staff and faculty, or stronger noncognitive skills on the part of the dual enrollment students as compared to AP students (Klopfenstein & Lively, 2012).

The International Baccalaureate (IB) program as described on the Leander Independent School District website (Leander Independent School District, n.d.), is a credit-based transition program, taught by secondary faculty, in which students may enroll to earn college credit while still in high school. The IB program was established in 1968 as a comprehensive 2-year advanced academic studies program. The IB program covers curricula in 6 subjects: English, mathematics, social studies, foreign language, and electives. Students can enroll in IB their junior year of high school and upon successful completion, may earn the IB diploma. Students with an IB diploma may receive advanced standing and/or up to 24 hours of college credit. According to the Leander Independent School District website (Leander Independent School District, n.d.), all Texas state universities and colleges award IB graduates 24 hours of college credit for their successful completion of the IB curricula. According to Bailey and Karp (2003), enrolling in college-level courses exposes students to the challenges of college-level coursework. An important benefit of transition programs such as the AP, dual enrollment, and IB, is the link between an intense, high quality school curriculum and bachelor's degree completion. However, Bailey and Karp, suggested "there is little

definitive information about the overall characteristics and effects of these programs" (p. 33).

The Advancement Via Individual Determination (AVID) program offers students an opportunity for support in tackling college preparatory course work they might otherwise not attempt. The Advancement Via Individual Determination program is a nationally recognized secondary educational program designed for students who tend to be "in the middle of the pack" and show an interest and the potential to pursue college preparatory classes (Ensor, 2009, p. 17). Many of these students are members of underrepresented groups requiring additional support for success in college (Watt, Huerta, & Alkan, 2011). The Advancement Via Individual Determination program provides access to a rigorous curriculum while at the same time, providing high levels of student support. The Advancement Vis Individual Determination programs not only address the academic needs of the students, but also provide a host of supports and guidance regarding college preparation and enrollment. Through the provision of academic and social support, coupled with motivational strategies, and guidance in and out of the classroom, AVID helps prepare students who might otherwise never attempt the pursuit of a college degree, to become college ready.

College Readiness

The concept of college readiness is a relatively new one for most high school educators. Traditionally, the focus of secondary educators has been to prepare students for success in high school level courses and to assist in fulfilling the basic eligibility requirements for college (Cline, Bissell, Hafner, & Katz, 2007). Educational leaders and policy makers have realized college readiness and college eligibility are not synonymous

terms. A more recent view of college readiness, according to Cline, Bissell, Hafner, and Katz (2007), differed from the more traditional view in two primary ways. First, the focus of college readiness efforts is one of "preparing students to succeed in college level work, rather than on fulfilling basic eligibility requirements" and secondly, "college readiness is closely related to work-force preparedness" (p. 30). In fact, according to Harvey, Slate, Moore, Barnes, and Martinez-Garcia (2013) preparation for success in college coursework "is an essential component for college and workplace readiness" (p. 186). There is the expectation that students who successfully complete the required high school college preparatory coursework for college entrance are well prepared for college classes. This has become an item of contention among secondary and postsecondary educators based upon the high numbers of first year college students who require remediation (Cline, Bissell, Hafner, & Katz, 2007).

The challenges inherent in preparing high school students for college are profound. Many of the decisions made at the secondary level are based upon standardized assessments and are affected by factors such as student social, economic, and academic readiness. Furthermore, according to Barnes and Slate (2013), access to college is problematic for many non-traditional or at-risk high school students.

Secondary educators are working within an educational system that demands high student achievement as well as the development of college readiness skills and competencies based upon standardized test results that do not take the historical and cultural backgrounds of all students into consideration. The core areas for college readiness associated with academic success are intellectual growth, critical thinking and problem solving, reading, writing, communication, and numerical skills (Gigliotti, 2012).

The importance of college readiness manifests itself economically and in terms of time invested in pursuance of a college degree. Gigliotti (2012) suggested that students who enrolled in remedial courses required a greater length of time to complete their degrees and a decreased graduation rate. Graduation rates for students who undertake remedial courses are grim. Complete College America (2011) reported over half of the students attending 2-year colleges and almost one-fourth of freshmen attending 4-year colleges required remediation. The National Center for Education Statistics (NCEA, 2004) reported the number of remedial courses taken by negatively impacts the probability of students receiving a bachelor's degree.

Although the percentages differ slightly within the literature, many jobs will require some form of college education. Moore et al. (2010) indicated "73% of the fastest growing occupations require some form of postsecondary education or training" (p. 818). Furthermore, students who are college ready are better prepared to participate as citizens, socially, economically, and politically (Moore et al., 2010).

However, both Conley (2005) and Sedlacek (2004), recognizing the need to understand not only academic but also non-academic factors that impact student preparedness, emphasized the importance of including noncognitive skills in college readiness protocols. Conley (2005) argued that in the American system of education, "we have two systems (secondary and postsecondary) that have developed in isolation from each other with different goals and purposes" resulting in a gap between what students need to know to succeed in college and what they are learning in high school (p. 1). This readiness gap is reiterated in the college readiness literature as a major barrier to student success in college (Cline et al., 2007; Conley, 2010; Sedlacek, 2004).

Barnes and Slate (2013) criticized the agenda as resulting in students who "do not graduate from high school or students who do graduate, but are not academically prepared or college ready" (p. 1). Sedlacek (2010) posited standardized tests, and prior grades are limited in the value of information they provide about the academic potential of students applying to college, particularly for nontraditional students. It is therefore beneficial to consider the whole student when assessing college readiness. Sedlacek argued that tests have not kept up with the changes that have taken place during the last century. He promoted the use of assessments including noncognitive variables, coupled with current tests such as the SAT® and the ACT® to obtain a more accurate readiness measurement.

Sedlacek (2010) defined noncognitive variables as "variables related to adjustment, motivation, and student perceptions, rather than the traditional verbal and quantitative (often called cognitive) areas typically measured by standardized tests" (p.

- 2). The noncognitive variables emphasized by Sedlacek included
 - Positive self-concept
 - Realistic self-appraisal
 - Ability to understand and deal with racism
 - Preference for long-range goals
 - Availability of a strong support person
 - Successful leadership experience
 - Sense of community engagement
 - Nontraditional knowledge acquisition

Of these characteristics, positive self-concept and realistic self-appraisal correlated with college grades, retention, and graduation (Sedlacek, 2010).

Recent college readiness literature incorporated the value of cognitive and noncognitive measures as key to diagnosing students' college readiness or the lack thereof. Gaertner and McClarty (2015) developed a set of college readiness indicators for middle school students incorporating "six dimensions shown to influence college readiness and success: academic achievement, behavior, motivation, social engagement, family circumstances, and school characteristics" (p. 21). According to Gaertner and McClarty (2015), student college readiness requires monitoring at an early age.

Comprehensive measures of college readiness may help "parents and teachers assess students' strengths and weaknesses across multiple dimensions and intervene early" (p. 21). In this way, a more accurate prediction of college outcomes might be made.

Method

The literature review included peer reviewed journal articles and dissertations published in 2006-2015 and focused on the perceptions of secondary faculty members on students' college readiness and the associated competencies and deficiencies. Literature was collected via Sam Houston State University's Engine Orange and Google Scholar. Engine Orange allows the user to perform one search for a variety of books, articles, and films from the library's catalog and selected databases rather than searching several databases for articles and other documents.

The following search terms were used to identify literature for the study: college readiness, college preparedness, academic preparedness, academic behaviors, academic knowledge, contextual knowledge, content knowledge, transition programs, cognitive

skills, and noncognitive skills, college success, indicators of postsecondary success, predictors of college success, social and emotional learning, college retention, and faculty perceptions of college readiness. An Excel spreadsheet was used to organize and catalog relevant articles. The Excel spreadsheet included the following: (a) articles selected for further review (b) article type, (c) author(s) and title, and (d) sampling design, (e) research method(s), and (f) notes.

After keyword searches were performed, the search was expanded when the results were too narrow in scope and limited when the results were too broad. Titles were retained only when they appeared to have relevance to the topic of secondary faculty perceptions of college readiness. As promising titles were reviewed, new search terms emerged and the process was repeated to include the new terms. Once the outcomes of the search became redundant and saturation was reached, the abstracts for each title were reviewed and the relevant literature was downloaded.

Articles were selected based on (a) year published, (b) content focused on perceptions of college readiness at the secondary level, (c) competencies and deficiencies pertaining to the college readiness of high school seniors as perceived by secondary faculty, (d) educational setting, and (e) population. Each article was read multiple times before completing the Excel spreadsheet sections pertaining to the article of interest.

Reports, books and monographs were excluded from the literature review.

Literature prior to 2006 was excluded to examine information pertaining to student college readiness limited to the last 10 years. College readiness perspectives of teachers from private and charter schools were not included in the literature review.

Data Analysis

An Excel database was created with the following headings: (a) journal or dissertation, (b) publication date, (c) title of article, (d) authors, (e) faculty type, (f) faculty setting, (g) institution type), (h) sample size, (i) primary theme, (j) secondary theme, (k) questions asked of participants, (l) perceptions of high school faculty, (m) high school competencies and proficiencies, (o) high school deficiencies, and (p) importance and relevance.

Articles and dissertations pertaining to the perspectives of secondary faculty on student college readiness and the associated competencies and deficiencies were analyzed using classical content analysis. The analysis consisted of chunking data to identify key terms to identify categories. Coding was used to condense phrases, words, and sentences that were then examined for patterns and themes (Creswell, 2007).

Results

The primary purpose of the literature review was to examine the perceptions of secondary education faculty regarding college readiness (RQ1) and the associated competencies and deficiencies (RQ2) of high school students preparing for college. The literature included two qualitative studies, one quantitative study, and one qualitative dissertation. The study authors collected data from U.S. public high school teachers using surveys and interviews. Reported response rates ranged from 19.8% to 34.1%. Sample sizes ranged from 19 to 1,185.

Abstetar (2013) explored the perceptions of secondary teachers regarding factors that affect student readiness for college. The primary research question in this qualitative study asked teachers to describe their perceptions and beliefs about the student college

readiness skills they provided. The primary question posed by Abstetar (2013), led to three sub questions relating to decisions regarding instruction: (a) judging the effectiveness of course content and instruction, (b) barriers that impede preparing students for college, and (c) and the role of instructor reflection.

The purposive sample consisted of 18 public high school teachers, representing grades 9-12, who participated in focus groups describing their beliefs and perceptions of student readiness for college. Faculty represented core content areas, electives, and student support services. The results of the study indicated that "while teachers live and work with the philosophy that all students should be encouraged to do their best, college-for-all is not an achievable expectation" (Abstetar, 2013, p. 2).

Although the issue of student content knowledge was discussed in the context of college readiness, according to Abstetar (2013), secondary teachers do not "actually have an official say in whether students are prepared of not" (p. 136). Grades and GPA are more often used as indicators of college readiness. Secondary teacher-participants indicated that students leave high school underprepared for college, and enumerated their perspectives on the reasons as follows:

- A lack of high expectations at the secondary level
- An emphasis in the core curriculum model on the minimum number of courses taken
- A lack of appropriate and realistic counseling and advising for college bound students
- The practice of secondary education to encourage a college-for-all mentality

- Lack of emphasis on higher-order thinking skills as opposed to rote memorization
- A failure to provide remediation and support for struggling students
- Questionable understandings on the part of secondary instructors related to college expectations (Abstetar, 2013, p. 4).

Reed and Justice (2014) identified the perceptions held by secondary and postsecondary faculty on student college readiness. In addition, a determination of the college readiness level proficiencies or deficiencies was addressed using a quantitative methodology for the collection and analysis of data. A college readiness survey, developed by a consultant, was used to gather data from high school and college faculty who taught seniors and freshmen, respectively. A comparison of the perceptions of high school teachers and college faculty on student college readiness was made using descriptive statistics and Mann-Whitney U tests. The sample (n = 1,185) included mixed high school and college faculty from U.S. public high schools and degree-granting universities. A response rate of 34.1% was obtained.

An important finding in the Reed and Justice (2014) study was the difference in perspectives between high school and college faculty regarding student college readiness. Reed and Justice postulated, "High school faculty rated students as college ready, while college faculty perceived students as deficient on many college readiness indicators" (p. 37).

Jo and Milson (2013) conducted a nationwide survey to examine the perceptions of high school and college geography educators regarding student college readiness for geography. Two-hundred and sixty high school faculty who taught human or world

regional geography were randomly selected, nationwide, from U.S. public high schools rendering a response rate of 17.4%. The survey included three questions for each of seven goals related to the content knowledge and skills that were deemed important for success in entry-level college geography courses. Indicators (goals) of college readiness for geography included appropriate application of geographical concepts, use of geospatial technologies to gather information, evaluation of cause and effect of human migration, analysis of regional cultural change over time, identification of patterns of human communities, connection of regional and local development to global ones, and analysis of the interaction between diverse communities. Participants were asked to respond to questions regarding student proficiencies, challenges, and the relative importance pertaining to each of the seven goals (Jo & Milson, 2013, p. 195).

Jo and Milson (2013) found notable differences between college faculty perspectives and high school faculty perspectives regarding student college readiness for geography and the relative importance of the goals needed for success. An important group difference was identified between goal 1 (appropriate application of concepts) and goal 2 (use of geospatial technologies). High school faculty rated their students' proficiency higher than college faculty. According to Jo and Milson (2013), "both college professors and teachers viewed their students' entrance proficiency with the seven geography goals as quite low" (p. 197). The results of the study indicated a notable underpreparedness of students for college geography due to what Jo and Milson (2013) described as a "curricular expectations gap" (p. 200).

A perception gap can be identified within the literature on student college readiness between postsecondary faculty and high school teachers (Sanoff, 2006). In a

nationwide survey, responses were obtained from a random sample of public high school teachers and college faculty in core academic subject areas. The survey was designed to solicit perceptions of student college readiness and other issues, such as high-stakes testing. Seven-hundred and forty-six teachers took part with a response rate of 8.3% and 1,098 college faculty rendering a response rate of 15.7%. The results of the survey indicated that professors and teachers differ in their perceptions of student college readiness in writing, mathematics, and overall preparation for college. Science, mathematics, and writing were identified by high school teachers as areas in which students were prepared. However, high school teachers agreed with college faculty criticisms of students' study habits and motivation. One English teacher in Ohio commented that "I see more and more students who expect a high grade for a minimal amount of work" (Sanoff, 2006, p. 11)

Yamamura, Martinez, and Saenz (2010) examined how teachers, counselors, parents, students, and superintendents in the South Texas border region interpreted the meaning of college readiness. The purpose of their study was to improve access and readiness for students in the Rio Grande Valley area of Texas. Part of a larger study in Hidalgo County which included 23 focus groups including 123 participants, Yamamura et al. (2010), utilized focus group data from K-12 stakeholders from five focus groups:

(a) superintendents, (b) teachers and counselors, (c) parents with children, (d) high school students, and (e) community leaders. Stakeholder expectations and responsibility for college readiness were examined "to formulate innovative ways of increasing college readiness in this area" (Yamamura et al., 2010, p. 128).

Yamamura et al. (2010) identified a gap in the college readiness literature that specifically focused on the stakeholders' "own perceptions of their responsibility in ensuring the students they serve are college ready" (p. 30). Furthermore, they described college readiness as being characterized as a "community effort" warranting an examination of schools, families, and community perspectives regarding their role in student college readiness efforts (Yamamura, et al., 2010, p. 130). Yamamura et al. (2010) viewed college readiness as encompassing a community asset component often overlooked.

Results of the study indicated teachers, administrators, parents, and counselors all claimed a responsibility for student college readiness. Teacher perspectives indicated a collective responsibility for student college readiness that "superseded their professional responsibility" (Yamamura et al., 2010, p. 141). According to Yamamura et al. (2010), "there is a mismatch in aspirational capital between teachers and other community members" (p. 141). Aspirational capital, as defined by Yosso (2005) is the hopes and dreams students have regarding their educational aspirations. Further research was suggested to examine teacher conceptions of responsibility for student college readiness.

Faculty Perceptions Identified in the Literature

Two themes emerged from the literature on student college readiness and the associated competencies and deficiencies: student content knowledge and skills, and learner qualities for college success. Categories related to student content knowledge and skills included: readiness skills for geography and academic skills required for college success. Categories related to learner qualities for college success included: (a) academic motivation, (b) academic maturity, and (c) learning styles.

Student content knowledge and skills. Student content knowledge and skills pertain to specific information and abilities students have acquired as a result of their educational experiences. Academic skills associated with acquiring content knowledge, as found in the literature, include the ability to express ideas in writing, critical and analytical thinking, the ability to make connections between concepts, and problem solving. A teacher's perspective of their students' prior knowledge and skills affects, in part, how teachers will approach their subject.

Readiness skills for geography. Jo and Milson (2013) identified knowledge and skills that were important for college readiness in geography using the National Geography Standards, the Advanced Placement Human Geography course description from the College Board, and the Texas College and Career Readiness Standards for Social Studies developed by the Texas Higher Education Coordinating Board and Texas Education Agency in 2009. The college readiness skills identified by Jo and Milson (2013), as important to success in entry-level college geography courses, were considered "indicators of students' readiness for college geography" and were common across the three documents (p. 194). Seven college readiness goals for geography, pertinent to introductory human and world geography were presented:

- Goal 1: Apply concepts of geography appropriately and accurately
- Goal 2: Use geospatial technologies to acquire, process, and report information from a spatial perspective
- Goal 3: Evaluate the causes and effects of human migration over time
- Goal 4: Analyze how various cultural regions have changed over time

- Goal 5: Distinguish spatial patterns of human communities that exist between or within contemporary boundaries
- Goal 6: Connect regional or local developments to global ones
- Goal 7: Analyze how and why diverse communities interact and become dependent on each other.

(Jo and Milson, 2013, p. 194)

Three perspective questions were posed via a questionnaire for each of the seven goals:

- How important is this goal for a student to succeed in your course?
- How proficient are your students with this goal before taking your course?
- What challenges do your students face related to this goal?

(Jo and Milson, 2013, p. 194)

Teachers viewed their students' proficiency with each of the seven goals as low. Jo Milson (2013) reported that teachers rated students' proficiency lowest for goal 2 (i.e., Use of geospatial technologies) and goal 5 (i.e., boundary patterns in human communities). The results of this study indicated students are leaving high school underprepared for college level geography. In fact, at both the high school and college level the general perception of student college readiness for geography is one of underpreparedness. According to Jo and Milson (2013) both high school teachers and college professors must adopt what was called a "square one mentality" when teaching students geography (p. 201).

Academic skills required for college success. Academic skills are dependent on acquired cognitive strategies. Cognitive strategies and content knowledge are critical elements for college success (Conley, 2010). Cognitive strategies and content knowledge

involve the ability to "comprehend disciplinary concepts and engage in the skills of interpretation, analysis, problem solving, and reasoning" (Jo & Milson, 2013, p. 194). Students' lack of prerequisite knowledge was considered a major challenge by teachers. However, of concern was the fact that teachers identified "students' general deficiency of higher-order critical and analytical thinking skills as a significant challenge for their students" (Jo & Milson, 2013, p. 200). Furthermore, a general lack of foundational knowledge among students in their college courses was identified (Jo & Milson, 2013). In a study by Reed and Justice (2014), high school teachers rated students' level of problem solving skills and critical thinking as proficient for college readiness. However, according to the literature, teachers tended to be more optimistic about student college readiness than did college faculty. For instance, in the Reed and Justice (2014) study, high school teachers perceived students as good note-takers and listeners, whereas college faculty held opposite views.

Sanoff (2006) reported more than three-fifths of high school teachers felt their students were only moderately prepared for college. Areas in which students were perceived as being adequately prepared for college included mathematics, writing, and science (Sanoff, 2006). Not all teachers agreed with this perception. For example, one Florida English teacher explained, "I teach composition, and many of my students do not understand the very basics of formulating an argument" she continued, "high school teachers need to emphasize writing skills and critical thinking skills. Colleges should organize seminars for high school teachers to help them understand an institution's expectations of first-year students" (Sanoff, 2006, p. 2). Only 5% of the teachers who were surveyed perceived their students as extremely prepared for college (Sanoff, 2006).

Learner qualities for college success. Student content knowledge and skills were connected in the literature most often to English, mathematics, science, and social studies. Although clearly an area of concern to high school teachers, emphasis on learner qualities for success in college, such as thinking skills, that could be applied to any topic were found to be more prevalent in the literature (Abstetar, 2013; Reed & Justice, 2014; Sanoff, 2006). Learner qualities for college success as reported by Reed and Justice, (2014), included student motivation, time management, study habits, and leadership.

Teacher participants (n = 1,185) in the study by Reed and Justice (2014) responded to a college readiness survey, created by a consultant, consisting of seven sections. The sections were as follows: (a) academic maturity, (b) academic motivation, (c) learning styles, (d) assertiveness, (e) social and interpersonal skills and advice seeking, and (f) planning and goal setting. In turn, each section contained attributes considered to be relevant to student college readiness. Items relevant to learner qualities for college success were found in Sections 2-6, while Section 1 contained information relevant to student content knowledge and skills.

Teachers in the qualitative study by Abstetar (2013) identified learner qualities for college success they perceived as important. The qualities included intellectual curiosity, open-mindedness, having experienced failure, and higher-order thinking skills, not tied to any content area. In fact, the teachers identified higher-order thinking skills as the second most important learner quality, preceded only by "personality traits" (Abstetar, 2013, p. 128). When asked to respond to one of the research questions in a focus interview pertaining to giving advice to graduating students, teachers were consistent in listing student characteristics, such as personality traits and ways of thinking, that teachers felt

students needed to be successful. Student characteristics included "intellectual curiosity, open-mindedness to experiencing failure or difficulty and knowing how to deal with it" (Abstetar, 2013, p. 127).

