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Retention and Graduation Rates of African American and Hispanic Students in Community
Colleges in TN: Index of Institutional Practices that Support Minority Student Success

A dissertation

presented to

the faculty of the Department of Educational Leadership and Policy Analysis

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Doctor of Education in Educational Leadership

by

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May 2018

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Keywords: Minority Students, Retention Rates, Graduation Rates, Engagement

ABSTRACT

Retention and Graduation Rates of African American and Hispanic Students in Community Colleges in TN: Index of Institutional Practices that Support Minority Student Success

by

Dayna Brown Smithers

Many four year institutions are reorganizing their processes and structures to develop a more inclusive model related to campus diversity efforts. Minimal information has been reported about two year institutional efforts toward inclusive excellence. Given the predicted demographic shifts of the nation and more specifically, the projected increase in enrollments of racially and ethnically diverse student bodies in community colleges, it is essential for higher education administrators and policymakers to understand the structures needed to support minority student success at community colleges.

The purpose of this quantitative study was to examine institutional support structures around inclusive excellence. An Institutional Diversity Practice Index (IDPI) was created using eleven key indicators found within the literature related to institutional practices that enhance minority student success. The absence or presence of practices at each school were tallied to create two groups. Groups were then compared to determine whether significant differences existed between retention and graduation rates, as well as differences in selected items on the Community College Survey of Student Engagement (CCSSE) related to diversity and support.

Due to the sample size limitations of minority student enrollment, the 13 community colleges in this study were classified into one of two groups: Higher Institutional Diversity Practice Index (6 practices or more) and Lower Institutional Diversity Practice Index (5 practices or less).

Archival data were used to examine retention rates, graduation rates, and student engagement indicators from the CSSE survey. The sampling frame for the study included all 13 TBR community college students during the academic 2013-2014 academic year.

Findings indicated that institutions who were classified in the higher practice group reported higher retention rates of African American and Hispanic students. There were no statistically significant differences between the high and low group with regard to graduation rates or student engagement indicators on the CSSE survey. A larger sample size would be required to determine what combination of institutional practices predict minority student retention and graduation rates. Overall, this study plows new ground and provides information related to the current landscape of institutional structures that support minority student success in Tennessee.

DEDICATION

This study is dedicated to my Heavenly Father for His overwhelming love, perfect timing (even when I couldn't see it), mercy, and His ability to always make a way.

To my husband Dale, for believing in me throughout this entire journey. Thank you for your patience, love, and support.

To my children, Jaxson, Jamison, and Jorja, know that all things are possible with God. I love you more than you will ever know.

To my parents, David and Yoshie Brown, you never stopped believing in me and I will forever be grateful.

To my mentors, Linda Calvert and Brenda White Wright, for always providing the perfect scripture and powerful words of encouragement that I needed to persevere during this process.

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CHAPTER 1

INTRODUCTION

Race issues are reemerging on college campuses. Thousands of college students across the nation are demanding that their schools do more to address racism and discrimination on campus (Barry-Jester & Casselman, 2015). College students are seeking a more diverse faculty and more resources to help minority student success (Barry-Jester & Casselman, 2015). The Tennessee Board of Regents System (TBR) broadly defines diversity as differences:

When applied within the context of education and the educational community, diversity represents the inclusion and support of groups of people with a variety of human characteristics that go beyond the legally protected classes of race, sex, age, religion, national origin, disability status, veteran status – to include, but not be limited to, other categories such as socio-economic status, sexual orientation, first generation college status, urban or rural upbringing – and other personal characteristics that shape an individual’s identity and life experience in a substantive way (Diversity, 1:09:00:00 TBR §§ IB, 2009).

During the fall of 2015 protests began at The University of Missouri over the university’s failure to address campus racism. Graduate student Jonathan Butler began a hunger strike and the Missouri football players threatened to not play. The Missouri System President, Tim Wolfe, was criticized for inadequately replying to student concerns about diversity and accused of ignoring a group of activists. President Wolfe resigned November 9, 2015. The chancellor of Missouri’s flagship campus, R. Bowen Loftin, was criticized for not responding to student concerns about diversity. Chancellor Loftin resigned after being demoted to a different position. From these incidents, a student organization was formed, Concerned Student 1950. This group is leading the activism on Missouri’s campus. Aside from Wolfe’s resignation, the group has

demanded that the university “increase the number of African American faculty members on the Columbia campus, increase the retention rate of African American students, and include diversity and inclusion topics as part of its mandatory student curriculum, among other things” (Woodhouse, 2015, para. 10).

Similar scenarios are happening at other schools across the country. Students at Yale have engaged in public verbal battles with faculty members over insensitivity regarding race (Barry-Jester & Casselman, 2015). In California, student demonstrations and a hunger strike forced the dean of students to resign from Claremont McKenna College (Barry-Jester & Casselman, 2015). In New York, racial issues were handled poorly at Ithaca College and President Tom Rochon was forced to resign (Maycan, 2016). Students are emphatic that university administrators understand what is at stake: “In hostile environments, students of color graduate at lower rates, jeopardizing not only their academic careers but also future success” (Perry, 2015, para. 2). Across the nation college administrators are scheduling forums and charging task forces to examine ways that address the rising student unrest (Barry-Jester & Casselman, 2015).

While access to college for underrepresented students has significantly improved (Williams, Berger, & McClendon, 2005), “many of these students experience differential retention rates and inequities in academic achievement” (Williams et al., 2005, p. vii). The percentage of students who earn a bachelor’s degree within six years of enrollment encompasses a wide gap between the African American completion rate compared to the overall completion rate at public research universities for full-time, non-transfer students (Barry-Jester & Casselman, 2015). Williams et al. (2005) state that, “this troubling achievement gap, especially across specific racial and ethnic groups and across different income levels, signals failure, not only for the individual students affected but also for the colleges and universities they attend and

for the educational system as a whole” (p. viii). To improve retention and graduation rates of minority students, models and strategies that best address the specific needs of this population are being researched.

College websites indicate that most institutions have a strategic plan for diversity (Williams et al., 2005). However, many diversity plans produce superficial or isolated results. Very little empirical work has been completed on institutional change related to diversity; static or narrowly constructed plans are not as effective in accomplishing comprehensive institutional diversity goals (Williams et al., 2005). Williams et al. offered a framework for how institutions can attain Inclusive Excellence through comprehensive organizational change. Four primary constructs comprise the Inclusive Excellence framework:

1. A focus on student intellectual and social development. Academically, it means offering the best possible course of study for the context in which the education is offered.
2. A purposeful development and utilization of organizational resources to enhance student learning. Organizationally, it means establishing an environment that challenges each student to achieve academically at high levels and each member of the campus to contribute to learning and knowledge development.
3. Attention to the cultural differences learners brings to the educational experience and that enhance the enterprise.
4. A welcoming community that engages all of its diversity in the service of student and organizational learning (p. vi).

“To create a ‘culture of inclusive excellence,’ higher education leaders must consider how their campus environments can adapt to meet the needs of today’s highly diverse entering students, rather than beginning with the assumption that diverse students must assimilate into existing environments with relatively narrow measures of quality” (Williams et al., 2005, p. 9). The rising student unrest on college campuses has resulted in many administrations creating new positions to purposefully address these issues. For example, the University of Missouri System hired a system chief diversity officer, Kevin McDonald, June 1, 2016. In response to the demands made from the Concerned Student 1950 protests, the system diversity officer position was created along with seven other initiatives including the reviewing of organization policies for a diversity audit, launching a system-wide Diversity, Equity and Inclusion Task Force and more support for hiring and retaining diverse faculty and staff (Keller, 2016). Oregon State University appointed three campus leaders in January 2016 to fight racial injustice; create a more inclusive and safe campus for all OSU students; and interact with diverse communities throughout Oregon (Floyd, 2016). The interim chief diversity officer at Oregon State will lead the new Office of Institutional Diversity and direct the university’s initiatives and communications on inclusion, equity and diversity (Floyd, 2016). The special assistant to the president for community diversity relations and an executive director of the Office of Equal Opportunity and Access was created (Floyd, 2016). In November 2015, Vanderbilt appointed George C. Hill as their first chief diversity officer and vice chancellor for equity, diversity and inclusion that “will be responsible for advocating for institutional change, working with university stakeholders to set goals and institutionalize accountability, and ensuring that diversity efforts are coordinated throughout the university” (Patterson, 2015, para. 8).

The future is quickly approaching a demographic shift where minorities will become the majority (Williams, 2013). By 2060, the non-Hispanic Caucasian alone population is projected to be 44 percent of the nation's total population resulting in the point where the nation can be described as a majority-minority nation (Colby & Ortman, 2015). The crossover is projected to occur in 2044; more than half of all Americans will belong to a minority group which is any group other than non-Hispanic Caucasian alone. "While the non-Hispanic White alone population is projected to remain the largest single group, no group will have a majority share of the total and the United States will become a 'plurality' of racial and ethnic groups" (p. 9). The fastest growing population is projected to be the Two or More Races group and the Hispanic population is projected to be the third fastest growing population (Colby & Ortman, 2015). Similarly, the U.S. Department of Education's National Center for Education Statistics has projected a 25 percent increase in enrollment of African American students in all postsecondary degree-granting institutions between 2010 and 2021 and a 42 percent increase in enrollment of Hispanic students (Hussar & Bailey, 2013). It is important to note that, despite the increasing enrollment projections for African American and Hispanic students, those who begin college have a considerably lower completion rate than Caucasians (or Asian-Americans) (Brownstein, 2015). Hispanic and African American students access higher education largely through community colleges (Brownstein, 2015). "Path-breaking research by the Georgetown University Center on Education and the Workforce has found that fully half of the increased enrollment among African American and Hispanic students since 1995 has been channeled into community colleges" (para. 8).

Statement of the Problem

As demonstrated by these recent events, many four year institutions are reorganizing their processes and structures to develop a more inclusive model related to campus diversity efforts. Institutions are focused on student academic and social development and offering the best possible educational setting for all students, regardless of identity and background (Williams & Clowney, 2007). Subsequently, less information has been reported about two year institutional efforts toward diversity and inclusive excellence. Research examining the relationship between interactions with diversity and student educational outcomes in community colleges has been lacking (Jones, 2013). “High profile empirical studies from Astin (1993), Chang (1999), Gurin (1999), Hurtado (2001), and Nelson Laird (2005) each appear to exclude community colleges from their samples” (Jones, 2013, p. 251). Given the predicted demographic shifts of the nation (Colby & Ortman, 2015) and more specifically, the projected enrollments of increase racially and ethnically diverse student bodies in community colleges (Brownstein, 2015), it is essential for higher education administrators and policymakers to understand the processes and structures needed for diverse student success at community colleges (Pickett, Smith, & Felton, 2017).

The purpose of this quantitative study was to examine institutional practices related to diversity and inclusive excellence and how those practices are related to student academic achievement and engagement for 13 community colleges in Tennessee. Academic achievement was operationalized as retention and graduation rates. Engagement was operationalized as student scores on selected items on the Community College Survey of Student Engagement (CCSSE) related to diversity and support. An Institutional Diversity Practice Index was created using eleven key indicators related to institutional practices that enhanced minority student success. The absence or presence of each practice at each college were tallied to create two

groups. Groups were then compared to determine whether significant differences existed between retention and graduation rates, as well as difference in selected items on the CCSSE related to diversity and support.

Conceptual Framework

Using the academic literature as a guide, the researcher developed a taxonomy, the Institutional Diversity Practice Index (IDPI), to group each community college in Tennessee by examining whether the college had 11 unique institutional structures and supports in place. Each community college was placed into one of two groups indicating a level of practice. The absence or presence of the institutional factors at the college resulted in the following classification: (1) Lower Institutional Diversity Practice Index (LOW) community colleges had 5 or fewer institutional structures and supports at the time of the study, and (2) Higher Institutional Diversity Practice Index (HIGH) community colleges had 6 or more institutional structures and supports at the time of the study. Table 1 provides a list of the 11 structures and supports used to create groups for analyses.

Table 1.

Institutional Diversity Practice Index Taxonomy

	Item	Description	Source
1	Chief Diversity Officer	The college has a formal position of chief diversity officer or similar title.	(Tomlin, 2016)
2	Multicultural Center or Diversity Resource Office	The college has a multicultural center or diversity resource center on campus.	(Anderson & Hall, 2015)
3	Strategic Plan	The college has a diversity strategic plan or elements of diversity and inclusive excellence are incorporated in the college's overall strategic plan.	(Williams, 2007)

4	Student Outcomes	The college tracks and publishes outcomes related to enrollment, retention and graduation rates by student demographics.	(Hurtado, Milem, Clayton-Pedersen & Allen, 1998)
5	Goals	The college has at least one strategic goal of increasing the retention and graduation rates of racial/ethnic minority students.	(Chang, Astin, & Kim, 2004; Hurtado, Dey, Gurin, & Gurin, 2003; Hurtado & Wathington Cade, 1999; Pike & Kuh, 2006)
6	Campus Climate	The college routinely conducts a campus climate surveys to gather perceptions of students, faculty and staff.	(Humphreys, 2007)
7	Website	The college website includes links to diversity and inclusive excellence resources for students, faculty and staff.	(Williams et al., 2005)
8	Professional Development	The college provides professional development and training opportunities related to diversity and inclusive excellence.	(AAC&U, 2017)
9	Scholarships and Grants	The college or college foundation provides financial aid, grants and scholarships for the recruitment and support of racial/ethnic minority students.	(Carter, 2006)
10	Curriculum	The college curriculum includes courses with topics related to diversity and inclusive excellence.	(AAC&U, 2017)
11	Recruitment and Outreach	The college hosts summer programs, weekend programs, and/or other college outreach and orientation programs aimed at increasing the recruitment of underrepresented students.	(Humphreys, 2007)

Research Questions

The following research questions outline the basis of this study:

Research Question 1: Is there a significant relationship between first to second year retention rates of community colleges with higher Institutional Diversity Practice Index scores and those colleges with lower Institutional Diversity Practice Index scores?

Research Question 2: Is there a significant relationship between three-year graduation rates of community colleges with higher Institutional Diversity Practice Index scores and those colleges with lower Institutional Diversity Practice Index scores?

Research Question 3: Is there a significant relationship between student engagement scores on the Community College Survey of Student Engagement (CCSSE) question that measured institutional emphasis on encouraging contact among students from different economic, social and racial backgrounds of community colleges with higher Institutional Diversity Practice Index scores and those colleges with lower Institutional Diversity Practice Index scores?

Research Question 4: Is there a significant relationship between student engagement scores on the Community College Survey of Student Engagement (CCSSE) question that measured institutional emphasis on providing student support needed to succeed at college of community colleges with higher Institutional Diversity Practice Index scores and those colleges with lower Institutional Diversity Practice Index scores?

Significance of the Study

The Tennessee Board of Regents (TBR) recognized that the creation and cultivation of programs, policies, and practices intended to increase and sustain diversity is critical in order to

be responsive to, “(1) shifting demographics; (2) the need to prepare students to succeed in a global and interconnected world; (3) the need to utilize the talents, experiences, and ideas of a broad group of people, in order to achieve excellence; and (4) the needs of the corporate, civic, and educational environs for culturally competent individuals” (Diversity, 1:09:00:00 TBR §, IIB 2009). TBR’s Diversity Policy states that “The Board of Regents specifically finds that diversity of students, faculty, administrators and staff is a crucial element of the educational process and reaffirms its commitment to enhancing education through affirmative actions to increase diversity at all levels” (Diversity, 1:09:00:00 TBR §§ IIA, 2009).

The Complete College Tennessee Act of 2010 requires colleges to increase the number of Tennesseans with postsecondary degrees. The plan also focuses on increasing enrollment and persistence to graduation among first-time full-time students from the following underrepresented groups: minority and low income students. Minority students include the following ethnicities: Alaskan Native, American Indian, Asian or Pacific Islander, Black or African American, Hispanic or Latino, Native Hawaiian or other Pacific Islander, and Multiple Codes. Low income students are considered Pell eligible (Northeast State Community College, 2012). In response to the Complete College Tennessee Act of 2010 and TBR’s Diversity Policy, each of the 13 Community Colleges created a Campus Diversity Plan. The plan “focuses on increasing enrollment and persistence to graduation among first-time full-time students from the following underrepresented groups” (Northeast State Community College, 2012, p. 3). The Campus Diversity Plan requirements concluded in 2015. Currently TBR is encouraging community colleges to tie diversity planning to overall campus strategic planning (Tennessee Board of Regents, 2016, September). Dr. Wendy Thompson, TBR vice chancellor for organizational effectiveness and strategic initiatives stated, “We’re not going to recommend that

there be a diversity plan outside the scope of strategic planning because we've taken overall strategic planning in a direction that dovetails with our completion agenda. The diversity plans should fit right into that; it shouldn't be something separate" (2016, para. 13).

