Words Matter: A Content Analysis Study of Public and Private Higher Education Mission Statements in the Middle States Region

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Words Matter: A Content Analysis Study of Public and Private Higher Education Mission Statements in the Middle States Region

Abstract
Postsecondary institutions are facing challenges in addressing demands of transparency, accountability, and rising costs. This quantitative content analysis study examined mission statements of higher education institutions based on the Middle States Commission on Higher Education (MSCHE) Standard I Mission and Goals. The mission statement articulates the institutional purpose, indicates whom the institution serves, and what it intends to accomplish. Using signaling theory, the study sought to explore how language is used in the mission statement to communicate to constituents. This study examined 206 public and private institutional mission statements in the MSCHE region that confer baccalaureate and master's degrees. DICTION 7.1 was used to conduct the content analysis. The results of the study suggest words and text patterns matter in the content of mission statements. This study found institutions used different words in the mission statements to institutionally differentiate in the higher education marketplace. Study results also found public institutions used words in their mission statements that more frequently conveyed characteristics of being common, certain, insistent, and complex than the mission statements of private institutions. This study's findings offer guidance to the higher education sector, accreditors, and institutional leaders. A process is identified to review and improve the content of mission statements of public and private institutions in the MSCHE region. Based on the results of the study, recommendations were suggested for future research, accreditors and higher education leaders to improve the language in the mission statement that may enhance communication and increase transparency to internal and external constituents.

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Words Matter: A Content Analysis Study of Public and Private Higher Education
Mission Statements in the Middle States Region

By

Trina Marie Marquez

Submitted in partial fulfillment
of the requirements for the degree
Ed.D. in Executive Leadership

Supervised by
Dr. Shannon Cleverley-Thompson

Committee Member
Dr. Anne G. Wahl

Ralph C. Wilson, Jr. School of Education
St. John Fisher College

December 2016
Dedication

My journey is filled with people in my life who have cared, supported, sacrificed, and encouraged me to achieve my doctorate and I owe everyone my sincere thanks.

First, I’d like to thank my family. My personal goal of achieving my doctorate would not have been possible if it were not for my husband, Keith Robert Marquez. Words can’t express my love and appreciation for his unwavering support for me to achieve my life-long dream. To my mother, Ella Mae Evans, thank you for giving me a thirst for learning, nurturing my dreams, and giving me the courage and strength to soar. Your calm demeanor, strength, and courage have guided my life and I love you with all my heart. To my sister, Valerie Jones, thanks for being everything that I’m not. I so appreciate you helping me to not take myself and life too seriously. Thank you for listening, encouraging, and loving me as your big sister, but more importantly thank you for being my best friend. I’d also like to thank Robert and Janeen Marquez, Bruce and Robin Holmes, and Randy and Annette Marquez – thanks for all the support, good thoughts, and wishes. The support of the Marquez family has been great and I appreciate all of you.

Second, I’d like to thank the faculty and staff of the Executive Leadership Program at St. John Fisher College. As my committee chair, Dr. Shannon Cleverley-Thompson committed and dedicated herself to ensuring that I become a better executive leader and scholar. Thanks for your guidance, patience, and understanding during the trials and tribulations of my dissertation process. Dr. Anne G. Wahl, my committee
member, was instrumental in assisting me to understand accreditation in the Middle States region. Your advice and expertise were invaluable in helping me to be a better practitioner in the higher education sector. I would be remiss if I didn’t thank my executive mentor Dr. Horace Smith, my advisor Dr. Marie Cianca, Dr. Guillermo Montes, Betsy Christiansen and program director, friend, and Soror Dr. Dingus-Eason, and Betsy Christiansen – for their collective counsel and support over the past two years that kept me focused on achieving my goals.

Third, I must thank my cohort team, Six Degrees (Dawn Bruner, Peter Granger, and Jan Thirlby) for the laughter and drive to be the best. I will never forget our experience! There are too many good friends and work colleagues who have been my cheerleaders to thank individually. Please know that your offers of assistance and inquiries of “Are you done yet?” provided the inspiration I needed to stay on my journey.

I dedicate this dissertation to my children and nephew, Kayla Renee Marquez, Brandon Keith Marquez, and Erick Jamari Jones. They will never know how much their hugs, kisses, and text messages have meant to me when I needed an extra boost of support. I hope they have the courage to travel around the world, be who they are and create their own paths. As they embark on their life’s journey, I hope that curiosity and intuition lead them to find passion, happiness, and a thirst for adventure that will allow them to follow their dreams. I love you all so much and wish you all the best in life and love.

Last, I’d like to thank Mama, Hattie Mae Starks. Although you are no longer with us, you are always in my heart. Thanks for always believing in me. Rest in peace.
Biographical Sketch

Trina Marie Marquez has worked in the private, public and K-20 education sectors. Since 2007, Mrs. Marquez has worked in the higher education sector holding senior leadership positions in technology, auxiliary services, and campus operations and currently serves as the Associate Vice President for Campus Operations and Auxiliary Services at Nazareth College in Rochester, New York. Starting her college education in 1984, Mrs. Marquez attended the Rochester Institute of Technology and graduated with a Bachelor of Science degree in Management Information Systems in 1991. She began attending Roberts Wesleyan College in Rochester, New York in 1997. She graduated with a Master of Science in Business and Organizational Management in 1999. In 2014, she began her doctoral studies in the Ed.D. Program in Executive Leadership at St. John Fisher College in Rochester, New York. Mrs. Marquez pursued her research in the field of Institutional Mission Statements under the direction of Dr. Shannon Cleverley-Thompson and Dr. Anne G. Wahl and received the Ed.D. degree in 2016.
Abstract

Postsecondary institutions are facing challenges in addressing demands of transparency, accountability, and rising costs. This quantitative content analysis study examined mission statements of higher education institutions based on the Middle States Commission on Higher Education (MSCHE) Standard I Mission and Goals. The mission statement articulates the institutional purpose, indicates whom the institution serves, and what it intends to accomplish.

Using signaling theory, the study sought to explore how language is used in the mission statement to communicate to constituents. This study examined 206 public and private institutional mission statements in the MSCHE region that confer baccalaureate and master’s degrees. DICTION 7.1 was used to conduct the content analysis. The results of the study suggest words and text patterns matter in the content of mission statements. This study found institutions used different words in the mission statements to institutionally differentiate in the higher education marketplace. Study results also found public institutions used words in their mission statements that more frequently conveyed characteristics of being common, certain, insistent, and complex than the mission statements of private institutions.

This study’s findings offer guidance to the higher education sector, accreditors, and institutional leaders. A process is identified to review and improve the content of mission statements of public and private institutions in the MSCHE region. Based on the results of the study, recommendations were suggested for future research, accreditors,
and higher education leaders to improve the language in the mission statement that may enhance communication and increase transparency to internal and external constituents.
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Chapter 1: Introduction

Higher education is under more pressure and scrutiny than at any other time in history. Private colleges and public universities are facing challenges, defining themselves in an era of transparency, accountability, new educational models, rising tuition costs, and external pressures (Carey, 2007; Eaton & Neal, 2015; Gaston, 2013). The higher education sector represents different types of colleges and universities with wide offerings of academic programs, degrees, and certifications for specific purposes (Eaton, 2009). Across school types, including 2-year, 4-year, comprehensive, doctoral, and proprietary classifications, higher education remains critical to the U.S. economy and for workforce preparation (Glaeser, Ponzetto, & Shleifer, 2007; Zaback, Carlson, & Crellin, 2012). However, while the sector is multi-faceted and increasingly competitive, the economy and rising cost of tuition are bringing forth change to higher education (Eaton & Neal, 2015). In fact, the high tuition and high aid-pricing model is at a breaking point and represents a significant threat to some colleges continued existence (Jaschik, 2016; Taylor & Morphew, 2010).