Academic motivation. In a study by Reed and Justice (2014), high school teachers rated the items pertaining to academic motivation as proficient. Academic motivation referred to intrinsic motivation associated with a desire to learn, creativity, and academic interests. According to Reed and Justice (2014), high school teachers had optimistic views of their students' academic motivation. However, Sanoff (2006) posited that teachers were willing to acknowledge students' shortcomings, particularly, poor study habits and motivation.

Academic maturity. Students were perceived by their high school teachers as proficient in assertiveness. For example, comfort with stresses, self-conduct, and opinion-sharing were identified as proficiencies (Reed & Justice, 2014). Similar perceptions of proficiency were identified for social and interpersonal skills and planning and goal setting. Sanoff (2006) found that teachers perceived students as lacking the ability to appropriately formulate an argument (assertiveness) by supporting a claim with evidence, rather than opinion.

Learning styles. Student participation, listening, note-taking, and the ability to study, as well as the use of library and computers are each categorized as learning styles. High school teachers perceived their students as proficient in these areas (Reed & Justice, 2014). In other words, teachers perceived their students as being college ready when referencing learning styles. However, teachers in Abstetar's study (2013), were quick to point out that "not all kids have the same skills coming in. Therefore, transition pieces

and extensive scaffolding may be needed" (p. 105). Teachers questioned the academic readiness of their students who were not only academically weak throughout high school, but those who might have been high achievers "academically if they had earned those academic achievements by doing exactly as they were told without any independent thought or motivation" (Abstetar, 2013, p. 130). Teachers explained that not all students were college ready, particularly immediately after graduation. One teacher remarked, "sometimes students who are academically prepared are not ready to go to college for other reasons: they have had a 'lack of planning' and vision and haven't completed the application process" (Abstetar, 2013, p. 123).

Teachers who were interviewed in Abstetar's study (2013) did not believe all students could be rendered college ready. Nor did they believe a college-for-all campus culture was a realistic one. However, they did perceive that students who possessed certain learner qualities associated with college readiness could find success. One quality that was of central importance was "the motivation to do well" (Abstetar, 2013, p. 124). In fact, motivation was considered a central component of student college readiness in three of the studies included in the literature review (Abstetar, 2013; Reed & Justice, 2014; Sanoff, 2006).

Discussion and Conclusions

The purpose of this literature review was to examine the perspectives of secondary faculty regarding student college readiness (RQ1) and the associated competencies and deficiencies of students enrolled in 2- and 4-year U.S. colleges (RQ2). Perceptions of secondary faculty on student college readiness and the associated competencies and deficiencies varied from study to study. Secondary faculty perceived

students to be moderately prepared for college in the areas of writing, science, and mathematics, but underprepared for geography (Jo & Milson, 2013; Sanoff 2006).

Students were perceived as proficient in goal setting, comfort with stresses, and opinion-sharing, yet lacking in the ability to support a claim with evidence (Reed & Justice, 2014). The overall perception of secondary faculty was that students enter college underprepared, although no single definitive reason for the underpreparedness was provided in the studies. However, secondary faculty tended to hold optimistic views regarding student college readiness across the studies.

According to Hardré and Sullivan (2009), critical linkages exist between teacher perceptions and their actions. In turn, the actions taken by teachers within the classroom, affect student learning outcomes. Hence, teacher perceptions of student content knowledge and skills and learner qualities can affect student learning and ultimately, college readiness. Perceptions of students' entrance proficiencies, affect instructional decision-making (Jo & Milson, 2013). The decisions teachers make about "how to approach their subject, in part, depends on their perceptions of students' prior knowledge" (Jo & Milson, 2013, p. 195). It is important to understand teacher-held perceptions of student college readiness to improve practices and remove barriers for college bound students.

Findings in the literature revealed optimistic perceptions of student college readiness held by high school teachers (Reed & Justice, 2014; Sanoff, 2006). Secondary faculty perceived students to be well prepared in content areas that included mathematics, science, and writing (Sanoff, 2006). Additionally, students were perceived by secondary

faculty as possessing adequate learner qualities such as, motivation, goal setting, and social skills (Reed & Justice, 2014).

Contrary to the results found by Sanoff (2006), teachers in Jo and Milson's (2013) study on the perceptions of high school and college faculty on student college readiness for college geography, viewed their students' college readiness proficiency for geography as "quite low" (p. 197). In fact, all proficiency means were below 3.0 on the same one-to-six rating scale used in the survey (Jo & Milson, 2013). Teachers identified students' general "deficiency of higher-order, critical and analytical thinking skill as a significant challenge for their students" (Jo & Milson, 2013, p. 200). Jo and Milson (2013) identified what they termed a "curricular expectations gap" between high school geography teachers and college geography faculty due to their differences on the perceived importance of the seven goals for college geography (p. 200).

The studies did not present a definitive answer to why students are arriving at college underprepared however, teacher perspectives on student college readiness and the associated competencies and deficiencies were addressed. Two themes, student content knowledge and learner qualities for college success emerged as focal points in the literature. Emphasis regarding their impact and degree of college readiness varied from study to study. For example, student content knowledge was given priority in the study by Jo and Milson (2013), while learner qualities for college success were given more attention in the study by Reed and Justice (2014). Respondents in Abstetar (2013) and Sanoff (2006) expressed perspectives on both themes with equal emphasis on the importance each played in student college readiness.

Faculty perceptions of student preparedness lead to expectations for learning. If teachers perceive their students to be underprepared, faculty are prone to adopt what Jo and Milson (2013) noted as a "square one mentality" (p. 201). When teachers have low expectations for their students, according to Stipek (2002), low expectations become a self-fulfilling prophecy. Expectations for students have changed over time and appear to be based on a term popularized by Lemann (2000) as "the big test" in his book entitled *The Big Test: The Secret History of the American Meritocracy.* Lemann (2000) posited, that the big test has become the focal point of our schools, a standard by which both the student and the school is judged. The pressure of teaching to standardized tests and achieving higher academic school ratings, prevalent in K-12, but not in higher education. Often the test score becomes more important than actual content knowledge, ultimately impacting what teachers can reasonably expect of their students.

There is an abundance of programs in K-12 designed to help students prepare for college; Advanced Placement courses, dual credit courses, and AVID for example. Yet, according to a recent report by the ACT® (2016), "overall achievement levels, both the average ACT® Composite Score and the percentages of students meeting the ACT® College Readiness Benchmarks, dropped this year compared to last year" (p. 2). However, there was a noted increase in the percentage of students who took the ACT®.

Despite the challenges of college readiness, secondary faculty maintain an optimistic view of student college readiness. This optimism appears to be based on the soft skills demonstrated by students, rather than on academic ability. Student attributes such as motivation and learning styles were considered as adequate by most secondary faculty.

Recommendations for Future Research

There is a lack of research on the perspectives of high school teachers on student college readiness and their associated competencies and deficiencies. Without a thorough understanding of teacher perspectives, limits will continue to exist on how well educators can prepare students for college through improving instruction in specific content areas and impacting learner qualities for college success. Perhaps a concerted effort to research faculty perspectives could assist educators in closing these gaps and increase opportunities for discourse between the faculty members working within each system.

A better understanding of teacher perspectives on college readiness, could assist educators in implementing and expanding targeted programs, initiatives, and classroom activities that address the learner qualities deemed necessary for college success.

A program which is designed to support students who are frequently first-generation college applicants is the AVID program. AVID aids students in developing, not only academic skills, but learner qualities such as perseverance, intellectual curiosity, and critical thinking. As it exists currently, AVID serves a limited population of students, but could be extended to include all students who are college-bound.

Professional development opportunities for faculty in the form of seminars, workshops, or localized trainings, highlighting faculty perceptions of college readiness, could prove beneficial in closing the readiness gap. Trainings could be hosted by secondary and postsecondary faculty at conferences held by organizations such as the National Association of Developmental Education (NADE), AVID, or the College Board. These conferences frequently draw educators from both secondary and postsecondary

systems and could serve as an ideal venue for collaboration between faculty. In this way, meaningful dialogue could be facilitated.

The creation of a "college readiness" endorsement on teaching certificates, similar to the existing Gifted and Talented endorsement (GT) or the ESL endorsement currently in place, could serve as motivation for teachers to earn additional professional development hours, which are required and/or encouraged at both the secondary and postsecondary levels. The college readiness certificate could provide teachers the opportunity to focus on the college readiness skills expected by postsecondary faculty through the creation of teacher-centered college readiness competencies. Upon completion of the competencies, teachers could be awarded a college readiness endorsement through their state's educational agency, enhancing their qualifications and expertise in the area of college readiness.

The crafting of a common definition for college readiness could serve to encourage open dialogue between secondary and postsecondary faculty. According to the literature, no such definition exists (Porter & Polikoff, 2012). Through the process of collaboratively creating a common definition for college readiness, faculty could move toward an elimination or reduction, of the college expectations gap.

Additional recommendations might include the application of findings from qualitative and quantitative studies on the perceptions of faculty on college readiness.

Through an understanding of the competencies and deficiencies identified by faculty in these studies, concerted efforts could be made to address the deficiencies *prior* to student enrollment in college. Support could be provided ahead of time to eliminate or at least reduce the necessity of providing remediation at the postsecondary level, particularly in

mathematics and English. Taking college entrance tests, such as the Texas Success

Initiative Assessment (TSIA) while in high school, frequently do not allow high school
teachers time for remediation and merely identify the academic shortcomings with which
students will graduate.

REFERENCES

- Abstetar, P. A. (2013). Secondary teacher perception of student readiness for college (Doctoral Dissertation). Retrieved from ProQuest Dissertations and Theses Global (Order No. 3601045).
- ACT[®]. (2016). The condition of college and career readiness 2016. Iowa City, IA:

 Author. Retrieved from http://www.act.org/content/dam/act/unsecured/documents

 /CCCR_National_2016.pdf
- Arnold, K. D., Lu, E. C., & Armstrong, K. J. (2012). The ecology of college readiness [Special Issue]. *ASHE Higher Education Report*, *38*(5), 1-138. Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/aehe.v38.5/issuetoc
- Bailey, T., & Karp, M. (2003). *Promoting college access and success: A review of credit-based transition programs*. Columbia, NC: Columbia University. Retrieved from http://www.gpo.gov/fdsys/pkg/ERIC-ED482497/pdf/ERIC-ED482497.pdf
- Barnes, W., & Slate, J. R. (2013). College readiness is not one-size-fits-all. *Current Issues in Education*, 16(1), 1-7. Retrieved from http://cie.asu.edu/ojs/index.php/cieatasu/article/viewFile/1070/401
- Cimetta, A. D., D'Agostino, J. V., & Levin, J. R. (2010). Can high school achievement tests serve to select college students? *Educational Measurement: Issues & Practice*, 29(2), 3-12. https://doi.org/10.1111/j.1745-3992.2010.00171.x
- Cline, Z., Bissell, J., Hafner, A., & Katz, M. (2007). Closing the college readiness gap.

 **Leadership, 37(2), 30-33. Retrieved from https://www.academia.edu/2403859/Closing_the_College_Readiness_Gap

- Complete College America (2011). *Texas*. Retrieved from http://www.completecollege.org/docs/Texas.pdf
- Conley, D. T. (2005). College knowledge: What it really takes for students to succeed and what we can do to get them ready. San Francisco, CA: Jossey-Bass.
- Conley, D. T. (2010). College and career ready: Helping all students succeed beyond high school. San Francisco, CA: Jossey-Bass.
- Conley, D. T., Hiatt, E., McGaughy, C., Seburn, M., & Venezia, A. (2010). Improving alignment between postsecondary and secondary education: The Texas college and career readiness initiative. Eugene, OR: Educational Policy Improvement Center. Retrieved from http://files.eric.ed.gov/fulltext/ED509648.pdf
- Creswell. J. W. (2007). Qualitative inquiry and research design: Choosing among five approaches (2nd ed.). Thousand Oaks, CA: Sage
- Ensor, K. L. (2009). Improving developmental college counseling programs: Utilizing the Via Individual Determination (AVID) to Motivate At-Risk Students. *Journal of college admission*, 205, 16-21. Retrieved from http://eric.ed.gov/?id=EJ867959
- Gaertner, M. N., & McClarty, K. L. (2015). Performance, perseverance, and the full picture of college readiness. *Educational Measurement: Issues & Practice*, *34*(2), 20-33. https://doi.org/10.1111/emip.12066
- Gigliotti, J. (2012). Rice University: Innovation to increase college readiness. *Continuing Higher Education Review*, 76, 166-174. Retrieved from http://files.eric.ed.gov/fulltext/EJ1000663.pdf
- Hardré, P. H., & Sullivan, D. W. (2009). Motivating adolescents: High school teachers' perceptions and classroom practices. *Teacher Development*, *13*(1), 1-16.

- https://doi.org/10.1080/13664530902858469
- Hargrove, L., Godin, D., & Dodd, B. (2008). *College outcomes comparisons by AP and non-AP high school experiences*. (Report No. 2008-3). New York, NY: The College Board. Retrieved from https://research.collegeboard.org/sites/default/files/publications/2012/7/researchre port-2008-3-college-outcomes-ap-non-ap-high-school-experiences.pdf
- Harvey. W., Slate, J. R., Moore, G. W., Barnes, W., & Martinez-Garcia, C. (2013).

 College readiness gaps: A review of the literature. *Journal of Education*Research, 7(3), 183-204.
- Heller, R. (2012). What studies say about college readiness (Research Brief). National Education Writers Association. Retrieved from http://www.ewa.org/sites/main/files/file-attachments/ewabrief-collegereadiness-revised2.pdf
- Jo, I., & Milson, A. J. (2013). College readiness for geography: Perceptions of high school teachers and college faculty. *Journal of Geography*, 112, 193-204. https://doi.org/10.1080/00221341.2012.761718
- Kirst, M. W. (2004). The high school/college disconnect. *Educational Leadership*, 62(3), 51-55. Retrieved from
 http://www.ascd.org/ASCD/pdf/journals/ed_lead/el200411_kirst.pdf
- Klopfenstein, K., & Lively, K. (2012). Dual enrollment in the broader context of college-level high school programs. *New Directions for Higher Education*, *158*, 59-68. https://doi.org/10.1002/he.20015

Klopfenstein, K., & Thomas, K. (2009). The link between advanced placement experience and early college success. *Southern Economic Journal*, 75, 873-891. Retrieved from

http://www.thefreelibrary.com/_/print/PrintArticle.aspx?id=193182392

- Leander Independent School District. (n.d.). *Advanced Programs*. Retrieved from http://www.leanderisd.org/default.aspx?name=AP.main
- Lemann, N. (2000). The big test: The secret history of the American meritocracy. New York, NY: Farrar, Straus, & Giroux.
- Moore, G. W., Slate, J. R., Edmonson, S. L., Combs, J. P., Bustamante, R., & Onwuegbuzie, A. J. (2010). High school students and their lack of preparedness for college: A statewide study. *Education and Urban Society*, *42*, 817-838. https://doi.org/10.1177/0013124510379619
- Porter, A. C., & Polikoff, M. S. (2012). Measuring academic readiness for college. *Educational Policy*, 26, 334-417. https://doi.org/10.1177/0895904811400410
- Reed, E., & Justice, M. (2014). College and high school educators' perceptions of current college readiness levels. *International Journal of Humanities and Social Science*, *4*(14), 37-43. Retrieved from http://www.ijhssnet.com/journals/Vol_4_No_14_December_2014/3.pdf
- Sanoff, A. P. (2006). A perception gap over students' preparation. *Chronicle of Higher Education*, B1.
- Sedlacek, W. E. (2004). Beyond the big test: Noncognitive assessment in higher education. San Francisco, CA: Jossey-Bass.

- Sedlacek, W. E. (2010). Noncognitive measures for higher education admissions. In P. Peterson, E. Baker, & B. McGraw (Eds.), *International Encyclopedia of Education* (pp. 845-849). http://doi.org/10.1016/b978-0-08-044894-7.00177-9
- Stipek, D. (2002). *Motivation to learn: From theory to practice* (4th edition). Needham Heights, MA: Allyn & Bacon.
- Texas Education Agency (2010). *House Bill 3 Transition Plan* (Report No. GE1160001).

 Austin, TX. Retrieved from tea.texas.gov/WorkArea/Download

 Asset.aspx?id=25769810845
- Thompson, T., & Rust, J. O. (2007). Follow-up of advanced placement students in college. *College Student Journal*, *41*, 416-422. Retrieved from http://eric.ed.gov/?id=EJ777945
- U.S. Department of Education, National Center for Education Statistics. (2004). *The condition of education 2004*. (NCES Publication No. 2004-077). Retrieved from https://nces.ed.gov/pubs2004/2004077.pdf
- Venezia, A., & Jaeger, L. (2013). Transitions from high school to college. *The Future of Children*, 23, 117-136. https://doi.org/10.1353/foc.2013.0004
- Watt, K. M., Huerta, J. J., & Alkan, E. (2011). Identifying predictors of college success through an examination of AVID graduates' college preparatory achievements.

 Journal of Hispanic Higher Education, 10(2), 120-133.

 https://doi.org/10.1177/1538192711402353
- Yamamura, E. K., Martinez, M. A., & Saenz, V. B. (2010). Moving beyond high school expectations: Examining stakeholders' responsibility for increasing Latina/o

students' college readiness. The High School Journal, 93, 126-148.

https://doi.org/10.1353/hsj.0.0045

Yosso, T. J. (2005). Whose culture has capital? Race, Ethnicity, and Education, 8(1), pp.

69-91. Retrieved from

http://gearupnv.org/wp-content/uploads/2014/01/Research-Article.pdf

CHAPTER III

PERCEPTIONS OF POSTSECONDARY FACULTY ON STUDENT COLLEGE READINESS

This dissertation follows the style and format of Research in the Schools (RITS).

Abstract

The purpose of this study was to examine the perceptions of postsecondary education faculty regarding student college readiness and the associated competencies and deficiencies. Literature was limited to the years 2006-2015. Classical content analysis was used to analyze data from articles and dissertations pertaining to faculty perceptions of student college readiness. Students were perceived by faculty as generally underprepared for college. Perceived student weaknesses included study skills, critical thinking, and the ability to generalize. Faculty perceived students as lacking the foundational content knowledge and skills needed for college mathematics, geography, and English composition.

KEY WORDS: College readiness, Academic preparedness, Academic behaviors, Contextual knowledge, Social and emotional learning.

CHAPTER III

PERCEPTIONS OF POSTSECONDARY FACULTY ON STUDENT COLLEGE READINESS

Introduction

Increasing college readiness rates has become a major concern nationally and globally (Arnold, Lu, & Armstrong, 2012). Hoyt and Sorensen (2001) referred to "the chain of blame for the lack of student preparedness for college" (p. 26). College faculty blame high school faculty who in turn blame middle school faculty, who blame the elementary teachers for the lack of student college readiness. A recent report issued by ACT® (2014) indicated that only one out of four students graduating from U.S. high schools is college ready. Even though these students may have been college-eligible, they lacked the skills required for college-level work resulting in high rates of remediation and low retention rates for those students who entered postsecondary education. According to ACT® (2014), the "U. S. K-12 education system is graduating many students who are not college ready" (p. 9). Professors who were surveyed by ACT® (2014) substantiated the lack of college readiness stating that only 26% of the students they taught were ready for college work. Furthermore, the professors said they were "unaware of any efforts to improve the alignment between K-12 and college" (ACT[®], 2014, p. 9).

Postsecondary faculty did not perceive incoming first-year students as academically prepared. For instance, in 2009 only 26% of college faculty reported their students were well prepared for college coursework. In 2012, the percentage of students reported as well prepared for college had not changed. In fact, the percentage of college

faculty who taught developmental (remedial) courses, reported that "26% of their students were well or very well prepared for college-level work" (ACT®, 2013, p. 5).

The transition from high school to college is problematic for many students.

Once enrolled in their first-year college-level courses, students frequently discover how unprepared they are, not only academically, but in the way they learn, apply knowledge, manage time, and organize information (Conley, 2010). According to Conley (2010), Postsecondary faculty expectations include a wide range of autonomous skills and behaviors many students have not acquired in high school. Students are often unprepared for the heavy reading loads, rapid pacing, and the assumption of prior content knowledge expected of them by their college professors (Conley, 2010). Conley (2010) found that postsecondary faculty expected their students to take ownership of their learning. If they were unable to do so, a substantial number of students simply gave up (Johnson, 2010).

Statement of the Problem

College readiness is a complex issue. Although a vast amount of literature and statistical data on college readiness exists, outside the realm of national reports, little literature exists that examines the perceptions of postsecondary faculty on student traits and the skills students bring to the college experience (Stevens & Miretzky, 2012). ACT® developed benchmarks that represent minimum scores for potential success in college-level courses. Students meeting the benchmarks have been shown to persist and complete degrees as opposed to students who do not meet the benchmarks. The ACT® College Readiness Benchmarks are: English, 18; Reading, 22; Mathematics, 22; and Science, 23 (ACT®, 2014). Adams (2014) reported 26% of the students who graduated and took the ACT® met the ACT® college readiness benchmarks in core academic areas,

including mathematics, English, and science. Thirty-one percent of the ACT®-tested graduates met none of the benchmarks. Unfortunately, little progress has been made in "aligning the expectations of high school with the academic requirements of college" (Adams, 2014, para. 15).