One formal institutional structure that supports diversity efforts on college campuses is the presence of a diversity office or multicultural center (Anderson & Hall, 2015) and that the campus has a position of chief diversity officer (Brown, 2017). At the university level, all nine public four-year universities in Tennessee have a Diversity Office and/or Multicultural Center that serves the primary function of providing a central location for underrepresented students and for faculty and staff to increase their knowledge and understanding of campus diversity. Furthermore, all public four-year institutions in Tennessee have a self-classified chief diversity officer or director – an “institutional rank of either special assistant or senior advisor to the president; vice president, provost, chancellor; associate vice president, provost, chancellor; assistant vice president, provost, chancellor; or dean, ...and a diversity element in their title” (Williams, 2013, pp. 22-23). The role of chief diversity officer typically is multidimensional – including being responsible for increasing the numbers of underrepresented individuals within the institution (recruiting and retention of students, staff, faculty, and leadership) and charged to change and shape the institution's culture, climate, and reputation (Tomlin, 2016). These offices/centers ensure that student academic support services, support services, and co-curricular programs meet the needs of a multicultural, diversified, student body (Lau, 2003). Institutional leaders create visible, easily accessible, cultural and socio-emotional support systems and resources customized to students' needs that can be important for students who do not compromise a racial or ethnic majority (U.S. Department of Education, 2016).

Conversely, at the community college level, 9 of 13 community colleges in Tennessee do not have a Diversity Office or Multicultural Center and only 4 of the 13 community colleges have a full-time staff member or administrator whose primary job is to advance and promote diversity efforts. There is an incongruence in formal institutional diversity efforts and student services in community colleges which is concerning given the student demographics within these schools. “The key areas for minority-student college persistence are academic preparation, adequate financial aid, and strong support networks in college” (Carter, 2006, p. 42). A welcoming, inclusive institutional environment and the student connection to that environment have been linked to persistence (Carter, 2006).

Definitions of Terms

The following terms are defined for use in this particular research study:

1. *Diversity*: Individual differences (e.g., personality, learning styles, and life experiences) and group/social differences (e.g., race/ethnicity, class, gender, sexual orientation, country of origin, and ability as well as cultural, political, religious, or other affiliations) (AAC&U, 2017).
2. *Graduation Rate*: The percent of completers within 150% of normal time divided by the revised adjusted cohort (Integrated Postsecondary Education Data System, 2017).
3. *Inclusion*: The active, intentional, and ongoing engagement with diversity – in the curriculum, in the co-curriculum, and in communities (intellectual, social, cultural, geographical) with which individuals might connect – in ways that increase awareness, content knowledge, cognitive sophistication, and empathic understanding of the complex ways individuals interact within systems and institutions (AAC&U, 2017).

4. *Non-white students*: Alaskan Native, American Indian, Asian or Pacific Islander, Black or African American, Hispanic, and Multiracial (Tennessee Higher Education Commission, 2016). For purposes of this study minority students refer specifically to Black or African American and Hispanic students.
5. *Retention Rate*: A measure of the rate at which students persist in their educational program at institution, expressed as a percentage (Integrated Postsecondary Education Data System, 2017). This is the percentage of first-time degree/certificate-seeking students from the previous fall who either re-enrolled or successfully completed their program by the current fall.
6. *Student engagement*: Identification and measurement of aspects of the program that are most rewarding to participants (Smither, 1998). For the purpose of this study student engagement was measured by student scores from selected items on the Community College Survey of Student Engagement (CCSSE) related to diversity and support.

Limitations and Delimitations

This study is constrained by limitations and delimitations. Limitations are potential weaknesses in the study that are out of the control of the researcher (Simon & Goes, 2013). The primary limitation of the current study is the collection of the secondary data used to create the Institutional Diversity Practice Index can lead to inaccurate or biased results. It is likely that institutional practices, such as teaching, advising and high impact experiences offered to all students regardless of race or ethnicity positively support and impact on retention and graduation rates. The researcher made the decision to create an index of institutional practices that were specifically related to supporting students from racially diverse backgrounds and then called the

college or examined the college's website to note the absence of presence of these practices. The use of secondary data is commonly used in educational research and considered valid and reliable (McMillan & Schumacher, 2010).

Delimitations are the characteristics that limit the scope and describe the boundaries of the study (Simon & Goes, 2013). This study is delimited to the 13 community colleges in the Tennessee Board of Regents system. For the purposes of this study students who entered in the fall of 2008 and graduated in the spring of 2013, entered in the fall of 2013 and were retained to the fall of 2014, and students who completed the 2014 CCSSE were the focus. Other factors not included as variables in this study may have directly or indirectly affected the student outcomes, such as student preparation characteristics related to retention and graduation rates.

Two cognitive variables, retention rates and graduation rates, and a non-cognitive variable, student engagement scores from the CCSSE, are another delimitation of this study. It is possible that different variables would generate more insight related to minority student success; however the freshman-to-sophomore retention rate, and the cohort graduation rate are two of the most frequently cited statistics in connection with student success (Voigt & Hundrieser, 2008) and the CCSSE survey instrument provides a valuable representation for student success (McClenney, Marti, & Adkins, 2012).

Lastly, this study defines minority students as African American and Hispanic students. It is possible that a broader definition of other races/ethnicities would generate different results related to minority student success. The researcher selected these two groups since the most notable college achievement gaps are among African American and Hispanic students (Brownstein, 2015).

Overview of the Study

Chapter 1 contains an introduction to the study, a statement of the problem, a conceptual framework, research questions, significance of the study, definitions of terms used in the study, and limitations and delimitations. Chapter 2 consists of a literature review of empirical studies related to institutional infrastructure and supports leading to increased outcomes for student success. Additionally, the literature review includes a synthesis and analysis of research related to cognitive and non-cognitive measures of student success for racial and ethnic minority students. Chapter 3 presents the methodology used in the study, including the sample, instrumentation, data collection, and data analysis. Chapter 4 provides the results of the study. Chapter 5 includes a summary of the findings, conclusions, and implications for future practice and research.

CHAPTER 2

LITERATURE REVIEW

The ability of the institution to effectively serve the community in which it resides regarding the work of diversity and inclusion on community college campuses is now viewed as essential (Pickett et al., 2017). The purpose of this literature review is to discuss graduation rates and minority students, retention rates and minority students, and student engagement and minority students. The literature review also explores institutional practices, supports and structures related to diversity and inclusive excellence.

Degree Completion in Higher Education

Research studies have demonstrated that increased educational attainment results in individuals with higher earned income, a better-skilled and more flexible workforce, reduction in federal, state, and local government support programs, and more active citizens in communities (Baum, Ma, & Payea, 2013). International comparative data from the Organisation for Economic Cooperation and Development (OECD) indicated that educational attainment in the United States lags behind many other developed nations (OECD, 2016). In 2015, the United States ranked fifth for postsecondary degree holders among 25-64 year olds, with an overall postsecondary attainment rate of 45%, behind Canada (55%); the Russian Federation (54%); Japan (50%); and Israel (49%) (OECD, 2016). A similar comparison of younger adults (aged 25-34) revealed that eleven other countries reported a higher proportion of people with a postsecondary degree than the United States (OECD, 2014). Korea reported the highest proportion at 69% while the United States reported 47%; the OECD average was 42% (OECD, 2016).

Narrowing the picture from a global view to a national view indicates additional areas of concern. Economic stability may be difficult to achieve with only a high school diploma in the 21st century. By 2020 postsecondary education and training will be required by 65% of all new jobs in the economy with 30% of the job openings requiring some college or an associate's degree (Carnevale, Smith, & Strohl, 2013). In the spring of 2017, approximately 18.1 million students enrolled in American higher education institutions with 5.4 million students enrolled at a two-year public institution (National Student Clearinghouse Research Center, 2017). Despite these figures, the job forecast has estimated that by 2020 the total employment number will be 165 million jobs – an almost 24 million increase in 10 years (Carnevale et al., 2013). “At the current production rate in higher education, we [the United States] will fall 5 million short of the workers with postsecondary credentials we will need by 2020” (Carnevale et al., 2013, p. 2). It is predicted that there will be 55 million job openings in the economy with 24 million newly created jobs and 31 million job openings due to baby boomers retiring (Carnevale et al., 2013). These studies support the notion that increasing the number of college graduates should be at the center of state workforce and economic development plans.

Policymakers are seeking major improvements in educational attainment by promoting a national college completion agenda. The focus has shifted from economic competitiveness to transparency, accountability, and affordability in higher education (Belfield, Crosta, & Jenkins, 2013; Jaschik, 2013). In March 2011, the U.S. Department of Education issued the *College Completion ToolKit* to present seven low-cost strategies for postsecondary institutions: developing an action plan, embracing performance-based funding, aligning high school standards with college entrance and placement standards, making it easier for students to transfer, using data to drive decision making, accelerating learning and reducing costs, and targeting adult

students (U.S. Department of Education, 2011a). The Department of Education has funded various grant programs to promote student learning outcomes, college completion and state targets to help increase the percentage of college graduates (U.S. Department of Education, 2011b).

Numerous initiatives have been created by various organizations to support the college completion agenda. The National College Board sought to increase the proportion of 25-to 34-year olds who hold an associate's degree or higher from the current level of 39% to 55% by 2025 (College Board, 2010; Hughes, 2012). The National Association of System Heads, the association of the chief executives of the 46 colleges and university systems of public higher education in the United States and Puerto Rico, and The Education Trust, a national non-profit advocacy organization that promotes high academic achievement for all students at all levels, particularly for students of color and low-income students, established the project Access to Success. The Access to Success project worked with 24 public higher education systems that pledged to decrease gaps in college-going and graduation rates for low-income and minority students by 2015 (U.S. Department of Education, 2011a). The Lumina Foundation, an independent, private foundation in Indianapolis that is committed to making opportunities for learning beyond high school available to all, helped create Achieving the Dream. The Achieving the Dream initiative helped more community college students succeed, specifically low-income students and students of color (U.S. Department of Education, 2011a).

While these organizations use diverse strategies in pursuit of a common goal, their initiatives all focus on a shared set of approaches (Russell, 2011): raising awareness of the issues among education stakeholders and mobilizing public support; aligning public policy with the college completion agenda; improving institutional outcomes through

programmatic activity and a culture of student success; improving higher education productivity; refining the measures of completion; analyzing current policies and practices and identifying those that are most effective; and enhancing support for attainment among underrepresented students, especially those from low-income and minority groups (Shapiro, Dundar, Ziskin, Yuan, & Harrell, 2013, p. 10)

Graduation Rates in Community Colleges

Local community colleges offer students the opportunity to complete a degree with fewer entry requirements, flexibility, little to no cost, and job access. The community college system in the United States was created from the results of the 1947 Truman Commission Report. The report sought the establishment of reasonably priced public colleges that would assist the community and provide comprehensive educational programs (Cooper, 2010). Community colleges are open access institutions that provide the opportunity for an education to any person who desires to attend. These important colleges provide an associate's (two year) degree for technical or career programs, as well as the first two years of general education courses that can be applied towards a bachelor's (four year) degree at a college or university (Schuch, Jones, & Harper, 2011). Community colleges, also known as two-year institutions, are the largest postsecondary sector of American higher education. Approximately 46% of all first-time undergraduates are community college students (American Association of Community Colleges Data Points, 2015). Public two-year institutions became a major focus of the completion agenda initiated by the Obama administration. In July 2009, President Barack Obama announced his American Graduation Initiative, asking "every American to commit to at least one year or more of higher education or career training and set a new national goal: by 2020, America will once

again have the highest proportion of college graduates in the world” (American Association of Community Colleges, p. 1).

While more students are entering college than ever before, during the first year of college, large numbers of students do not return and a substantial proportion depart before attaining a degree (Horn, Berger, & Carroll, 2005). At two-year degree-granting institutions, only 29% of first-time, full-time undergraduate students who began their pursuit of a certificate or associate's degree in fall 2010 attained a degree within three years (U.S. Department of Education, 2014). At public two-year institutions, 19.5% attained a degree within three years, 53.6% for private nonprofit two-year institutions, and 62.8% for private for-profit two-year institutions (U.S. Department of Education, 2014). Initially, funding models for higher education were built on the number of students served upon enrollment, but a shift is now underway that moves from financial incentives for student access to student success and the importance of creating more equity in student outcomes (Lumina Foundation, 2017).

Numerous initiatives were created by state higher education organizations to support the college completion agenda. Many states, including Washington State, Ohio, Indiana, Tennessee and Texas, revised their funding formulas to reflect outcome goals in addition to enrollment. Performance measures included institutional achievement in the level of and improvement in the number of degrees and certificates awarded (U.S. Department of Education, 2011a). States increased attention to certificates and degrees awarded to Pell Grant recipients, adult students, minority students, and developmental students (U.S. Department of Education, 2011a). States also increased attention to the numbers and percentages of certificates and degrees awarded in priority fields such as mathematics, science, engineering, and nursing (U.S. Department of Education, 2011a). Lastly, states have increased attention to an institution’s number and

percentage of students who transitioned successfully from developmental to college-level courses and completed certificate or degree programs on time (U.S. Department of Education, 2011a).

During 2013, in the state of Tennessee, Governor Bill Haslam announced a Drive to 55 campaign with the goal of increasing college graduation to 55% by 2025. The Drive to 55 is a component of Tennessee's 2010 Complete College Tennessee Act. At the 2014 State of the State speech to Tennessee legislature on February 3, 2014, Governor Haslam said, "In the year 2025, 55% of Tennesseans will need a certificate or degree beyond high school to get a job. Today, only 32% of Tennesseans qualify. To truly be America at its best, that's not good enough" (Tennessee Office of the Governor, 2017, p.7). Governor Haslam added, "Our Drive to 55 initiatives focuses on five key goals: 1. Getting students ready; 2. Getting them into school; 3. Getting them out of school; 4. Finishing what we started with adult students; and 5. Tying education directly to workforce needs" (Tennessee Office of the Governor, 2017, p.8). Tennessee has implemented the following initiatives to achieve the Drive to 55: TN Promise, TN Reconnect, and TN LEAP. The TN Promise scholarship is a last-dollar scholarship for seniors in high school to provide last dollar funding equating to two years of tuition-free attendance at a community or technical college in Tennessee. The TN Reconnect program is designed to help adults return to finish a degree, or adults who are going to college for the first time, as well as veterans and service members. The Reconnect grant is a last-dollar scholarship for students who attend Tennessee Colleges of Applied Technology and community colleges. The Tennessee LEAP (Labor Education Alignment Program) was designed to eliminate skills gaps in Tennessee and provided funding to communities that developed a framework for regional partnerships (THEC, 2017).

Minority Graduation Rates in Community Colleges

The Southern Regional Education Board (SREB) reported that the fastest growing student populations in colleges and universities are African American and Hispanic students. By 2022, the majority of public high school graduates in 10 of the 16 SREB states are projected to be non-White public high school graduates. As the minority population grows in the United States, low college graduation rates will become a problem for national prosperity (Thomas, 2010). The director of education data services for SREB in 2009, Joseph Marks, said, “The overall college graduation rate will go down unless the graduation gaps between groups are closed because the faster growing groups have the lowest rates” (Nealy, 2009, para. 6).

The percentage of African American students who began college in 2000 earned a certificate or associate degree within the expected time frame of three years was 5.8% lower than the overall graduation rate for that same year. Despite the differences in the three year graduation rates, the percentage difference (whether an increase or decrease) each year of African American certificate or associate degrees granted was relatively consistent with the total graduation rate and Caucasian student graduation rate between 2000 and 2010. Overall the graduation rate of Caucasian students who began certificate or associate degrees in 2000 through 2010 was approximately 2.6% higher when compared with the total graduation rate. The graduation rate of African American students who began certificate or associate degrees in 2000 through 2010 was approximately 8.3% lower than the total graduation rate. Comparing the two races, there is approximately a 10.9% difference in graduation rates between Caucasian and African American students who began certificate or associate degrees in 2000 through 2010 and graduated three years later.

Despite the fact that the percentage of Hispanic students, starting out in 2000, who earned a certificate or associate degree within the expected time frame of three years was 6.8% lower than the 2000 total graduation rate, the percentage difference (whether an increase or decrease) each year of Hispanic certificate or associate degrees granted was relatively consistent with the total graduation rate and Caucasian student graduation rate between 2000 and 2010. Overall the graduation rate of Caucasian students who began certificate or associate degrees in 2000 through 2010 was approximately 2.6% higher when compared with the total graduation rate. The graduation rate of Hispanic students who began certificate or associate degrees in 2000 through 2010 was approximately 4.8% lower than the total graduation rate. Comparing the two races, there is approximately a 7.4% difference in graduation rates between Caucasian and Hispanic students who began certificate or associate degrees in 2000 through 2010 and graduated three years later. Table 2 displays the proportion of all certificate or associate degrees granted within three years at two-year public institutions compared to the proportion of certificate or associate degrees granted to Caucasian, African American, and Hispanic students within three years at two-year public institutions.

Table 2

Graduation Rates from First Institution Attended Within 150 Percent

	% of Total Certificate or Associate Degrees Granted at Public Institutions (within 3 years)	% of Caucasian Certificate or Associate Degrees Granted at Public Institutions (within 3 years)	% of African American Certificate or Associate Degrees Granted at Public Institutions (within 3 years)	% of Hispanic Certificate or Associate Degrees Granted at Public Institutions (within 3 years)
2000 starting cohort	23.6	25.7	17.8	16.8
2002 starting cohort	21.9	24.5	13.2	16.7

2003 starting cohort	21.5	24.1	12.7	16.3
2004 starting cohort	20.3	22.9	11.5	15.0
2005 starting cohort	20.6	22.9	12.1	15.6
2006 starting cohort	20.4	23.1	12.0	15.5
2007 starting cohort	20.3	22.9	11.8	15.9
2008 starting cohort	20.2	22.8	11.8	15.8
2009 starting cohort	19.8	22.5	11.3	15.9
2010 starting cohort	19.5	22.4	10.8	16.2

Source: (National Center for Education Statistics, 2014, Table 326.20).