While academia has grown increasingly more accessible to students, the price of higher education has risen to levels that have not kept pace with most students’ ability to pay (Zaback et al., 2012; Zumeta, 2000). Due to the demand for, and costs of, higher education, students have had to increase their reliance on student loans to finance their goals to obtain a postsecondary education (Zaback et al., 2012). In a 2014 financial aid report, the federal government reported processing 21 million student loan applications
and approving 13 million postsecondary students for financial aid totaling $134 billion in federal student aid (U.S. Department of Education [USDOE], 2014). When the tuition increases exceeded the rate of inflation, taxpayers demanded that colleges and universities hold down tuition costs by becoming more efficient (Zaback et al., 2012; Zumeta, 2000). Due to the rising cost of higher education and increases in student debt, policymakers and the public are pressuring accreditors, agencies that provide recognition to institutions as part of an accreditation process, to demonstrate institutional effectiveness and accountability (Adler-Kassner & Harrington, 2010; Behr & Walker, 2010; Brittingham, 2008; Burke, 2005). However, there is wide disagreement upon measurement of institutional effectiveness and accountability among higher education sector advocates and critics (Burke, 2005; Eckles, 2010; Middaugh, 2010; Pascarella, Cruce, Wolniak, & Blaich, 2004; Powell, Gilleland, & Pearson, 2012).

**Accountability in higher education.** Since 2009, with the rising cost of higher education, declines in federal and state funding, and a weakened economy, colleges and universities have struggled to demonstrate they are accountable to the public (Eaton & Neal, 2015). Institutions are also working to increase institutional efficiencies to reduce costs (Eaton & Neal, 2015; Trow, 1996; Zaback et al., 2012). These persistent challenges continue to plague colleges and universities, and they drive the reasons for the public continuing to call for greater transparency, efficiency, and accountability (Gaston, 2013; Middaugh, 2010; Neal, 2008; Zumeta, 1998, 2000).

From the years 2007-2010, the Voluntary System of Accountability (VSA), the University and College Accountability Network (U-CAN), and the Voluntary Framework of Accountability (VFA) launched separate efforts to provide comparative information
about the student experience. The goal was to address accountability concerns and increase transparency among private and public 4-year colleges and universities (Boggs, 2011; Jankowski & Provezis, 2011, Jankowski et al., 2012). These reporting systems, while not widely adopted in higher education, were valid first attempts to address accountability and transparency concerns. However, they were not universally required of all institutions and lacked consistent reporting criteria and performance measures (Boggs, 2011; Ewell, 2011; Jankowski & Provezis, 2011).

In 2014, President Barack Obama’s administration developed the College Scorecard as a consumer-friendly tool for higher education institutions and families (USDOE, 2013). Unlike previous systems, all degree-granting institutions are required to submit standardized data to increase transparency and assist students and parents in their college decision-making process. The College Scorecard consists of five search options: (a) programs, (b) degrees, (c) location, (d) size, and (e) name. All represent key data elements that every higher education institution is required to report (College Scorecard, 2016). Students and parents can select colleges and universities based on institution type (public, private non-profit, private for-profit) and specialized mission statements that focus on ethnic and religious identities and purposes (College Scoreboard, 2016). While the Scorecard received mixed reviews from proponents and critics, the tool gives parents and students another way to compare institutions and to aid with college selection decisions (Zhou, 2015).

**Brief background of the higher education sector.** In 1919, the private (peer-to-peer), voluntary practice of institutional accreditation was created to (a) strengthen and sustain the quality and integrity of higher education, (b) make it worthy of public
confidence, and (c) minimize the scope of external control (Middle States Commission on Higher Education [MSCHE], 2008a). Since their inception, accrediting bodies have transitioned to being more accountable to the public. For example, on their websites, accrediting agencies publicly display selected information about each college and university’s accreditation status (Council for Higher Education Accreditation [CHEA], 2015; MSCHE, 2015a).

In the 1940-1950s, during the passage of the historic Servicemen’s Readjustment Act of 1944 (commonly known as the GI Bill), Congress connected the accreditation process to the distribution of federal student aid as a means to ensure educational quality (Eaton, 2009; Neal, 2008). The Higher Education Act (HEA) of 1965 governs federal student aid and links accrediting agencies and federal funding through a process called “gate-keeping” (Higher Education Act of 1965 [HEA], P. L. 89-329). All degree-granting colleges and universities must obtain and sustain their accreditation status from a recognized agency to qualify for HEA Title IV-Student Assistance (HEA, 1965, P. L. 89-329). This law regulates all aspects of financial assistance to students and families by offering grants, loans, and work-study for postsecondary institutions (HEA, 1965, P. L. 83-229).

Higher education is a self-regulated sector. HEA’s laws to determine financial aid eligibility for students and institutional educational quality is determined by the process of accreditation (Eaton, 2009; Eaton & Neal, 2015; Volkwein, 2010a). Given the rising costs of tuition and families’ dependence on federal financial aid, accreditation has become a critical requirement of any viable college and university to ensure educational quality and financial aid for students.
Accreditation in higher education. The premise of accreditation, as presented by Huisman and Currie (2004), is an internal accountability system designed to require compliance with established standards of educational quality for colleges and universities. The ability to sustain a successful accreditation status necessitates a periodic assessment of an institution’s performance against accrediting agency standards (MSCHE, 2015a). The responsibility of oversight and recognizing accrediting agencies is a joint responsibility between the U.S. Department of Education and the Council for Higher Education Accreditation (CHEA) (HEA, 1965, Public Law 89-329).

CHEA is the private sector organization authorized by the U.S. Department of Education to categorize, recognize, and grant accrediting authority to other private agencies (CHEA, 2015). Within the United States, there are four different categories of private accrediting agencies who accredit non-profit, private, and public, degree-granting 2-year and 4-year institutions (a) programmatic, (b) national career-related, (c) national faith-related, and (d) regional (Eaton, 2009). The regional accreditors focus on various types of colleges and universities (2-year, 4-year, public, and private), and they concentrate on institutional and programmatic levels of accreditation. There are six private accreditors across the United States that are recognized by the U.S. Department of Education and CHEA, and they are organized by region (CHEA, 2015).

All six of the regional accreditation agencies have standards based on the institutional mission of the respective college they accredit. In accordance with the requirements of CHEA and the U.S. Department of Education, all regional accrediting agencies mandate addressing student achievement through the institution’s mission statement (CHEA, 2015). These regional accrediting agencies assess colleges and
universities, as a whole, based on their performance to achieve the mission and goals of the institution across academic and administrative units (Head & Johnson, 2011).

Middle States Commission on Higher Education (MSCHE) Region. MSCHE is one of the six regional accrediting agencies leading the paradigm shift in the higher education sector from measuring institutional inputs towards measuring educational outcomes (Volkwein, 2010a). MSCHE reported 99.61% of the institutions located in the research region of this study met all required standards to be accredited (MSCHE, 2015b). Within MSCHE, 48% of the public and private institutions who confer baccalaureate and master’s degrees competitively compete for the same population of perspective students with similar institutionally stated purposes (MSCHE, 2015a).