Purpose of the Study

The primary purpose of this study was to examine the perceptions of postsecondary education faculty regarding college readiness. The secondary purpose of this study was to examine perceived student competencies and deficiencies pertaining to college readiness as found in the literature. After a review of the literature, a synthesis of what is known regarding postsecondary faculty perceptions of student college readiness, and perceived student competencies and deficiencies was presented.

Educational Significance of the Study

The literature on the perceptions of postsecondary faculty on student college readiness is limited. Consideration of postsecondary teacher perceptions of college readiness including the perceived student competencies and deficiencies can help inform practice closing the college readiness gap. University administrators, faculty, and lawmakers might use the findings from this literature review when considering policies and decisions that may impact college readiness. Additionally, postsecondary faculty professional development needs in student college readiness could be expanded and improved based on what has been learned from this study.

Research Questions

1. What are the perceptions of postsecondary faculty members regarding student college readiness as provided in the literature?

2. What are the college readiness competencies and deficiencies of college freshmen as perceived by postsecondary faculty as provided in the literature?

College Readiness

According to Conley (2008), how likely students are to transition successfully to college depends on their college readiness. In the most general terms, college readiness "is the degree to which previous educational and personal experiences have equipped students for the experiences and demands they will experience in college" (Conley, 2008, p. 3). However, there exists much variation in the literature regarding the meaning of college readiness. Olson (2007) questioned whether Americans expected students to be college ready and work ready and whether students were expected to be "one or the other, or both" (p. 1). Conley (2007) presented one of the most commonly referenced definitions of college readiness and success in the reviewed literature:

College readiness can be defined as the level of preparation a student needs to enroll and succeed, without remediation, in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program. *Succeed* is defined as completing entry-level courses at a level of understanding and proficiency that makes it possible for the student to consider taking the next course in the sequence or the next level of course in the subject area. (p. 5)

Traditionally, college readiness is defined in terms of core academic skills such as grades, class rank, and scores on standardized tests such as the ACT® or SAT® (ACT®, 2014). However alternate definitions exist that include traditional and nontraditional factors. For instance, Byrd and MacDonald (2005) suggested a definition involving an

"understanding of student characteristics and skills within the context of college" (p. 25). In other words, an ability on the part of the student to navigate the college culture, not measured in a traditional sense. Camara (2013) recommended broadening the definition from one based on academics to one unconstrained by only academic factors.

College faculty have identified several key areas as critical for student success in college (Olson, 2007). Students must have the ability to read informational texts, as opposed to the focus on literature encountered in high school. According to Olson (2007), high school state standards often emphasize narrative writing, whereas students in college must be able to "write persuasively, conduct research, and use evidence to support a position" (p. 8). Other key areas included the ability to work in groups, reasoning, and solving mathematical problems.

Faculty set expectations for students and determine whether students meet these expectations. If students can meet faculty expectations, they are considered successful. If students are unable to meet faculty expectations, students will be unsuccessful and may not complete college (Koslow-Martin, 2010). In a study by Attewell, Lavin, Domina, and Levey (2007), 40% of traditional college students took at least one remedial course in college, with mathematics being the most commonly taken remedial subject. Some colleges have reported as many as 80% of entering students required remedial (developmental) education coursework (Saxon & Morante, 2014). All difficulties students experience in the transition from high school to college are not purely academic in nature. According to Conley (2010), college readiness when understood to encompass cognitive and noncognitive skills, is more holistic. Conley (2010) asserted "entry level courses almost always expect students to possess a range of attributes that can be

summed up as self-management skills" (p. 4). Students are expected to be able, to perform a variety of independent and group tasks that involve higher level thinking skills and the ability to self-monitor as well as meet deadlines.

Although there has been an increasing interest in the noncognitive skills which contribute to college success, such as self-control, grit, and growth mindset, there are challenges present when it comes to measuring and using these measurements to ascertain college readiness (Duckworth & Yeager, 2015). Common methods of noncognitive skill measurement, including self-report questionnaires, questionnaires administered to teachers about their students, and performance tasks, are vulnerable to threats of response validity, bias, and "outright faking" (Duckworth & Yeager, 2015, p. 241). According to Duckworth and Yeager (2015), "perfectly unbiased, unfakeable, and error-free measures are an ideal, not a reality" (p. 243).

Method

The literature review included research articles and dissertations focused on the perceptions of postsecondary faculty members on students' college readiness and the competencies and deficiencies as they pertained to the college readiness of college freshmen as perceived by postsecondary faculty. Scant literature exists on the faculty perspectives of student college readiness and the associated competencies and deficiencies outside the realm of national reports and surveys (Stevens & Miretzky, 2012). National reports and surveys frequently use data gleaned from the ACT® or SAT® which, according to Sedlacek (2004), are a limited measure of student aptitude because they do not include an assessment of students' noncognitive characteristics that are critical for student college readiness. For this reason, only peer reviewed journal articles

and dissertations were included in the literature review. Monographs and books were excluded from this literature review due to the lack of peer review of these sources. Articles and dissertations were collected via search engines accessed through Sam Houston State University's Newton Gresham Library and Google Scholar. Engine Orange was accessed through Sam Houston State University's Newton Gresham Library's online system. Engine Orange allows the user to perform one search for a variety of books, articles, and films from the library's catalog and selected databases rather than searching several databases for articles and other documents.

Literature was limited to the years 2006-2015 to include recent (current) publications. The following search terms were used to identify literature for the study: college readiness, college preparedness, academic preparedness, cognitive skills, and noncognitive skills, college success, indicators of postsecondary success, predictors of college success, social and emotional learning, college retention, and faculty perceptions of college readiness. After keyword searches were performed and the number of hits for each search term were recorded, the search was expanded if the results were too narrow in scope and limited if the results were too broad. Titles were retained only if they appeared to have relevance to the topic of faculty perceptions of college readiness at the postsecondary level. As promising titles were reviewed, new search terms emerged and the process was repeated to include the new terms. Once the outcomes of the search became redundant and saturation was reached, the abstracts for each title were reviewed and the relevant literature was downloaded. An Excel spreadsheet was created for organizing and coding the relevant literature. The following headings were developed: (a) journal, (b) publication date, (c) title of article, (d) authors, (e) faculty type, (f) faculty

setting, (g) institution type (i.e., community college, 4-year college, mixed), (h) sample size, (i) primary theme, (j) secondary theme, (k) questions asked of participants, (l) perceptions of college faculty, (m) competencies and proficiencies college, (n) deficiencies college, and (r) importance and relevance. Articles were selected based on (a) year published, (b) competencies and deficiencies pertaining to the college readiness of high school seniors as perceived by post-secondary faculty, (c) educational setting, and (d) population. Each article was read multiple times before entering information into the spreadsheet. Upon completion of the Excel spreadsheet sections, the document was mail merged into an MS Word document for coding purposes.

Data Analysis

Classical content analysis was used to analyze data from articles and dissertations pertaining to the competencies of student college readiness, as perceived by postsecondary faculty. Chunking is the process of separating data into small units and attaching a "code or descriptor to each of the units" (Onwuegbuzie, Dickinson, Leech, & Zoran, 2009, p. 5). Through the process of chunking, key terms and categories were identified. The use of coding facilitated the condensation of phrases, words, and patterns. Following the process of coding, the phrases words and sentences were examined for themes and patterns (Creswell, 2009).

Results

The purposes of this literature review study were to examine the perceptions of postsecondary education faculty regarding college readiness and the associated competencies and deficiencies of students enrolled in public 2- and 4-year colleges. The reviewed literature was comprised of five dissertations and five journal articles published

between 2006 and 2015. Literature was limited to the years 2006-2015 to include recent (current) literature.

Jo and Milson (2013) conducted a study to examine the perceptions of college readiness as it relates to college-level geography in the U.S. Two-hundred and sixty high school geography teachers and 93 college geography professors were surveyed regarding their perceptions of seven curricular goals relating to geography and their students' proficiencies with each of the goals was developed and administered nationally. The questionnaire contained a one-to-six rating scale for which mean statistics were calculated. Although the response rate varied across the states, the overall response rate was 19.8%.

The questionnaire consisted of three perspective questions for each of the following geography goals: (a) application of concepts, (b) use of geospatial technologies, (c) evaluation of cause and effect, (d) cultural change over time, (e) ability to distinguish between spatial patterns of human communities, (f) ability to connect regional developments to global ones, and (g) analyze how and why diverse communities interact and become dependent on each other (Jo & Milson, 2013). Geography professors and high school geography teachers were asked,

- "How important is this goal for a student to succeed in your course?"
- "How proficient are your students with this goal before taking your course?"
- "What challenges do your students face related to this goal?" (Jo & Milson, 2013, p. 195).

College professors ranked students' entrance proficiency lowest for the appropriate application of concepts, and the use of geospatial technologies. The results

of this study indicated professors perceived their students as coming to their courses underprepared with "very little prior knowledge of geography" and in need of further instruction in both knowledge and skills to be successful in college-level geography (Jo & Milson, 2013, p. 201).

Corbishley and Truxaw (2010) suggested, Grade 12 students in the United States did not demonstrate the proficiencies needed for the rigors of college-level mathematics. A survey of college mathematics faculty at public colleges and universities in a northeastern state was used to investigate the mathematical readiness of entering college students. The survey was administered electronically to 22 mathematics instructors representing eight public colleges and universities in the northeastern U.S. Response rates were not provided. Levels of faculty experience ranged from 2 to 42 years. The researchers sought answers to two primary questions:

- What perceptions do college mathematics instructors have of mathematical readiness of average incoming freshmen students?
- Which mathematical topics do college mathematics instructors perceive as being important for success in college-level mathematics?

The instrument used by the researchers consisted of six demographic questions, 30 rating-scale items, and three free response questions relating specifically to mathematical skills and topics. Each item consisted of two responses: perceptions of the skills of incoming freshmen using a 0-5 rating scale (0 = never, 5 = excellent) and opinions as to the importance of the skill or topic using a 0-2 rating scale (0 = not important, 2 = very important). Three free response questions allowed the participants to add their own experiences and perceptions. Means and standard deviations were used to

analyze the rating-scale items and axial coding was used to analyze the free responses. A primary finding of the study were similar to results reported by Jo and Milson (2013). Mathematics faculty perceived "average freshman students" as not ready for college mathematics (Corbishley & Truxaw, 2010, p. 81). Corbishley and Truxaw (2010) postulated "every mean score for student skill, across all contents, fell within the very poor or poor range" (p. 81).

When students enter college without the prerequisite mathematics skills, they are often placed in remedial or developmental mathematics courses. Zientek, Schneider, and Onwuegbuzie (2014) sought to understand the perceptions of developmental mathematics faculty regarding student placement in developmental mathematics. A convenience sample including 79 community college faculty and 10 state college faculty across four states in the United States was obtained. The response rate ranged from 21% to 82% for the community college faculty (n = 79) and 100% for the state college (n = 10). Participants were asked to respond to two items: "Please describe factors that you believe impact students' need to be placed in developmental courses?" and "What factors do you believe hinder the success of some students in developmental mathematics courses?" (Zientek et al., 2014, p. 71). The survey was distributed electronically. Constant comparisons analysis (Glaser & Strauss, 1967) was used to analyze the open-ended responses.

Time delay since previous mathematics course was the most frequent reason given for placement in developmental mathematics given by faculty (51%), followed by weak mathematical skills (44%). Factors identified most frequently by faculty as hindering student success in developmental mathematics were academic behaviors and

work habits (67.4%), followed by dispositional factors (49%), and situational factors (42%). Zientek, Schneider, and Onwuegbuzie (2014) posited that the information gathered from faculty could be used to assist educators and policy makers in decreasing the number of students taking developmental courses, thereby increasing the number of students who are better prepared and more likely to succeed in college.

Harms (2010) posited that university faculty members throughout the U.S. perceive college freshmen as not prepared for success in introductory college algebra. In a qualitative phenomenological study of the perceptions of university mathematics professors, faculty (n = 10) participated in recorded interviews. These themes emerged from the interviews: (a) higher expectations from high school teachers, (b) student overreliance on calculators, (c) curriculum deficits, (d) lack of study skills, and (e) lack of prerequisite mathematics skills. Faculty perceived most freshman students lack the basic study skills and mathematics skills to be successful in college algebra. Similar to the findings of Zientek et al. (2014) who cited time delay since the last mathematics course as the primary factor for students being placed in developmental mathematics. Faculty respondents in Harms' study (2010) suggested students be required to take mathematics all four years of high school to be better prepared for college mathematics.

Reed and Justice (2014) sought to identify specific college readiness attributes of students at high school and college levels as perceived by high school and college faculty using quantitative methods. The College Readiness Survey (CRS), developed by a general consultant, was used to measure college readiness in the study. High school and college faculty (n = 1,185) responded to an electronic CRS with a response rate of 34.1%.

Descriptive and nonparametric statistics were used to determine the differences in scores between high school and college educators.

The two purposes of the study were to identify the educators' perceptions of college readiness attributes at the high school and college levels and to determine the proficiencies or deficiencies as perceived by educators as related to college readiness levels. Four primary research questions were posed:

- What are high school educators' perceptions of the college readiness of high school seniors?
- What are college educators' perceptions of the college readiness of college freshmen?
- What do high school and college educators feel are major student proficiencies and deficiencies in relation to college readiness?
- Do statistically significant differences exist between public senior high school and public college educators' perceptions of the college readiness of students?
 (Reed & Justice, 2014, p. 39)

The seven areas addressed in the CRS were academic maturity, academic motivation, learning styles, use of library and computers, assertiveness, interpersonal skills, advice seeking, and planning and goal setting. Results indicated that college educators perceived students to be deficient all areas, the exception being an interest in attending college, which was a subset of academic motivation, comfort with stresses, sharing opinion, and self-conduct (assertiveness). The general conclusion drawn by Reed and Justice (2014) was teachers and college faculty perceived student college readiness

levels quite differently, with college faculty perceiving students to be less prepared for college than high school teachers.

Two overarching themes emerged from the literature pertaining to the perceptions of faculty on student college readiness and the associated competencies and deficiencies: student academic skills (specific to mathematics, geography, and English composition) and student noncognitive factors. Each article or study included in the literature review, focused on faculty perceptions of student academic skills, student noncognitive factors, or both. The following categories encompassed by student academic skills were identified as (a) study skills, (b) critical and analytical thinking skills, (c) reasoning and generalization, and (d) foundational content knowledge and skills. Categories encompassed by student noncognitive factors were: motivation (inclusive of overall attitude toward learning) and leadership.

Student academic skills. Academic skills are those skills essential for college success. Conley (2010) posited the importance of student proficiency in core areas such as mathematics, English, and science. This literature review study included faculty perceptions of students' academic skills specific to college-level geography, mathematics, and English composition.

Study skills. University mathematics faculty indicated their students did not know how to study. The faculty expressed their concern in this way, "believe it or not, I would say 90% of my students do not know how to study" (Harms, 2010, p. 43). Faculty indicated that students with adequate study skills performed successfully in mathematics. Concerns were expressed by faculty regarding the inability of students to take notes. Zientek et al. (2014) noted inadequate study skills as a hindrance to student success in

college mathematics, and classified factors resulting in student placement into developmental mathematics as either academic or dispositional in nature, although few mandatory assessments include dispositional factors as part of the assessment instrument.

Critical and analytical thinking skills. Faculty in the Jo and Milson (2013) study identified student deficiencies in analytical thinking skills, specific to college geography. Faculty identified "students' deficiency of higher-order, critical and analytical thinking skills as a significant challenge for their students" (p. 200). More than 40% of the faculty respondents identified a weakness in higher-order and critical thinking skills as problematic for students in college-level geography.

Reasoning and generalization. The ability to reason and generalize are important academic skills for student success in most college courses. A student who can reason well and generalize can make connections and apply concepts learned to a variety of situations (Corbishley & Truxaw, 2010). The ability to reason and generalize was perceived as the weakest of the constructs considered by faculty in the Corbishley and Truxaw (2010) study. Thirteen out of 22 responders identified the ability to generalize and reason as a weakness. Reasoning and generalization have importance in mathematics when students are asked to solve word problems. A respondent in the Corbishley and Truxaw (2010) research noted, "students could not think about mathematics beyond memorization of facts and procedures" (p. 78).

Reasoning and generalization was also identified by Jo and Milson (2013) as problematic for college geography students. Making connections through the process of reasoning and generalization is of tantamount importance in college coursework. To be successful in college geography, students must be able to apply concepts, evaluate causes

and effects, and analyze information. In fact, of the seven college geography goals discussed by Jo and Milson (2013), five involved the ability to reason and generalize. Faculty in this study perceived students' ability to reason and generalize as quite low.

Foundational content knowledge and skills. Jo and Milson (2013) indicated geography professors perceive that their students enter their courses lacking in foundational knowledge. According to the literature, students who demonstrate insufficient background in geography and mathematics often require additional instruction (Jo & Milson, 2013; Zientek et al., 2014). As posited by Zientek et al. (2014), student deficiency in foundational mathematics skills can result in placement in developmental mathematics courses. Poor foundational knowledge and skills in mathematics was also identified as problematic by Corbishley and Truxaw (2010). One participant in the study estimated that "roughly 85% of incoming freshmen place into a remedial mathematics class" (Corbishley & Truxaw, 2010, p. 76).

Mathematics. Foundational knowledge specific to mathematics was found to be problematic when considering student readiness for college-level coursework.

Furthermore, students' lack of foundation mathematics skills was perceived as a primary reason for placement in developmental mathematics (Zientek et al., 2014). Due to students' weak foundational content knowledge, faculty perceived students as underprepared for college mathematics in all three of the studies in which faculty perceptions of student college readiness were examined (Corbishley & Truxaw, 2010; Harms, 2010; Zientek et al., 2014). Student dependence on calculators for simple mathematics computations was a recurring theme in the study by Harms (2010).

Participants in the Corbishley and Truxaw (2010) study felt the overreliance on

calculators by incoming freshmen "suggested that students are not forming a true understanding of the calculations they are performing" with only one noted exception. (p. 81). Time delay since the previous mathematics course taken was noted as the primary reason for student placement in developmental mathematics by 50.6% of the developmental faculty (n = 89) in Zientek et al. (2014). Time delay between the last and current mathematics course may impact what faculty perceive as inadequate foundational content knowledge and skills in mathematics.

English composition. According to Gil (2013), English as-a-Second Language (ESL) students enrolled in community colleges exhibit a passing rate of in college English composition between 8 and 80%. Gil (2013) claimed that students who lack the skills required for English composition, specifically adequate vocabulary, reading, and the associated decoding skills, will not be sufficiently prepared to succeed in later sequential English coursework. Faculty respondents perceived students as unprepared for English composition due to lack of vocabulary and reading comprehension skills, both of which were cited by faculty as essential for student success in most, if not all college-level courses.

Geography. College geography skills include application of concepts, use of geospatial technology, determination of cause and effect, analysis of cultural regions, and making connections between local and global developments (Jo & Milson, 2013).

College geography professors perceived students as underprepared for college geography. A primary cause for student underpreparedness expressed by the faculty was an insufficient background in geography stemming from prior experiences in high school level geography courses.

Student noncognitive factors. Two primary noncognitive factors regarding student preparedness for college identified in the literature were student motivation and leadership. Sixty-percent of the studies made a general reference to the importance of student dispositional factors for student college readiness (Blanchard, 2009; Harms, 2010; Ibezim-Uche, 2013; Jenkins, 2013; Stevens & Miretzky, 2012; Zientek et al., 2014). Student motivation included the general attitude toward learning held by students and responsibility for learning.

Student motivation. Lack of motivation was found to be a contributing factor to student underpreparedness for college. In fact, according to Blanchard (2009), "most faculty believe the reason for the growth of student underprepared students is due to student motivation, rather than the student's background or available resources" (p. iii). Faculty perceived students as "not interested in doing well in school anymore" (Blanchard, 2009, p. 73). Seventy-five percent of the community college faculty participants in a study by Ibezim-Uche (2013) perceived students as having merely "average" motivation, as opposed to above average motivation. University faculty in Harms' (2010) study also cited motivation as problematic for students enrolled in college mathematics and expressed their concern about motivation and poor time management. Faculty in Harms' (2010) study expressed their concerns about student motivation. It was their perception that for students to be successful in algebra, students needed to be "self-motivated" (p. 44).

Leadership. Leadership may include participation in any area of a student's background such as church, sports, and non-educational groups. Students demonstrating leadership were identified in the literature as students who were willing to participate in

classroom discussions and express their opinions in a classroom setting (Reed & Justice, 2014). Faculty perception of leadership differed in the literature. Forty-one percent of faculty in a study by Jenkins (2013) perceived male students as competent in possessing leadership traits, while college faculty in a study by Reed and Justice (2014) perceived students as deficient in this area. The difference may have been because Jenkins' respondents focused primarily on African American male students, while the study by Reed and Justice (2014) focused on a larger and more diverse population of students.

Discussion and Conclusions

The purpose of this literature review was to examine the perspectives of postsecondary faculty regarding student college readiness and the associated competencies and deficiencies of students enrolled in 2- and 4-year U.S. colleges. Five dissertations and five journal articles were included. There is scant literature devoted to faculty perceptions of college readiness of first-year college students (Stevens & Miretzky, 2012). The limited amount of literature regarding faculty perceptions of student college readiness is perplexing. Faculty perception of student college readiness is vital in understanding factors that contribute to student persistence, placement in developmental education, and the improvement of policies and programs impacting student college success.