The college achievement gaps and differences in attainment rates between Caucasian and African American students are well documented; consequently, greater attention is directed toward the “services, functions, and outcomes of community colleges, particularly as they affect student persistence and completion” (Cooper, 2010, p. 22). A 2011 study conducted by the National Center for Educational Statistics found that the percentage of first-time beginning community college students who attained a degree or certificate or transferred to a four-year institution within six years is 45.6%. Minority students are particularly vulnerable to not completing; less than 40% of students attained a degree or certificate or transferred to a four-year institution with six years (National Center for Educational Statistics, 2011). Many students require remedial education classes, experience financial difficulty covering college costs, and have a hard time balancing competing priorities such as school, family, and work (Cooper, 2010). Higher education will need to explore strategies that focus on students because “placing students at the center of institutional policy and practice can lead the way to improved student outcomes and a more equitable distribution of opportunity” (p. 22).

Paths to Graduation

As community colleges are open access institutions, becoming more selective during the admissions process is not an option for community college administrators to increase graduation rates. Community colleges are expected to accommodate a diverse student profile, many of whom face financial, academic, and personal encounters that can affect retention (Bailey, Jenkins, & Leinbach, 2005). One way to approach improving graduation rates involves understanding why students leave or choose to stay at an institution. Community college students have many barriers that might compromise their ability to be successful and complete college. Generally speaking, community college students are underprepared, have lower test scores, delay entering school, attend school on a part-time basis, are from low income backgrounds, may be older students with other life responsibilities, or are first-generation students; all of these factors are related to lower retention and graduation rates (Bailey, Alfonso, Schott, & Leinbach, 2004; Cohen & Brawer, 2008; McCabe, 2000; Thayer, 2000). Furthermore, focusing on retention rates is crucial for an institution's financial stability and to sustain academic programs (Fike & Fike, 2008).

In a 2004 study, researchers at ACT (Habley & McClanahan, 2004) surveyed two- and four-year higher education administrators regarding retention practices. The survey asked the chief academic officers and other administrators to rate the importance of factors associated with attrition and factors that promote retention. The survey received an overall response rate of 35% and a public two-year college response rate of 39%, or 386 out of 991 surveys (Habley & McClanahan, 2004). The ACT researchers used retention and degree completion rates, taken from ACT's 2003 Institutional Data Questionnaire, to identify a set of high-performing colleges that performed above the median in both retention and degree completion and a set of low-

performing colleges that performed below the median on both sets of measures. Of the 386 two-year public colleges in the dataset, 55 were identified as high performing and 66 as low performing (Habley & McClanahan, 2004).

After comparing the practices from the high-performing community colleges to the low-performing community colleges, the following factors separated the two groups:

- mathematics, writing, and reading centers/labs,
- advising interventions with selected student populations,
- learning communities,
- foreign language centers/labs, and
- programs for racial/ethnic minorities.

The community college respondents were also asked to identify four campus retention practices that had the greatest impact on student retention; those responses were as follows:

- mandated course placement testing (20.7%),
- tutoring programs (19.3%),
- required remedial/developmental coursework (19.2%), and
- comprehensive learning assistance center/lab (19.2%) (Habley & McClanahan, 2004, p. 6).

Despite a multitude of retention-oriented programs and services offered on community college campuses, only 27.2% of the community colleges that responded to the survey had established an improvement goal in the first to second year retention rate, and only 19.9% reported that the college had established an improvement goal for degree completion. “The ACT study (Habley & McClanahan, 2004) is a laudable effort to examine retention practices

associated with institutional effectiveness in a large sample of community colleges” (Jenkins, 2006, p.7). The study did not examine institutional characteristics that affected institutional performance. In 2015, the average attrition rate for two year public institutions was approximately 54.7% from the first year to the second year and these colleges reported a 21.9% graduation rate (ACT, 2015).

Improving Retention with Student Support Services

Research indicates that institutions need to create and implement effective programs to increase student retention (Lau, 2003). Mahoney (1998) implemented a quantitative study over a four-year period measuring academic performance, continuing education, and graduation data for three groups: all undergraduates, Student Support Services (SSS) participants, and eligible Student Support Services participants who chose to not participate. In this study the SSS program provided low-income, first-generation, and disabled students with several types of academic support (Mahoney, 1998). Mahoney found that students who participated in Student Support Services had the highest retention rates (72%) when compared to the general undergraduate population (67%) and as compared to eligible students who chose to not participate in Student Support Services (59%). When comparing graduation rates, similar results were discovered: Student Support Services participants had the highest graduation rates (61%) when compared to the general undergraduate population (56%) and eligible students who chose to not participate in Student Support Services (55%). The results of this study indicated that the extra provision through Student Support Services program participants resulted in higher rates for both retention and graduation when compared to regular students and eligible students who chose to not participate in these services (Mahoney, 1998).

A qualitative study was implemented by Herbert in 1997 to research the impact of Student Support Services at the University of Connecticut. Findings revealed that student programs had a positive impact on college achievement and persistence for students who took advantage of the programs. Another study found a correlation between student persistence and student services received (Chaney, Muraskin, Cahalan, & Goodwin, 1998). Student Support Services are services that are designed to increase student integration and improve chances to persist and graduate. Research indicated, “student[s] that have been encouraged to recognize and [use] their strengths and are given tools to improve upon their weaknesses show remarkable improvement in the classroom” (Maxie, 2003, p. 1).

Tinto’s Student Integration Model

In higher education there are a number of theories pertaining to student retention. One of the most widely used theoretical frameworks is Tinto’s integration framework (1993). Tinto theorized that students are more likely to remain enrolled in an institution if they become academically and socially integrated into the life of that institution. Students are more likely to persist if they become more integrated by developing connections to individuals, engaging in academic activities, or participating in clubs. Students are less likely to persist if they do not feel at home at an institution or do not believe that the institution can help them meet their goals (Karp, Hughes, & O’Gara, 2010). Students are also less likely to persist if they feel isolated or do not engage in social interactions at the institution (Karp et al., 2010).

Tinto explained that student integration into an institution involved both academic and social integration. Student involvement with the intellectual life of the college implies academic integration whereas student relationships and connections created outside of the classroom

implies social integration. Furthermore, Tinto noted that an institution can have both informal and formal systems to encourage integration and persistence. Tinto's framework has been questioned in relation to the relevance of social integration for community college and commuter students: The majority of his research is based on traditional-age students residing at universities (Wild & Ebbers, 2002). The definition of social integration has also been challenged by many higher education scholars in regard to the retention of minority students.

Rendón, Jalomo, and Nora (2004) challenged the perspective that retention depends on the student's ability to integrate and assimilate into the institution. These authors suggested that institutions share responsibility in the successful cultural and social integration of the students and that it is not the students' sole responsibility. Rendón et al. (as cited in Swail, Redd, and Perna, 2003) defined biculturation as the process where students, "live simultaneous lives in two cultures, two realities" (p. 49). Duster (cited in Swail et al., 2003) explained, "dual competency" as the process where, "students must be competent in their own culture plus the culture of the institution" (p. 49). Students who made cultural connections through social groups that reflected their culture of origin were found more likely to persist in higher education (Kuh & Love 2004).

Even though some groups formed on their own or informally, institutions can help create opportunities for students to connect. Tierney (2004) argued that social integration implies conformity and recognition of the prevailing culture or environment and that students should leave their identity at home. Some educators now define integration as having a sense of belonging. Tinto (1993) later elaborated on the importance of supportive student communities for minority and adult students who had a difficult time transitioning to college. Tinto also described the need to build inclusive campuses stating that, "to be fully effective, college communities, academic and social, must be inclusive of all students who enter" (p. 187).

Validating Experiences and Persistence

Rendón (1994, 2002) viewed that, for non-traditional and underserved students including community college students, validation may be more important for their success and persistence. Validation was defined as contacts with students, initiated by faculty and staff, which create feelings of self-worth and a belief in the students' ability to succeed in the college environment. Validation was described as showing recognition, respect, and appreciation for students and their families and communities. Although Rendón (1994, 2002) presented validation as an alternative to integration, it may also be regarded that validation is a precondition for integration meaning that faculty and staff may reach out to students in validating ways, thus leading students to feel more integrated. Barnett (2011) gave examples of this type of validation, such as faculty and staff interacting with students by encouraging the student to discuss their personal goals, showing an appreciation of their personal and cultural history, or giving extra assistance with class material. Barnett (2011) designed a study that explored Rendón's (1994, 2002) validation construct through examining the community college student experiences with validation from faculty to see whether these experiences contributed to their sense of academic integration and intent to persist in college. Barnett's (2011) research empirically tested and supported two of Tinto's integration framework principles: (1) faculty-student interactions influence academic integration and, (2) academic integration influences students' intent to persist.

The Idea of Diversity and Inclusion

The idea of diversity is wide-ranging, varied, and unclear as it relates to its meaning and essentiality for higher education (Williams & Clowney, 2007). Historically, diversity was linked with college access concerns for underrepresented racial minorities or equity and inclusion

matters associated with institutional hiring practices (Parker, 2015). Today, diversity relates to various demographic groups, sexual identity, religious affiliation and other factors (Williams & Clowney, 2007).

Diversity refers to any dimension that is used to distinguish groups and people from one another. And it means a respect for and appreciation of differences in identity such as age, gender, ethnicity, national origin, sexual orientation, disability, indigenous status, gender expression/identity, education, religion and other dimensions that are intrinsic to who we are. (RCB, p. 5).

Often, colleges and universities speak about diversity in regard to the structural or compositional diversity of students and staff, collegiate experiences, or diversity in the core curriculum (Hurtado, Milem, Clayton-Pedersen, & Allen, 1998). Milem, Chang, and Antonio (2005) defined diversity as a, “focus on race and ethnicity and with an eye toward campus process and practice...Given our focus on process, we define diversity as an engagement across racial and ethnic lines comprised of a broad and varied set of activities and initiatives” (pp.3-4). Furthermore, campus diversity was related to institutional programs and practices that promoted equity and inclusion (Milem et al., 2005). There is a difference between diversity and inclusion, although the two terms are similar in nature.

Inclusion is a state of being valued, respected and involved. It is how diversity is put into action. It's about recognizing the needs of each individual and having the right conditions so that each person has the opportunity to achieve their full potential. Inclusion is reflected in an organization's culture and practices, in addition to its programs and policies...In simple terms, diversity is the mix, and inclusion is getting the mix working well together.

We believe diversity is a fact and inclusion is a choice we make as individuals and as leaders (RCB, p. 5).

Diversity in Institutions of Higher Education

Mildred García, president of California State University at Fullerton and the 2013 chair of Association of American Colleges and Universities (AAC&U), stated, “As our nation faces unprecedented demographic shifts and a complex and challenging economic, legal, and regulatory environment, it is more important than ever that every higher education institution redouble its effort to ensure that all students learn with and from diverse peers and graduate ready to lead in a diverse and globally connected world” (Association of American Colleges and Universities, 2013, para. 6). “According to the U.S. Census, by 2050 racial/ethnic minorities will comprise 55% of the working-age population, with Latinos at 30%, African-Americans at 12% and Asian-Americans at 8%. These rates reflect a sizable increase for Latinos (by 100%) and Asian-Americans (by 33%) over current statistics. To ensure that all workers have the skills to succeed in the workplace, our nation’s leaders, as well as leaders of our higher education institutions, recognize the importance of promoting diverse learning environments – not for the sake of diversity itself but precisely because of the economic (and educational) benefits that flow from learning that takes place in a diverse setting” (Cooper & Coleman, 2010, para. 3-4).

In January 2007, Dr. Debra Humphreys, the Vice President for Communications and Public Affairs from the Association of American Colleges and Universities (AAC&U), remarked that college campuses needed to tackle the following three questions in regard to diversity: “How exactly are we to really achieve meaningful inclusion in this era of Greater Expectations? Why is diversity important in higher education in this context – and in your and your students’ own

local, national, and international contexts? And, finally, what impact does diversity really have on achievement of your own learning goals?” (2007, p. 3). Humphreys commented that many educators know that it is important to increase access to higher education and diversity on campuses, but it is equally important to guarantee that all students receive the very best education possible. Humphreys declared that, “we also need to change our notions of excellence to be sure that all students, whatever their background or prior learning, learn about issues of diversity, and preferably in diverse settings. If we don’t do this, we are doing a disservice to all our students” (p. 3).

When campuses administrators are considering diversity efforts for their campuses, it is helpful to keep in mind that: (1) diversity means different things to different people on campus depending on the job that they have and where they are located on campus, and (2) diversity in higher education requires individuals look at different areas on campus, sources of data, and how these two interact (Humphreys, 2007). “One of the most important findings in research is that those institutions with a holistic plan and visible leadership commitment to addressing issues of diversity seem to have a better intergroup relations and diversity outcomes by a variety of measures” (p. 4). To make connections between campus diversity programming, Humphreys explained that a relationship between recruitment and retention of a diverse student body and efforts to encourage intergroup dialogue on campus created a better environment for minority students demonstrating that recruitment is related to climate. Further,

higher education can do its best work when it embraces the diversity of ideas and experiences that characterize the social, cultural, and intellectual world...Persuasive research indicates that for all students, engaging diversity on campus and in the curriculum promotes intellectual development, enhances critical thinking, reduces

prejudice, improves intergroup relations, and contributes to student academic success and satisfaction. Exploring diversity also produces graduates more likely to engage as informed citizens in remedying unsolved social problems. (p. 4)

In 2013, the Board of Directors for the Association of American Colleges and Universities (AAC&U) adopted a new mission statement, released a new set of strategic goals, and released the new statement entitled “Diversity, Equity, and Inclusive Excellence”. The AAC&U’s revised mission statement is, “to make liberal education and inclusive excellence the foundation for institutional purpose and educational practice in higher education” (para. 2). The board’s statement on diversity, equity, and inclusive excellence stated that, “equity begins with the conviction that all students who have completed high school deserve the opportunity to attend college and to obtain an education that will prepare them well for work, life and citizenship” (para. 2). This statement further advanced the AAC&U’s 1998 definition of liberal education as global and diverse. The 1998 definition embraced a variety of ideas and experiences that characterized the social, natural, and intellectual world. It is society’s responsibility to acknowledge diversity in all its forms, reiterating that to be committed to diversity and excellence in all forms meant that institutions needed to embrace diverse ideas, experiences, and people – this defined inclusive excellence. The AAC&U defined student success as, “not exclusively as degree attainment, but also as the achievement of the primary goals of liberal education: broad and in-depth knowledge, the capacity to integrate and apply learning to new situations, and the intellectual creativity and resilience to face challenges” (para. 4). Commitment to this broad definition of student success meant that institutions needed broad-based, compassionate leaders who demonstrate awareness of and proactive willingness to address their school’s equity and inequity issues.

The AAC&U established four goals: (Goal 1) LEAP: Liberal Education as a Global Necessity; (Goal 2) QUALITY: 21st Century Markers for the Value of US Degrees; (Goal 3) EQUITY: Innovation, Inclusive Excellence, and Student Success; and, (Goal 4) SOCIAL RESPONSIBILITY: Integrative Liberal Learning for the Global Commons (AAC&U, n.d.). The third goal focused on accelerating, “broad-scale systematic innovation to advance educational practices that engage diversity and challenge inequities in order to make excellence inclusive” (p. 9). Specifically, the AAC&U looked to increase collaborative practices that focused on student and faculty success to systematic collaborations that would improve the quality of the underserved student achievement. “The time is right and the need is urgent to provide a horizon-expanding education to all who participate in our educational system – in school, in community college and career-technical institutions, and in four-year colleges and universities, public and private. Access to educational excellence is the equity challenge of our time” (p. 9).

Despite multiple efforts to promote diversity in institutions of higher education, the U.S. Department of Education provided documentation that there are, “continuing educational inequities and opportunity gaps in accessing and completing a quality postsecondary education” (U.S. Department of Education, 2016a). The authors of the report stated:

- Higher education is a key pathway for social mobility in the United States.
- During the past 50 years, the U.S. has seen racial and ethnic disparities in higher education enrollment and attainment, as well as gaps in earnings, employment, and other related outcomes for communities of color.
- Gaps in college opportunity have contributed to diminished social mobility (e.g., the ability to jump to higher income levels across generations) within the United States,

and gaps in college opportunity are in turn influenced by disparities in students' experiences before graduating from high school.

- The participation of underrepresented students of color decreases at multiple points across the higher education pipeline including at application, admission, enrollment, persistence, and completion.
- The interaction of race and ethnicity, family income, and parental education can influence educational and labor market outcomes. (pp.1-2)

The mission statement, strategic goals, and statement led to the AAC&U focus on helping higher education provide a, “liberal and liberating education for all college students, including and especially those students from groups historically underserved by the American educational system at all levels (AAC&U, 2013, para. 4). “The AAC&U Board of Directors believes it is essential especially at this particular moment in the history of American higher education to affirm that every college student deserves an education that provides the full array of learning outcomes essential for success” (para. 6).