While the remaining 52% of the institutions in MSCHE region confer similar degrees as the public and private institutions, they represent a range of different categories of colleges with specialized mission statements, as represented by the Carnegie Classification categories (Clark et al., 2007; MSCHE, 2015a). In 1973, the Carnegie Commission on Higher Education established a classification framework to compare similar institutions (Clark, Warren, & Au, 2007). The Carnegie Classifications categories of colleges and universities with comparable institutional purposes are tribal, special focus, research/doctorate, baccalaureate, master’s, and associate’s (Clark et al., 2007). The mission-centric standards established by the accreditation agencies are unique to each college or university’s identity based on the Carnegie Classification, defines the purpose by which all other institutional actions support, and is central to evaluating educational quality (Clark et al., 2007, Eaton, 2009; MSCHE, 2015a).
This study selected the mission statements of public and private institutions who confer baccalaureate and master’s degrees because they represent almost 50% of the MSCHE institutions within the region. This presents a competitive higher education environment where institutions need to differentiate themselves in the marketplace of postsecondary education. MSCHE provides regulatory oversight through the accreditation process to guide public and private institutions to create mission statements and set goals and objectives.

MSCHE accreditation standards. Each institution within the MSCHE region is required to define the institutional purpose, indicate whom the institution serves, and what it intends to accomplish (MSCHE, 2015). This is evidenced by MSCHE requiring colleges and universities to show the alignment between educational outcomes and the mission statements, goals, and objectives (MSCHE, 2015; Volkwein, 2010a). The U.S. Department of Education requires MSCHE and other accrediting agencies to demonstrate student success and the ways in which it is connected to the achievement of the institutional mission (USDOE, 2016).

The MSCHE accreditation standards described in the Characteristics of Excellence in Higher Education 12th Edition, outline specifics relating to defining and achieving the mission statement in Standard 1 and Standard 7 (MSCHE, 2015a). The following outlines the requirement for each standard:

- Standard 1: Mission and Goals - The institution’s mission clearly defines its purpose within the context of higher education and indicates who the institution serves and what it intends to accomplish. The institution’s stated goals, consistent with the aspirations and expectations of higher education,
clearly specify how the institution will fulfill its mission. The mission and
goals are developed and recognized by the institution with the participation of
its members and its governing body and are used to develop and shape its
programs and practices and to evaluate its effectiveness.

- **Standard 7: Institutional Assessment** - The institution has developed and
  implemented an assessment process that evaluates its overall effectiveness in
  achieving its mission and goals and its compliance with accreditation
  standards.

All 14 accreditation standards described in the *Characteristics of Excellence in Higher
Education 12th Edition* are outlined in Appendix A.

In response to growing tensions and concerns between policy makers and the
general public, MSCHE accreditation standards were revised and the new requirements
became effective for all member institutions in January 2016. The new standards are
fully integrated, central to the institutional mission, and more rigorous than the previous
accreditation requirements (MSCHE, 2015a). All MSCHE higher education institutions
must adhere to the standards as reflected in the *Standards for Accreditation and
Requirements for Affiliation* (13th ed.) (MSCHE, 2015a).

The new process provides a formative assessment, requires less time, focuses on
improvement initiatives, provides feedback and support to the institution, and shortens
the evaluative cycle from 10 to eight years (MSCHE, 2015b). The requirements related
to defining and achieving mission and goals in Standard I were simplified, revised, and
reflect the following language:
• Standard I: Mission and Goals - The institution’s mission defines its purpose within the context of higher education, the students it serves, and what it intends to accomplish. The institution’s stated goals are clearly linked to its mission and specify how the institution fulfills its mission.

Although this study focused on Standards for Accreditation and Requirements for Affiliation (13th ed.) (MSCHE, 2015a) Standard I Mission and Goals, it is important to understand how the mission statement relates to all of the new standards. MSCHE’s accreditation standards make the institutional mission statement central to determining educational quality (MSCHE, 2015). The mission statement is now incorporated into each of the seven standards and relates as follows:

• Standard I Mission and Goals definitively stating the institution’s purpose and specifying how the institutional mission is achieved.
• Standard II Ethics and Integrity defines both ethics and integrity as hallmarks of educational institutions while being faithful to the institutional mission.
• Standard III Design and Delivery of the Student Learning Experience outlines criteria to ensure assessment of student outcomes are appropriate and consistent with the institutional mission.
• Standard IV Support of the Student Experience emphasizes the institution’s need to recruit and create experiences for students who have interest aligned with the mission of the institution.
• Standard V Educational Effectiveness Assessment assess the institution’s success in achieving the mission.
- Standard VI Planning, Resources, and Institutional Improvement develops and allocates adequate planning and resource strategies to support institutional achievement of the mission.

- Standard VII Governance, Leadership, and Administration warrants an institutional structure and hierarchy are in place that allows for the achievement of the institutional mission statement (MSCHE, 2015a).

These standards demonstrate the value and the importance of institutional mission statements in the accreditation process and to ensure educational quality at the institutional and programmatic levels (MSCHE, 2015b). The consolidated Standards for Accreditation and Requirements for Affiliation (13th ed.) to which all MSCHE institutions must meet are listed in Appendix B.

Mission statements: history and purpose. Mission statements were established in the business and strategic management fields as the most important document in organizations and a signature part of any company’s profile (Drucker, 1974; Klemm et al., 1991; Morphew & Hartley, 2006; Pearce & David, 1987; Rajasekar, 2013). Despite getting a later start in the literature, mission statements now share equal stature in the higher education sector as they “profoundly shape” the culture and planning challenges of institutions (Norris & Poulton, 2008, p. 9). In fact, Morphew and Hartley (2006) stated, “It would seem not having a mission statement begs the very legitimacy of a college or university” (p. 456). Business and educational leaders, alike, view mission statements as effective management tools in the public and private sectors (Lake & Mrozinski, 2011).

According to David and David (2003), a mission statement can be defined as “enduring statements of purpose that distinguish one organization from other enterprises”
Mission statements have also been described as critical to organizational success (Morphew & Hartley, 2006), and vital in setting strategic direction (Sidhu, 2003). Yet others offer more lofty statements, suggesting mission statements are the reason for a company to exist (Pearce & David, 1987) or how they have risen to a level of mythology (Lake & Mrozinski, 2011).

Over the past four decades, mission statement content has been wide and varying. Some defining components of mission statement content include mentioning customers, markets, and stakeholders (David, 1989; Pearce & David, 1987). While Bart et al. (2001) and Bartkus, Glassman, and McAfee (2006) describe other components of the mission statement such as sharing values and articulating organizational priorities as critical to a mission statement’s effectiveness. Regardless of how it’s defined, Drucker’s (1974) original purpose of the mission statement to define the identity of the organization, as the primary reason for having a mission statement continues to be relevant in the 21st century.

Mission statements have been important to organizations since the early 1970s and 1980s. While initially emerging from the business sector, mission statements became critical elements of any company profile (David, 1989; Pearce & David, 1987). The mission statement defined the organizational purpose and goals for managing company performance (Drucker, 1974), provided the starting blocks to guide the strategic planning process (Klemm, Sanderson, & Luffman, 1991; Pearce & David, 1987), and included marketing and advertising (Pearce & David, 1987). Others defined their mission statements to include keyword components (Rajasekar, 2013), and they provided the
“glue” to connect the organization through shared values and standards of behavior (as cited in Stone, 1996, p. 32).