Two overarching themes emerged regarding the perceptions of faculty on student college readiness (RQ1) and the associated competencies and deficiencies (RQ2). The two themes were: student academic skills and student noncognitive factors. Students were perceived by faculty as generally underprepared for college (Blanchard, 2009; Ibezim-Uche, 2013). Furthermore, student academic skills as well as noncognitive

characteristics were perceived as declining (Stevens & Miretzky, 2012). An exception to many of the studies was offered by Jenkins (2013) where faculty perceived African American male students as determined, motivated, and self-reliant.

Postsecondary faculty perceived students as having weaknesses in study skills, critical and analytical thinking, and the ability to generalize and reason. Students also lacked foundational content knowledge and skills needed for college mathematics, geography, and English composition (Blanchard, 2009; Corbishley & Truxaw, 2010; Harms, 2010; Ibezim-Uche, 2013; Jo & Milson, 2013; Zientek et al., 2014). Collegelevel faculty based their evaluation of student preparedness on higher-order thinking skills and students' ability to express their ideas critically. Reed and Justice (2014) stated "if this ability is not detected in a student, then college faculty will judge the student as not being college ready" (p. 42). The ability to think critically and analytically affects student success in most all academic areas. Critical and analytical thinking, and the ability to generalize and reason enables students to make connections and solve problems. Boylan (2002) posited a lack of good critical thinking skills often was the cause for the failure of students who are underprepared for college-level work. Boylan (2002) suggested that students placed in developmental education courses would benefit more from instruction that encouraged students to think about the application and transfer of content and concepts, rather than instruction limited to skills alone. However, Corbishley and Truxaw (2010), posited that although reasoning and generalization were considered "the most important construct for entering freshmen" it was perceived by mathematics faculty as the "lowest in terms of perceived student competencies" (p. 82). Blanchard (2009) agreed that the underpreparedness of students was due to poor critical

thinking skills. She attributed the inability of students to think critically to "how the high schools no longer prepared the students for the critical and analytical work required in college" but tended to "teach to the tests on which their schools are rated" (p. 74). Even though all states in the U.S. have implemented some form of college readiness standards, Jo and Milson (2013) contended that an expectations gap exists between secondary and postsecondary educators. It was this expectations gap that hindered specific content knowledge and skill acquisition needed for college preparedness and ultimately student success.

The overall perception of college mathematics faculty found in the literature was that students were not ready for college-level mathematics (Corbishley & Truxaw, 2010; Harms, 2010; Zientek et al., 2014). Mathematical readiness was defined by Corbishley and Truxaw (2010) as "the degree to which a student is predicted to succeed in the college environment in mathematics" (p. 72). High enrollments in developmental mathematics support the perspectives of mathematics faculty that students are underprepared for college-level mathematics. Due to the open-access policies of many community colleges, this proves to be more problematic for 2-year colleges than 4-year colleges (Zientek et al., 2014). Remedial or developmental coursework can "lengthen the time for and increases the cost of attaining a postsecondary degree" (Zientek et al., 2014, p. 68). In fact, these issues (time and cost) are the basis for a major reform movement in developmental education (Complete College America, 2011). However, because the reform movement is relatively new, the extent to which it will effectively address these concerns is not known.

Jo and Milson (2013) indicated student college readiness in geography was identified as "a set of knowledge and skills (goals) important for success in entry-level college geography courses" (p. 194). They emphasized how faculty perceptions of student entrance proficiencies in geography influenced the instructional pace of their course. Both teachers and professors perceived the need to "start at the beginning with geography content skills, rather than building upon prior knowledge of students" (Jo & Milson, 2013, p. 202). Jo and Milson (2013) attributed the difficulty to differing curricular priorities of college faculty and teachers as well as inattention to the importance of geography when considering college readiness initiatives.

Student academic success in English composition is dependent upon adequate vocabulary, reading and decoding skills, as well as basic English writing skills. In a study by Gil (2013), English composition faculty at a community college perceived ESL students deficient in each of the three areas. The study results indicated that inadequate vocabulary and the lack of reading comprehension skills were the prime factors influencing the students' inability to write English essays. Because ESL students are a growing population in community colleges and universities nationwide, Gil's (2013) study has ramifications for how the challenges of student college readiness must be met. Faculty who taught ESL students were not the only group that perceived students as underprepared in writing. One respondent in Blanchard's (2009) study commented that students "cannot make a coherent sentence or paragraph" (p. 67). Another faculty member admitted, "I no longer require essay writing on exams...I have just given up" (Blanchard, 2009, p. 67). Goldschmidt and Siegfried (2008) posited that gaps in understanding exist among college educators and the ESL students regarding academic

preparedness. For this reason, many ESL students experience failure during their first semester in college and are consequently placed in developmental education programs (Goldschmidt & Siegfried, 2008).

Student noncognitive weaknesses such as poor motivation and work habits were described by 67% of the faculty in Zientek et al. (2014). Faculty cited students for lacking leadership skills (Reed & Justice, 2014). Leadership skills were among eight noncognitive variables identified by Sedlacek (2011) suggested for use in conjunction with standardized tests for student college admissions. Sedlacek (2011) posited, "While noncognitive variables are useful for all students, they provide viable alternatives in fairly assessing the abilities of people of color, women, international students, older students, students with disabilities, or others with experiences that are different" (p. 191)

There were a few studies that identified areas of entering student competency, namely Corbishley and Truxaw (2010) and Jenkins (2013). Competencies identified were use of technology and leadership, respectively. But generally, the literature offered descriptions of student deficiencies. The primary examples were Corbishley and Truxaw (2010) who cited inadequate foundational knowledge and Jo and Milson (2013) who posited students' lack of geographical content knowledge as lacking. In addition, Gil (2013) identified poor vocabulary and decoding skills as deficits. Throughout the literature, faculty agreed that students were underprepared for college. However, it should be emphasized that conclusions and interpretations should be made with caution as the literature base is quite small.

Recommendations for Future Research

An understanding of faculty perspectives on student college readiness can provide insight into factors that hinder student success or otherwise serve as barriers to higher education. Through further research, barriers to higher education may be identified and minimized. Even though administrators and stakeholders cannot control some situational factors impeding student success, an awareness of these factors could, through further study, enhance the understanding of the challenges faced by underprepared students as they enter college for the first time. This may improve the chances of their success and encourage faculty and administrators to consider services and actions that may be helpful.

Zientek et al. (2014) identified prior mathematics course time-lag as a challenge. More research in this area may support structuring and aligning mathematics courses to prevent student math skills atrophy. Negative faculty perceptions of student competencies and deficiencies determine, in part, how faculty develop instruction and how they relate to their students. A major consequence of the faculty perception of student underpreparedness is that instruction must begin at a "square one mentality" (Jo & Milson, 2013, p. 201). This limits instruction to simply assisting students with the development of foundational skills, rather than building on prior knowledge. Given this finding, broader studies about faculty perceptions of student critical thinking and leadership skills are in order along with research that identifies effective practice for dealing with student challenges in these areas. These are also likely high impact areas of focus when providing professional development opportunities for faculty.

REFERENCES

- ACT®. (2013). ACT national curriculum survey®. 2012: Policy implications on preparing for higher standards. Iowa city, IA: Author. Retrieved from http://files.eric.ed.gov/fulltext/ED542018.pdf
- ACT[®]. (2014). The condition of college and career readiness 2014. Iowa City, IA:

 Author. Retrieved from

 https://www.act.org/content/dam/act/unsecured/documents/CCCR14
 NationalReadinessRpt.pdf
- Adams, C. (2014). *ACT® scores virtually unchanged, but participation hits new high*.

 Retrieved from http://www.edweek.org/ew/articles/2014/08/27/02act.h34.html
- Arnold, K. D., Lu, E. C., & Armstrong, K. J. (2012). The ecology of college readiness [Special Issue]. *ASHE Higher Education Report*, *38*(5), 1-138. Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/aehe.v38.5/issuetoc
- Attewell, P., Lavin, D., Domina, T., & Levey, T. (2007). New evidence on college remediation. *The Journal of Higher Education*, 77, 886-924. https://doi.org/10.1353/jhe.2006.0037
- Blanchard, B. R. (2009). Faculty perceptions of underprepared students in community college (Doctoral Dissertation). Retrieved from ProQuest Dissertations & Theses Global. (Order No. 3369810).
- Boylan, H. R. (2002). What works: Research-based best practices in developmental education. Boone, NC: National Center for Developmental Education.

- Byrd, K. L., & MacDonald, G. (2005). Defining college readiness from the inside out:

 First-generation college student perspectives. *Community College Review*, *33*(1),
 p. 22- 37. https://doi.org/10.1177/009155210503300102
- Camara, W. (2013). Defining and measuring college and career readiness: A validation framework. *Educational Measurement: Issues and Practice*, *32*(4), p. 16-27. https://doi.org/10.1111/emip.12016
- Complete College America (2011). *Time is the enemy*. Washington, DC: Retrieved from http://www.completecollege.org/docs/Texas.pdf
- Conley, D. T. (2007). *Redefining college readiness*. Educational Policy Improvement Center. Eugene, OR: Educational Policy Improvement Center. Retrieved from http://files.eric.ed.gov/fulltext/ED539251.pdf
- Conley, D. T. (2008). Rethinking college readiness. *New Directions for Higher Education*, 2008(144), 3-13. https://doi.org/10.1002/he.321
- Conley, D. T. (2010). *Replacing remediation with readiness*. (Working Paper). Retrieved from http://files.eric.ed.gov/fulltext/ED533868.pdf
- Corbishley, J. B., & Truxaw, M. P. (2010). Mathematical readiness of entering college freshmen: An exploration of perceptions of mathematics faculty. *School Science* & *Mathematics*, 110(2), 71-85. https://doi.org/10.1111/j.1949-8594.2009.00011.x
- Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.). Thousand Oaks, CA: Sage.
- Duckworth, A. L., & Yeager, D. S. (2015). Measurement matters: Assessing personal qualities other than cognitive ability for educational purposes. *Educational*

- Researcher, 44, 237-251. Retrieved from http://journals.sagepub.com/stoken/rbtfl/hixxiPxVRpaxg/full
- Gil, A. C. (2013). Community college English composition instructors' perceptions regarding the college writing readiness of ESL students (Doctoral Dissertation).

 Retrieved from ProQuest Dissertations & Theses Global. (Order No. 3608813).
- Glaser, B. G., & Strauss, A. (1967) *The discovery of grounded theory: Strategies for qualitative research.* Chicago, IL: Aldine Publishing Co, 1967.
- Goldschmidt, M., & Seifried, T. (2008). Mismatched expectations among developmental ESL students in higher education. Research and Teaching in Developmental Education, 24(2), 27-38. Retrieved from http://www.jstor.org/stable/42802308
- Harms, K. (2010). Effectively preparing college bound students for college-level mathematics: University math faculty perceptions (Doctoral Dissertation).

 Retrieved from ProQuest Dissertations & Theses Global. (Order No. 3427696).
- Hoyt J. E., & Sorensen, C. T., (2001). High school preparation, placement, testing, and college remediation. *Journal of Developmental Education*, 25(2), 26-33.

 Retrieved from http://eric.ed.gov/?id=EJ641633
- Ibezim-Uche, S. (2013). A predictive study of community college faculty perceptions of student academic preparation, work ethics, and institutional support (Doctoral Dissertation). Retrieved from ProQuest Dissertations & Theses Global. (Order No. 3592599).
- Jenkins, S. K. (2013). Faculty perceptions of, and experiences with, African American male students at a community college (Doctoral Dissertation). Retrieved from ProQuest Dissertations & Theses Global. (Order No. 3589803).

- Jo, I., & Milson, A. J. (2013). College readiness for geography: Perceptions of high school teachers and college faculty. *Journal of Geography*, 112, 193-204. https://doi.org/10.1080/00221341.2012.761718
- Johnson, H. (2010). *Transition from high school to college* (Research Brief). Education Partnerships, Inc. Retrieved from http://files.eric.ed.gov/fulltext/ED538705.pdf
- Koslow Martin, J. E. (2010). First -year college students and faculty: A comparison of expectations for success (Doctoral Dissertation). Retrieved from ProQuest Dissertations & Theses Global. (Order No. 3404157)
- Olson, L. (2007). Diplomas count: Ready for what? Preparing students for college, careers, and life after high school. Education Week, 26(40), 7-8, 10, 12.

 Retrieved from http://www.edweek.org/media/ew/dc/2007/40national_SGB07.pdf
- Onwuegbuzie, A. J., Dickinson, W. B., Leech, N. L., & Zoran, A. G. (2009). A qualitative framework for collecting and analyzing data in focus group research.

 *International Journal of Qualitative Methods, 8(3), 1-21. Retrieved from http://ijq.sagepub.com/content/8/3/1.1.full.pdf+html
- Reed, E., & Justice, M. (2014). College and high school educators' perceptions of current college readiness levels. *International Journal of Humanities and Social Science*, *4*(14), 37-43. Retrieved from http://www.ijhssnet.com/journals/Vol_4_No_14_December_2014/3.pdf
- Saxon, D. P., & Morante, E. A. (2014). Effective student assessment and placement:

 Challenges and recommendations. *Journal of Developmental Education*, *37*(3),

 24-30. Retrieved from http://www.nade.net/site/documents/articles/SaxonMorante

 _ArticleV37.pdf

- Sedlacek, W. E. (2004). Beyond the big test: Noncognitive assessment in higher education. San Francisco, CA: Jossey-Bass.
- Sedlacek, W. E. (2011). Using noncognitive variables in assessing readiness for higher education. *Readings on Equal Education*. 25, 187-205. Retrieved from https://cerpp.usc.edu/files/2013/11/UsingNCV-Sedlacek.pdf
- Stevens, S. & Miretzky, D. (2012). Faculty's perceptions of students' characteristics: A for effort please. *Current Issues in Education*, *15* (2), 1-13. Retrieved from cie.asu.edu/ojs/index.php/cieatasu/article/download/875/330
- Zientek, L. R., Schneider, C. L., & Onwuegbuzie, A. J. (2014). Instructors' perceptions about student success and placement in developmental mathematics courses.

 Community College Enterprise, 20(1), 67-84.

CHAPTER IV

PERCEPTIONS OF SECONDARY AND POSTSECONDARY FACULTY ON STUDENT COLLEGE READINESS

This dissertation follows the style and format of *Research in the Schools (RITS)*.

Abstract

The purpose of this phenomenological study was to identify the perceptions of secondary and postsecondary faculty on student college readiness and the associated competencies and deficiencies. Participants were employed as instructors with five or more years of experience in mathematics, science or English at an accredited public Texas high school, Texas 4-year university, or community college. Individual interviews and focus group sessions were conducted. Emergent themes regarding student college readiness secondary and postsecondary faculty: soft skills, communication, and institutional programs and supports. High school teachers held more optimistic views of student college readiness than did postsecondary faculty.

KEY TERMS: Soft skills, student motivation, communication, institutional programs, academic skills, student learning, grades, college knowledge, developmental education, emotional intelligence.

CHAPTER IV

PERCEPTIONS OF SECONDARY AND POSTSECONDARY FACULTY OF STUDENT COLLEGE READINESS

Introduction

During the last few decades, completing some form of postsecondary education has become critical for students to successfully participate in a global economy.

However, many students who are college eligible are not ready for college. (Barnes & Slate, 2013; Cohen, 2008; Conley 2010a). Meeting college admission requirements is not homologous with being prepared to successfully perform college-level work (Cline, Bissell, Hafner, & Katz, 2007). Several reasons for the lack of student readiness exist; student skill deficiencies, such as inexperience with informational reading, persuasive writing and research, mathematical problem solving, and reasoning (Olson, 2007). Other factors include misalignment between the expectations of secondary faculty and postsecondary faculty regarding student college readiness, student failure to take college preparatory classes, lack of academic rigor at the secondary level, and grade inflation (Hoyt & Sorenson, 2001).

There has been a shift in the focus of college readiness in educational literature during the past decade. The paradigm has shifted from students qualifying for admissions to truly being prepared to succeed once enrolled. There are vast differences between scoring well on admissions tests, taking the appropriate coursework, getting good grades, and the acquisition of the prerequisite skills and behaviors necessary to succeed once enrolled in higher education. In a more general sense, the term college readiness serves as an umbrella for a "multidimensional set of skills, traits, habits, and

knowledge that students need to enter college with the capacity to succeed once they are enrolled" (Arnold, Lu, & Armstrong, 2012, p. 2). Though it is a prevalent research topic, no commonly accepted definition for college readiness exists (Porter & Polikoff, 2012).

According to the ACT® National Curriculum Surveys® (ACT®, 2009, 2013), the reasons for the differences in faculty expectations can be attributed to the how secondary and postsecondary faculty evaluate their students' college readiness. Postsecondary faculty perceive their incoming first-year students to be far less academically prepared than do secondary faculty. For instance, in 2009 only 26% of college faculty reported their students were "well" or "very well" prepared for college-level work in their content area. In 2012 the percentage of students reported as well prepared for college had not changed. In fact, the percentage of college faculty who taught developmental (remedial) courses, reported that 26% of their students were "well or "very well" prepared for college-level work (ACT®, 2013, p. 5).

First generation students are at a greater risk for being underprepared for college as opposed to students who may have come from backgrounds in which one or both parents attended college. Areas in which first generation students may require additional supports are assistance in applying to college, encouragement to participate in rigorous coursework while still in high school, clarification of student misconceptions regarding the college selection process, navigating financial aid and scholarships, and self-esteem (Reid & Moore, 2008). At best, college readiness is a complex term inclusive of both internal behavioral factors, and external environmental factors. There is no one standard currently in use identifying students who are ready or who are not ready for college (Porter & Polikoff, 2012). College instructors hold a more critical view of student

college readiness than do high school faculty. A mere 18% of college professors who were surveyed felt that their students had arrived well prepared for college and only 3% agreed their students were very well prepared (Achieve, 2005). High school teachers have been criticized by college faculty as doing a less than adequate job in preparing students for college, particularly in mathematics and science. College faculty report that they spend a "significant amount of time teaching material they feel should have been learned in high school" (Achieve, 2005, p. 2).

Statement of the Problem

Gaps in the expectations for student college readiness exist between secondary and postsecondary educational systems. In part, the difficulty is caused by the absence of a nationally recognized definition of college readiness. Even though many educational reforms have been directed toward preparing students for college, there has been little communication between secondary and college faculty involving college readiness (Kirst, 2004). Until the preparation-expectation gap is narrowed, it is likely that students will continue to arrive underprepared for college-level work resulting in low rates of retention and high rates of remediation.

Purpose of the Study

The primary purpose of this study was to examine the perceptions of secondary and postsecondary education faculty regarding student college readiness. The secondary purpose of this study was to compare the perceptions of secondary and postsecondary faculty regarding student competencies and deficiencies pertaining to college readiness. Through the non-random, purposeful selection of secondary and postsecondary informants, faculty perceptions of student college readiness, were identified.

Educational Significance of the Study

Consideration of secondary faculty and postsecondary faculty perceptions of college readiness can help inform practice for the purpose of closing the college readiness-expectation gap. It is critical for secondary and postsecondary faculty to share common, realistic expectations of what it means to be college ready to foster student success. This study advanced toward providing a common definition of college readiness between secondary and postsecondary faculty. School administrators, faculty, and lawmakers might use the findings from the study to inform decision making.

Conceptual Framework

Congruity theory (Osgood & Tannenbaum, 1955) was used in framing this investigation. Congruity theory suggested that if there are two sets of conflicting concepts requiring judgments, the constituents will experience pressure to change (Osgood & Tannenbaum, 1955). Congruity theory as it was applied to this study, facilitated the understanding of the multiple realities of secondary faculty and postsecondary faculty regarding students' college readiness. According to congruity theory, pressure towards attitude change is generated by incongruity. Through the explicit identification of incongruences between secondary and postsecondary faculty on college readiness expectations, the motivation for change was provided. The more consistent the goals and perceptions of the faculty members, the more success students are likely to experience.

Limitations

There are a variety of internal and external threats to the credibility of a research study. Three potential threats to credibility in this study were identified as (a) descriptive

validity, (b) interpretive validity, and (c) researcher bias (Onwuegbuzie & Leech, 2007). A primary goal in this study was to describe accurately faculty perceptions of student college readiness. Due to the participants' shared memory of specific examples and events, as well as my own, descriptive validity could have been threatened. To reduce this threat, I chose to audio record the interviews and employ member-checking.

Member-checking is an important strategy for accurately portraying meaning (Johnson & Christensen, 2012). The use of member-checking in this study allowed the participants to determine the level of accuracy with which I reported their experiences. In order to enhance the accuracy and overall validity of the study, as recommended by Creswell (2009), an external auditor was used. One of my dissertation co-chairs served in this capacity.

Interpretive validity pertains to "the extent to which a researcher's interpretation of an account represents an understanding of the perspective of the group understudy and the meanings attached to their words and actions" (Onwuegbuzie & Leech, 2007, p. 238). The process of member-checking was used to reduce the threats to interpretive validity. Additionally, participant quotes were recorded to further support accurate interpretations of their responses.

Researcher bias was a threat to the external validity of the study due to the fact, the researcher has been a secondary educator for 25 years. Several strategies were used to reduce the threat of researcher bias. I recorded my thoughts, opinions, and feelings in a reflective journal to identify any biases that may have impacted either the analysis or interpretation of the findings. I did not attempt to generalize the findings, but relied upon

the use of qualitative data for understanding the processes prevalent within the localized educational settings as recommended by Onwuegbuzie and Leech (2007).