Racial Climate on College Campuses

Scholars from the University of Michigan provided an expert report on the Educational Value of Diversity for two lawsuits that challenged the university's use of affirmative action in admissions. The report offered a, “theoretical model that explained how a diverse student body within an institution can produce far-reaching educational benefits for all college students... students in diverse educational environments learn more and are better prepared to become active participants in a pluralistic, democratic society when they leave higher education” (Schuh et al., 2011, p. 44). The report was instrumental in the Supreme Court's decision that ruled, “the

educational benefits of diversity ‘are not theoretical but real’ and that diversity is a compelling interest in higher education” (p. 44).

Colleges and universities are not only responsible for preparing students for the workforce, but also responsible for preparing students to become good overseers of our nation’s democratic principles and ideals (Schuh et al., 2011). Student affairs professionals have a significant role in advancing or undermining the impact of diversity on students. There are key internal and external forces that have the potential to facilitate or undermine efforts related to learning and experiences in diverse educational settings.

“Key external forces that shape campus climate include: governmental policies, programs, and initiatives, as well as sociohistorical forces” (Schuh et al., 2011, p. 46).

Government factors can influence the campus climate, such as: financial aid policies and programs, affirmative action, state and federal policies, access and equity court decisions in higher education, and the way that states provide for institutional differentiation within higher education (Hurtado et al., 1998). Sociohistorical factors that influence the campus climate include events or issues outside of the campus that involve the way people view or experience different forms of diversity (Hurtado et al., 1998).

Hurtado et al. (1999) believed that external factors interact with internal factors to produce the climate on campuses for students. Milem, Dey, and White (2004), described five dimensions for internal campus climate factors: (1) compositional diversity, (2) historical legacy of inclusion or exclusion, (3) psychological climate, (4) behavioral climate, and (5) organizational/structural diversity.

Compositional diversity, also known as structural diversity, refers to the numerical and proportional representation of different student populations on a campus (Schuh et al., 2011).

“Institutional programs and policies that increase the compositional diversity of a campus play an important symbolic role by communicating to interested internal and external constituents that diversity is a priority for the campus and its leaders” (p. 47). Compositional diversity is often viewed as the most important when campus leaders are tasked with improving campus climate. Educators, institutional leaders, and policymakers commonly believe that a critical mass of people from various groups must be on campus if diversity is going to work. The focus solely on this dimension tends to make diversity an end in itself, “rather than as an educational *process* that, when properly implemented, has the potential to produce many important educational outcomes” (p. 48).

Increasing the compositional diversity of a campus is a crucial first step in the process to change campus climate (Hurtado et al., 1998). However, compositional diversity cannot be the only dimension of climate that college administrators address; leaders need to think and act in a multidimensional way if increased learning is to stem from increased campus diversity. The historical legacy of inclusion or exclusion points to historical remnants of segregated schools and colleges that continue to have an effect on the campus climate in regard to racial and ethnic diversity (Hurtado et al., 1999). The resistance to desegregate communities and campuses, having policies that benefit the majority population, and attitudes and behaviors that prevent interactions with different cultures and communities are still shaping dynamics on campuses today. “It is important for educators to be clear about any history of exclusion that has occurred on their campus, to talk about efforts over time to be more inclusive, and to address any persistent negative consequences of this history” (Schuh et al., 2011, p. 48). This will help gather support for diversity initiatives and other programs designed to improve the campus climate.

The psychological climate can be defined as, “including views held by individuals about intergroup relations as well as institutional responses to diversity, perceptions of discrimination or conflict among groups, and attitudes held toward individuals from different backgrounds” (p. 48). Different psychological climate studies have shown that administrators, faculty, and students from different backgrounds will see the campus climate in different ways. The role or position of the person at the institution will affect the way that person experiences and views the campus, the campus mission, and the campus climate.

“The behavioral dimension of the institutional climate consists of actual reports of general social interaction, interaction between and among individuals from different racial/ethnic backgrounds, and the nature of relations between and among groups on campus” (Hurtado et al., 1999, p. 49). Research indicated that students from different racial and ethnic groups interpret same-group interactions differently (Schuh et al., 2011). Caucasian students can interpret a group of African American students as an example of racial segregation or separation, where students of color will interpret ethnic group clustering as a way to find cultural support within a larger unsupportive environment. Hurtado et al. (1998;1999) noted that when different groups do not engage with other groups it may affect student views of each other, their support for diversity initiatives, and the development of important educational outcomes. Therefore, it is important for educators to make sure that same-group and mixed group contact are not mutually exclusive. “Students who have the opportunity to engage with peers from different backgrounds in regular, structured interactions are more likely to show growth in a number of critical educational outcomes” (Schuh et al., 2011, p. 49). In addition to interpersonal interactions, structural transactions at the institution can impact campus climate.

“The organizational-structural dimension of climate is reflected in the curriculum and campus activities; in decision-making practices related to budget allocations, admissions, staffing, and reward structures; and in other important structures and processes that guide the day-to-day ‘business’ of our campuses” (p. 49). The institutional structural dimension characterizes different ways that some groups benefit or become implanted in institutional structures and organizational processes. The organizational structural dimension of climate is an important way to influence and shape campus climate.

Critical Race Theory and Education

Critical theories show how invisible power structures can shape the way individual stories are told and how individuals are heard and processed in the minds of others. Critical theory can be defined as a “radical restructuring [of] society toward the ends of reclaiming historic cultural legacies, social justice, the redistribution of power and the achievement of truly democratic societies” (Lincoln & Denzin, 2000, p.1056). Research theories in higher education scholarship that critically examine social roles and institutions are gaining more recognition.

One example of critical theory is critical race theory (CRT). “Critical race theorists seek first to illuminate how society is structured along racial lines, and then to transform this condition” (Schuh et al., 2011, p. 160). Some of the central components of CRT include that racism is an inherent part of society, race is a social construction, and that in order to be able to address racism it is important to hear the stories of people of color (Delgado & Stefancic, 2001). In higher education, researchers are now using CRT as a research framework and line of inquiry into understanding the development of college students. CRT can help “explain the centrality of

race and ethnicity while emphasizing the influence of culture on identity” (Schuh et al., 2011, p. 196).

There are five prominent tenets of CRT that can be helpful in educational research: counter-storytelling, the permanence of racism, whiteness as property, interest convergence, and the critique of liberalism. Delgado and Stefancic (2001) defined counter-storytelling a method of writing that “aims to cast doubt on the validity of accepted premises or myths, especially ones held by the majority” (p. 144). Counter-storytelling is a means of revealing and assessing normalized discussions that perpetuate racial stereotypes. Counterstories are used to challenge the narratives and beliefs of the majority, thus giving a voice to marginalized groups. It helps us understand what life is like for others and allows other people to see a new and different world. In education, counter-stories can originate in individual’s stories and narratives, other individual’s stories and narratives, and composite stories and narratives (DeCuir & Dixson, 2004).

The permanence of racism includes embracing a realist view of the American societal structure (DeCuir & Dixson, 2004). This realist view requires individuals to realize the overriding role racism has played and continues to play in American society. The permanence of racism also proposes that racist hierarchical structures exist in political, economic, and social areas (DeCuir & Dixson, 2004). These structures, including our education system, allocate privileges to Caucasians and not people of color (DeCuir & Dixson, 2004).

Another component of CRT is whiteness as property. Delgado and Stefancic (2001) defined property interest in whiteness as the “idea that white skin and identity are economically valuable” (p. 153). Ladson-Billings and Tate (1995) suggest that in utilizing a CRT perspective to analyze educational inequity, the curriculum, and, specifically, access to high-quality, rigorous

curriculum, has been almost exclusively enjoyed by Caucasian students. It is important to note that some students of color have been able to get through barriers to educational opportunity, but they are a very small number when compared to the Caucasian students (DeCuir & Dixson, 2004). Many schools reinforce whiteness as property in their policies and practices which results in African American students needing to conform to acceptable standards (DeCuir & Dixson, 2004).

An additional element of CRT is interest convergence. Interest convergence, defined by Delgado and Stefancic (2001), is a “thesis pioneered by Derrick Bell that the majority group tolerates advances for racial justice only when it suits its interest to do so” (p. 149). There are some instances, for example in sports, where schools may seek out minority students to raise their success in the sporting area. In this situation, the minority students are given an opportunity to receive an education; however, it is only because the school will benefit from their presence (2001).

The last factor of CRT is liberalism. Liberalism is a “political philosophy that holds the purpose of government is to maximize liberty; in civil rights, the view that the law should enforce formal equality in treatment” (DeCuir & Dixson, 2004, p.150). CRT is critical of the following viewpoint embraced by many liberals: the idea of colorblindness, the neutrality of the law, and incremental change (DeCuir & Dixson, 2004). The idea of colorblindness, “fails to take into consideration the persistence and permanence of racism and the construction of people of color as Other” (p. 29). With incremental change, equality rather than equity is pursued. Equality is seeking for individuals to have the same opportunities and experiences, but this is not possible because race and experiences with race create an unequal situation (DeCuir & Dixson,

2004). Equity identifies that the playing field is unequal and tries to address the inequality (2004).

Many institutions state a commitment to diversity through formally creating a position that focuses on diversity relations and issues. CRT views the hiring of one person to attend to the school's diversity initiative as a limitation of the liberal commitment to diversity (DeCuir & Dixson, 2004). The token commitment to diversity through a single professional dedicated to the work and covering a wide range of responsibilities ensured that change would be incremental and not immediate (DeCuir & Dixson, 2004). A restriction of liberalism is its dependence on incremental change (DeCuir & Dixson, 2004). In sum, more research is needed to further develop CRT as a framework and method of analysis in educational research (DeCuir & Dixson, 2004). “CRT implies that *race* should be the center of focus and charges researchers to *critique* school practices and policies that are both overtly and covertly racist” (p. 30).

Inclusive Excellence & Institutional Support of Diversity

Many colleges and universities struggle with diversity efforts on campus even if they are equipped with diversity plans, diversity committees, or diversity offices. Damon Williams, a nationally recognized expert in diversity, leadership, and organizational change, believed that many campuses struggle due to lengthy faculty and staff terms of employment which often result in different levels of resistance to change; decentralized structures that can create conflicting ideas about diversity and excellence that can make it very difficult to have coordinated and united efforts; ritualistic and symbolic diversity planning which often means superficial and short-term results is achieved rather than creating initiatives that result in deep sustained transformations (Williams, 2007). Williams stated that if higher education wants to see real

change in diversity then institutions will need to focus on “implementing a diversity change infrastructure that is holistic, multidimensional, and focused on making a real difference” (p. 9).

Diversity plans need to address administrative structures as well as the unspoken priorities and attitudes of community members. The University of Connecticut (UConn) has embarked upon changing the culture of the institution in pursuit of the AAC&U’s idea of inclusive excellence. “Making excellence inclusive means attending both to the demographic diversity of the student body and also to the need for nurturing climates and cultures so that all students have a chance to succeed” (AAC&U, 2013, para. 6). UConn’s standardized test scores, such as the SAT, have increased for all students, enrollment of underrepresented African American and Latino students has increased, the university is retaining and graduating minority students at a nation-leading rate, and there is an increase in the ethnic and racial diversity of the faculty (Williams, 2007).

UConn has developed the following strategic leverage points to achieve inclusive excellence: (1) “*Diversity must be a campus-wide priority*” (p. 9). Diversity should be discussed during academic meetings, strategic planning meetings, faculty senate, and at the institution’s highest levels of governance, policy, and leadership if change is going to happen. If the plan “is authorized at the highest levels of the institution, it applies to the entire university and is designed to withstand changes in leadership, even at the presidential or provost levels” (p. 9). However, to ensure that changes take place, diversity needs to be implemented by academic deans, vice presidents, department chairs, and others in positions of authority. “In order to achieve cultural change that runs deeper than the surface, institutions will need to attach diversity implementation efforts to their financial systems, rewarding individuals, departments, and units for gains they achieve in diversity, and holding them accountable for the processes that they use

to achieve these goals” (p. 10). The second strategic leverage point at UConn is: (2) *“Institutions need a diversity leadership development process to enhance the skills and shift the mental models of students, faculty, staff, and administrators”* (p. 10). Institutions will need to purposely develop a plan to change how diversity issues are approached and implemented across the campus, from recruitment to hiring to teaching. There are many deep-seated, incorrect, beliefs around diversity that need to be reevaluated; for example, admissions requirements will need to be lowered, diverse topics are too disruptive in the classroom, or “the presence of services and programs targeted to the needs of under-represented groups balkanizes the campus environment by creating separate spaces for students from ethnically and racially diverse backgrounds” (p. 10). Social cognition is a strategy that UConn uses. Upper level administrators, including the president, provost, deans, and other leaders, are provided current information on diversity issues during a working breakfast or lunch from prominent scholars, researchers, and leaders in the field of diversity. These briefings are used as a starting point for the institution to further explore specific diversity topics that pertain to the individual school. The third strategic leverage point at UConn is: (3) *“An empowered, formal diversity infrastructure is essential”* (p. 11). The creation of a chief diversity officer position shows a strong level of institutional commitment to the achievement of inclusive excellence. “When appropriately empowered, these high-ranking administrators play a key role in advising senior leadership and guiding the decision making of the institution” (p. 11). Chief diversity officers can lead in multiple areas of the campus, from leading academic initiatives that will develop diversity requirements in the classroom to initiatives focusing on recruiting and hire more women and minority faculty. This position is an important role in catalyzing the diversity change process and being the face of diversity at the institution. Compared to other

organizations, colleges and universities are extremely symbolic and ritualized environments. Therefore, UConn's fourth strategic leverage point is: (4) *"Diversity needs to be embedded in the symbolic and cultural fabric of the institution"* (p.12). Traditions such as graduation and convocation are valued on campus and viewed as an automatic event for most institutions. "To achieve inclusive excellence, institutions must infuse diversity into current traditions and build new traditions that position diversity as a top priority alongside academic, athletic, and leadership excellence" (p. 12). The fifth leverage point for diversity at UConn is: (5) *"Motivational energy and entrepreneurial strategies are vital to change"* (p. 13). Institutions can create entrepreneurial strategies that can give the campus community, students, faculty, and staff an opportunity to become involved in diversity efforts. Individual students and student organizations at the University of Michigan have taken advantage of the undergraduate student grant in the Office of Academic Multicultural Initiatives to explore new diversity projects and programs to increase campus wide diversity engagement. Michigan State University established an inclusive excellence grant program that inspires faculty and staff to advance curricular initiatives designed to leverage the educational benefits of diversity for the entire student population (Williams, 2007). Many state systems, like the Tennessee Board of Regents (TBR), encourage innovative diversity efforts through an in-house grant process. TBR's Student Engagement, Retention, and Success Grant is designed to support new and existing programs that serve underrepresented or other targeted student populations. TBR is specifically looking for programs that will have the potential to significantly increase or impact educational achievement or diversity initiatives. The grant proposal should produce outcomes that parallel the goals of the institution's diversity plan, the Complete College TN Act or the Access to Success initiative.

Lastly, UConn implemented new strategies to market the institution to minority students. The university hosts minority yield receptions that are “specifically designed to spur interaction among prospective students of color and to address questions and issues that ethnically and racially diverse students and their parents have about financing higher education, selecting a major, and living in a nearly all white, rural, and isolated community, like Storrs, Connecticut” (p. 13). UConn’s admissions office hires diverse students to call prospective minority students to help aid the decision to enroll. UConn hosts electronic admission days at major urban high schools to help streamline their online admissions process. These initiatives help students of color become integrated into campus life (Williams, 2007) thereby reflecting the sixth and final strategic leverage point at UConn: (6) “*Administrative systems need to be modified to accommodate the needs of historically underrepresented populations*” (p. 13). The strategies at UConn are only one example of an institution’s commitment to change. The literature is ripe with additional examples of institutional minority support strategies.

Institutional Minority Support Strategies

“The U.S. Department of Education’s mission is to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access. Integral to furthering that mission is supporting efforts to create diverse and welcoming campus communities for all students” (U.S. Department of Education, 2016a, p.1).

In March 2011, the U.S. Department of Education issued the *College Completion Tool Kit*. This tool kit presented seven low-cost strategies for postsecondary institutions: developing an action plan, embracing performance-based funding, aligning high school standards with college entrance and placement standards, making it easier for students to transfer, using data to

drive decision making, accelerating learning and reducing costs, and targeting adult students (U.S. Department of Education, 2011a). Milem et al. (2005) offered practical recommendations for engaging diversity as well as basic approaches to address diversity as follows: (1) Take a multidimensional approach; (2) Engage all students; and (3) Focus on process (p. 19).

For continued progress in the area of diversity, Williams (2007) continued to offer several principles for leadership and administration of institutional diversity efforts:

- A powerful definition and rationale for diversity must be established by the leaders of the school. The rationale should be inclusive, include academics, and focus on historic and contemporary diversity issues.
- The diversity vision, strategy, and outcomes need to be communicated consistently with the campus. The passion to achieve greater diversity outcomes should be a part of the institution's brand.
- All campus leaders must invest in the effort to bring forth change on the campus. 'Institutional leaders must continue to place diversity at or near the top of academic, financial, and social priorities of the institution, even during times of financial retrenchment and competing interests' (p. 14).
- Creativity will be needed to help formulate resources to drive diversity work.
- Campus diversity efforts should focus on climate, academic success, and understanding the implications of diversity for the entire student population in terms of learning, student development, and clarification of values (Williams, 2007).
- Partnerships and relationships should be established with the pre-college educational community, nonprofit organizations, businesses, and other higher education institutions, including historically black and minority-serving colleges.