As mission statement content developed, the Pearce and David (1987) and David (1989) research represent seminal studies that set the foundation for the nine-key component word framework for mission statements. The nine key components make up the framework which is the benchmark for mission statement studies (David, 1989; Pearce & David, 1987, Williams, 2008; Rajasekar, 2013). The nine keyword components and the meaning of each are outlined in Table 1.1.

Table 1.1

*Mission Statement Key Components*

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<th>Key Component</th>
<th>Researcher(s)</th>
<th>Definition</th>
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<td>9 Employees</td>
<td>David (1989)</td>
<td>The importance of managers and employees.</td>
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Echoing similar results from Pearce and David (1987), Klemm et al. (1991) extended the use of word choices and patterns of text with a focus on corporate values that encompassed strategic objectives, quantified business targets, and included a business definition. Ireland and Hitt (1992) further expanded the components of corporate mission statements to business strategy, distinctive competence, and competitive positioning in the marketplace. Additionally, Swales and Rogers (1995) investigated the expression of corporate ethos and culture in mission statements, while Stone (1996) explored mission statements’ word choices and text characteristics and required them to be clearly articulated, unique, relevant, and written in a “positive (inspiring tone)” (p. 34).

**Mission statements in the business sector.** In the early years of mission statement research, Pearce and David (1987) studied the word choices and patterns of the text composition of mission statements of Fortune 500 companies. This was done to determine the relationship between identified word choices, text pattern components, and corporate financial performance. David (1989) expanded his word choices and text pattern component research of mission statements by studying the missions of large manufacturing and service companies to provide guidance in developing mission statement content to senior executives. The key components listed in Table 1.1 were used to frame the mission statement content in this study. Since the late 1980s, mission statement research studies in the business sector began to shift from connecting word choices and text pattern components to linking to organizational relevance and company performance more consistently (Bart, 1997; Bart, Bontis, & Taggar, 2001; Peyrefitte & David, 2006; Rajasekar, 2013; Williams, 2008).
For example, studies examining relationships between mission statements and firm performance in the areas of sales, profits, returns, and employee behavior of industrial companies (Bart, 1997) and relationships between mission statements and financial performance (Bart, Bontis, & Taggar, 2001) became more relevant indicators of demonstrating mission statement value in the 21st century. Although Peyrefitte and David (2006) studied mission statements using the Pearce and David (1987) key component framework, the study sought to compare similarities and differences in mission statements across four business environments. Peyrefitte and David (2006) argued that the mission statement analysis was still inadequate and conflicting—even though many word choices and patterns of text components and definitions of mission statements were comparable.

While Williams (2008) continued to study corporate firms using the Pearce and David (1987) word-component framework, findings of the study aligned with Peyrefitte and David’s (2006) study regarding the inadequacy of mission statement analysis. Furthermore, Williams (2008) recommended that further exploration of the mission statement could explain its influence on internal and external stakeholders, the effects on company performance, and the contributions to company planning. Despite two decades of research on word choices, and given that mission statements are a “corporate reporting genre,” further research on the methods were required for effective mission statement development (Williams, 2008, p. 118).

**Mission statements in the higher education sector.** The mission statements of colleges and universities largely define what makes those institutions accountable and effective (Ewell, 2011). Kuh (2007) acknowledged the need for greater transparency by
stating, “Public reporting about various aspects of institutional performance is long overdue” (p. 31). The U.S. Department of Education (USDOE) recognizes accrediting organizations as the experts to determine the educational quality of colleges and universities (Neal, 2008). However, the mission-centric private accreditation process of evaluating higher education institutions is out of step with the public’s evolving need to hold colleges and universities accountable (Eaton & Neal, 2015; Neal, 2008; Trow, 1996). As a result, the accreditation process will continue to be the focal point of the debate (Brittingham, 2008; Eaton, 2009; Ewell, 2008; Eaton & Neal, 2015; Gaston, 2013; Middaugh, 2010).

While the business literature has examined corporate mission statements, the research literature on mission statements in the higher education sector is limited. According to Birnbaum (2000), many business practices find their way into the higher education sector due to pressure from business and government leaders to be more efficient and effective. However, some higher education leaders reluctantly embrace and implement business strategies, but ultimately, these strategies are seen as management “fads” and abandoned (Birnbaum, 2000, p. 2).

Nonetheless, mission statement research studies in higher education continued. Morphew and Hartley (2006) examined the mission statements of 4-year U.S. colleges and institutions to understand what institutions said in their mission statements and to explore the relationship between the rhetorical word choices and text patterns of the institution type. Palmer and Short (2008) studied the mission statements of schools of businesses within colleges and universities to contrast the mission statements of the larger public and private institutions. As the researchers studied the word choices and text
patterns of mission statement content of each institution, Newsom and Hayes (1991), Morphew and Hartley (2006), and Palmer and Short (2008) illuminated the need to understand what institutions reveal in their mission statements.

Mission statements were used as marketing initiatives (Kirp, 2009) for recruiting efforts linked to organizational identity based on special-purpose mission statements or Carnegie Classifications. The research of Abelman and Dalessandro (2008, 2009) and Atkinson (2008) studied the mission and vision statements of colleges to determine if word choices and patterns of text components were well conceived and viable for 2-year and 4-year institutions and consistent with institutional type based on Carnegie Classifications. In addition, tribal community colleges were studied by Abelman (2011) and Lake and Mrozinski (2011) studied community colleges and strategic planning. The Abelman and Dalessandro (2008, 2009), Atkinson (2008), Abelman (2011), and Lake and Mrozinski (2011) established the need to ensure that institutional mission statements in higher education align appropriately with the institution’s identity, stated purpose, and connection to strategic planning.

From a different perspective, Morphew and Hartley (2006) studied mission statements to determine patterns of difference across institutional types; while Taylor and Morphew (2010) studied mission statements of baccalaureate colleges and universities to understand how institutions represent themselves to potential students and other external constituencies. However, what has remained unexamined is a study that explores the mission statement content of public and private higher education institutions within an accrediting region to identify word choices and text patterns and how the mission statement is used to communicate to internal and external constituents.
There is a wide range of opinions on mission statement narratives from identifying customers, markets, products and services to describing social responsibilities (Morphew & Hartley, 2006; Pearce, 1982; Peyrefitte & David, 2006). But after 2010, the empirical studies of mission statements in higher education began to decline. Regardless of the origin of mission statements in the business sector, and despite Birnbaum’s (2000) concerns about management fads infiltrating academe, mission statements play a critical role in the higher education sector because of the requirement to meet accreditation standards and compliance to federal regulations (MSCHE, 2015a; USDOE, 2016).

**Shift in measuring educational outcomes.** While defining educational quality is paramount for accrediting agencies, significant change is occurring in how educational quality is measured at the institutional level. Mission statements of colleges and universities are expected to reflect the institutional purpose and communicate educational outcomes to constituents (MSCHE, 2015a; Volkwein, 2010a). However, there has been a shift from measuring institutional inputs to measuring institutional outputs.