Research Questions

The following questions form the basis for study 3:

- 1. What are the perceptions and beliefs of secondary and postsecondary faculty on student college readiness?
- 2. How do the perceptions and beliefs of secondary and postsecondary faculty compare?

Literature Review

Secondary and postsecondary faculty expect students to have acquired a host of academic and behavioral skills for successful participation in high school and college-level courses. The expectations for engagement, independent work, motivation, and intellectual development of secondary faculty are frequently less exacting than the expectations of postsecondary faculty (Conley, 2007b). Postsecondary faculty expect students to have acquired a diverse skill set once they reach college. Students are expected to be responsible for their own learning and mastery of prior content knowledge often not present at the secondary level (Conley, 2010b).

A recurring theme cited by Reid and Moore (2008) is the need for K-12 systems to collaborate to create and align curriculum encompassing skills required for student success in college such as time management, study skills, and socialization. Efforts at both the secondary and postsecondary levels would require faculty, counselors, administrators, and student support service professionals to identify and support first generation students in their transition from high school to college.

Another perspective on the cause for the lack of preparedness, according to some college readiness researchers, is the implementation of a federally initiated one-size-fitsall agenda resulting in students who either "do not graduate from high school or graduate, but are not academically prepared" (Barnes & Slate, 2013, p. 1). Postsecondary faculty attempt to meet the needs of underprepared students through remediation. However, Barnett and Fay (2013) posit that remediation occurring while students are simultaneously taking college coursework is less effective than when offered during the summer as students are transitioning from high school to college. Most students requiring remediation have been identified through some form of standardized testing, for example a high school exit level exam such as the State of Texas Assessment of Academic Readiness (STAAR), or the Texas Success Initiative Assessment (TSIA). However, placement via standardized testing is a highly-debated issue in college readiness literature. Not all college readiness experts condone the use of standardized test scores as the sole placement indicators for students entering college (Saxon & Morante, 2014). College readiness is best evaluated using multidimensional methods that include cognitive and noncognitive metrics (Conley, 2005, 2007a; Sedlacek, 2004, 2008, 2011).

Method

A phenomenological approach was chosen to explore the perceptions of secondary and postsecondary faculty on student college readiness through obtaining information from key participants in their respective educational environments.

Phenomenological approaches allow researchers seek to understand meaning in both events and human interchanges (Glaser & Strauss, 1967; Lincoln & Guba, 1985). Lester

(1999) described phenomenological methods as "particularly effective as bringing to the fore the experiences and perceptions of individuals from their own perspectives" (p. 1). Although much is known regarding student perceptions of college readiness, little is known about the faculty perceptions of student college readiness.

Researcher's Role

As a secondary science teacher for 25 years, I have focused on preparing students for college and community college. In addition, I have been enrolled for the last four years as a student at the university which served as one of the sites for this study. As the key instrument in this study, an awareness of my personal biases was essential to avoid influencing the research process (Creswell, 2009).

Context

The setting for the study was my own high school campus and the college campus at which I am currently enrolled. Two community colleges, located within the Central and Southwestern U.S were also included in the study. The central Texas high school had a student population of approximately 2,500 students, the east Texas state 4-year university had an enrollment of approximately 19,000 students, and the two community colleges each had student enrollments exceeding 30,000 students.

I selected my own high school campus as the site for the interviews involving secondary faculty. I have been a faculty member on this campus for the last nine years, and have established a trusting relationship with the faculty members and administrators. I selected this campus because of this relationship with the faculty and our shared experiences. I felt the faculty would be more open and honest to sharing the challenges and opportunities inherent in preparing students for college. A disadvantage was that I

may have not seen or heard what the faculty were saying, but instead, seen or heard what I believed to be true because I knew the school. This can be a disadvantage found in both the secondary and postsecondary studies.

I selected the college in which I am currently enrolled as a doctoral student for one of the sites for the study involving postsecondary faculty. Having been a student at this specific college for the last four years, I have established a professional and congenial relationship with my professors and peers. I felt the university setting offered a positive and supportive environment in which to undertake the study. Further, because the faculty knew of my research interests, they were more willing to share their experiences on the topic of student college readiness.

Two community colleges, located within the Central and Southwestern U.S were also included in the study. The three faculty who taught at these institutions, were currently or formerly enrolled in the doctoral program at the university at which I attend. These faculty members had an interest in my research topic and were willing to share their perspectives. A potential disadvantage was my personal relationships with and preconceived perceptions of university and community college faculty beliefs on student college readiness and the associated competencies and deficiencies.

Participants

Creswell (2007) indicated that a purpose of qualitative research is to gather detailed information from several individuals. As recommended by Onwuegbuzie and Leech (2007), a phenomenological study should consist of between three to 10 participants. I anticipated that by inviting 12 faculty at minimum, I would have an

adequate number of participants based on the recommended range. However, I received more acceptances than expected.

Each of the participants was currently employed as classroom teacher in mathematics, science or reading/writing at an accredited public Texas high school or an accredited Texas 4-year university, or at a Central or Southwestern U.S community college. Each participant met the criteria of having five or more years of teaching experience at the high school or college level.

Faculty who taught science, mathematics, and reading/writing were selected because these three areas are most often the major focus in preparing students for college. The high school faculty who were selected taught 11th or 12th grade science and advanced placement (AP) science, mathematics, or writing/reading and the college faculty chosen taught freshman science, mathematics, or writing/reading due to their direct experience with students transitioning from high school to college.

The college faculty who were selected taught a variety of courses including college level mathematics, developmental mathematics, and developmental English.

Faculty who taught science, mathematics, and reading/writing were selected because of their direct experience with college freshmen enrolled in subjects which frequently present challenges to college students.

The participants were described using pseudonyms to ensure confidentiality.

Brilliant Betty was an advanced (pre-calculus) mathematics teacher. She had been teaching advanced mathematics in public high school for over seven years. At the time of the interview, Betty was pursuing a doctoral degree in Educational Leadership from a public state university located in Texas. Daring Dan was a senior level English teacher

with both public middle school and high school experience. Daring Dan worked intensively with high school seniors who were enrolled his senior level English course.

The Fantastic Five were a focus group consisting of five secondary faculty who taught high school science and mathematics. Faculty were referred to individually as Sensational Randy, Scientific Sarah, Analytical Pam, Magnificent Helen, and Heroic Victor. Sensational Randy taught advanced Anatomy and Physiology, Scientific Sarah taught AP Biology, Analytical Pam taught AP C Physics (calculus-based), Magnificent Helen taught AP Calculus, and Heroic Victor taught AP Chemistry. The pseudonyms for the postsecondary faculty were Courageous Tom, Dynamite Henry, Beatific Larry, Marvelous Helena, and Motivated Paula. Motivated Paula and Marvelous Helena taught developmental mathematics at a community college, Courageous Tom taught developmental English at a community college, and Dynamite Henry and Beatific Larry taught college level mathematics at a 4-year college.

Data Collection

DiCicco-Bloom and Crabtree (2006) described a semi-structured interview approach as one centered on predesigned open-ended questions allowing other questions to emerge as the dialogue between the researcher and participants unfolds. Interviews are advantageous because they allow the researcher to control the line of questioning, and afford rich descriptive information, but have limitations including researcher presence which can result in biased responses, filtered information obtained from participants, and variation in the ability of the participants to articulate their perceptions (Creswell, 2009). This study employed semi-structured interviews to obtain rich descriptions of the perceptions and beliefs of secondary faculty and postsecondary faculty on student college

readiness, minimizing the influence of the researcher on the participants' responses, and facilitating the emergence of additional questions as the interview unfolded (DiCicco-Bloom & Crabtree, 2006; Johnson & Christensen, 2004). Face-to-face interviews were selected for interviews with the secondary faculty for the sake of convenience of the respondents at the high school campus. Telephone interviews were offered for the convenience of the respondents at the college and community college campuses.

Interviews lasted between 30 and 60 minutes. Each interview was recorded, transcribed, and analyzed for data relevant to the research questions pertaining to student college readiness and the related competencies and deficiencies described by the participants during the interviews. Upon completion of the study, results were shared with all stakeholders.

Instrumentation. As the qualitative researcher in this study, I served as the primary instrument. Open-ended interview questions were designed to solicit participant perceptions and beliefs regarding student college readiness and related competencies and deficiencies. The interview questions were developed to allow participants to elaborate, but restrictive enough to maintain focus on faculty perspectives and beliefs of student college readiness and associated competencies and deficiencies. An interview protocol was drafted and peer reviewed to maintain clarity and connection to the research questions (Lincoln & Guba, 1985). As recommended by Creswell (2009), an interview protocol was used for asking questions during the interviews. Components included setting, date, interviewee name, 4-5 questions, followed by probes to solicit further detail, spaces for recording responses, and a thank you statement (Creswell, 2007). Although the open-ended interview questions were fundamentally the same for each participant, a

semi-structured interview allows flexibility in the order and the topics addressed by the researcher (Johnson & Christensen, 2012). Questions were adjusted as needed to solicit deep, rich, contextual descriptions from the participants. Individual interviews and a focus group interview was conducted. According to Kruger and Kasey (2009), focus groups are advantageous when time is limited and/or interviewees may be reluctant to share their opinions through one-on-one interviews. The complete interview protocol is included in the Appendix A.

Data Analysis

After data were collected from interviews with secondary and postsecondary faculty, they were divided into "meaningful analytical units" by reading each line of the text and looking for specific meanings relevant to perspectives of faculty on student college readiness (Johnson & Christensen, 2012, p. 520). Each "segment" of text consisted of words, or single sentences and passages that were considered central to the research (Johnson & Christensen, 2012, p. 520). Each segment of data was then identified using descriptive words or category names during the process of coding. Because the codes or category names were developed directly from the data, they were considered "inductive codes" (Johnson & Christensen, 2012, p. 525).

Once the categories were identified, they were examined to discover what themes had emerged across the interviews (Johnson & Christensen, 2012). During the final stage, the data and results emerging from the previous stages were reflected upon to identify the central ideas (themes). Peer debriefing was used to enhance the accuracy of the study. According to Creswell (2009), "this strategy—involving an interpretation beyond the researcher and invested in another person—adds validity to an account" (p.

192). An external auditor was used for reviewing the entire project. In this way, an objective assessment was made both throughout the research process and upon its conclusion (Creswell, 2009). One of my university dissertation co-chairs peer debriefed the study and the other served as an external auditor to enhance its accuracy and overall validity. Theoretical saturation occurred once no new information emerged from the data.

Findings from Secondary Faculty

Both individual and focus group interviews were conducted to gather data from secondary faculty. The key themes that emerged following analysis of secondary faculty perspectives on student college readiness were: soft skills, student motivation, role of the teacher, communication, institutional programs and support, academic skills, instructor responsibilities, student learning, and grades.

Soft skills. Conley (2010a) identified soft skills as academic behaviors or self-management skills reflecting a "greater student self-awareness, self-monitoring, and self-control over a series of processes and behaviors necessary for academic success" (p. 39). Soft skills as described by interview participants were congruent with Conley's (2010a) definition. The categories associated with the theme "soft skills," included ability to organize, time management, planning, critical thinking, homework, study skills, maturity, getting help, student choices, taking initiative, and perseverance. The categories were each defined and sample comments from select categories were provided.

Ability to organize centered on prioritizing tasks and schedules. Time management meant balancing work, school, and community activities. Planning referred to both short and long-term plans. Critical thinking was indicated by the ability to take

information and apply it in a new context. Homework completion was considered an essential task for college success. Study skills were skills students needed to be able to work and learn both independently and in groups. Maturity was the seriousness with which students approached their study of mathematics. Getting help meant students knew where and how to obtain assistance or academic supports. Student choices were conscious decisions students made to be or not to be college ready. Taking initiative was defined as taking ownership for the learning on the part of the student. Perseverance equated to the term "grit," coined for use in educational circles by Duckworth and Yeager (2015).

Taking initiative was cited by each of the Fantastic Five as problematic when it came to student work. Magnificent Helen described the lack of initiative on the part of her students this way:

They need to start learning how to help themselves without us telling them, "Oh you missed this, this is how you do it." So, I'd say take initiative in their learning and this would help them in that field, I would assume.

Sensational Sam emphatically agreed and expressed his thoughts by saying, "take responsibility if they (students) miss a class or the work that is done!"

The Fantastic Five agreed it was essential not to give up when pursuing goals and dreams. Scientific Sarah had this comment regarding perseverance:

I think grit is what they really need. They need to be able to stick with it. They need to be able to find a way to, as she was saying, to meet that challenge and have the confidence not to give up.

Student motivation. The theme "student motivation" was considered a central component of student college readiness (Abstetar, 2013; Reed & Justice, 2014; Sanoff, 2006). Student motivation was defined as the internal drive students had or lacked to complete successfully the task at hand. Categories associated with the theme "student motivation" included, figuring it out, self-advocacy, and students are driven, Advanced Placement (AP) students, using resources, easy-path mindset, and hand-holding.

Figuring it out, as described by faculty, meant students would benefit from struggling with challenging content, assignments or problems. Self-advocacy meant students could represent and voice their own needs regarding their education. Students are driven referred to students who were intrinsically motivated and inspired by learning. Advanced Placement (AP) students were students who chose coursework that upon completion, would potentially allow them to earn college credit for their efforts. Using resources indicated students' ability to locate, access, and use materials, programs, and services that would assist them in meeting their educational goals. Easy-path mindset referred to students taking the easiest route to complete a task, assignment or problem. Hand-holding was the provision of an excess of support to students when they were faced with major or minor challenges, such as a difficult assignment, problem or question.

Secondary faculty cited student motivation as a critical component for student success. Motivation plays an important role in the shaping of instructor expectations for students. Expectations are particularly relevant to student college readiness because according to Stipek (2002), when teachers have low expectations for their students, low expectations become a self-fulling prophecy resulting in low levels of student motivation.

It was the consensus of the focus group, that students adopted what they called an easy-path mindset to difficult or challenging material often found in upper level science and mathematics classes. Analytical Pam, who taught AP Physics, explained it this way:

I think that there's a (laugh) a problem with students thinking that because something is hard that they couldn't like it, I guess. So, students will say, "physics is hard" or "I don't like physics" and if you ask them why they'll say "it's because it is hard."

Hand-holding was viewed by the secondary faculty focus groups as propagating and facilitating the easy-path mindset. For example, Analytical Pam spoke openly on the subject:

Those kids who have relied on those supports throughout their high school career and have made it a very successful career in high school by using all those supports and then feel, they might feel they are lacking because they don't have as many people holding their hand through college.

Role of the teacher. Teachers play a central role in preparing students for college. They often serve as role models, sources for information about the application process, student advocates, and instructional coaches. According to Rivkin, Hanushek, and Kain (2005), the effect of a teacher on student learning is greater than student ethnicity or family income, school attended by student, or class size. The theme "role of the teacher" was described as the duties, voluntary and assigned, taken on by teachers when working with students in their high school classes and in preparing for college.

The "role of teacher," encompassed, the categories of teacher influence, teacher support, communication, concerns, working with students, a systems approach to

readiness, and strengthening skills. Teacher influence was described as the impact teachers had upon, not only student learning, but the decisions made by students.

Teacher support referred to the agents primarily responsible for preparing students for college. Communication described written and oral exchanges between student and teachers as well as students and other adults about college preparation. Concerns were areas such as, student failure (in life after high school), about which teachers worried.

Working with students was defined as helping students in multiple areas, academic and emotional, as they progressed through their high school career. A systems approach to readiness meant a premeditated campus-wide program of college readiness to be implemented and maintained. Strengthening skills was described as scaffolding or building upon a student's present skill set toward college readiness,

Teachers in the Fantastic Five spoke enthusiastically about the need for a systematic approach to college readiness, rather than isolated "flavor-of-the-month" approaches. For example

One of the things also I think you know as us as school that we can do to help foster that (college readiness) is we need kind of a systematic approach to getting these kids ready all the way up from freshmen. Because right now we tend to lump them together by saying ok, they're high school students, but they're not.

Teachers also felt frustrated in their role when they attempted to strengthen the skills students required for college and high school coursework. Teachers felt they were doing a good job, but were sometimes disappointed at the outcome of their efforts. Scientific Sarah spoke up:

It's frustrating when you think you're giving them the skills, you think you're giving them the skills or the tools to learn the skills or to be able to critically think and put the big pictures together and they're not making that leap and I don't know why!

Communication. Communication was a skill faculty perceived as important to student success pursuant to college readiness. Van Auken (2015) suggested that even though traditional forms of communication such as oral and written forms are no longer the default for students due to the growth of electronic communication, they are still necessary to "succeed in life during and after college" (p. 23). Furthermore, students now require assistance in mastering the more traditional forms of communication necessary to "get a job, develop meaningful relationships, and appropriately respond when faced with conflicts" (Van Auken, 2015, p. 23). The theme communication, included categories of, student conversations, adult conversations, and talking about college.

Adult conversations referred to conversations a student might have had with an adult, including a parent, someone within the educational system who was knowledgeable about college or community college enrollment planning. Adult conversations also included the ability to communicate appropriately with adults, such as teachers or counselors. Student conversations were described as interchanges among students regarding college readiness and college planning. Talking about college included teacher directed discussions about college experiences occurring within the classroom for the benefit of the students.

Magnificent Helen felt students did not know how to have conversations with adults. She expressed her view that the ability to hold conversations with adults was a skill that was lacking and needed to be taught. She said, "They just don't have that skill and I have no idea how to create that, but I think that is something they need to be able to do."

Analytical Pam thought her AP students talked about college at home with their parents frequently. She explained:

I don't know that's it's exactly what we're doing on this campus that is supporting that (college readiness). It may be the college AP level, it's the conversations they're having at home with their parents. The parents expect to talk about college with their students. AP students frequently talk about college with their parents.

Institutional programs and supports. The theme "institutional programs and supports" encompassed campus programs that supported students in pursuing a postsecondary degree or certification. At the secondary level, instructional programs and support are defined as programs centered on student success during high school and those directed toward college and career pursuits. Examples include Advancement Via Individual Determination (AVID), the College Board AP Program, dual enrollment, and more informally organized supports, and teacher mentoring, tutorials, and advocate classes.

The categories associated with institutional programs and supports were student programs, community college, campus advocates, AP programs, and AVID. Student programs encompassed wide variety of supports, such as college nights, which were

provided for students (and their parents), that focused on college readiness. The category of community college was defined as a frequent default option for students after graduating from high school. The category, campus advocates, referred to teachermentors, counselors, assistant principals, principals, or school office personnel who assisted and supported students in their pursuit of education beyond high school.

AP programs comprised college courses taught on high school campuses by collegeboard trained high school teachers. AVID was described as a program, designed as an elective class, for students who needed support in during high school while preparing for college.

Four out of the Fantastic Five taught AP science or mathematics and all had a positive view of AP programs and the role they played in preparing students for college. Heroic Victor described the AP programs in this way:

I think our advanced courses are, I mean it is a national program, but I think it's, the goal is to have kids experience college level coursework before they go to college so they can sort of have an opportunity to develop skills that you don't, kind of like on the job training almost, before they have to go on and do it for real. So, I think that it is a least an effort being made to encourage getting the experience before they go to college.

Some teachers in the focus group felt the AVID program (and the AP program) did not reach enough students. They felt there were many students who needed additional support, but were not participating in the AVID program or taking an AP course.

Academic skills. According to Conley (2010a), academic skills encompassed overarching skills specific to reading, writing, math, science, social science, world

languages, and the arts. It is likely that students have developed these skills over the course of their academic careers. The theme "academic skills" included the following categories: higher order thinking skills, foundational knowledge, class practice, computational skills, and mathematical skills.

The category of higher order thinking skills included skills needed to analyze and solve word problems, often requiring previously acquired knowledge. Foundational knowledge referred to knowledge acquired in previous coursework. The category class practice extended to homework and the ability to ask questions when needed for understanding. Computational skills refer to a student's ability to perform basic calculations with or without a calculator. Computational skills were skills that required calculations using a five-function or graphing calculator or hand calculations, such as adding, subtracting, multiplying, and dividing. Mathematical skills were skills centered on students' ability to rearrange an equation and solve for a variable.

Brilliant Betty felt that some students were not adept in computational skills and hypothesized as to the cause: "um that are maybe just holes in their middle school basic math computational skills. Betty felt that because students had not mastered certain computational skills in middle grades, it was causing them difficulty in high school mathematics. Mathematical skills were described by Brilliant Betty as specific "algebraic" skills, such as those required to rearrange an equation to solve for "x" or apply the quadratic equation to find a solution to an algebra problem. Brilliant Betty put it this way, "the specific math skills, uh are just some basic algebra, being able to solve, um, if they have to stop and think about, you know do I add or do I subtract to solve for

x, or how do I deal with this quadratic?" She also suggested that mathematical skills could refer to "just basic skills, study skills that sort of thing."

Instructor responsibilities. In the context of the interviews, the theme "instructor responsibilities" was described as duties assigned to or taken on by teachers both in and outside of the classroom. The categories identified within the theme instructor responsibilities were: test prep, mastery, vertical alignment, and getting help. The category, test prep, included, state level test preparation, and college entrance test preparations. The category of mastery as it pertained to the interviews, referred to readiness standards as measured by the state or college entrance exams. Vertical alignment can be described as the process of ensuring that course content builds upon previous content and prepares students for subsequent courses within the school district. Getting help referred to students' ability to seek help when needed with the classroom teacher as a primary resource.