Chapter Summary

Hilary Pennigton, director of postsecondary programs for the Bill & Melinda Gates Foundation from 2006-2012, stated, “If you look at who enters college, it now looks like America. But if you look at who walks across the stage for a diploma, it’s still largely the white, upper-income population” (Thomas, 2010, para. 2). Several studies have shown that student body racial diversity, or structural racial diversity, helps an institution create a better environment for student interactions (Chang, Astin, & Kim, 2004; Hurtado, Dey, Gurin, & Gurin, 2003; Hurtado & Wathington Cade, 1999; Pike & Kuh, 2006). Student relations and engagement with diversity are positively correlated with a range of wanted educational outcomes, including higher levels of student cross-cultural capability, increased academic engagement, and greater advances in active and critical thinking (Adams, 1995; Astin, 1993; Milem, 2003). “In the end, students will elect to stay or leave college not so much because of a theory, but because college and university faculty and administrators have made transformative shifts in governance, curriculum development, in- and out-of-class teaching and learning, student programming, and other institutional dimensions that affect students on a daily basis” (Braxton, 2000). In sum, the commitment to practices that support diversity and inclusive excellence will have lasting impacts. Furthermore, community colleges, in particular, are uniquely positioned to address the equity achievement gap because community colleges serve the largest body of racially diverse college students in the nation. More research is needed to understand the institutional practices related to diversity and inclusive excellence on community college campuses.

CHAPTER 3

RESEARCH METHODOLOGY

The purpose of this comparative study was to examine institutional support and structures around diversity and inclusive excellence and how the absence or presence of those practices relate to student academic achievement and engagement for 13 community colleges in Tennessee. This chapter provides an overview of the research methodology, including the research questions and null hypotheses, population, instrumentation, data collection, and data analysis.

Archival data from the Tennessee Higher Education Commission Fact Book 2014-2015, the Tennessee Board of Regents Graduation Table, and responses to specific questions from the Community College Survey of Student Engagement 2014 were analyzed to understand relationships between institutional diversity practices, student academic achievement and student engagement. Specific attention was given to the retention rates of Caucasian, African American, and Hispanic students and the graduation rates of African American and Hispanic students attending the 13 TBR community colleges. The colleges were differentiated by two groups according to the college's Institutional Diversity Practice Index (IDPI) score. The IDPI taxonomy is a framework created by the researcher that uses the existing literature to identify 11 practices related to diversity and inclusive excellence. The absence or presence of each practice resulted in an overall diversity practice index score by college.

The 13 TBR community colleges were grouped based on the absence or presence of 11 unique institutional structures and supports identified in the literature. For the purpose of this study, colleges with position(s) spending less than 50% of their time on minority efforts were not classified as having a chief diversity officer or similar title. Colleges were classified as

providing professional development and training opportunities related to diversity and inclusive excellence if the event happened during 2016 or 2017. Colleges with 5 or fewer structures and supports in place at the time of this study were categorized in the Lower Institutional Diversity Practice Index (LOW) group. Colleges with 6 or more structures and supports in place at the time of this study were categorized in the Higher Institutional Diversity Practice Index (HIGH) group. Six colleges were in the LOW group and seven colleges were in the HIGH group.

Research Questions and Null Hypotheses

For this study, data were collected from Tennessee Higher Education Commission Fact Book for retention rates, the Tennessee Board of Regents Graduation Table for graduation rates, and the Community College Survey of Student Engagement (CCSSE) for student engagement. The combined database was analyzed for differences in retention rates, graduation rates, and student engagement related to the HIGH and LOW groups. The study involved the following research questions and associated hypotheses:

Research Question 1

Is there a significant relationship between first to second year retention rates of community colleges with higher Institutional Diversity Practice Index scores and those colleges with lower Institutional Diversity Practice Index scores?

H_{01a}: There is not a significant relationship between the first year to second year retention rates of community college students in relationship to the college's Institutional Diversity Practice Index grouping.

H_{01b}: There is not a significant relationship between the first year to second year retention rates of Caucasian community college students in relationship to the college's Institutional Diversity Practice Index grouping.

H_{01c}: There is not a significant relationship between the first year to second year retention rates of African American community college students in relationship to the college's Institutional Diversity Practice Index grouping.

H_{01d}: There is not a significant relationship between the first year to second year retention rates of Hispanic community college students in relationship to the college's Institutional Diversity Practice Index grouping.

Research Question 2

Is there a significant relationship between three-year graduation rates of community colleges with higher Institutional Diversity Practice Index scores and those colleges with lower Institutional Diversity Practice Index scores?

H_{02a}: There is not a significant relationship between the graduation rates of community college students in relationship to the college's Institutional Diversity Practice Index grouping.

H_{02b}: There is not a significant relationship between the graduation rates of African American community college students in relationship to the college's Institutional Diversity Practice Index grouping.

H_{02c}: There is not a significant relationship between the graduation rates of Hispanic American community college students in relationship to the college's Institutional Diversity Practice Index grouping.

Research Question 3

Is there a significant relationship between student engagement scores on the Community College Survey of Student Engagement (CCSSE) question that measured institutional emphasis on encouraging contact among students from different economic, social and racial backgrounds of community colleges with higher Institutional Diversity Practice Index scores and those colleges with lower Institutional Diversity Practice Index scores?

H₀₃: There is not a significant relationship between the student engagement scores on the Community College Survey of Student Engagement (CCSSE) question that measured institutional emphasis on encouraging contact among students from different economic, social, and racial or ethnic backgrounds in relationship to the college's Institutional Diversity Practice Index grouping.

Research Question 4

Is there a significant relationship between student engagement scores on the Community College Survey of Student Engagement (CCSSE) question that measured institutional emphasis on providing student support needed to succeed at college of community colleges with higher Institutional Diversity Practice Index scores and those colleges with lower Institutional Diversity Practice Index scores?

H₀₄: There is not a significant relationship between the student engagement scores on the Community College Survey of Student Engagement (CCSSE) question that measured institutional emphasis on providing student support needed to succeed at college in relationship to the college's Institutional Diversity Practice Index grouping.

Sample

The Tennessee Higher Education Commission (THEC) coordinates the locally governed universities, the University of Tennessee's Board of Trustees, which governs the University of Tennessee institutions, and the Tennessee Board of Regents (TBR), which governs the state's community colleges and technology centers. Currently there are 13 community colleges and 27 colleges of applied technology. The 13 TBR community colleges are: Chattanooga State Community College, Cleveland State Community College, Columbia State Community College, Dyersburg State Community College, Jackson State Community College, Motlow State Community College, Nashville State Community College, Northeast State Community College, Pellissippi State Community College, Roane State Community College, Southwest Tennessee Community College, Volunteer State Community College, and Walters State Community College.

The population for this study included all 13 TBR community college students during the academic 2013-2014 academic year. Retention rates were examined using first time, full time, freshman who were retained from fall 2013 to fall 2014. During this window, there was a total of 13,499 TBR community college students. The data were further reported by race as follows: 9,988 total Caucasian community college students, 2,237 total African American community college students, and 485 total Hispanic community college students. When evaluating graduation rates, the first time, full time, freshman who began college in fall 2011 and graduated spring 2014 were used as the sampling frame for the study; there were 14,836 total TBR community college students who were in this dataset. The dataset included 3,084 total African American community college students and 427 total Hispanic community college students. When evaluating student engagement scores from the CCSSE data, a total of 10,060 students

from the 13 TBR community colleges completed the CCSSE survey questions that were used in the study.

Instrumentation

Existing data for this study were collected from the Tennessee Higher Education Commission Fact Book for retention rates for public institutions, Tennessee Board of Regents Graduation Table for graduation rates, and the CCSSE's Community College Survey of Student Engagement for student engagement. THEC's Division of Policy, Planning, and Research compiles statistical information pertaining to higher education in Tennessee in the Tennessee Higher Education Fact Book. The Fact Book contains data provided by TBR and its institutions, the University of Tennessee and its institutions, the Tennessee Independent Colleges and Universities Association, the THEC Division of Postsecondary School Authorization, and the Tennessee Student Assistance Corporation. The Tennessee Higher Education Commission Fact Book presents data for the 2014-2015 academic year in the following areas: student participation, student success, academic and fiscal trends, and outcomes funding formula. Similarly, TBR's Division of Research and Assessment is responsible for providing research, assessment, and information support services to all functional areas of the Tennessee Board of Regents. In addition, the office maintains data reporting systems for the board.

In 2001, the Center for Community College Student Engagement (CCSSE) was created to survey student and faculty members nationwide to provide information about student engagement and institutional practices at two-year institutions. The CCSSE was built on the idea that student engagement is significantly related to student learning, persistence, and academic attainment. The survey asks students about their college experiences, how they spend their time,

what they feel they have gained from their classes, how they assess their relationships and interactions with faculty, counselors, and peers, and how the college supports their learning. The CCSSE research demonstrates a positive relationship between the data collected by CCSSE, students' self-reported engagement behaviors, and better outcomes for community college students. "It shows that CCSSE is measuring institutional practices and student behaviors that matter – and therefore, that the CCSSE survey instrument indeed provides a valuable proxy for student success" (McClenney et al., 2012, p.2).

In the spring of 2014, 350 two-year institutions participated in the CCSSE, including all 13 community colleges in TBR. In the 2014 CCSSE study, students in participating institutions were asked seven questions regarding how much their college emphasized different areas. For the purpose of this study, the researcher analyzed the following two questions from the CCSSE survey: How much does this college emphasize each of the following? (a) Encouraging contact among students from different economic, social, and racial or ethnic backgrounds; and, (b) Providing the support you need to help you succeed at this college. Students responded on a 4-point scale: 1 = Very little, 2 = Some, 3 = Quite a bit, and 4 = Very much.

Data Collection

Prior to beginning this study, permission to conduct research was obtained from the Institutional Review Board (IRB) of East Tennessee State University. This research was deemed exempt from review under federal guidelines because it did not meet the definition of research involving human subjects.

This quantitative study analyzes secondary data including retention rates, graduation rates, and CCSSE scores. The retention rates reflect commitment, the graduation rates reflect goal completion; and the CCSSE scores reflect student engagement with the institution.

A database was created for analysis from secondary data collected from THEC's Student Success Table 2.1 (Freshman to Sophomore Retention Rates for Public Institutions Fall 2013 to Fall 2014), Table 2.2 (Retention Rates for Public Institutions by Race Fall 2013 to Fall 2014), and TBR's 3-Year Graduation Rates Table. Each college's retention numbers by race were calculated from the retention percentages provided from THEC's Table 2.2. Similarly, each college's graduation numbers by race were calculated from the graduation percentages provided from TBR's Graduation Rates Table. An Analytics and Evaluation Analyst from TBR provided data for the 2014 CCSSE participants from all of the TBR community colleges and all identifying information had been masked prior to sharing these data to assure that anonymity and confidentiality were both protected. Students with a score of a 4 or 3 on the selected CCSSE questions were grouped as highly engaged and students with a score of a 2 or 1 were grouped as lowly engaged.

Data Analysis

In this study, two measures of academic achievement (retention rates and graduation rates) and student engagement were analyzed to gauge whether the absence or presence of institutional diversity and inclusion practices at each community college made a significant difference in retention, graduation and student experience scores. All data were analyzed using the Statistical Package of Social Science (SPSS). All data were analyzed at the .05 level of significance.

When analyses of quantitative data is concerned with more than one variable, two-way tables are employed. These two-way tables deliver a groundwork for statistical inference, where statistical tests question the relationship between the variables on the basis of the data observed. A two-way contingency table analysis using Pearson Chi-square was used on Research Questions 1a, 1b, 1c, 1d, 2a, 2b, 2c, 3, and 4. Research questions 1a, 1b, 1c, and 1d examined retention rates and the type of institution (low and high Institutional Diversity Practice Index scores). Research questions 2a, 2b, and 2c examined graduation rates and the type of institution (low and high Institutional Diversity Practice Index scores). Research questions 3 and 4 examined student engagement responses and the type of institution (low and high Institutional Diversity Practice Index scores).

Chapter Summary

The purpose of this study was to determine if there are significant differences in the success of Tennessee public community college students who attended community colleges with Higher Institutional Diversity Practice Index scores as opposed to those with Lower Institutional Diversity Practice Index scores. Specific attention was given to retention rates, graduation rates, and student engagement responses. Chapter 3 described the methodology and procedures for conducting this study. The following chapter presents the results of the data analysis.

CHAPTER 4

FINDINGS

This chapter presents the analysis of research data obtained from the 13 community colleges in the Tennessee Board of Regents System. Data pertaining to student retention rates, graduation rates, and CCSSE responses were analyzed using the Statistical Package of the Social Sciences (SPSS). The data obtained were used to answer four research questions. Research questions 1, 2, 3, and 4 were analyzed using the two-way contingency table analysis (chi-squared test).

The purpose of this comparative study was to examine institutional support and structures around diversity and inclusive excellence practices and whether the absence or presence of those practices are significantly related to retention, graduation and engagement levels for students in the 13 community colleges in Tennessee. Archival data from the Tennessee Higher Education Commission Fact Book 2014-2015, the Tennessee Board of Regents Graduation Table, and the Community College Survey of Student Engagement 2014 Report were analyzed to understand relationships between institutional practices and student retention and graduation rates as well as student engagement. Specific attention was given to the retention rates of Caucasian, African American, and Hispanic and the graduation rates of African American and Hispanic students. The 13 TBR community colleges were divided into two groups for analysis according to each college's Institutional Diversity Practice Index score.

Institutional Diversity Practice Index

The 13 TBR community colleges were grouped based on the absence or presence of 11 unique institutional structures and supports identified in the literature. Colleges with 5 or fewer

structures and supports in place at the time of this study were categorized in the Lower Institutional Diversity Practice Index (LOW) group. Colleges with 6 or more structures and supports in place at the time of this study were categorized in the Higher Institutional Diversity Practice Index (HIGH) group. Six colleges were in the lower group and 7 colleges were in the higher group. Table 3 contains a summary of the institutional diversity practice taxonomy. To protect the identity of the colleges, each college was assigned a letter and placed in the table from highest to lowest score. The highest college score was 10 practices and lowest college score was 3 practices.

Table 3.

Institutional Diversity Practice Index Scores

Item	A	B	C	D	E	F	G	H	I	J	K	L	M	
Chief Diversity Officer	X	X	X	X										4
Multicultural Center or Diversity Resource Office	X	X	X	X										4
Strategic Plan	X	X	X	X	X	X	X	X	X	X	X	X		12
Student Outcomes	X	X	X	X	X	X	X	X	X	X	X	X	X	13
Goals		X			X	X	X	X	X		X			7
Campus Climate	X	X					X							3
Website	X	X	X	X	X								X	6
Professional Development	X			X	X					X				4
Scholarships and Grants	X	X	X	X	X	X	X	X	X	X	X		X	12
Curriculum	X	X	X	X	X	X	X	X	X	X	X	X		12
Recruitment and Outreach	X		X		X	X								4
College IDPI Score	10	9	8	8	8	6	6	5	5	5	5	3	3	

To complete the taxonomy for grouping the colleges, the researcher contacted an administrator at the college and asked questions as well as reviewed each college’s website,

including curriculum and professional development activities. All 13 colleges report student outcome data; 12 community colleges have at least one element of diversity in their college strategic plan; 12 colleges include scholarships and grants related to diversity; 12 colleges have at least one course in the curriculum on a topic related to diversity; seven colleges have diversity goals; six colleges have a website dedicated to providing resources and links related to diversity and inclusion; four colleges have a chief diversity officer; four colleges have a multicultural center or diversity resource office; four colleges have professional development activities for faculty and staff related to diversity; four colleges have recruitment and outreach efforts related to the recruitment of racially diverse students; and three colleges have conducted a campus climate survey.

Institutional Profile

For the purpose of this study the entire student population attending the 13 community colleges in the TBR system for the 2013-2014 school year were analyzed and yielded the following demographic provided in Table 4. Each school's overall retention and graduation rate as well as each school's African American and Hispanic retention and graduation rates are provided. The table further identifies each college as a HIGH school or a LOW school. Interestingly, three of the seven colleges in the HIGH group reported African American retention rates above the TBR average of 46.8% for African American students whereas none of the colleges in the LOW group reported African American retention rates above the TBR average for African American students. Furthermore, six of the seven colleges in the HIGH group reported Hispanic retention rates above the TBR average of 60.0% for Hispanic students whereas only

one college in the LOW group reported Hispanic retention rates above the TBR average for Hispanic students.

Table 4.