Prior to the 1980s, accreditation agencies focused on the quality of traditional institutional inputs, such as SAT scores, faculty credentials, enrollment, class size, spending levels, and other institutional resources (Ewell, 2008; Middaugh, 2010). Over the past few years, measures for educational quality have changed from evaluating traditional internal inputs to measuring external performance indicators based on results (Duncan, 2015; Eaton & Neal, 2015; Volkwein, 2011). The movement to evaluate performance-based indicators on educational outcomes, such as student learning, degree completion, student retention, graduation, and job placement rates, have become more
relevant success measures for students in the 21st century (Duncan, 2015; Frye, 1999; Gaston, 2013; Volkwein, 2011).

A letter dated April 22, 2016, was sent to all recognized accrediting agencies from the U.S. Department of Education that referenced specific regulatory criteria for student achievement (USDOE, 2016a). Wheelan and Elgart (2016) reported that the U.S. Department of Education required higher education leaders and regional accrediting agencies to shift from evidence-based institutional oversight to collecting more data to demonstrate educational outcomes. The April 22, 2016 letter stated that accrediting agencies must demonstrate rigorous standards to remain a trustworthy authority in determining educational quality (USDOE, 2016a). Additionally, the U.S. Department of Education (2016a) explicitly requires evidence of linking student outcome achievement to institutional mission by stating:

To make this demonstration, the agency must show, among other things, that it has a standard or standards that effectively address the quality of each institution’s “[s]uccess with respect to student achievement in relation to the institution’s mission.” To that end, the agency must show that it has clear standards for success in student achievement in relation to the institution’s mission (602.25(a), 602.18(a)), and how it has reviewed institutions according to this criterion (602.31(a) (2)). (p. 4)

This shift in measuring institutional outputs and the U.S. Department of Education’s requirement of accrediting agencies to link student achievement to the institutional mission are factors causing unrest in the higher education sector. These shifts are significant to higher education leaders for a few key reasons. First, this
represents a transformational shift in the higher education sector from internal indicators (inputs) to demonstrating accountability (outcomes) to external stakeholders and it signifies a more prescriptive approach to governmental oversight (Eaton, 2008, 2009; Eaton & Neal, 2015). This philosophical change has caused higher education colleges and universities to transition from historical measures of institutional excellence and performance that include the value of endowments, faculty credentials, graduation rates, and student retention, towards measures that indicate institutional and educational outcomes (Frye, 1999; Volkwein, 2010a). Gaston (2013) also identified this shift, as the reason that fuels the tensions between the government, the general public, and accreditation agencies.

Second, despite the call for whole scale changes to the accreditation process, accreditors are holding firm to the principles of ensuring educational quality, committing to the mission and institutional diversity, protecting higher education autonomy, and maintaining academic freedom (Brittingham, 2008; Eaton & Neal, 2015; Volkwein, 2007). These tenets of the private accreditation process of continuous improvement are in direct conflict with the general public’s demand for greater transparency in the higher education sector. Last, while critics and advocates contrast the pressures to make significant modifications to the accreditation system and gatekeeping dilemma, the controversy and discourse between higher education leaders, policymakers, and the general public are only intensifying (Neal, 2008; Volkwein, 2010a; Zumeta, 2000).

**Competition in the higher education marketplace.** The decline of federal and state aid is also having an impact on both public and private institutions in the higher education sector (Eaton & Neal, 2015; Fortenbury, 2013; USDOE, 2015; Zumeta, 2000).
Within the United States, 60% of the higher education sector consists of 4-year institutions offering baccalaureate and/or master’s degrees, and 40% are 2-year institutions offering associate degrees (Erickson, 2012). Of the colleges and universities conferring baccalaureate and/or master’s degrees, over 60% are private colleges, yet, nationally, the remaining 40% of the public universities enroll nearly three-quarters of all students (Erickson, 2012).

Both public and private colleges and universities were established for the public good (Douglas, 2006; Rudolph, 1962). While private institutions served students who could afford to pay tuition, public institutions were created and given land by the government to provide access at a lower cost (Douglas, 2006; Rudolph, 1962). However, both institution types share the challenges of competing in the MSCHE marketplace for students, rising tuition costs, and addressing affordability and transparency concerns from the general public (Eaton, 2009; Eaton & Neal, 2015).

Although both public and private institutions serve students in achieving a postsecondary education, there are a few key differences between the two institution types. The first major difference is the manner in which they are funded. Public institutions are funded by state government to give residents an opportunity to get a public education and to subsidize the operating expenses of public colleges which contribute to the lower tuition costs (Peterson’s annual guide, 2015). Private colleges do not receive state funds and rely heavily on tuition, donations, and private contributions (Fortenbury, 2013; Peterson’s annual guide, 2015). The second difference is the institutional size and degree offerings. Public institutions are large, enroll more students, and offer a wider range of degree offerings. Private institutions tend to be smaller in size
and offer a smaller more particular academic focus (Fortenbury, 2013; Peterson’s annual guide, 2015). The last major difference between public and private institutions is the class size and student demographics. Public institutions have larger class sizes and enroll more in-state students due to state tuition incentives (Fortenbury, 2013; Peterson’s annual guide, 2015). Private institutions have smaller classes and enroll more out-of-state students.

These differences between public and private higher education institutions, enrollment challenges, coupled with the decline of federal and state aid, has created an increasingly competitive environment in higher education, particularly between private and public colleges and universities (USDOE, 2015; Fortenbury, 2013). Given that 99.61% of the universities and colleges within the MSCHE region are accredited, the need for institutions to identify their purpose in the higher education marketplace to attract and retain students has intensified (Fortenbury, 2013; MSCHE, 2015b). However, due to the Carnegie Classification system, the colleges and universities who are conferring baccalaureate and master’s degrees have similar institutional purposes (Clark et al., 2007; MSCHE, 2015a).

**Problem Statement**

Private colleges and public universities are facing several challenges. Given the rising cost of tuition, declines in federal funding, and growing tension between policy makers and accreditors, the higher education sector is under pressure to demonstrate educational outcomes (Eaton & Neal, 2015; Neal, 2008). Public and private institutions are increasingly vying to attract and retain students to maintain institutional sustainability in a competitive marketplace. Content analysis of word choice and text patterns in
institutional mission statements may inform educational leaders, accreditors, and the
government and educational outcomes to internal and external constituents. Furthermore, pressure from
policy makers, accreditors, and the general public on the higher education sector to be
more accountable, transparent, and demonstrate educational outcomes is predicted to be
constant throughout the 21st century (Brittingham, 2008; Eaton & Neal, 2015; Gaston,
2013; Volkwein, 2010).

Institutional accountability and effectiveness in colleges and universities are
defined by their mission statements (Ewell, 2011). The importance of mission statements
has been elevated due to the status of the economy and the significant roles accreditation
plays in determining the educational quality and gatekeeping for federal funds (Eaton &
Neal, 2015; MSCHE, 2015a; Neal, 2008). Within the MSCHE region, mission
statements defining the institutional purpose, indicating whom the institution serves, and
communicating what it intends to accomplish, help to determine educational quality
(MSCHE, 2015a).