The category of vertical alignment was discussed at length by Betty. She felt that there was a need to align not only mathematics curriculum within the K-12 system, but to extend the alignment to the postsecondary levels (P-16). She felt the communication between K-12 and postsecondary levels was lacking. Betty had this to say about vertical alignment:

That would be nice to be a panel (P-16), but if that information was kind of communicated from even the state level, if they went out and did the research and brought it to the campuses in the district level it would be kind of nice. I feel like we are missing that kind of vertical alignment.

Brilliant Betty voiced concerns for her students who needed help, but were too shy to ask for help. She expressed her feelings this way, "I feel like a lot of my students who need the most help are the most shy about asking for it." Getting help, according to Betty, included asking questions in class as well as attending before or after school tutorials.

Student learning. The theme, "student learning" pertained not only to learning that occurs because of classroom instruction, but also learning resulting from student experiences that take place outside the classroom through extra-curricular activities, clubs and organizations, and community service. It also extends to students' emotional maturation and development. The theme "student learning" encompassed eight categories: soft skills, student success, curiosity and interest, the value of being college ready, experience, student development, emotional intelligence, and curriculum.

Soft skills included a variety of noncognitive skills, such as time management and organizational skills, considered conducive to academic success during and after high school. Student success was inclusive of positive educational experiences students had in or out of the classroom environment. Curiosity and interest were connected to students' zest for learning, or lack thereof. The value of being college ready was a category describing students' ability to understand and appreciate the value of pursuing a college education. The category of experience referred to students' personal journey through and beyond high school. Development referred to students' social, emotional, physical, and intellectual growth over time. Emotional intelligence described students' ability to reflect on their learning and experiences. Curriculum referred to content that was taught and the pedagogy used in its presentation.

Daring Dan summarized emotional intelligence in the following manner, "other competencies involving your sense of determination and from that, you have such phrases as grit, and perseverance, and responsibility, maturity, and gosh, all that falls under the general category of emotional intelligence." Daring Dan felt students were as prepared for college as they had prepared themselves to be based in part upon their level of emotional intelligence.

Daring Dan spoke passionately about curriculum, noting that it was essential that students know what they are learning and why. He explained:

To answer their questions in a very uh, pointed and effusive way, what's the point? I'll tell you why we're doing this, and if the student can answer that question, can set the stage for why this matters, uh why it may not matter to you. If they can disarm the sense of uncertainty that young people feel, students will find more relevance and resonance of that course in their lives.

Grades. This theme was one of the most heated topics discussed among secondary educators during the interviews. Grades were an academic metric used as the primary criteria by which school districts, teachers, and students were assessed. Grades referred to scores received in a particular subject area or on state mandated tests such as end-of-course tests (EOCs) and could extend to nationally standardized tests such as the ACT[®]. Ideally, grades indicated a student's level of learning or mastery.

The categories included with grades were: grades do not reflect learning and continuous improvement. Grades don't reflect learning meant that grades were not necessarily an indicator of student content or skill mastery levels. Continuous improvement was an

opportunity given to students to improve upon a failing grade on an assignment, such as a test or quiz.

Teachers spoke very passionately about grades. All secondary teachers expressed the opinion that grades are not necessarily an indicator of student learning and were overly subjective in nature. Magnificent Helen had this to say about grades:

You may earn or be given a 100 in PAP Pre-Cal and then you know nothing out of that and then you are going to take calculus at high school or at college and if you don't know what you were supposed to have learned, that's just going to snowball!

Teachers at the high school level experienced pressure from administrators, students, and parents regarding grades and ultimately, GPA. The Fantastic Five felt that this pressure could affect the ability of teachers to remain objective when it came to grades.

Teachers felt that students who did not take advantage of continuous improvement and still earned "A's" or "B's" were more ready than those students who did. Many teachers in the Fantastic Five opposed continuous improvement because they felt it impaired a student's ability to become college ready. Sensational Randy said this about continuous improvement:

If they've really studied and worked through things and they earned that A or even maybe that B, but they haven't had to do corrections or all the etcetera that we manage them to appease, really, their grades through continuous improvement, then I would say they're more ready than the kid who has to take advantage of every extra credit and oh, you can turn this in late and all of that kind of stuff. I don't think those kids are as ready as the others could be.

Findings from Postsecondary Faculty

Individual interviews were conducted to gather data from postsecondary faculty. The key themes that emerged following analysis of postsecondary perspectives on student college readiness were: soft skills, institutional programs and supports, college knowledge, reading, communication, mathematics skills, developmental education, and emotional intelligence.

Soft skills. The theme "soft skills" included the categories of student organization, student involvement, student maturity, student attitudes, time management, and study skills. The category student organization meant the ability to keep up with assignments and due dates as found in a syllabus, in addition to keeping track of notes and a variety course materials. Student involvement reflected a student's level of engagement with campus activities, such as clubs and organizations. Student maturity referred to a students' ability to approach coursework with an appropriate level of responsibility for learning. Student attitudes included a broad understanding on the part of the students, as to what they intended to gain from a college education. Time management meant the ability to create and organize schedule for school and non-school related activities. Study skills were skills students needed to be able to work and learn both independently or groups.

Dynamite Henry thought it would be a good idea to require students to take a study skills course. He explained, "These are steps, not so much with content, but trying to help students with study skills, that kind of thing, which I think is helpful." Dynamite Henry expressed the opinion that all students could benefit from assistance with time management, not just for underrepresented groups. He said, "This could come about

through maybe providing for some type of academic coaching. For all students, not just for some underrepresented groups."

Institutional programs and supports. This theme was comprised of the formal and informal programs provided for students needing academic or general assistance to navigate the college system. The theme "institutional programs" included the categories types of services, meeting student needs, student programs, program effectiveness, increasing college readiness, college prep, faculty mentoring, and professional organizations. The category identified as types of services, referred to services such as counseling and advising. Student programs included supports such as study skills classes, tutoring centers, and mentoring programs. Increasing college readiness described the focus and goal of all institutional supports. College prep was defined as an academy with the sole purpose of intensive academic intervention to support students toward college readiness. Faculty mentoring encompassed formal and informal efforts on the part of the faculty to directly assist students who needed additional support as they made the transition to college. Faculty mentoring included academic and psychosocial support. Professional organizations included faculty organizations designed to benefit faculty and ultimately students, through networking, conferences, research, and collaboration opportunities. Program effectiveness referred to research-based programs that were monitored and adjusted to better support students. The category meeting student needs, included, but was not limited to clubs and activities designed for helping and supporting students throughout their college experience.

Courageous Tom suggested the following actions be taken to improve program effectiveness:

Well, I think we need an expensive and robust multi-directional effort that is coordinated and intensive and based on research. I think we should try everything from Bridge programs, first year experience classes, to ongoing mentorship, to pathways-weighted institutional redesign. All those things are necessary and need to be done in coordination with each other.

Courageous Tom believed students' needs were not being met consistently. He felt this was detrimental to student success and described his perception in this manner:

For the most part, they (students) have varying degrees of institutional support and attention, but um, and so, the bottom line seems to me to be that many of our underprepared students are not successful. Still, I do not have the numbers to back that up.

College knowledge. College knowledge referred to contextual skills and awareness of how college operates (Conley, 2010c). The theme "college knowledge" included the categories of understanding college culture, college is not like high school, misconceptions about college, and understanding connections. Understanding college culture meant having information about the accepted norms for a college campus. The category, college is not like high school, pertained to attitudes students had acquired in high school that were inappropriate in college. Misconceptions about college referred misinformation students had received about college, such as the practice of skipping class, primarily originating from peers or older students. The category, understanding connections, meant students could make a connection between their course of study (major) and the career or pathway to which it could lead.

Dynamite Henry, who taught college-level mathematics, discussed how often, students were surprised to find how easy it was to fail an assignment or even a course in college as opposed to high school. He said, "So our students, particularly in math, end up with, there's a good chunk with, failing grades and they're quite surprised at that!"

Courageous Tom perceived students as lacking the ability to make the connection between the course of study they were pursuing and a possible career pathway to which it might lead.

Reading skills. The theme "reading skills" included a student's ability to comprehend and apply written information. The categories of reading comprehension, and reading independently were discussed as stumbling blocks for students. Reading comprehension meant students could understand what they read, while reading independently meant reading without assistance from an instructor.

Beatific Larry, a mathematics professor, described the importance of improving students' reading comprehension. He said, "You know, they sound the words out in their head, they move their eyes left and right, up and down, they think they've read it, but they haven't comprehended. Larry explained that students struggled with reading independently. He emphasized, "They have a hard time studying and reading on their own."

Communication. Communication referred to oral and written exchanges between students and their professors. The theme "communication" included the categories of communicating with instructors and the importance of communication. If students were adept at communicating with instructors, it meant they were able complete oral or written exchanges with their professors in a respectful and timely manner.

Communicating with instructors was defined as oral or written exchanges with professors regarding assignments, grades, or content. The importance of communication indicated the priority placed on communication as a required skill for success in college, professions, and careers. Courageous Tom indicated that students do not communicate with their instructors in a timely manner. He expressed his thoughts when he said, "I also think they don't make it a priority to keep track of what they missed by communicating with instructors. I think sometimes they wait a long time to communicate with instructors, instead of immediately." Tom also stressed the importance of communication beyond college. He felt communication was important to profession and career. Tom felt that communication was more important than organizational skills when it came to working on a project, or even missing a deadline. He explained the importance of communication this way:

What I think the reality is, that the professional world is one that if you, a more important and valuable skill is keeping in communication with the people you are working with, your bosses for example, but also the people you are collaborating with on projects so that more important than meeting or missing a deadline, more important than having all of your ducks in a row in terms of organization on a project is communication.

Mathematics skills. This theme pertained to a student's foundational knowledge in basic mathematics and algebra. "Mathematics skills" encompassed the categories of content deficiencies, measuring readiness, problem solving, and use of calculators.

Content deficiencies pertained to foundational content found to be lacking by college mathematics students. Measuring readiness, as it pertained to mathematics skills, meant

students had passed an associated state-level entry exam for credit-bearing college mathematics coursework. Problem solving pertained to students' ability to solve problems through the application and rearrangement of algebraic formulas, as well as understanding what the sentences in the word problem mean.

Use of calculators was emphasized by some instructors and de-emphasized by others. Marvelous Helen did not allow the use of calculators in her developmental mathematics class. Helen felt the use of calculators hindered the students' ability to acquire basic computational skills that would be required on tests. Her department supported her policy. She explained it to me this way:

My department head has always supported me and students have actually gone and complained she won't let me use calculators and he supported me and said, "If you use calculators, the tests are going to be that much harder."

Beatific Larry identified the ability to problem solve as a competency students needed to experience success in mathematics. Larry had this to say about problem solving:

Well, I can think of a third in addition to algebraic manipulation. Being able to turn a sentence or sentences that describe a quantitative concept, turn that into an equation or some type of algebraic object. You know, if I say John has 2 more apples than Alice. They know what the sentence means, but if they try to turn it into an equation, they can't do that, so if I see someone with that competency, that's a good sign to me.

Larry thought that students who could interpret word problems correctly, were in a good position to become successful in his mathematics course.

Developmental education. The theme "developmental education" involved student placement into a sequence of non-credit bearing courses, either mathematics or English, for preparing for the subsequent, credit-bearing courses. Developmental education contained two categories: student placement and developmental education validation. Student placement referred to the placement of students in developmental education courses due to lower than acceptable scores on state college entrance level tests. Developmental education validation meant that when students were successful in their completion of developmental education courses and the subsequent credit-bearing courses, the field of developmental education could be validated or deemed worthwhile.

Marvelous Pam, who taught developmental mathematics was concerned about the high percentage of students being placed in developmental mathematics. She sounded discouraged when she said, "About 90% of the students at our university have to take at least one developmental math class." However, she was a bit more optimistic when she described how she felt about the validation of developmental education, "I think we can keep pushing in the direction we are going in, we can keep um, validating the area of developmental education." Pam felt that students were benefiting from the developmental mathematics classes that she taught.

Emotional intelligence. The theme "emotional intelligence" encompassed the categories of fears about learning and student professionalism. Fears about learning was primarily associated with mathematics and stems from students' unsuccessful experiences in previous mathematics courses, perhaps going back as far as elementary school. Student professionalism involved student behaviors inside and outside the classroom setting. Professionalism in the context of this study, referred to student

participation in class, attendance, and how students engaged both inside and outside the classroom.

Marvelous Pam described how student fears of learning affected students' learning. Pam emphasized the importance of students' confidence in their learning skills. She explained:

Um, as far as their effect, I would say uh, I would say that the whole anxiety would fall into that category, which I think I called that their emotional category. So, um, their basically their ability to feel confident in their learning skills, um, to understand their anxieties as they relate to their testing and learning.

Described by Marvelous Pam, student professionalism was a necessary student characteristic. She gave some examples, "What I mean by that is you know, attendance, promptness, um, participation, skills that fall into the area of um, how they engage in the classroom and outside the classroom for that matter as well."

Discussion and Conclusions

Three common themes emerged among secondary and postsecondary faculty regarding student college readiness: soft skills, communication, and institutional programs and supports. In addition, both secondary and postsecondary faculty referenced students' academic skills. However, the theme "academic skills" emerged from the analysis of secondary faculty interviews, as opposed to the more specific theme "mathematics skills" emerging from the postsecondary interview analysis. Themes specific to secondary faculty were: student motivation, role of the teacher, instructor responsibilities, student learning, and grades. Themes specific to postsecondary faculty were: college knowledge, reading, developmental education, and emotional intelligence.

Both secondary and postsecondary faculty made at least one reference to students either having missed or forgotten academic skills that should have been mastered at lower grade levels. Although secondary and postsecondary faculty were both concerned with academic skills and pre-requisite skills needed for their courses, it was the postsecondary faculty that more frequently noted the lack of soft skills, such as time management and student organization, as barriers to student success.

In the context of this study, "mathematics skills" are academic in nature as opposed to soft skills, such as time management and organization. Secondary and postsecondary faculty identified a lack of pre-requisite knowledge as problematic as they negatively affect college readiness. Not surprisingly, faculty members felt that if students had gaps in the acquisition of mathematics skills in lower grades, they were further handicapped as they progressed through high school and college. Ideally, academic skills, such as mathematics skills are scaffolded throughout a student's education.

According to the participants, a lack of foundational skills can and likely will, detrimentally affect a student's college readiness and success. This perception aligns with data presented in a recent report by the National Center for Education Statistics (NCES, 2016). Among students who began their postsecondary education at 2-year public institutions, 55.2% enrolled in remedial mathematics courses. The percentages were slightly lower at 45.2% for students who began at 4-year institutions.

Common to both secondary and postsecondary faculty, the theme, "communication" was of prime importance in terms of college readiness. Particularly noteworthy, was the importance of students communicating with their teachers and their professors in a professional and timely manner. High school teachers and college

professors alike identified inadequate communication skills as a student deficiency. Faculty members expressed concern that students were unable to communicate with adults effectively, primarily though oral exchange, although quality written communication was also mentioned as deficient. A contributing factor to inadequate communication skills was identified by Van Auken (2015). He suggested that even though traditional forms of communication such as oral and written forms are no longer the default for students due to the growth of electronic communication, they are still necessary to "succeed in life during and after college" (p. 23).

Two themes unique to secondary faculty included "grades" and "student motivation." Interestingly, "grades" was not a theme emerging from postsecondary faculty. A plausible explanation for this may be that within the K-12 system, grades are one of the main criteria by which students, teachers, and school districts are assessed. Grades emanating from teacher generated assignments or state mandated tests, such as the subject specific end-of-course (EOC) exams. There is a tremendous amount of value given to grades within the K-12 system. For this reason, it was not surprising secondary faculty emphasized grades during their interviews.

"Student motivation" as perceived by secondary educators, pertained to intrinsic motivation, rather than extrinsic motivation or rewards. The secondary faculty felt strongly that the district policy of continuous improvement, which allows student to re-do any major assignment (quiz or test) for a maximum grade of a 70 (mastery level), undermined a student's motivation to perform at their best, the first time. The faculty mentioned an overabundance of "hand-holding" or excessive support that proved to be detrimental to a student's college preparedness.

Themes unique to postsecondary faculty included "developmental education" and "reading." Two faculty participants taught in developmental education courses, specifically, English and mathematics. Both faculty were committed to their students' success and felt that developmental education played an important role in helping students develop the content knowledge and skills needed for college-level coursework. Of interest was the perception of a developmental mathematics faculty. Over 90% of the students on her campus had been placed in one or more developmental education courses. For this reason, she was passionate that more research should be done to address student's needs and to develop better placement and assessment tools. The faculty member felt that assessment tools that included a soft-skill or noncognitive diagnostic might be beneficial and lead to better assignment of students into the appropriate developmental mathematics course.

Interestingly, "reading" was a theme discussed only at the postsecondary level. In fact, it was identified by one of the college-level mathematics professors as critical to the success of students in mathematics. He felt that if students were unable to read for comprehension, including difficult texts, they would have difficulty in problem solving.

It was the general perception of secondary and postsecondary faculty that students were prepared for college in varying degrees. This perception aligns with the non-dichotomous view of college readiness described by Barnes and Slate (2013). The application of this concept of college readiness, affords students some level of college readiness along a continuum, rather than college ready or not college ready (Barnes & Slate, 2013). Although there were individual faculty at both the high school and college level claimed their students were overall not prepared for college, most the interviewees

identified specific student weaknesses that could be addressed and avoided deeming them unprepared for college. Most faculty felt that with appropriate remediation, institutional support, and effort on the part of the student, that college success was a possibility for most students.

Secondary and postsecondary faculty held similar perceptions of student college readiness. Overall, faculty perceived most students as leaving high school and entering postsecondary education with some degree of underpreparedness in one or more of the following areas: academic skills, maturation level, and soft skills. Furthermore, faculty indicated that it was an impossible task to presume that all students could be made to be college ready. Secondary faculty seemed to hold a more optimistic view of their students' readiness than postsecondary faculty, but nonetheless, the overall perception was one of underpreparedness for the demands of postsecondary education.

Recommendations for Future Research

Understanding how secondary and postsecondary faculty perceive student college readiness has the potential to positively impact student outcomes in many areas. A thorough understanding of the competencies and deficiencies as perceived by faculty could lead to more timely interventions and increased college readiness for all students. As an example, a postsecondary mathematics faculty member who was interviewed indicated students were unable to read for comprehension and understanding of challenging texts which he felt was critical to success in mathematics, an area frequently requiring remediation. Perhaps, a future study examining how reading skills affect success in mathematics would be beneficial.

Faculty at both secondary and postsecondary levels expressed concerns that students were unable to communicate effectively with their teachers, professors, and other adults, as well as peers. They viewed communication skills as essential to college success as well as success in future careers. A comparative study examining communication deficiencies and competencies (oral, written, and electronic) in secondary and postsecondary students could prove worthwhile.

It was evident that a collaboration gap exists between secondary and postsecondary educators. Faculty at both levels expressed a frustration that there was no clear channel of communication between the high school faculty and college level faculty. It would be a future goal to encourage discourse and shared research efforts between the K-12 and postsecondary systems. In this way, a coordinated approach may be made to ensure all students are college ready.

Soft skills, such as organization, study skills, and time management, were emphasized as an area of student weakness by the secondary faculty and postsecondary faculty. Further research on the effectiveness of the AVID Program at the college and high school level may provide a means to improve student soft skills while the same time, promote open communication between high school and college faculty in their effort to improve college readiness for all students.

REFERENCES

- Abstetar, P. A. (2013). Secondary teacher perception of student readiness for college (Doctoral Dissertation). Retrieved from ProQuest Dissertations and Theses Global (Order No. 3601045).
- Achieve. (2005). Rising to the challenge: Are high school graduates prepared for college and work? A study of recent high school graduates, college instructors, and employers. Achieve, Inc. Retrieved from http://www.achieve.org/files/pollreport_0.pdf
- ACT®. (2009). ACT national curriculum survey® 2009. Iowa City, IA: Author. Retrieved http://www.act.org/content/dam/act/unsecured/documents/NationalCurriculumSurvey2009.pdf
- ACT[®]. (2013). *ACT national curriculum survey*[®]. 2012: Policy implications on preparing for higher standards. Iowa city, IA: Author. Retrieved from http://files.eric.ed.gov/fulltext/ED542018.pdf
- Arnold, K. D., Lu, E. C., & Armstrong, K. J. (2012). Special Issue: The Ecology of College Readiness. *ASHE Higher Education Report*, *38*(5), 1-138. Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/aehe.v38.5/issuetoc
- Barnes, W., & Slate, J. R. (2013). College readiness is not one-size-fits-all. *Current Issues in Education*, 16(1), 1-7. Retrieved from http://cie.asu.edu/ojs/index.php/cieatasu/article/viewFile/1070/401
- Barnett, E. A., Fay, M. P. (2013). The Common Core State Standards: Implications for community colleges and student preparedness for college. An NCPR Working

- Paper. National Center for Postsecondary Research. Retrieved from http://files.eric.ed.gov/fulltext/ED549164.pdf
- Cline, Z., Bissell, J., Hafner, A., & Katz, M. (2007). Closing the college readiness gap.

 **Leadership, 37(2), 30-33. Retrieved from https://www.academia.edu/2403859/Closing_the_College_Readiness_Gap
- Cohen, M. (2008). Improving college preparation: Lessons from the American diploma project. *The New England Journal of Higher Education*, 22(5), 21-23. Retrieved from http://eric.ed.gov/?id=EJ794244
- Conley, D. T. (2005). College knowledge: What it really takes for students to succeed and what we can do to get them ready. San Francisco, CA: Jossey-Bass.
- Conley, D. T. (2007a). *Toward a more comprehensive conception of college readiness*.