Institutional 2014 Demographics

IDPI	School	Overall Retention Rate Fall 2013-Fall 2014	African American Retention Rate Fall 2013-Fall 2014	Hispanic Retention Rate Fall 2013-Fall 2014	Overall 3-Year Graduation Rate 2011-2014	African American 3-Year Graduation Rate 2011-2014	Hispanic 3-Year Graduation Rate 2011-2014
High	A	65.4	57.4	69.2	17.1	10.4	15.4
	B	59.5	36.9	63.0	17.8	4.9	11.1
	C	55.2	42.5	63.4	13.7	3.3	7.1
	D	58.0	45.9	64.3	17.3	3.7	15.4
	E	57.5	51.9	62.7	7.6	4.9	12.6
	F	56.6	46.7	69.2	13.8	5.8	26.7
	G	62.7	59.5	46.2	19.9	10	19.2
Low	H	59.0	44.0	57.1	17.1	9.3	18.8
	I	51.4	39.7	43.8	10.7	3	4.3
	J	60.7	33.3	60.0	16.2	0	16
	K	59.5	36.6	55.2	21.3	4.9	5.6
	L	56.3	44.4	56.9	9.7	3.9	11.1
	M	62.4	43.6	57.5	22.7	11.3	14.7
TBR Total		58.9	46.8	60.0	15.5	5.0	13.1

Analysis of Research Questions

Research Question 1

Is there a significant relationship between first to second year retention rates of community colleges with higher Institutional Diversity Practice Index scores and colleges with lower Institutional Diversity Practice Index scores?

Table 5 shows the retention frequencies for the Higher Institutional Diversity Practice Index (HIGH) group and the Lower Institutional Diversity Practice Index (LOW) group. For purposes of this study the population of all community college students from the 13 community

colleges was used. Retention of a student from freshman year to sophomore year is indicated by ‘Yes’ while ‘No’ indicates that the student was not retained by an institution within the public system.

Table 5

Retention Frequencies

	HIGH	LOW	Total
No	3295	2255	5550
Yes	4769	3180	7949
Total	8064	5435	13499

H_{01a}: There is not a significant relationship between the first year to second year retention rates of community college students in relationship to the college’s Institutional Diversity Practice Index grouping.

A two-way contingency table analysis was conducted to evaluate whether students had significantly higher retention rates based on their community college’s Institutional Diversity Practice Index grouping. The two variables were the Institutional Diversity Practice Index classification with two groups (HIGH and LOW) and retention of students from fall of the freshman year to fall of the following year with two levels (retained and not retained).

Classifications and retention rates were not found to be significantly related, Person $\chi^2(1, N = 13499) = .53, p = .466$, Cramer’s V = .006. Therefore, the null hypothesis was retained. There is no significant difference in retention rates between HIGH and LOW. The proportions of students retained within each classification were .59 for HIGH and .59 for LOW. Figure 1

illustrates the frequencies of retention within the Institutional Diversity Practice Index classifications.

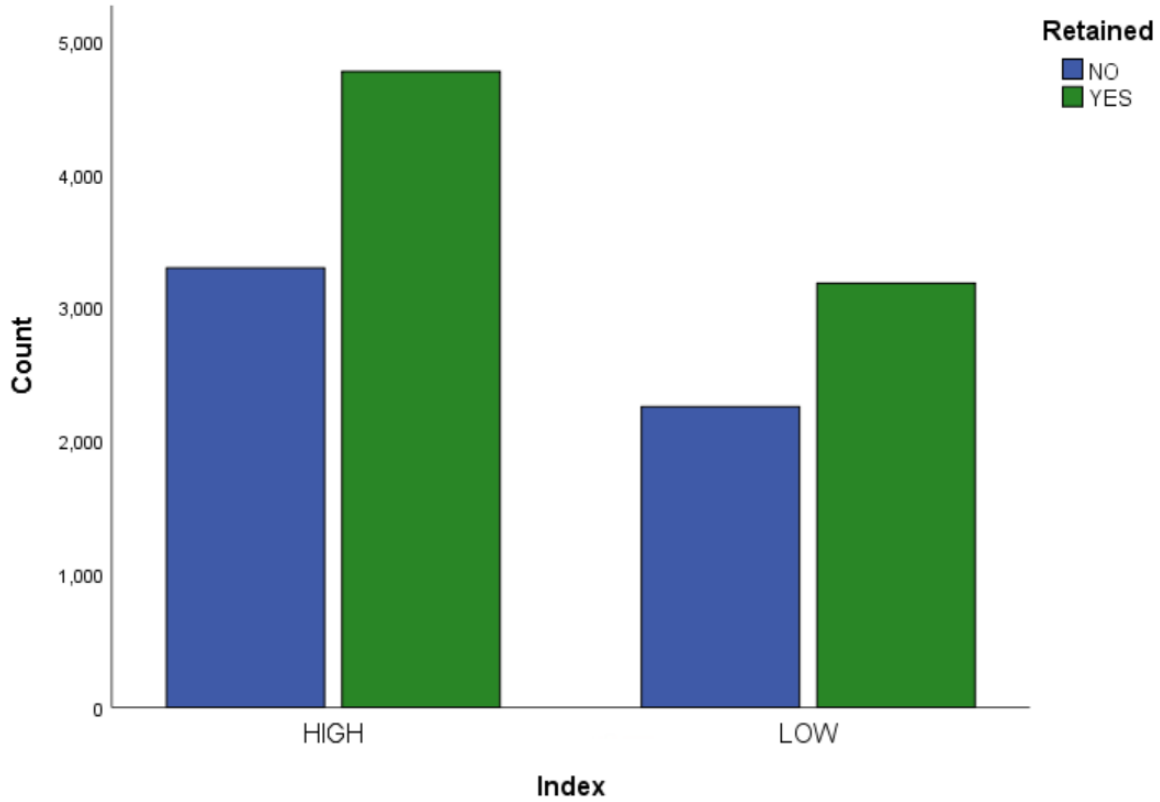


Figure 1. Retention Within Index Classifications

Table 6 shows the Caucasian retention frequencies for the Higher Institutional Diversity Practice Index (HIGH) group and the Lower Institutional Diversity Practice Index (LOW) group. For purposes of this study the population of Caucasian community college students from the 13 community colleges was used with the anticipation of gauging more accurate retention rates for these groups. Retention of a Caucasian student from freshman year to sophomore year is

indicated by ‘Yes’ while ‘No’ indicates that the Caucasian student was not retained by their respective college.

Table 6

Caucasian Retention Frequencies

	HIGH	LOW	Total
No	2185	1688	3873
Yes	3514	2601	6115
Total	5699	4289	9988

H_{01b}: There is not a significant relationship between the first year to second year retention rates of Caucasian community college students in relationship to the college’s Institutional Diversity Practice Index grouping.

A two-way contingency table analysis was conducted to evaluate whether Caucasian students had significantly higher retention rates based on their community college’s Institutional Diversity Practice Index grouping. The two variables were Institutional Diversity Practice Index classifications with two groups (HIGH and LOW) and retention of Caucasian students from fall of the freshman year to fall of the following year with two levels (retained and not retained). Classifications and retention rates were not found to be significantly related, Person $\chi^2(1, N = 9988) = 1.07, p = .302$, Cramer’s $V = .10$. Therefore, the null hypothesis was retained. There is no significant difference in Caucasian retention rates between HIGH and LOW. The proportions of Caucasian students retained within each classification were .61 for HIGH and .61 for LOW. Figure 2 illustrates the frequencies of Caucasian retention within the two college classifications.

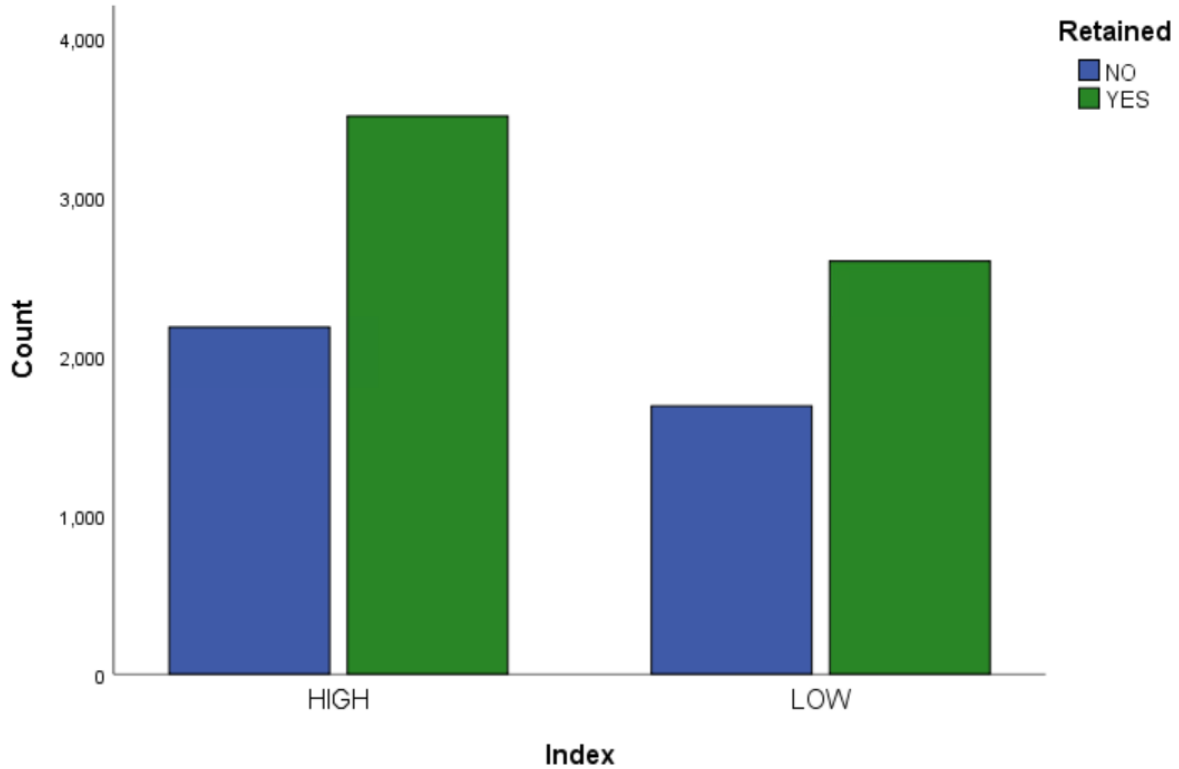


Figure 2. Caucasian Retention Within Index Classifications

Table 7 shows the African American retention frequencies for the Higher Institutional Diversity Practice Index (HIGH) group and the Lower Institutional Diversity Practice Index (LOW) group. For purposes of this study the population of African American community college students from the 13 community colleges was used with the anticipation of gauging more accurate retention rates for these groups. Retention of an African American student from freshman year to sophomore year is indicated by ‘Yes’ while ‘No’ indicates that the African American student was not retained by their respective college.

Table 7

African American Retention Frequencies

	HIGH	LOW	Total
No	823	365	1191
Yes	781	265	1046
Total	1607	630	2237

H_{01c}: There is not a significant relationship between the first year to second year retention rates of African American community college students in relationship to the college's Institutional Diversity Practice Index grouping.

A two-way contingency table analysis was conducted to evaluate whether African American students had significantly higher retention rates based on their community college's Institutional Diversity Practice Index grouping. The two variables were Institutional Diversity Practice Index classifications with two groups (HIGH and LOW) and retention of African American students from fall of the freshman year to fall of the following year with two levels (retained and not retained). Classifications and retention rates were found to be significantly related, Person $\chi^2(1, N = 2237) = 7.77, p = .005$, Cramer's $V = .059$. Therefore, the null hypothesis was rejected. African American students were retained at a significantly higher rate in HIGH institutions than in LOW institutions. The proportions of African American students retained within each classification were .49 for HIGH and .42 for LOW. The probability of an African American student being retained by the college was approximately 1.14 (.58/.51) times more likely if the African American student attended a HIGH college as opposed to a LOW

college. Figure 3 illustrates the frequencies of African American retention within the two college classifications.

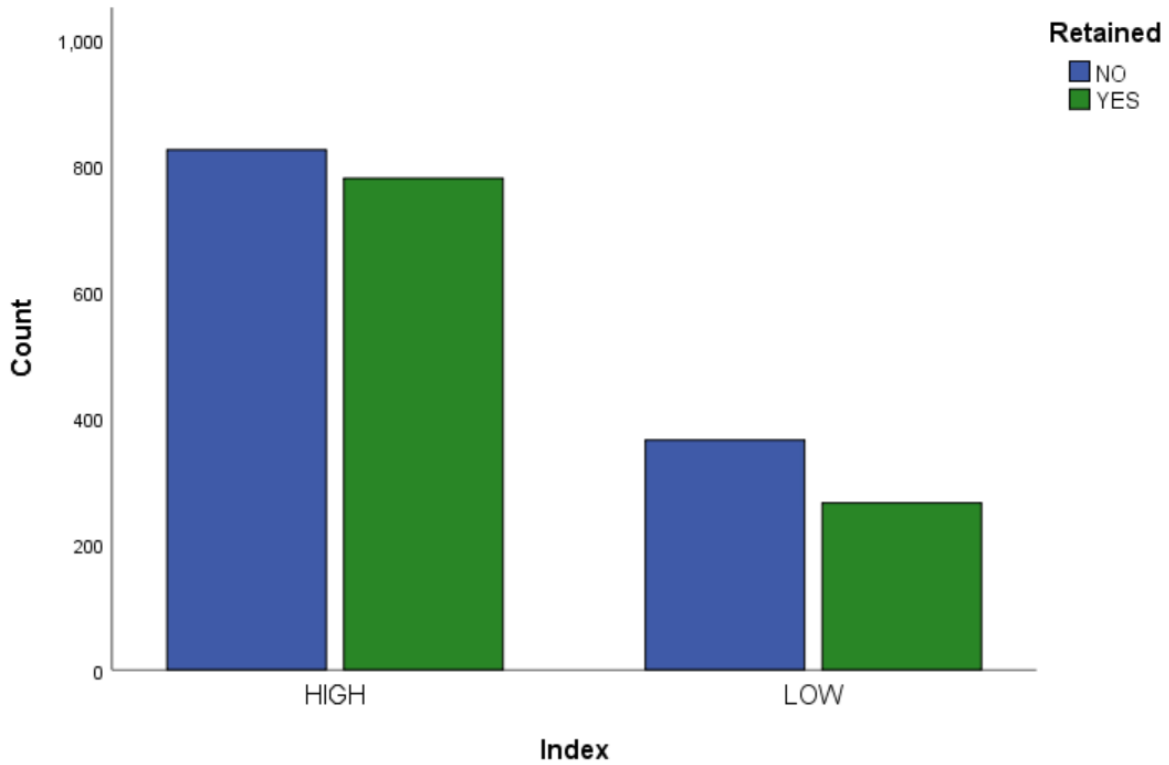


Figure 3. African American Retention Within Index Classifications

Table 8 shows the Hispanic retention frequencies for the Higher Institutional Diversity Practice Index (HIGH) group and the Lower Institutional Diversity Practice Index (LOW) group. For purposes of this study the population of Hispanic community college students from the 13 community colleges was used with the anticipation of gauging more accurate retention rates for these groups. Retention of a Hispanic student from freshman year to sophomore year is indicated by ‘Yes’ while ‘No’ indicates that the Hispanic student was not retained by their respective college.

Table 8

Hispanic Retention Frequencies

	HIGH	LOW	Total
No	111	83	194
Yes	185	106	291
Total	296	189	485

H_{01d}: There is not a significant relationship between the first year to second year retention rates of Hispanic community college students in relationship to the college's Institutional Diversity Practice Index grouping.

A two-way contingency table analysis was conducted to evaluate whether Hispanic students had significantly higher retention rates based on their community college's Institutional Diversity Practice Index grouping. The two variables were Institutional Diversity Practice Index classifications with two groups (HIGH and LOW) and retention of Hispanic students from fall of the freshman year to fall of the following year with two levels (retained and not retained).

Classifications and retention rates were not found to be significantly related, Person $\chi^2(1, N = 485) = 1.98, p = .160$, Cramer's $V = .064$. Therefore, the null hypothesis was retained. There is no significant difference in Hispanic retention rates between HIGH and LOW. The proportions of Hispanic students retained within each classification were .63 for HIGH and .56 for LOW.

Figure 4 illustrates the frequencies of Hispanic retention within the two college classifications.