Despite the increasing importance of institutional mission statements, the subject
is not widely studied in the higher education sector across all institutional types. As a
result, mission statement studies are limited in the higher education sector, and in the
MSCHE region, in particular, of public and private institutions who confer baccalaureate
and master’s degrees (Abelman & Dalessandro, 2008, 2009; Abelman, 2011; Atkinson,
2008; Lake & Mrozinski, 2011; Morphew & Hartley, 2006; Taylor & Morphew, 2010).
There is a gap in the literature regarding overall mission statement studies in higher
education and more specifically studies examining the words and text patterns of mission
statements and how it is used to communicate to constituents of public and private institutions within an accrediting region. Examining content for word choice highlights the type of language that is used in documents, message tones indicate conveyance of attitude, and text patterns signify how content is used through examined text (Hart & Carroll, 2015). Private and public higher education institutions must use word choices and patterns of text in mission statements to define the institutional identity and communicate purpose to constituents.

**Theoretical Rationale**

The theoretical lens that will guide this study is Spence’s (1973) signaling theory. The theory describes imperfect or asymmetric information in the marketplace between different parties (Spence, 1973). Traditionally, signaling is an economic theory applied in the areas of finance, management, marketing, and accounting literature associated with disclosing corporate information benefits and associated costs (Connelly, Certo, Ireland, & Reutzel, 2011). However, Campbell, Shrives, and Bohmbach-Saager (2001) discussed signaling theory more broadly.

Spence’s (1973) signaling theory explains the concept of information asymmetry as the phenomenon that exists when one party has more or better information than the other party. His seminal article to explain the theory focused on the labor market. Spence (1973) used an example of the job market to demonstrate how potential job seekers use “signals” of their education levels to reduce information asymmetry and improve communication to broadcast their qualifications to a potential employer. The exchange of these communication “signals” reduces information asymmetry in the job market between the two parties (Spence, 2002). This explains how potential employees
differentiate themselves in the job market by indicating their level of higher education (Spence, 2002). However, Campbell et al., (2001) expanded the signaling theory to describe voluntary disclosure information that companies give through annual reports and corporate disclosure statements.

**Evidence supporting signaling theory in the higher education sector.**

Campbell et al. (2001) expanded Spence’s (1973) signaling theory to include corporate mission statements. As part of an annual report that contains non-propriety information, mission statements communicate the organization’s purpose to stakeholders and constituencies and therefore should be included as part of corporate disclosure (Campbell et al., 2001). Due to time and resources, the annual process of disclosing financial narratives and regulatory reports can be a costly endeavor for corporations (Campbell et al., 2001). Whereas, when applied to corporate mission statements, signaling has positive attributes as a communication tool and was cost free (Campbell et al., 2001).

Kjelland (2008) applied signaling theory to higher education by implying a positive relationship between years of educational experience and increased earnings in the labor market. He argued that persons with higher education levels signal productivity-enhancing characteristics and educational success in the job market to potential employers (Kjelland, 2008). Echoing Spence’s (1973) labor market study, Kjelland (2008) agreed that the *signal* of higher education levels reduced information asymmetry between job seekers and potential employers. Spence (2002) and Kjelland (2008) thoughts also align with higher education policymakers who suggest that colleges and universities are critical to the U.S. economy and workforce preparation (Glaeser et al., 2007; Zaback et al., 2012).
The concept of corporations utilizing mission statements as value-added information to corporate disclosure documents is aligned with the elevated importance of mission statements in the higher education sector (Kjelland, 2008; MSCHE, 2015a). In addition, it further addresses the need to be more transparent with information specific to organizational purpose and plans (Eaton & Neal, 2015; Neal, 2008). Applying the expansion of signaling theory to non-financial voluntary information, such as mission statements, offers broad implications of the ways to reduce information asymmetry in the market to a more substantive stakeholder group, which includes the community, customers, and “business partners” (Campbell et al., 2001, p. 70; Ross, 1977).

Spence’s (1973) signaling theory is appropriate for this study due to its effective use in the business sector regarding the publication of signals to the business market (Campbell et al., 2001; Connelly et al., 2011; Kjelland, 2008). Furthermore, the implications of added value to non-financial reporting is synonymous with the constituents of the higher education sector calling for more transparency (Eaton & Neal, 2015). This study explores mission statements of public and private institutions within the MSCHE region in the context of examining how word choices and text patterns are used to define the institutional purpose and communicate to constituents. Spence’s (1973) signaling theory will provide the lens to explore mission statements as a signal to communicate to internal and external constituents in the higher education sector.

Statement of Purpose

The purpose of this study was to determine if public and private higher education institutions differ in the word choices and text patterns they use in their mission statements to signal and define the institutional identity and communicate institutional
purpose to constituents. The research goal was to gain insight into, through content analytics, what word choices and text patterns comprise mission statements and how they communicate institutional purpose to internal and external constituents of the higher education sector. The study will inform higher education leaders, policy makers, and accreditors of the differences in the language used in mission statements of public universities and private colleges who confer baccalaureate and master’s degrees in the MSCHE region.

**Research Questions**

The study was guided by the following questions:

1. Do public versus private institutions of higher education within the MSCHE region use different word choices in the text of their institutional mission statements?

2. Do higher education institutions that confer baccalaureate versus master’s degrees within the MSCHE region use different word choices in the text of their institutional mission statements?

3. Do public versus private institutions of higher education within the MSCHE region use different text patterns in the text of their institutional mission statements?

4. Do baccalaureate versus master’s degree institutions of higher education within the MSCHE region use different text patterns in the text of their institutional mission statements?
Significance of the Study

Similar to companies in the business sector, higher education institutions use mission statements to communicate the institutional purpose and educational outcomes to constituents. Within the MSCHE region, 48% of the public universities and private colleges who confer baccalaureate and master’s degrees compete to attract, retain, and graduate the same population of perspective students (MSCHE, 2015a). Higher education institutions in these categories have comparable institutional purposes, limited resources, and challenges to differentiate and sustain their existence in an increasingly competitive marketplace (Erickson, 2012; Fortenbury, 2013). This study aimed to identify what words higher education institutions use in the mission statement to define institutional identity and communicate institutional purpose in a competitive higher education marketplace.

The new MSCHE accreditation requirements effective in 2016, integrate the institutional mission statement of every higher education institution throughout all required standards (MSCHE, 2015a). Mission statements of colleges and universities within the MSCHE region define the institutional purpose, identify who the institution serves, and how it intends to accomplish the institutional mission (MSCHE, 2015a). Some of the pressures on the higher education sector include the general public’s demand for greater transparency, MSCHE’s rigorous accreditation process, and the U.S. Department of Education’s mandate that higher education institutions must demonstrate student achievement through the institutional mission (Eaton & Neal, 2015; MSCHE, 2015a; USDOE, 2016a).
Given the changing environment and increased focus on communication and mission achievement in higher education by MSCHE (2015a), gaining greater insight into word choices and text patterns used in college and university mission statements. This new insight may provide higher education leaders with a deeper understanding of how words in mission statements may be communicated and perceived by internal and external constituents. To meet the needs of a changing economy and demonstrate accountability, transparency, and educational outcomes, higher education institutions must improve and demonstrate overall communication to constituents. The results from this study provide additional knowledge of the word choices and text patterns used to signal institutional purpose to educational leaders, accreditors, and the general public.

Chapter Summary

The higher education sector, as a result of the pressures of the economy, accreditors, policymakers, and the general public, is changing rapidly. Higher education institutions face challenges meeting the demands for greater accountability, increased transparency, and demonstration of educational outcomes (Eaton & Neal, 2015; Gaston, 2013; Zumeta, 2000). In response to growing tensions and concerns, the MSCHE accreditation standards and processes are fully integrated, mission-centric, and more rigorous, and the achievement of the institutional mission will determine the level of educational quality and, subsequently, accreditation status (MSCHE, 2015a).