 Eugene, OR: Educational Policy Improvement Center. Retrieved from https://docs.gatesfoundation.org/documents/collegereadinesspaper.pdf
- Conley, D. T. (2007b). *Redefining college readiness*. Educational Policy Improvement Center. Eugene, OR: Educational Policy Improvement Center. Retrieved from http://files.eric.ed.gov/fulltext/ED539251.pdf
- Conley, D. T. (2010a). College and career ready: Helping all students succeed beyond high school. San Francisco, CA: Jossey-Bass.
- Conley, D. T. (2010b). *Replacing remediation with readiness*. (Working Paper).

 Retrieved from http://files.eric.ed.gov/fulltext/ED533868.pdf
- Conley, D. T. (2010c). Eligible & ready for college. *Principal Leadership*, 11(4), 18-22.

 Retrieved from http://eric.ed.gov/?id=EJ916305

- Creswell. J. W. (2007). Qualitative inquiry and research design: Choosing among five approaches (2nd ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.). Thousand Oaks, CA: Sage.
- DiCicco-Bloom, B., & Crabtree. B. F. (2006). The qualitative research interview.

 *Medical Education, 40(4), 314-321. https://doi.org/10.1111/j.1365-2929.2006.02418.x
- Duckworth, A. L., & Yeager, D. S. (2015). Measurement matters: Assessing personal qualities other than cognitive ability for educational purposes. Educational Researcher, 44(4), 237-251. Retrieved from http://journals.sagepub.com/doi/pdf/10.3102/0013189X15584327
- Glaser, B., & Strauss, A. (1967). The discovery of grounded theory: Strategies for qualitative research. Chicago, IL: Aldine.
- Hoyt J. E., & Sorensen, C. T., (2001). High school preparation, placement, testing, and college remediation. *Journal of Developmental Education*, 25(2), 26-33.

 Retrieved from http://eric.ed.gov/?id=EJ641633
- Johnson, B., & Christensen L., (2004). *Educational research: Quantitative, qualitative, and mixed approaches.* Los Angeles, CA: Sage.
- Johnson, B., & Christensen L., (2012). Educational research: Quantitative, qualitative, and mixed approaches (4th ed.). Los Angeles, CA: Sage.
- Kirst, M. W. (2004). The high school/college disconnect. *Educational Leadership*, 62(3), 51-55. Retrieved from
 http://www.ascd.org/ASCD/pdf/journals/ed_lead/el200411_kirst.pdf

- Krueger, R.A., & Casey, M.A. (2009). Focus groups: A practical guide for applied research (4th Ed.). Thousand Oaks, CA: Sage.
- Lester, S. (1999). *An introduction to phenomenological research*. Taunton, UK: Stan Lester Developments. Retrieved from http://www.psyking.net/HTMLobj-3825/Introduction_to_Phenomenological_Research-Lester.pdf
- Lincoln, Y., & Guba, E. (1985). Naturalistic inquiry. New York, NY: Sage.
- Olson, L. (2007). Diplomas count: Ready for what? Preparing students for college, careers, and life after high school. *Education Week*, 26(40), 7-8, 10, 12.

 Retrieved from http://www.edweek.org/media/ew/dc/2007/40national_SGB07.pdf
- Onwuegbuzie, A. J., & Leech, N. L., (2007). Validity and qualitative research: An oxymoron? *Quality and Quantity*, 41, 233-249. https://doi.org/10.1007/s11135-006-9000-3
- Osgood, C., & Tannenbaum, P. (1955). The principle of congruity in the prediction of attitude change. *Psychological Review*, 62, 42-55.
- Porter, A. C., & Polikoff, M. S. (2012). Measuring academic readiness for college. *Educational Policy*, 26, 334-417. Retrieved from http://journals.sagepub.com/doi/pdf/10.1177/0895904811400410
- Reed, E., & Justice, M. (2014). College and high school educators' perceptions of current college readiness levels. International Journal of Humanities and Social Science, 4(14), 37-43. Retrieved from http://www.ijhssnet.com/journals/Vol_4_No_14_December_2014/3.pdf
- Reid, M. J., & Moore, J. I. (2008). College readiness and academic preparation for postsecondary education: Oral histories of first-generation urban college students.

- *Urban Education*, 43(2), 240-261. Retrieved from http://eric.ed.gov/?id=EJ785629
- Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005) Teachers, schools, and academic achievement. *Econometrica*, 73(2), 417-458. Retrieved from https://econ.ucsb.edu/~jon/Econ230C/HanushekRivkin.pdf
- Sanoff, A.P. (2006). A perception gap over students' preparation. *Chronicle of Higher Education*, B1.
- Saxon, D. P., & Morante, E. A. (2014). Effective student assessment and placement:

 Challenges and recommendations. *Journal of Developmental Education*, *37*(3),

 24-30. Retrieved from

 http://www.nade.net/site/documents/articles/SaxonMorante_ArticleV37.pdf
- Sedlacek, W. E. (2004). Beyond the big test: Noncognitive assessment in higher education. San Francisco, CA: Jossey-Bass.
- Sedlacek, W. E. (2008). Using noncognitive variables in K-12 and higher education. In University of Michigan summit on college outreach and academic success:

 Summary report from meetings at the School of Education, August 11-12, 2008.

 (pp. 35-42). Ann Arbor, Michigan. Retrieved from http://williamsedlacek.info/publications.html
- Sedlacek, W. E. (2011). Using noncognitive variables in assessing readiness for higher education. *Readings on Equal Education*, 25, 187-205. Retrieved from http://cerpp.usc.edu/files/2013/11/UsingNCV-Sedlacek.pdf
- Stipek, D. (2002). *Motivation to learn: From theory to practice* (4th edition). Needham Heights, MA: Allyn & Bacon.

- U. S. Department of Education, National Center for Education Statistics. (2016).
 Remedial coursetaking at U.S. public 2- and 4-year institutions: Scope,
 experience, and outcomes (NCES Publication No. 2016-405). Retrieved from https://nces.ed.gov/pubs2004/2004077.pdf
- Van Auken, J. (2015). Four approaches to help college students develop traditional communication skills in a social media age. Campus Activities Programming, 47(7), 22-24. Retrieved from http://connection.ebscohost.com/c/articles/109201416/four-approaches-help-college-students-develop-traditional-communication-skills-social-media-age

CHAPTER V

SUMMARY AND CONCLUSIONS

In this final chapter, the contributions of Study 1, Study 2, and Study 3 are being discussed. In addition, this chapter includes recommendations for future policy and practice that could be influenced by the contributions of these studies. This chapter concludes with a discussion regarding future research goals associated with the topic of faculty perceptions of student college readiness.

Contributions of Study 1, Study 2, and Study 3

The combined contributions of Study 1, Study 2, and Study 3 have resulted in new information in the area of student college readiness from the perspectives of secondary and postsecondary faculty. Through Study 1 and Study 2, I have examined the perspectives of secondary faculty and postsecondary faculty as found in the literature. In Study 3, the perceptions secondary and postsecondary faculty regarding student college readiness, and student competencies were described using Osgood and Tannenbaum's Congruity theory (1955).

In a recent report by the National Center for Education Statistics (NCES, 2016) it was suggested that many high school graduates lack proficiency in subject-matter knowledge and analytical skills necessary for college-level work. The gap between what is expected in college and the skills students have acquired in high school leads to high percentages of student enrollment in remedial education. For example, according Arnold, Lu and Armstrong (2012), approximately one-third of students at 4-year institutions and more than two-fifths of those at 2-year institutions enrolled in remedial education. Understanding current faculty perceptions of college readiness can help inform

educational practices through the identification of expectations. It is critical for secondary and postsecondary faculty to share common, realistic expectations of what it means to be college ready to foster student success. A solution to the lack of a common definition of college readiness between secondary and postsecondary faculty was offered in Study 1. Through increased discourse between secondary and postsecondary educators, a common definition of college readiness could be established, reducing or eliminating the expectations gap that was found to exist between the two systems. Furthermore, school administrators, teachers, and lawmakers might use the findings from the literature review when considering policies and decisions regarding increased college readiness.

The results of Study 1 demonstrate the need for additional research on the perceptions of secondary faculty on student college readiness. Although there is a wealth of research on student college readiness, research specifically addressing the perspectives of secondary faculty on student college readiness is scant. Only two qualitative studies, one quantitative study, and one qualitative dissertation specifically addressing the perspectives of secondary faculty on student college readiness were published between the years of 2006-2015.

Much literature exists on student college readiness. However, the amount of literature specific to the perspectives of high school teachers on student college readiness and their associated competencies and deficiencies is scarce. Additional research on the perspectives of secondary faculty on student college readiness may aid in better preparing high school students for college. Without a thorough understanding of teacher perspectives, limits will continue to exist on how well educators can prepare students for

college through improving instruction in specific content areas and impacting learner qualities for college success.

Two themes were prevalent in the literature on secondary faculty perspectives of student college readiness: "student content knowledge and skills" and "learner qualities for college success." Content knowledge and skills included specific course-required skills, such as those required for geography. Learner qualities referred to student noncognitive skills and characteristics that proved important for college readiness. Some of the skills referred to in the literature included motivation, maturity, and learning styles.

Much of the literature cited a communication and an expectations gap between the K-12 and postsecondary systems as problematic when it came to student college readiness (Jo & Milson, 2013; Reed & Justice, 2014; Sanoff, 2006). This finding results in the consideration of increased discourse between the K-12 and postsecondary systems for reducing or eliminating the gaps in communication and expectations between the two systems. Increased dialogue between K-12 and postsecondary educators would facilitate the establishment of a shared understanding of college readiness, to close the expectations gap between the two educational systems and increase student college readiness.

The results of Study 2 indicated a scarcity of research on the perspectives of postsecondary faculty on student college readiness. The reviewed literature was comprised of five dissertations and five journal articles published between 2006 and 2015. The limited amount of literature regarding faculty perceptions of student college readiness is perplexing. Faculty perception of student college readiness is vital in understanding factors that contribute to student persistence, placement in developmental

education, and the improvement of policies and programs impacting student college success. Consideration of postsecondary teacher perceptions of college readiness including the perceived student competencies and deficiencies can help inform practice for the purpose of closing the college readiness gap.

Two overarching themes emerged from the literature pertaining to the perceptions of postsecondary faculty on student college readiness and the associated competencies and deficiencies: student academic skills (specific to mathematics, geography, and English composition) and student noncognitive factors. Each article or study included in the literature review focused on postsecondary faculty perceptions of student academic skills, student noncognitive factors, or both. The sample size, five research articles and five published dissertations, resulted in faculty perspectives on college readiness in the subject areas of mathematics, geography, and English composition. This result may limit the generalization of the academic skills identified in Study 2 to other subject areas. However, the importance of the noncognitive skills found in the literature may provide valuable information regarding the perspectives of postsecondary faculty on student college readiness and the associated competencies and deficiencies.

Postsecondary faculty perceived students as having weaknesses regarding study skills, critical and analytical thinking, and the ability to generalize and reason. Students also lacked foundational content knowledge and skills needed for college mathematics, geography, and English composition (Blanchard, 2009; Corbishley & Truxaw, 2010; Harms, 2010; Ibezim-Uche, 2013; Jo & Milson, 2013; Zientek et al., 2014). College-level faculty based their evaluation of student preparedness on higher-order thinking skills and students' ability to express their ideas critically. According to Reed and Justice

(2014), "if this ability is not detected in a student, then college faculty will judge the student as not being college ready" (p. 42). The ability to think critically and analytically impacts student success in most all academic areas. Critical and analytical thinking, and the ability to generalize and reason enables students to make connections and solve problems. Boylan (2002) posited that the lack of good critical thinking skills often was the cause for the failure of students who are underprepared for college-level work.

The primary purpose of Study 3 was to examine the perceptions of secondary and postsecondary education faculty regarding student college readiness. The second purpose of this study was to compare the perceptions of secondary and postsecondary faculty of the student competencies and deficiencies pertaining to college readiness. Through the non-random, purposeful selection of secondary and postsecondary informants, a phenomenological study of the perceptions of student college readiness, and student competencies was identified.

The key themes that emerged following analysis of postsecondary perspectives on student college readiness were: soft skills, institutional programs and supports, college knowledge, reading, communication, mathematics skills, developmental education, and emotional intelligence. Soft skills included noncognitive skills such as student attitudes, maturity and student organizational and time management skills. Institutional programs and supports were formal and informal programs provided for students needing academic or general assistance to navigate the college system. College knowledge referred to contextual skills and awareness of how college operates (Conley, 2010a). Reading skills included a student's ability to comprehend and apply written information.

Communication referred to oral and written exchanges between students and their

professors. Mathematics skills pertained to a student's foundational knowledge in basic mathematics and algebra. Developmental education involved student placement into a sequence of non-credit bearing courses, either mathematics or English, to prepare for the subsequent, credit-bearing courses. Emotional intelligence encompassed a student's maturity level, and their attitudes toward learning.

Key themes emerging from secondary faculty interviews were: academic skills, instructor responsibilities, soft skills, student learning, role of the teacher, institutional programs and supports, student motivation, communication, and grades. Academic skills pertained to skills required in high school courses such as, computational skills, mathematics skills, higher-order thinking skills, and foundational knowledge. Instructor responsibilities included vertical alignment of the curriculum, teaching students to master content, and providing extra help for students in a specific content area. Soft skills referred to a host of student attributes or characteristics including, but not limited to study skills, homework, maturity, and making choices regarding their educational experiences. Student learning encompassed a host of categories, among them were: curriculum and learning, emotional intelligence, curiosity and success, and the value of being college ready. The role of the teacher referred to faculty roles specific to preparing students for college, such as student support and communication. Institutional programs and supports were programs for facilitating student college readiness while in high school. One such support was provided in the form of assistance in transitioning to a local community college while still enrolled in high school. Student motivation referred to the drive or lack thereof, demonstrated when students are faced with challenges. Communication was the ability of students to communicate effectively with teachers, peers, and other adults,

often for the purpose of requesting for help with assignments. Faculty opined about grades. Grades were identified as numerical or letter values indicating students' level of proficiency. Frequently, grades emanated from teacher generated assignments or state mandated tests, such as subject specific end-of-course (EOC) exams.

Common to both secondary and postsecondary faculty, the theme communication was of prime importance in terms of college readiness. Particularly noteworthy, was the importance of students communicating with their teachers and their professors in a professional and timely manner. High school teachers and college professors alike, identified inadequate communication skills as a student deficiency. Faculty members expressed concern that students were unable to communicate with adults effectively, primarily though oral exchange, although quality written communication was also mentioned as deficient. A contributing factor to inadequate communication skills was identified by Van Auken (2015). He suggested that even though traditional forms of communication such as oral and written forms are no longer the default for students due to the growth of electronic communication, they are still necessary to "succeed in life during and after college" (p. 23). The three themes common to both secondary and postsecondary faculty were: (a) institutional programs and supports, (b) soft skills, and (c) communication. Institutional programs and supports at the high school level differed in purpose from those found at the postsecondary level for the primary reason that high school programs and supports were designed to prepare students for college following graduation. An exception was the AVID program. AVID has been implemented at both the secondary and postsecondary levels. Soft skills were skills frequently defined as noncognitive skills and consistently identified by all faculty as essential for success in

high school and college and just as consistently identified as an area of student weakness. Often noted were students' inability to study, manage time, and be organized. Like soft skills, faculty at both secondary and postsecondary levels perceived students as deficient in their ability to communicate with teachers, peers, and other adults, especially when needing help. One difference however, is that theme of communication as described by secondary faculty, included communication to students about college readiness and life after college.

Two themes that were unique to secondary faculty included grades and student motivation. Student motivation as perceived by secondary faculty involved students' actions and reactions when faced with academic challenges or difficult, longer assignments. Faculty noted when students were faced with a problem that required multiple steps and/or analytical skill, students would not persist in attempting to complete the work. Motivation as perceived by secondary faculty was considered an area of student deficiency.

Interestingly, grades were not a theme emerging from postsecondary faculty. A plausible explanation for this may be the fact that within the K-12 system, grades are one of the main criteria by which students, teachers, and school districts are assessed. These grades emanated from teacher generated assignments or state mandated tests, such as the subject specific end-of-course (EOC) exams. There is a tremendous amount of value given to grades within the K-12 system. For this reason, it was not surprising secondary faculty emphasized grades during their interviews.

Conclusions

Together the findings in these three studies provided needed insight into research on the perspectives of secondary and postsecondary faculty on college readiness. Gaps were found to exist in the expectations between secondary and higher education faculty as well as a lack of a common definition of college readiness. The results of these three studies provide valuable information for all stakeholders seeking methods to prepare students for college or improve practices that affect college readiness. Specifically, the use of this information may increase the awareness of the college readiness challenge leading faculty across secondary and postsecondary institutions to communicate toward a consensus on how readiness may be better defined and addressed. An increased awareness and communication may lead to actions that reduce barriers to college readiness that prevent access to higher education.

Implications for Policy and Practice

In combination, the findings provided in Study 1, Study 2, and Study 3 have implications for policy and practice in both the K-12 and higher education systems in the U.S. Pursuing postsecondary education is no longer a luxury but mandatory for upward social mobility (Barnes & Slate, 2013). Jobs open to students with only a high school diploma are "only marginally better than those available to individuals without one" (Conley, 2010a, p. 3). Meeting college admission requirements is not homologous with being prepared to perform college-level work (Cline, Bissell, Hafner, & Katz, 2007). Only about one in four students who graduate from high school are able meet these requirements. The cause of the lack of preparedness, according to some college readiness researchers, is the implementation of a federally initiated one-size-fits-all agenda

resulting in students who either "do not graduate from high school or graduate, but are not academically prepared" (Barnes & Slate, 2013, p.1).

According to Conley (2007c), little effort has been made to unify the multiple dimensions of college readiness. Limiting college readiness strictly to academic measures, eliminates the vast array of learning strategies and coping skills that are essential for success in college, many of which may not have been acquired in high school. Because college is unlike high school, the competencies required for college are also different (Conley, 2007b). To operationalize a definition of college readiness a distinction must be made between college readiness and academic readiness.

Implications for policy and practice in K-12 and higher education would include the creation of a common definition of college readiness for eliminating or reducing the current expectations gap between K-12 and higher education. Further provisions should be made for the time and resources for meaningful dialogue between the K-12 and higher education systems for aligning expectations for students regarding college readiness skills and behaviors. In addition, policy makers must understand the importance of integrating the many components of college readiness when designing college entrance and placement tests. Offering incentives for further research on faculty perceptions of student college readiness seems warranted, given the scarcity of literature found in this study and the potential positive impact such research could have on student college readiness.

Recommendations for Future Research

An understanding of student college readiness and their associated competencies and deficiencies as perceived by secondary and postsecondary educators can assist in eliminating barriers to college success for all students. Educators may use the findings of

this study to improve instructional programs and supports, help students develop the noncognitive or soft skills as well as academic skills critical to student college preparedness and success. It would be a future goal to encourage discourse and shared research efforts between the K-12 and postsecondary systems. In this way a coordinated approach may be made to ensure all students are college ready.

Through further research, barriers to higher education may be identified and minimized. Even though administrators and stakeholders cannot control some situational factors impeding student success, an awareness of these factors could, through further study, enhance the understanding of the challenges faced by underprepared students as they enter college for the first time. This may improve the chances of their success and encourage faculty and administrators to consider services and actions that may be helpful.

Negative faculty perceptions of student competencies and deficiencies determine, in part, how faculty develop instruction and how they relate to their students. A major consequence of the faculty perception of student underpreparedness is that instruction must begin at a "square one mentality" (Jo & Milson, 2013, p. 201). Faculty perceptions of student underpreparedness limits instruction to simply assisting students with the development of foundational skills, rather than building on prior knowledge. Given this finding, broader studies about faculty perceptions of student critical thinking and leadership skills are in order along with research that identifies effective practice for dealing with student challenges in these areas. Areas of high impact, such as students' critical thinking and leadership skills, might be a beneficial focus when providing professional development opportunities for faculty.

REFERENCES

- Abstetar, P. A. (2013). Secondary teacher perception of student readiness for college (Doctoral Dissertation). Retrieved from ProQuest Dissertations and Theses Global (Order No. 3601045).
- Achieve. (2005). Rising to the challenge: Are high school graduates prepared for college and work? A study of recent high school graduates, college instructors, and employers. Achieve, Inc. Retrieved from http://www.achieve.org/files/pollreport_0.pdf
- ACT[®]. (2007). Rigor at risk: Reaffirming quality in the high school core curriculum.

 Iowa City, IA: Author. Retrieved from

 http://www.act.org/research/policymakers/pdf/rigor_report.pdf
- ACT[®]. (2009). *ACT national curriculum survey*[®] 2009. Iowa City, IA: Author. Retrieved from http://www.act.org/research-policy/national-curriculum-survey/
- ACT[®]. (2013). *ACT national curriculum survey*[®]. 2012: Policy implications on preparing for higher standards. Iowa city, IA: Author. Retrieved from http://files.eric.ed.gov/fulltext/ED542018.pdf
- ACT®. (2014). The condition of college and career readiness 2014. Iowa City, IA:

 Author. Retrieved from

 https://www.act.org/content/dam/act/unsecured/documents/CCCR14
 NationalReadinessRpt.pdf
- ACT[®]. (2016). The condition of college and career readiness 2016. Iowa City, IA:

 Author. Retrieved from http://www.act.org/content/dam/act/unsecured/documents

 /CCCR_National_2016.pdf

- Adams, C. (2014). *ACT® scores virtually unchanged, but participation hits new high*.