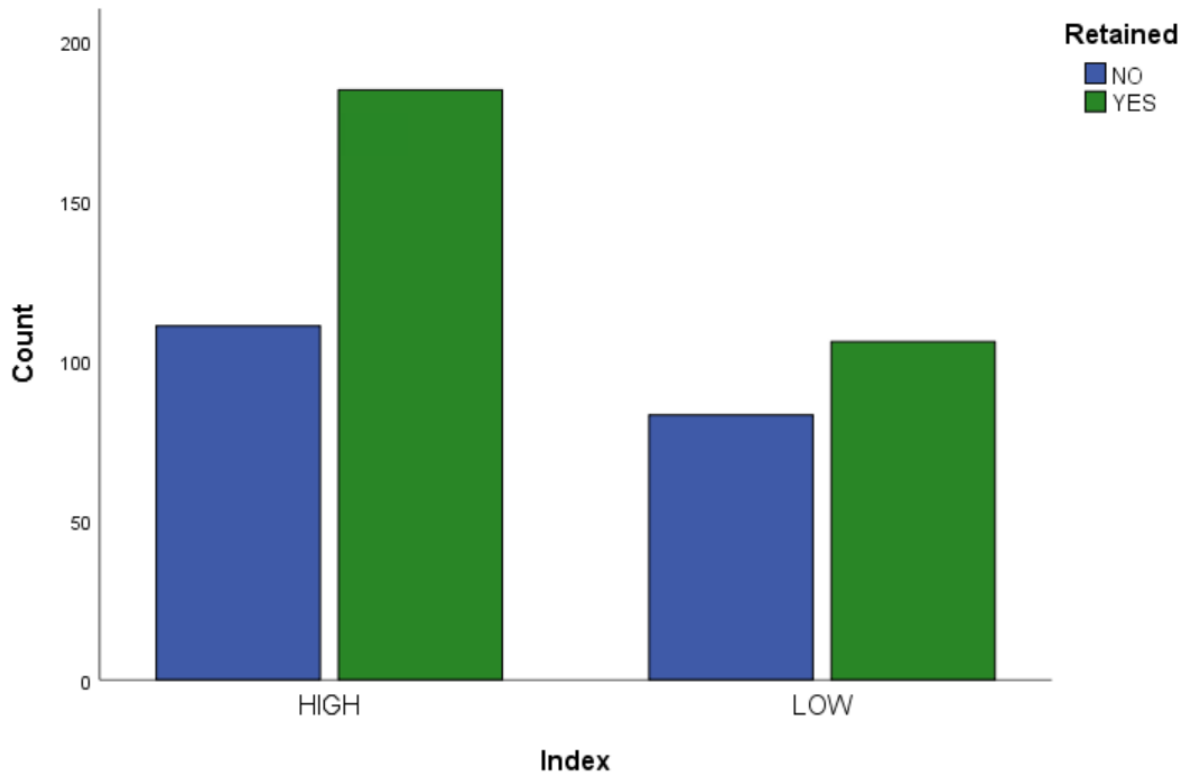


Figure 4. Hispanic Retention Within Index Classifications

Research Question 2

Is there a significant relationship between three-year graduation rates of community colleges with higher Institutional Diversity Practice Index scores and those colleges with lower Institutional Diversity Practice Index scores?

Table 9 shows the graduate frequencies for the Higher Institutional Diversity Practice Index (HIGH) group and the Lower Institutional Diversity Practice Index (LOW) group assuming a 3-year graduation rate. For purposes of this study the population of all community college students from the 13 community colleges was used with the anticipation of gauging more accurate graduation rates for these groups. Graduation is indicated by ‘Yes’ while ‘No’ indicates that the student did not graduate from an institution within the public system.

Table 9

Graduate Frequencies

	HIGH	LOW	Total
No	7707	4829	12536
Yes	1330	970	2300
Total	9037	5799	14836

H₀2_a: There is not a significant relationship between the graduation rates of community college students in relationship to the college’s Institutional Diversity Practice Index grouping.

A two-way contingency table analysis was conducted to evaluate whether students had significantly higher graduation rates based on their community college’s Institutional Diversity Practice Index grouping. The two variables were Institutional Diversity Practice Index classifications with two groups (HIGH and LOW) and graduation of students with two levels (graduated and not graduated). Classifications and graduation rates were found to be significantly related, Person $\chi^2(1, N = 14836) = 10.892, p = .001$, Cramer’s $V = .027$. Therefore, the null hypothesis was rejected. Students graduated at a significantly higher rate in LOW institutions than in HIGH institutions. The proportions of students graduated within each classification were .15 for HIGH and .17 for LOW. The probability of a student graduating from the college was approximately 1.13 (.17/.15) times more likely if the student graduated from a LOW college as opposed to a HIGH college. Figure 5 illustrates the frequencies of graduation within the Institutional Diversity Practice Index classifications.

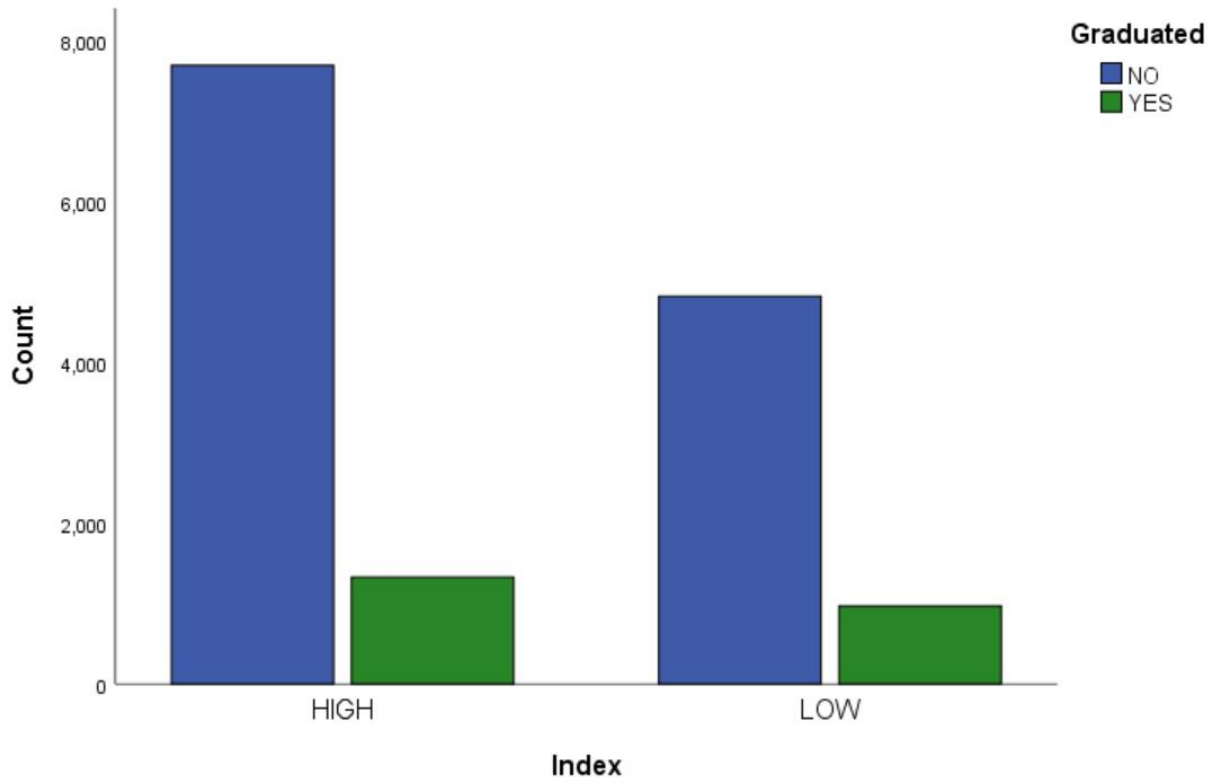


Figure 5. Graduation Within Index Classifications

Table 10 shows the African American graduate frequencies for the Higher Institutional Diversity Practice Index (HIGH) group and the Lower Institutional Diversity Practice Index (LOW) group assuming a 3-year graduation rate. For purposes of this study the population of African American community college students from the 13 community colleges was used with the anticipation of gauging more accurate graduation rates for these groups. Graduation is indicated by ‘Yes’ while ‘No’ indicates that the African American student did not graduate from an institution within the public system.

Table 10

African American Graduate Frequencies

	HIGH	LOW	Total
No	2144	785	2929
Yes	115	40	155
Total	2259	825	3084

H_{02b}: There is not a significant relationship between the graduation rates of African American community college students in relationship to the college’s Institutional Diversity Practice Index grouping.

A two-way contingency table analysis was conducted to evaluate whether African American students had significantly higher graduation rates based on their community college’s Institutional Diversity Practice Index grouping. The two variables were Institutional Diversity Practice Index classifications with two groups (HIGH and LOW) and graduation of African American students with two levels (graduated and not graduated). Classifications and graduation rates were not found to be significantly related, Person $\chi^2(1, N = 3084) = .074, p = .785$, Cramer’s $V = .005$. Therefore, the null hypothesis was retained. There is no significant difference in African American graduation rates between HIGH and LOW. The proportions of African American students graduated within each classification were .05 for HIGH and .05 for LOW. Figure 6 illustrates the frequencies of African American graduation within the Institutional Diversity Practice Index classifications.

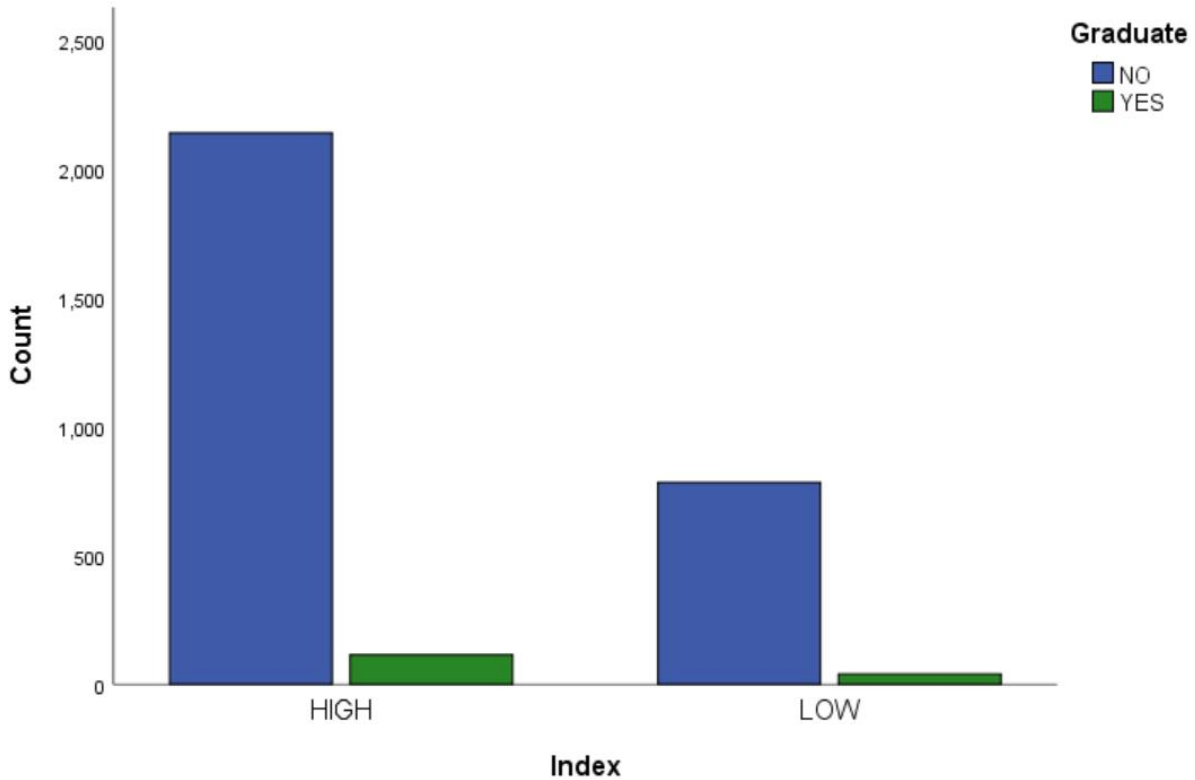


Figure 6. African American Graduation Within Index Classifications

Table 11 shows the Hispanic graduate frequencies for the Higher Institutional Diversity Practice Index (HIGH) group and the Lower Institutional Diversity Practice Index (LOW) group assuming a 3-year graduation rate. For purposes of this study the population of Hispanic community college students from the 13 community colleges was used with the anticipation of gauging more accurate graduation rates for these groups. Graduation is indicated by ‘Yes’ while ‘No’ indicates that the Hispanic student did not graduate from an institution within the public system.

Table 11

Hispanic Graduate Frequencies

	HIGH	LOW	Total
No	237	134	371
Yes	38	18	56
Total	275	152	427

H_{02c}: There is not a significant relationship between the graduation rates of Hispanic community college students in relationship to the college’s Institutional Diversity Practice Index grouping.

A two-way contingency table analysis was conducted to evaluate whether Hispanic students had significantly higher graduation rates based on their community college’s Institutional Diversity Practice Index grouping. The two variables were Institutional Diversity Practice Index classifications with two groups (HIGH and LOW) and graduation of Hispanic students with two levels (graduated and not graduated). Classifications and graduation rates were not found to be significantly related, Person $\chi^2(1, N = 427) = .335, p = .562$, Cramer’s $V = .028$. Therefore, the null hypothesis was retained. There is no significant difference in Hispanic graduation rates between HIGH and LOW. The proportions of Hispanic students graduated within each classification were .14 for HIGH and .12 for LOW. Figure 7 illustrates the frequencies of Hispanic graduation within the Institutional Diversity Practice Index classifications.

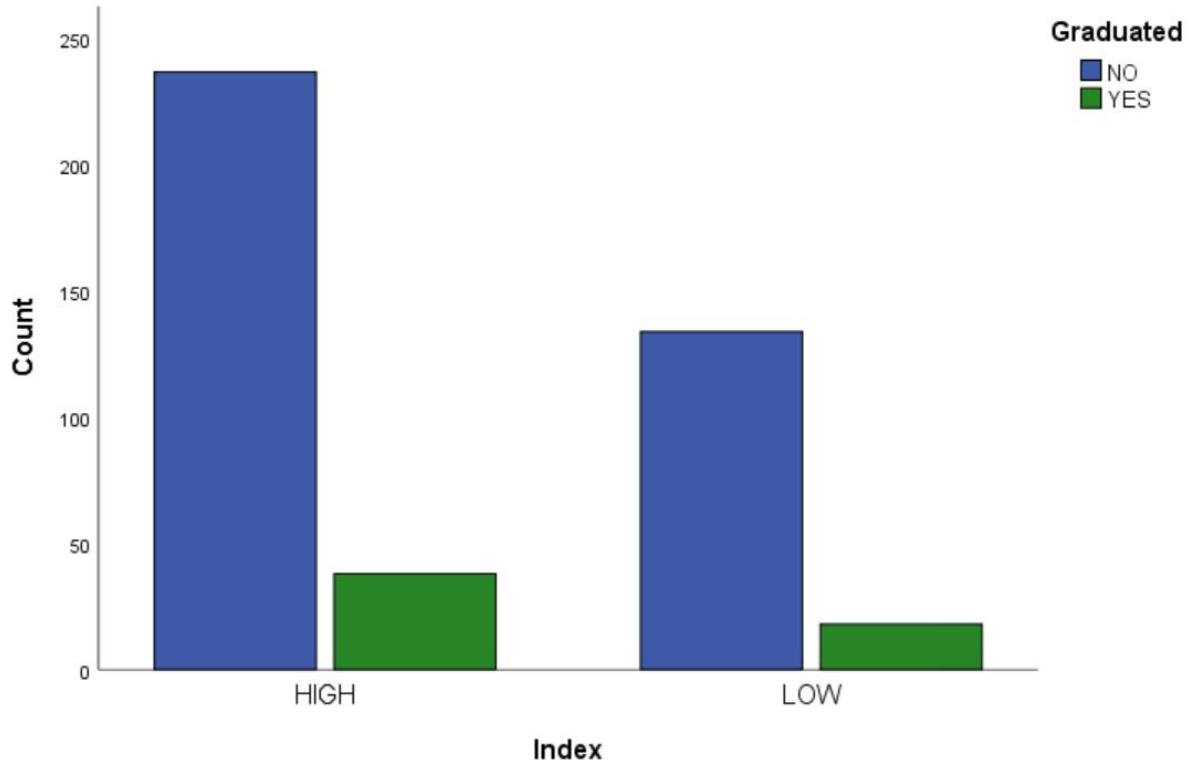


Figure 7. Hispanic Graduation Within Index Classifications

Research Question 3

Is there a significant relationship between student engagement scores on the Community College Survey of Student Engagement (CCSSE) question that measured institutional emphasis on encouraging contact among students from different economic, social and racial backgrounds of community colleges with higher Institutional Diversity Practice Index scores and those colleges with lower Institutional Diversity Practice Index scores?

Table 12 shows the student engagement scores for the Higher Institutional Diversity Practice Index (HIGH) group and the Lower Institutional Diversity Practice Index (LOW) group. For purposes of this study the population of all community college students from the 13 community colleges who participated in the spring 2014 CCSSE was used with the anticipation

of gauging more accurate satisfaction scores for these groups. Student diversity engagement is indicated by ‘Yes’ if the student submitted a score of a 3 or 4, while ‘No’ indicates that the student submitted a score of a 1 or 2.

Table 12

Student Success Diversity Frequencies

	HIGH	LOW	Total
No	2616	2105	4721
Yes	2932	2239	5171
Total	5548	4344	9892

H₀₃: There is not a significant relationship between the student engagement scores on the Community College Survey of Student Engagement (CCSSE) question that measured institutional emphasis on encouraging contact among students from different economic, social, and racial or ethnic backgrounds in relationship to the college’s Institutional Diversity Practice Index grouping.

A two-way contingency table analysis was conducted to evaluate whether students had significantly higher engagement scores on the CCSSE question that measured institutional emphasis on encouraging contact among students from different economic, social, and racial or ethnic backgrounds based on their community college’s Institutional Diversity Practice Index grouping. The two variables were Institutional Diversity Practice Index classifications with two groups (HIGH and LOW) and diversity engagement of students with two levels (engaged and not engaged). Classifications and diversity engagement scores were not found to be significantly related, Person $\chi^2(1, N = 9892) = 1.664, p = .197, \text{Cramer's } V = .013$. Therefore, the null

hypothesis was retained. There is no significant difference in diversity engagement between HIGH and LOW. The proportions of students engaged within each classification were .53 for HIGH and .52 for LOW. Figure 8 illustrates the frequencies of diversity engagement within the Institutional Diversity Practice Index classifications.