The elevated importance of mission statements requires higher education institutions to use word choices and patterns of text in their mission statements to define the institutional identity and communicate purpose to constituents (MSCHE, 2015a). The empirical studies from the business sector lend themselves to higher education in
positioning the mission statement as an effective communication tool (Campbell et al., 2001; Pearce & David, 1987; Williams, 2008). Signaling provides the theoretical lens to identify and reduce information asymmetry in the higher education marketplace by framing mission statements as communication signals to constituents (Campbell et al., 2001; Kjelland, 2008).

This study examined the mission statements of public and private higher education institutions within the MSCHE region who confer baccalaureate and master’s degrees. Through technological advancements in content analytics, content research for this study included word choices, message tones, and text pattern analysis (Hart & Carroll, 2015). To address the research gap, the study examined the language of mission statements of public and private institutions in the MSCHE region. The study may inform improving the content of mission statements and how it is used to communicate to internal and external constituents.

The next chapter contains a review of the literature as it relates to purpose, importance, utility, and analysis of mission statements in the higher education sector. The contents of Chapter 3 detail the methodological approach of the study design outlining the research context, research participants, methods, data collection, and data analysis. The study results and data analysis are reported in Chapter 4. The study’s findings, implications, and recommendations are discussed in Chapter 5.

**Definition of Terms**

The definitions chosen for this study were based on the MSCHE requirements in Chapter 1, the literature review in Chapter 2, and the study’s research and analysis conducted in Chapter 3.
Accountability – the obligation to report to others, to explain, to justify, to answer questions about how resources have been used and to what effect. The accompanying fundamental questions are: who is to be held accountable, for what, to whom, through what means, and with what consequences (Trow, 1996)?

Accrediting Agency – a legal entity, or that part of a legal entity, that conducts recognition to institutions as part of an accreditation process through voluntary, non-federal peer review and makes decisions concerning the accreditation or pre-accreditation status of institutions, programs, or both (USDOE, 2016a).

Accreditation or Accreditation Process – a volunteer peer reviewed procedure adopted for self-regulation intended to strengthen and sustain the quality and integrity of higher education, making it worthy of public confidence. Institutions choose to apply for accredited status, and once accredited, they agree to abide by the standards of their accrediting organization and to regulate themselves by taking responsibility for their own improvement (MSCHE, 2016).

DICTION 7.1 – content analysis software that uses over 10,000 words and 31 dictionaries to create master and calculated variables to test narrative content for word choice and verbal tones (Hart & Carroll, 2015).

Institutional or Regional Accreditation – the process by which institutions of higher education are evaluated as a whole with an eye toward their unity of purpose and the extent to which the sum of the parts complements the whole (Head & Johnson, 2011).

Mission Statement or Mission – the words that identify an institution’s specific purpose(s) and aim(s). It describes an institution’s philosophy and serves as a guide for all that it does. The mission (and its supporting goals) provide points of reference for
decisions on student admission, course and program offerings, community outreach, financial matters, and more (MSCHE, 2016).

*Multivariate Analysis of Variance* (MANOVA) – a one-way ANOVA tests whether there are significant differences between two or more groups on a scaled dependent variable (e.g., is there a difference between males and females on their SAT scores). MANOVA generalizes the ANOVA to a situation where you are looking for a significant difference between groups on multiple scaled dependent variables (Statistics Solutions, 2016; Gall, Gall, & Borg, 2007).

*Text Patterns* – DICTION 7.1 identifies repetition of key terms, ratios of adjectives to verbs, ratios of descriptive to function words, and word size to analyze and determine scores for strings of content in one of four calculated variables (variety, insistence, embellishment, and complexity) (Hart & Carroll, 2015).

*Word Choice(s)* – DICTION 7.1 searches content using dictionaries and word lists to identify and define words. Words are analyzed, scored, and categorized into one of five master variables (certainty, optimism, activity, realism, and commonality) (Hart & Carroll, 2015).
Chapter 2: Review of the Literature

Introduction and Purpose

The importance of mission statements in the higher education sector has been elevated due to the status of the economy and the considerable responsibilities that accreditation agencies have in determining the educational quality and gatekeeping for federal funds through the accreditation process (Brittingham, 2008; Eaton & Neal, 2015). While the mission statement empirical literature emerged from the business sector, the research studies of mission statements in higher education institutions were limited. There is a gap in the literature regarding overall mission statement studies in higher education and, more specifically, studies examining how the higher education sector uses words in mission statements to identify institutional purposes and communicate to constituents. However, due to market pressures and in response to public demands, MSCHE has made mission statements of colleges and universities within the region and across all institutional types central to an institution’s educational success (MSCHE, 2015a). Therefore, in order to fulfill the MSCHE mandate and to gain accreditation, private and public higher education institutions are challenged to use word choices and patterns of text in mission statements as signals to define the institutional identity and communicate purpose to constituents.

Even though the business sector has been studying mission statements for over 40 years, there is still more information to glean from mission statement studies (Peyrefitte & David, 2006; Williams, 2008). MSCHE, as part of the Standards for Accreditation and
Standard I Mission and Goals, states institutions must define the institutional purpose, indicate whom the institution serves, and what it intends to accomplish (MSCHE, 2015a). As a result, innovative ways to improve communication between higher education institutions and internal and external constituents are being investigated. Private and public higher education institutions are challenged to use word choices and patterns of text in mission statements to define the institutional identity and communicate purpose to constituents.

This study examined the word choices and patterns of text in mission statements of public universities and private colleges who confer baccalaureate and master’s degrees in the MSCHE region. The study was guided by the following questions:

1. Do public versus private institutions of higher education within the MSCHE region use different word choices in the text of their institutional mission statements?

2. Do higher education institutions that confer baccalaureate versus master’s degrees within the MSCHE region use different word choices in the text of their institutional mission statements?

3. Do public versus private institutions of higher education within the MSCHE region use different text patterns in the text of their institutional mission statements?

4. Do baccalaureate versus master’s degree institutions of higher education within the MSCHE region use different text patterns in the text of their institutional mission statements?
The chapter provides a review of the literature on mission statements that are organized into two main areas (a) exploring the language of mission statements in the business sector, and (b) mission statement utility and analysis in higher education. A methodological review and summary will conclude the chapter.

**Language of Mission Statements in the Business Sector**

Mission statements have been researched in the business sector for many years, but some studies are repetitive and have similar findings. The historical review and analysis of the business sector literature on studies of mission statements exposed similar studies that fall into three categories (a) examine mission statements to identify word choice and pattern of text (Amato & Amato, 2002; David, 1989; Pearce & David, 1987; Peyrefitte & David, 2006; Rajasekar, 2013); (b) compare mission statements of different groups or types of corporations (Amato & Amato, 2002; Swales & Rogers, 1995; Williams, 2008); and (c) explore the relationship between mission statements and company size and performance (Amato & Amato, 2002; Bart, 1997; Bart et al., 2001; Williams, 2008).