 Retrieved from http://www.edweek.org/ew/articles/2014/08/27/02act.h34.html
- AIR. (2013, November). Predictors of postsecondary success (Research Brief.)

 Washington, DC: Author. Retrieved from

 http://www.ccrscenter.org/sites/default/files/CCRS%20Center_Predictors%20of%

 20Postsecondary%20Success_final_0.pdf
- Arnold, K. D., Lu, E. C., & Armstrong, K. J. (2012). The ecology of college readiness [Special Issue]. *ASHE Higher Education Report*, *38*(5), 1-138. Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/aehe.v38.5/issuetoc
- Attewell, P., Lavin, D., Domina, T. & Levey, T. (2007). New evidence on college remediation. *The Journal of Higher Education*, 77(5), 886-924. https://doi.org/10.1353/jhe.2006.0037
- Bailey, T., & Karp, M. (2003). *Promoting college access and success: A review of credit-based transition programs*. Columbia, NC: Columbia University. Retrieved from http://www.gpo.gov/fdsys/pkg/ERIC-ED482497/pdf/ERIC-ED482497.pdf
- Barnes, W., & Slate, J. R. (2013). College readiness is not one-size-fits-all. *Current Issues in Education*, 16(1), 1-7. Retrieved from http://cie.asu.edu/ojs/index.php/cieatasu/article/viewFile/1070/401
- Barnett, E. A., & Fay, M. P. (2013). The Common Core State Standards: Implications for community colleges and student preparedness for college. An NCPR Working Paper. *National Center for Postsecondary Research*. Retrieved from http://files.eric.ed.gov/fulltext/ED549164.pdf

- Blanchard, B. R. (2009). Faculty perceptions of underprepared students in community college (Doctoral Dissertation). Retrieved from ProQuest Dissertations & Theses Global. (Order No. 3369810).
- Boylan, H. R. (2002). What Works: Research-Based Best Practices in Developmental Education. Boone, NC: National Center for Developmental Education.
- Byrd, K. L., & MacDonald, G. (2005). Defining college readiness from the inside out:

 First-generation college student perspectives. *Community College Review*, *33*(1),

 22- 37. https://doi.org/10.1177/009155210503300102
- Camara, W. (2013). Defining and measuring college and career readiness: A validation framework. *Educational Measurement: Issues and Practice*, *32*(4), p. 16-27. https://doi.org/10.1111/emip.12016
- Cimetta, A. D., D'Agostino, J. V., & Levin, J. R. (2010). Can high school achievement tests serve to select college students? *Educational Measurement: Issues & Practice*, 29(2), 3-12. https://doi.org/10.1111/j.1745-3992.2010.00171.x
- Cline, Z., Bissell, J., Hafner, A., & Katz, M. (2007). Closing the college readiness gap.

 *Leadership, 37(2), 30-33. Retrieved from https://www.academia.edu/2403859/Closing_the_College_Readiness_Gap
- Cohen, M. (2008). Improving college preparation: Lessons from the American diploma project. *The New England Journal of Higher Education*, 22(5), 21-23. Retrieved from http://eric.ed.gov/?id=EJ794244
- Complete College America (2011). *Time is the enemy*. Washington, DC: Retrieved from http://www.completecollege.org/docs/Texas.pdf

- Conley, D. T. (2005). College knowledge: What it really takes for students to succeed and what we can do to get them ready. San Francisco, CA: Jossey-Bass.
- Conley, D. T. (2007a). The challenge of college readiness. *Educational Leadership*, 64(7), 23-29. Retrieved from http://eric.ed.gov/?id=EJ766371
- Conley, D. T. (2007b). *Redefining college readiness*. Educational Policy Improvement Center. Eugene, OR: Educational Policy Improvement Center. Retrieved from http://files.eric.ed.gov/fulltext/ED539251.pdf
- Conley, D. T. (2007c). *Toward a more comprehensive conception of college readiness*.

 Eugene, OR: Educational Policy Improvement Center. Retrieved from https://docs.gatesfoundation.org/documents/collegereadinesspaper.pdf
- Conley, D. T. (2008). Rethinking college readiness. *New Directions for Higher Education*, 2008(144), 3-13. https://doi.org/10.1002/he.321
- Conley, D. T. (2010a). College and career ready: Helping all students succeed beyond high school. San Francisco, CA: Jossey-Bass.
- Conley, D. T. (2010b). Eligible & ready for college. *Principal Leadership*, 11(4), 18-22.

 Retrieved from http://eric.ed.gov/?id=EJ916305
- Conley, D. T. (2010c). *Replacing remediation with readiness*. (Working Paper).

 Retrieved from http://files.eric.ed.gov/fulltext/ED533868.pdf
- Conley, D. T., Hiatt, E., McGaughy, C., Seburn, M., & Venezia, A. (2010). *Improving alignment between postsecondary and secondary education: The Texas college and career readiness initiative*. Eugene, OR: Educational Policy Improvement Center. Retrieved from http://files.eric.ed.gov/fulltext/ED509648.pdf

- Corbishley, J. B., & Truxaw, M. P. (2010). Mathematical readiness of entering college freshmen: An exploration of perceptions of mathematics faculty. *School Science* & *Mathematics*, 110(2), 71-85. https://doi.org/10.1111/j.1949-8594.2009.00011.x
- Creswell. J. W. (2007). Qualitative inquiry and research design: Choosing among five approaches (2nd ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.). Thousand Oaks, CA: Sage.
- DiCicco-Bloom, B., & Crabtree. B. F. (2006). The qualitative research interview.

 Medical Education, 40, 314-321. https://doi.org/10.1111/j.1365-2929.2006.02418.x
- Duckworth, A. L., & Yeager, D. S. (2015). Measurement matters: Assessing personal qualities other than cognitive ability for educational purposes. *Educational Researcher*, 44(4), 237-251. Retrieved from http://journals.sagepub.com/doi/pdf/10.3102/0013189X15584327
- Ensor, K. L. (2009). Improving developmental college counseling programs: Utilizing the advancement via individual determination (AVID) to motivate at-risk-students.

 **Journal of college admission, 205, 16-21. Retrieved from http://eric.ed.gov/?id=EJ867959
- Gaertner, M. N., & McClarty, K. L. (2015). Performance, perseverance, and the full picture of college readiness. *Educational Measurement: Issues & Practice*, *34*(2), 20-33. https://doi.org/10.1111/emip.12066

- Gigliotti, J. (2012). Rice University: Innovation to increase college readiness. *Continuing Higher Education Review*, 76, 166-174. Retrieved from http://eric.ed.gov/?id=EJ1000663
- Gil, A. C. (2013). Community college English composition instructors' perceptions regarding the college writing readiness of ESL students (Doctoral Dissertation).

 Retrieved from ProQuest Dissertations & Theses Global. (Order No. 3608813).
- Glaser, B., & Strauss, A. (1967). The discovery of grounded theory: Strategies for qualitative research. Chicago, IL: Aldine.
- Goldschmidt, M., & Seifried, T. (2008). Mismatched expectations among developmental ESL students in higher education. *Research and Teaching in Developmental Education*, 24(2), 27-38. Retrieved from http://www.jstor.org/stable/42802308
- Hardré, P. L. & Sullivan, D. W. (2009). Motivating adolescents: high school teachers' perceptions and classroom practices. *Teacher Development*, 13(1), 1-16. https://doi.org/10.1080/13664530902858469
- Hargrove, L., Godin, D., & Dodd, B. (2008). *College outcomes comparisons by AP and non-AP high school experiences*. (Report No. 2008-3). New York, NY: The College Board. Retrieved from https://research.collegeboard.org/sites/default/files/publications/2012/7/researchre port-2008-3-college-outcomes-ap-non-ap-high-school-experiences.pdf
- Harms, K. (2010). Effectively preparing college bound students for college-level mathematics: University math faculty perceptions (Doctoral Dissertation).

 Retrieved from ProQuest Dissertations & Theses Global. (Order No. 3427696).

- Harvey. W., Slate, J. R., Moore, G. W., Barnes, W., & Martinez-Garcia, C. (2013).

 College readiness gaps: A review of the literature. *Journal of Education*Research, 7(3), 183-204.
- Heller, R. (2012). What studies say about college readiness (Research Brief). *National Education Writers Association*. Retrieved from http://www.ewa.org/sites/main/files/file-attachments/ewabrief-collegereadiness-revised2.pdf
- Hoyt J. E., & Sorensen, C. T., (2001). High school preparation, placement, testing, and college remediation. *Journal of Developmental Education*, 25(2), 26-33.

 Retrieved from http://eric.ed.gov/?id=EJ641633
- Ibezim-Uche, S. (2013). A predictive study of community college faculty perceptions of student academic preparation, work ethics, and institutional support (Doctoral Dissertation). Retrieved from ProQuest Dissertations & Theses Global. (Order No. 3592599).
- Jenkins, S. K. (2013). Faculty perceptions of, and experiences with, African American male students at a community college (Doctoral Dissertation). Retrieved from ProQuest Dissertations & Theses Global. (Order No. 3589803).
- Jo, I., & Milson, A. J. (2013). College readiness for geography: Perceptions of high school teachers and college faculty. *Journal of Geography*, 112, 193-204. https://doi.org/10.1080/00221341.2012.761718Johnson, H. (2010). *Transition from high school to college* (Research Brief). Education Partnerships, Inc.
 Retrieved from http://files.eric.ed.gov/fulltext/ED538705.pdf

- Johnson, R. B., & Christensen L., (2004). *Educational research: Quantitative, qualitative, and mixed approaches* (2nd ed.). Los Angeles, CA: Sage.
- Johnson, R. B., & Christensen L., (2012). *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.). Los Angeles, CA: Sage.
- Kirst, M. W. (2004). The high school/college disconnect. *Educational Leadership*, 62(3), 51-55. Retrieved from
 http://www.ascd.org/ASCD/pdf/journals/ed_lead/el200411_kirst.pdf
- Klopfenstein, K., & Lively, K. (2012). Dual enrollment in the broader context of college-level high school programs. *New Directions for Higher Education*, *158*, 59-68. https://doi.org/10.1002/he.20015
- Klopfenstein, K., & Thomas, K. (2009). The link between advanced placement experience and early college success. *Southern Economic Journal*, 75, 873-891.

 Retrieved from http://www.thefreelibrary.com/_/print/PrintArticle.aspx?id=193182392
- Koslow Martin, J. E. (2010). First -year college students and faculty: A comparison of expectations for success (Doctoral Dissertation). Retrieved from ProQuest Dissertations & Theses Global. (Order No. 3404157)
- Krueger, R.A., & Casey, M.A. (2009). Focus groups: A practical guide for applied research (4th Ed.). Thousand Oaks, CA: Sage.
- Leander Independent School District. (n.d.). *Advanced Programs*. Retrieved from http://www.leanderisd.org/default.aspx?name=AP.main
- Lemann, N. (2000). The big test: The secret history of the American meritocracy. New York, NY: Farrar, Straus, & Giroux.

- Lester, S. (1999). *An introduction to phenomenological research*. Taunton, UK: Stan Lester Developments. Retrieved from http://www.psyking.net/HTMLobj-3825/Introduction_to_Phenomenological_Research-Lester.pdf
- Lincoln, Y., & Guba, E. (1985). Naturalistic inquiry. New York, NY: Sage.
- Mishkind, A. (2014). Definitions of college and career readiness: An analysis by state.

 (AIR Report July 2014). Washington, DC: College and Career Readiness Center.

 Retrieved from

 http://www.ccrscenter.org/sites/default/files/CCRS%20Defintions%20Brief_REV

 _1.pdf
- Moore, G. W., Slate, J. R., Edmonson, S. L., Combs, J. P., Bustamante, R., & Onwuegbuzie, A. J. (2010). High school students and their lack of preparedness for college: A statewide study. *Education and Urban Society*, *42*, 817-838. https://doi.org/10.1177/0013124510379619
- Olson, L. (2007). Diplomas count: Ready for what? Preparing students for college, careers, and life after high school. *Education Week*, 26 (40), 7-8, 10, 12.

 Retrieved from http://www.edweek.org/media/ew/dc/2007/40national_SGB07.pdf
- Onwuegbuzie, A. J., Dickinson, W. B., Leech, N. L., & Zoran, A. G., (2009). A qualitative framework for collecting and analyzing data in focus group research.

 *International Journal of Qualitative Methods, 8(3), 1-21. Retrieved from http://ijq.sagepub.com/content/8/3/1.1.full.pdf+html
- Onwuegbuzie, A. J., & Leech, N. L., (2007). Validity and qualitative research: An oxymoron? *Quality and Quantity*, 41, 233-249. https://doi.org/10.1007/s11135-006-9000-3

- Osgood, C., & Tannenbaum, P. (1955). The principle of congruity in the prediction of attitude change. *Psychological Review*, 62, 42-55.
- Porter, A. C., & Polikoff, M. S. (2012). Measuring academic readiness for college. *Educational Policy*, 26, 334-417. Retrieved from http://journals.sagepub.com/doi/pdf/10.1177/0895904811400410
- Reed, E., & Justice, M. (2014). College and high school educators' perceptions of current college readiness levels. *International Journal of Humanities and Social Science*, 4(14), 37-43. Retrieved from http://www.ijhssnet.com/journals/Vol_4_No_14_December_2014/3.pdf
- Reid, M. J., & Moore, J. I. (2008). College readiness and academic preparation for postsecondary education: Oral histories of first-generation urban college students. *Urban Education*, *43*(2), 240-261. Retrieved from http://eric.ed.gov/?id=EJ785629
- Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005) Teachers, schools, and academic achievement. *Econometrica*, 73(2), 417-458. Retrieved from https://econ.ucsb.edu/~jon/Econ230C/HanushekRivkin.pdf
- Sanoff, A.P. (2006). A perception gap over students' preparation. *Chronicle of Higher Education*, B1.
- Saxon, D. P., & Morante, E. A. (2014). Effective student assessment and placement:

 Challenges and recommendations. *Journal of Developmental Education*, *37*(3),

 24-30. Retrieved from

 http://www.nade.net/site/documents/articles/SaxonMorante_ArticleV37.pdf

- Sedlacek, W. E. (2004). Beyond the big test: Noncognitive assessment in higher education. San Francisco, CA: Jossey-Bass.
- Sedlacek, W. E. (2008). Using noncognitive variables in K-12 and higher education. In University of Michigan summit on college outreach and academic success:

 Summary report from meetings at the School of Education, August 11-12, 2008.

 (pp. 35-42). Ann Arbor, MI. Retrieved from http://williamsedlacek.info/publications.html
- Sedlacek, W. E. (2010). *Noncognitive measures for higher education admissions*. In P. Peterson, E. Baker, & B. McGraw (Eds.), *International encyclopedia of education* (pp. 845-849). http://doi.org/10.1016/b978-0-08-044894-7.00177-9
- Sedlacek, W. E. (2011). Using noncognitive variables in assessing readiness for higher education. *Readings on Equal Education*, 25, 187-205. Retrieved from http://cerpp.usc.edu/files/2013/11/UsingNCV-Sedlacek.pdf
- Stipek, D. (2002). *Motivation to learn: From theory to practice* (4th edition). Needham Heights, MA: Allyn & Bacon.
- Stevens, S. & Miretzky, D. (2012). Faculty's perceptions of students' characteristics: A for effort please. Current Issues in Education, 15 (2), 1-13. Retrieved from cie.asu.edu/ojs/index.php/cieatasu/article/download/875/330
- Texas Education Agency (2010). *House Bill 3 Transition Plan* (Report No. GE1160001).

 Austin, TX. Retrieved from tea.texas.gov/WorkArea/Download

 Asset.aspx?id=25769810845
- Thompson, T., & Rust, J. O. (2007). Follow-up of advanced placement students in

- college. *College Student Journal*, *41*, 416-422. Retrieved from http://eric.ed.gov/?id=EJ777945
- U. S. Department of Education, National Center for Education Statistics. (2004). The condition of education 2004. (NCES Publication No. 2004-077). Retrieved from https://nces.ed.gov/pubs2004/2004077.pdf
- U. S. Department of Education, National Center for Education Statistics. (2016).
 Remedial coursetaking at U.S. public 2- and 4-year institutions: Scope,
 experience, and outcomes (NCES Publication No. 2016-405). Retrieved from http://nces.ed.gov/pubs2016/2016405.pdf
- Van Auken, J. (2015). Four approaches to help college students develop traditional communication skills in a social media age. *Campus Activities Programming*, 47(7), 22-24. Retrieved from http://connection.ebscohost.com/c/articles/109201416/four-approaches-help-college-students-develop-traditional-communication-skills-social-media-age
- Venezia, A., & Jaeger, L. (2013). Transitions from high school to college. The Future of Children, 23(1), 117-136. https://doi.org/10.1353/foc.2013.0004
- Watt, K. M., Huerta, J. J., & Alkan, E. (2011). Identifying predictors of college success through an examination of AVID graduates' college preparatory achievements.

 Journal of Hispanic Higher Education, 10, 120-133.

 https://doi.org/10.1177/1538192711402353
- Yamamura, E. K., Martinez, M. A., & Saenz, V. B. (2010). Moving beyond high school expectations: Examining stakeholders' responsibility for increasing Latina/o

- students' college readiness. *The High School Journal*, *93*(3), 126-148. doi:10.1353/hsj.0.0045.
- Yosso, T. J. (2005). Whose culture has capital? *Race, Ethnicity, and Education*, 8(1), 69-91. Retrieved from: http://gearupnv.org/wp-content/uploads/2014/01/Reasearch-Article.pdf
- Zientek, L. R., Schneider, C. L., & Onwuegbuzie, A. J. (2014). Instructors' Perceptions

 About Student Success and Placement in Developmental Mathematics Courses.

 Community College Enterprise, 20(1), 67-84.
- Zins, J. E., Bloodworth, M. R., Weissberg, R. P., & Walberg, H. J. (2007). The scientific base linking social and emotional learning to school success. *Journal of Educational and Psychological Consultation* 17,191-210.

 doi:10.1080/10474410701413145.

APPENDIX A: INTERVIEW PROTOCOL

Good afternoon and thank you for taking the time to share your perspectives on student college readiness. My name is Maureen Selman and am representing Sam Houston State University. I am interested in learning how high school teachers/college faculty perceive student college readiness and the associated competencies. You have been chosen because you are a full-time employee and have been a classroom teacher for more than five years and represent a variety of disciplines. Your views are important because of your teaching experiences.

This morning we will be discussing your thoughts and opinions about student college readiness and the associated competencies and deficiencies. Please feel free to share your point of view in a conversational style as we address the interview questions. Negative experiences are as relevant as positive ones. Your confidentiality is assured. No names will be associated with any comment that is made.

My role as an interviewer is to ask questions and digitally record your responses. I will not be participating in the discussion. I will be asking four interview questions and may ask for clarification if needed to enhance my understanding. The interview will last approximately 30 to 60 minutes. Once again, I appreciate the time you have taken to share your perspectives with me. Please begin with an introduction and brief description of the course(s) you teach.

APPENDIX B: INTERVIEW QUESTIONS

Secondary and Postsecondary Interview Questions

- 1. To what extent do you consider your students ready for college?
- As you know, in order to be considered "college ready" there are many
 competencies they should have. Please tell me about specific areas of student
 competencies you associate with college readiness.
- 3. As you know there are many deficiencies that prevent students from being considered "college ready". Please tell me about specific areas of student deficiencies you associate with college readiness.
- 4. What efforts do you see that are being implemented or have been implemented at the secondary level to prepare students for college?
- 4a. How effective do you think those efforts have been?
- 5. What, if anything, do you think can be done to further improve student college readiness at the secondary level?

pVITA

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Degrees Earned

Master of Post-Secondary Education, Troy University Bachelor of Arts, Biology, Oglethorpe University

Professional Licensure

Composite Science 6-12, Lifetime, Texas Science 6-12 (Georgia) Gifted and Talented Endorsement ESL Certified Strategic Intervention Model (SIM) Professional Developer

Presentations

Selman, M.N., (2015, February) *Perspectives of secondary and postsecondary faculty on student college readiness*. Southwest Educational Research Association (SERA). San Antonio, Texas.

Skidmore, S. T., Crockett, S. H., & Selman, M. N. (2014, February). *Student support coursework that impacts student success*. National Association for Developmental Education, Dallas, Texas.

Selman, M. L., & Forsell, K., (2012, August). *Strategic intervention model (SIM)*. Annual professional development presentation at Rouse High School, Leander, Texas.

Work of Professional Experience

Position	Organization
Secondary Science Educator	Leander ISD, Leander, TX
	Spalding County Schools, Griffin, GA
	Huntsville ISD, Huntsville, TX
Science Department Chair	Leander ISD
SIM Professional Developer	Leander ISD
Career Specialist	Huntsville ISD
Instructor	
Physics, PAP Physics, AP B Physics	Leander ISD, Huntsville ISD, SCS
Chemistry, PAP Chemistry,	Leander ISD, Huntsville ISD
Integrated Physics and Chemistry	Leander ISD, Huntsville ISD
Biology, PAP Biology	Leander ISD, Huntsville ISD, SCS
Principles of Technology	Leander ISD

Honors and Awards

Leander ISD Educational Excellence Foundation (LEEF) 2015 Teacher Honoree University of Texas Master Teacher Institute, Participant – Physics