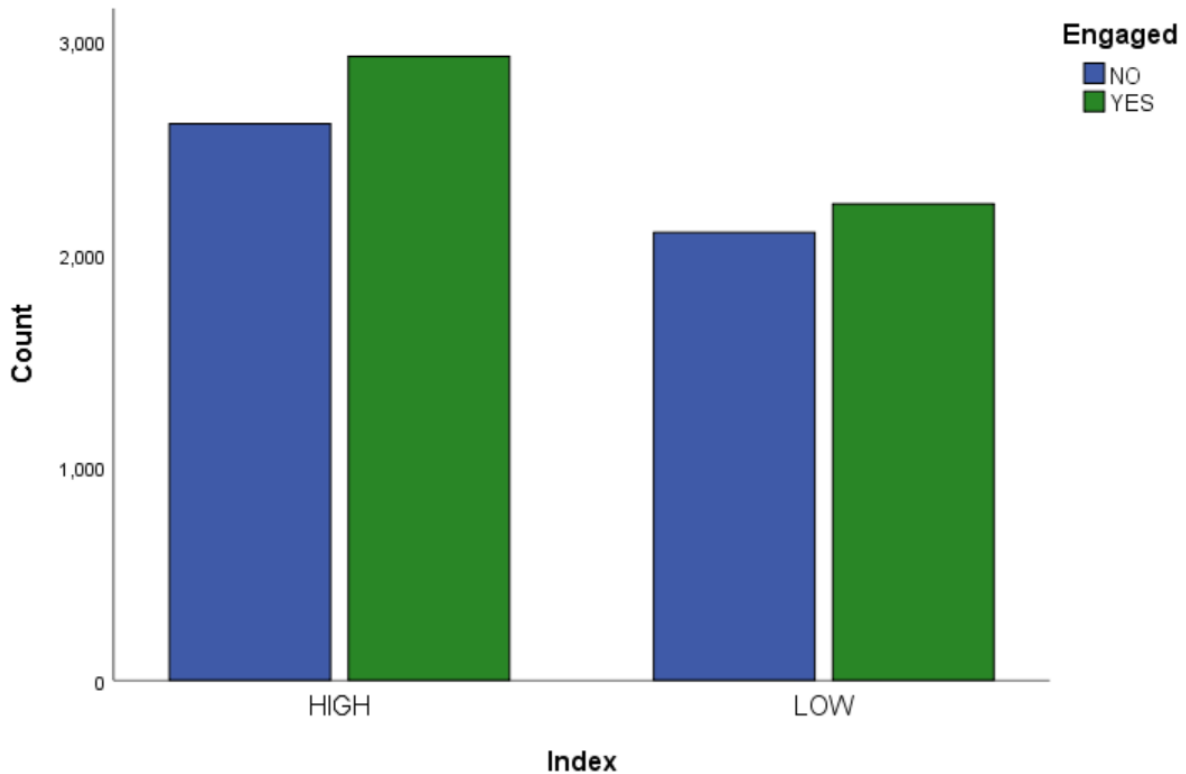


Figure 8. Diversity Engagement Within Index Classifications

Research Question 4

Is there a significant relationship between student engagement scores on the Community College Survey of Student Engagement (CCSSE) question that measured institutional emphasis on providing student support needed to succeed at college of community colleges with higher

Institutional Diversity Practice Index scores and those colleges with lower Institutional Diversity Practice Index scores?

Table 13 shows the student engagement scores for the Higher Institutional Diversity Practice Index (HIGH) group and the Lower Institutional Diversity Practice Index (LOW) group. For purposes of this study the population of all community college students from the 13 community colleges who participated in the spring 2014 CCSSE was used with the anticipation of gauging more accurate graduation rates for these groups. Student support engagement is indicated by ‘Yes’ if the student submitted a score of a 3 or 4, while ‘No’ indicates that the student submitted a score of a 1 or 2.

Table 13

Student Success Support Frequencies

	HIGH	LOW	Total
No	1402	1076	2478
Yes	4157	3276	7433
Total	5559	4352	9911

H₀4: There is not a significant relationship between the student engagement scores on the Community College Survey of Student Engagement (CCSSE) question that measured institutional emphasis on providing student support needed to succeed at college in relationship to the college’s Institutional Diversity Practice Index grouping.

A two-way contingency table analysis was conducted to evaluate whether students had significantly higher engagement scores on the CCSSE question that measured institutional

emphasis on providing student support needed to succeed at college based on their community college's Institutional Diversity Practice Index grouping. The two variables were Institutional Diversity Practice Index classifications with two groups (HIGH and LOW) and support engagement of students with two levels (engaged and not engaged). Classifications and support engagement scores were not found to be significantly related, Person $\chi^2(1, N = 9911) = .320, p = .571$, Cramer's V = .006. Therefore, the null hypothesis was retained. There is no significant difference in support engagement between HIGH and LOW. The proportions of students engaged with the support provided to them within each classification were .75 for HIGH and .75 for LOW. Figure 9 illustrates the frequencies of support engagement within the Institutional Diversity Practice Index classifications.

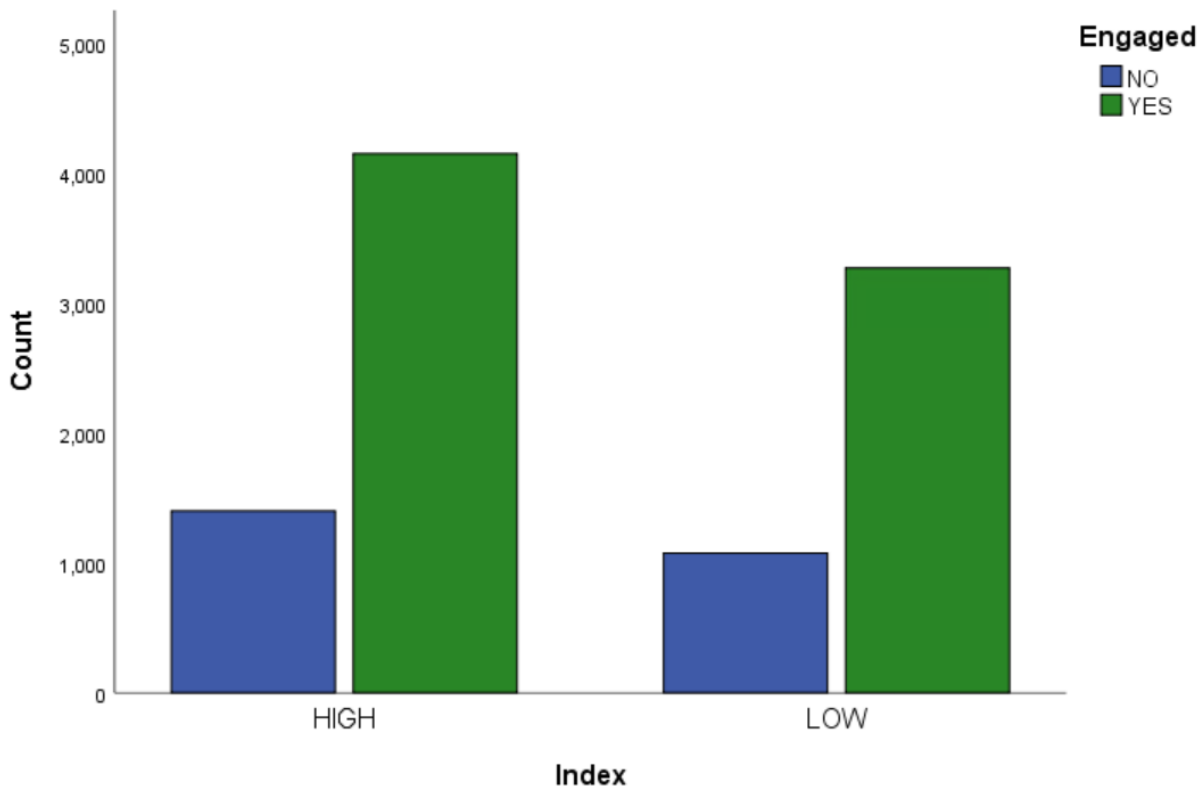


Figure 9. Support Engagement Within Index Classifications

Chapter Summary

This chapter contains the results of analytical procedures performed on data collected from archival data. The data collection was driven by four research questions and nine null hypotheses. Discussions of the findings along with summaries, conclusions, and recommendations are presented in Chapter 5.

CHAPTER 5

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this comparative study was to examine institutional support and structures around diversity and inclusive excellence on student academic achievement and engagement for 13 community colleges in Tennessee. Archival data from the Tennessee Higher Education Commission Fact Book 2014-2015, the Tennessee Board of Regents Graduation Table, and the Community College Survey of Student Engagement 2014 Report were analyzed to understand relationships between institutional efforts and student academic achievement and student engagement. Specific attention was given to the retention rates of Caucasian, African American, and Hispanic students and graduation rates of African American and Hispanic students attending the 13 TBR community colleges differentiated by two groups according to the college's Institutional Diversity Practice Index score. Chapter 5 presents a discussion of research findings, summary of findings, conclusions, and recommendations for practice and future research. The summary of findings and conclusion are based on the data analyses from Chapter 4.

Summary of Findings

At the .05 level of significance, statistical relationships were found in the retention and graduation variables between the Higher Institutional Diversity Practice Index schools and the Lower Institutional Diversity Practice Index schools pertaining to African American retention rates and the graduation rates for all students. However, these findings alone do not support the purpose of this quantitative study to determine if there are significant relationships in the success of Tennessee public community college students with regard to the absence or presence of institutional diversity and inclusion efforts on campus.

Four research questions were examined and the findings are provided in the following paragraphs.

Research Question 1

Is there a significant relationship between first to second year retention rates of community colleges with higher Institutional Diversity Practice Index scores and colleges with lower Institutional Diversity Practice Index scores?

Both the comparison of all students and the Caucasian students' retention rates in relationship to the college's Institutional Diversity Practice Index grouping showed no significant relationship and showed the proportions to be the same (.59) for both the high and low groups. However, there was a significant relationship in the African American retention rate in relationship to the college's Institutional Diversity Practice Index grouping. Therefore, it can be concluded that African American students attending a HIGH college had significantly higher retention rates (.49) than students attending a LOW college (.42). The comparison of Hispanic students' retention rates in relationship to the college's Institutional Diversity Practice Index grouping showed no significant relationship but it did show the proportion to be higher (.63) for the HIGH group versus the LOW group (.56).

Research Question 2

Is there a significant relationship between three-year graduation rates of community colleges with higher Institutional Diversity Practice Index scores and those colleges with lower Institutional Diversity Practice Index scores?

There was a significant relationship in the overall graduation rate in relationship to the college's Institutional Diversity Practice Index grouping. Therefore, it can be concluded that all students attending a LOW college had significantly higher graduation rates (.17) than students attending a HIGH college (.15). The comparison of African American students' graduation rates in relationship to the college's Institutional Diversity Practice Index grouping showed no significant relationship as the proportions were the same (.05) for both the high and low groups. The comparison of Hispanic students' graduation rates in relationship to the college's Institutional Diversity Practice Index grouping showed no significant relationship but it did show the proportion to be higher (.14) for the HIGH group versus the LOW group (.12).

Research Question 3

Is there a significant relationship between student engagement scores on the Community College Survey of Student Engagement (CCSSE) question that measured institutional emphasis on encouraging contact among students from different economic, social and racial backgrounds of community colleges with higher Institutional Diversity Practice Index scores and those colleges with lower Institutional Diversity Practice Index scores?

There were no significant relationships between student engagement scores on the CCSSE question that measured institutional emphasis on encouraging contact among students from different economic, social, and racial or ethnic backgrounds based on their community college's Institutional Diversity Practice Index grouping. The proportions were (.53) for the HIGH group and (.52) for LOW group.

Research Question 4

Is there a significant relationship between student engagement scores on the Community College Survey of Student Engagement (CCSSE) question that measured institutional emphasis on providing student support needed to succeed at college of community colleges with higher Institutional Diversity Practice Index scores and those colleges with lower Institutional Diversity Practice Index scores?

There were no significant relationships between student engagement scores on the CCSSE question that measured institutional emphasis on providing student support needed to succeed at college based on their community college's Institutional Diversity Practice Index grouping. The proportions were (.75) for both the HIGH group and the LOW group.

Conclusions

Based on the results of the four research questions in this study, more research is needed to examine institutional support and structures related to diversity and inclusive excellence and student academic achievement and engagement. Literature has shown that it can be a challenge for institutions to understand the support and structures needed to achieve an inclusive excellence-driven institution, especially community colleges. Using the existing scholarship, the researcher created a taxonomy of 11 practices to examine institutional practices related to diversity efforts. The creation of the Institutional Diversity Practice Index provides a useful tool for community colleges to gauge their current institutional structures and supports around diversity and inclusive efforts for minority students.

It is noteworthy to mention that the descriptive findings from the study highlights a connection between more institutional support and structures around diversity and inclusive

excellence and minority retention rates. Furthermore, there was a significant difference in the African American retention rate in relationship to the college's Institutional Diversity Practice Index grouping with African American students attending a HIDI colleges having significantly higher retention rates than students attending a LOW college. While the comparison of Hispanic student retention rates in relationship to the college's Institutional Diversity Practice Index grouping showed no significant difference, findings indicated that the proportion was higher for the HIGH group versus the LOW group. Additional research with a larger Hispanic population is needed.

While the retention rate data leads to some interesting trends warranting additional research, no conclusive results can be drawn from the relationship of minority community college graduation rates and a college's Institutional Diversity Practice Index grouping. This study showed a significant difference between the graduation rates of community college students in relationship to the college's Institutional Diversity Practice Index grouping. The probability of a student graduating from a LOW college was more likely than graduating from a HIGH college. More research is needed to further examine this result. Similarly, no conclusive results can be drawn from the relationship of community college student answers to two specific student engagement questions on the Community College Survey of Student Engagement and their college's Institutional Diversity Practice Index grouping. Further research is also needed to examine this result. Overall, more research is needed to understand the impact of formal and informal institutional diversity and inclusive excellence structures and whether those institutional structures influence community college student success. Lastly, a limitation of the study was that student academic factors, such as high school grade point average, standardized test scores and other academic preparedness factors leading to retention and graduation were not controlled

for in the present design. Future research studies should control for student academic characteristics as well as institutional characteristics related to minority student retention and graduation rates.

Recommendations for Practice

1. Community colleges should examine their practices and engage in dialogue related to providing support and structures that aid in the improvement of minority retention and graduation efforts.
2. Community colleges should make intentional efforts to study and understand what is happening with African American students and graduation rates.
3. Community colleges should further analyze differences between their African American students and Hispanic students, specifically concerning academic characteristics and institutional practices that lead to better graduation rates.
4. Community colleges should employ a leader who spends 50% or more of his or her time concerned with diversity and inclusive excellence efforts on campus.

It is recommended that each community college in the TBR system examine their current practices using the Institutional Diversity Practice Index. While the index framework designed for this study cannot offer solutions regarding graduation, it does provide insight into the relationship between the Institutional Diversity Practice Index and retention rates for Hispanic and African American students. There is much room for improvement, especially among African American graduation rates in community colleges in Tennessee.

Recommendations for Further Research

This study can be strengthened by researching additional studies and examining what other community colleges outside of the Tennessee Board of Regents system are doing to improve minority student academic achievement and engagement. The results of this study can be used to lead other researchers to gain meaningful information about the Tennessee Board of Regents' minority students. This study window of 2014 provides a snapshot of the enrollment, retention and graduation rate landscape for minority students prior to the last dollar funding initiative of Tennessee Promise. Future studies are recommended to delve further into the enrollment, retention and graduation changes that may have resulted from the Tennessee Promise initiative and its relationship to minority retention and graduation rates. Lastly, the current study utilized a quantitative design. Additional qualitative studies are recommended to reveal greater understanding of the challenges that minority community college students face. Examining the following could also expand this study:

1. Conducting a study that follows student interactions with the various supports and structures to compare students who were retained until graduation with those who were not retained, including the utilization of findings from the CCSSE survey from the graduation semester to understand student engagement experiences.
2. Examining in greater detail the four cases of TBR community colleges that currently employ a Chief Diversity Officer or similar position. These four colleges were in the High Institutional Diversity Practice Index Group and future research would provide insight related to practices that these administrators believe are most effective toward increasing retention and completion.

3. Examining in greater detail what combination of Institutional Diversity Practice Index factors best predict retention and completion rates for African-American and Hispanic students while controlling for student academic characteristics.
4. Replicating this study to see whether the Tennessee Promise program has influenced student access and success for African American and Hispanic students in Tennessee.

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APPENDIX

Data Sources

Variable	Source
Retention Rates	Tennessee Higher Education Commission Fact Book 2014-2015 https://www.tn.gov/thec/research/redirect-research/fact-book.html
Graduation Rates	Tennessee Board of Regents Graduation Table TBR Office of Policy and Strategy
CCSSE Scores	Community College Survey of Student Engagement 2014 Report TBR Office of Policy and Strategy

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