The Amato and Amato (2002), Williams (2008) and Rajasekar (2013) studies differ in sample size, industry, Fortune and Forbes ranking, financial performance, and organizational size. However, the collective findings similarly discover mission statements with several present and missing word components, variances in mission statements of high- and low-performing organizations, and recommendations for future studies (Amato & Amato, 2002; Bart, 1997; Bart et al., 2001; David, 1989; Pearce & David, 1987; Peyrefitte & David, 2006; Rajasekar, 2013; Williams, 2008). As a result, the selected literature review analyzed seminal studies in the business literature that
continue to play a role in the current studies in the business and higher education sectors. These studies represent foundational blueprints for mission statement studies and continue to play dominant roles in current mission statement research in the business sector (Amato & Amato, 2002; David, 1989; Pearce & David, 1987; Williams, 2008; Rajasekar, 2013).

Pearce and David (1987) studied the word choices and patterns of text composition in mission statements of Fortune 500 companies. The purpose of their study was to determine the relationship between strategic planning and corporate financial performance (Pearce & David, 1987). They conducted a review using a population of 500 mission statements (Pearce & David, 1987).

The Fortune 500 companies were selected to compare higher performing companies to lower performing companies within the same business group (Pearce & David, 1987). The eight key components of a comprehensive mission statement, which formed the basis of the study were a) target customers, b) principle products/services, c) geographic domain, d) technologies, e) commitment to survival, growth and profitability, f) company philosophy, g) company self-concept, and h) desired public image (Pearce & David, 1987). Pearce and David (1987) hypothesized that high-quality firms with strategic planning efforts were indicative of firms that had comprehensive mission statements, and they should outperform firms with weak or no mission statement. The participants were mailed a survey and data was collected by using the mission statements of 218 responses.

Of the 218 responses, 88 (40.4%) stated that their company had no mission statement, 11 (5%) stated that the company’s mission statement was confidential, 58
(26.6%) of the responses submitted unusable mission statements, and 61 (28%) of the participants responded with mission statements that were suitable and used in the study (Pearce & David, 1987). A Pearson statistical correlation of the eight key components was conducted. One computation was significant and one had a coefficient above .2701. Two significant findings were revealed: a) the statistically significant result confirmed empirical support to the concept that higher performing firms have comparatively more comprehensive mission statements; and b) these positive results suggest that corporate philosophy, self-concept, and public image are important to include in an organizational mission statement (Pearce & David, 1987).

David (1989) examined corporate mission statements to gain insight into how mission statements were developed. The purpose of the study was to provide profiles and guidelines to senior executives that could be useful in the development of corporate mission statements (David, 1989). The sample size consisted of mission statements from 181 large manufacturing and service firms (David, 1989).

A personal letter was mailed to the CEOs of the 1,000 top manufacturing and service companies listed in Business Week, requesting copies of the companies’ mission statements (David, 1989). The data was collected based on the CEOs submission of their companies’ mission statements. Of the 181 responses, 75 (41%) of the firms formally submitted mission statements; and 106 CEOs responded that their firm had not developed a mission statement (David, 1989). Among the 75 CEOs that responded to the mission statement request, there were 30 manufacturing and 45 service firms. In the Pearce and David (1987) study, eight key components of a comprehensive mission statement were identified. A subsequent study by David (1989) expanded the previously identified
mission statement key components by adding concern for employees to the list of word components. The Pearce and David (1987) and David (1989) studies combine to create the nine-key component list that has become the gauge by which mission statements are measured.

Replicating the Pearce and David (1987) study, Williams (2008) examined words used in mission statements of Fortune 1000 companies. The aim of the study was to examine mission statements to a) identify the relationship between mission statements to corporate financial performance, and b) identify the words and rhetorical strategies used in mission statements to convey company identity. The population included 46 mission statements from Fortune 1000 companies (Williams, 2008).

Williams (2008) selected Fortune 1000 corporations to compare the mission statements of high and low financially performing companies. Williams (2008) applied the mission statement component framework of Pearce and David (1987) to identify key components. Williams’ (2008) hypothesized that the mission statements of financially high-performing companies would include a significantly higher number of the Pearce and David (1987) word components than the mission statements of financially low-performing companies. Data were collected for 42 mission statements by two research assistants through corporate websites (Williams, 2008).

The 42 mission statements were divided into financially high-performing and low-performing companies based on their profit levels. Higher performing companies had profits ranging from $2 million to $36 million dollars and low performing companies had profits ranging from $4,000 to losses of $11 million dollars. Wordsmart, textual analysis software was used to create word lists to identify the frequency of words, the
percentage of total words those frequencies represented, and the total number of words in
the statement or statements (Williams, 2008). The word lists were synthesized to
eliminate synonyms and rhetorical strategies. For example, words, such as honesty and
trust, were combined with integrity, and collaboration and team were combined with
teamwork (Williams, 2008).

The study found 42 of 46 (91.3%) of the Fortune 1000 companies examined had
missions and/or values statements available (Williams, 2008). While both high and low
financial performing groups’ mission statements contained words related to customers,
products, and services, the financially low-performing group included words referencing
technology (Williams, 2008a). Although not statistically significant, the high-performing
group’s mission statements included words referencing location and philosophy
(Williams, 2008a). However, the $t$-test results ($p < .05$) indicated significant results in
both groups, including the three Pearce and David (1987) word components of public
image, survival, and employees (Williams, 2008a). The text analysis examining the
words for rhetorical strategies in the 27 mission statements found that the high-
performing (5.6%) and low-performing (5.4%) corporations used first-person pronouns
similarly (Williams, 2008). Ten different values were discussed in four of the 27 mission
statements examined, most of the 27 mission statements expressed goodwill, and the
same number of company’s referenced excellence, integrity, and innovation (Williams,
2008a). In addition, of the 42 corporations, mission statement length varied: 11
companies had one-sentence statements, six companies had two to three sentences, and
25 companies had mission statements consisting of four or more sentences (Williams,
2008a).
A limitation of the study was only 16 (38%) of the companies used the words “mission statement” or “missions” as a heading to describe the actual mission statement (Williams, 2008a, p. 111). The remaining companies used headings like “Our Aspirations,” “Guiding Principles,” and “Our Story” (Williams, 2008a, p. 111). As a result, the 27 mission statements examined for this study may have included a hybrid sample of mission statements and values statements (Williams, 2008a).

Overall, the study found mission statements in Fortune 1000 companies were alive, well, and continued to be a “standard communication tool for the majority of large corporations” (Williams, 2008, p. 115). The length and sophistication of mission statements, when located on corporate websites, was found to have increased over the years (Williams, 2008). The study found that the Pearce and David (1987) mission statement framework of word components was present and continued to be relevant in the mission statements of Fortune 1000 companies (Williams, 2008).

Rajasekar (2013) reaffirmed Williams (2008) study by examining mission statements of Asian corporations. The purpose of the study was to evaluate Asian firms to determine if identified word choices and patterns of text were present in mission statements of non-United States corporations. The study conducted a review of 45 mission statements from companies located in the country of Oman (Rajasekar, 2013).

The Omani corporations were selected from the Muscat Securities Market and categorized by industry type (Rajasekar, 2013). Comparable to Williams (2008), Rajasekar (2013) used the Pearce and David (1987) word-component framework as the guide to test how mission statements were developed and communicated. Since mission statements are the most visible and public part of the strategic planning process, the study
hypothesized that the Pearce and David (1987) word components were critical, essential, and should be included in a mission statement (Rajasekar, 2013).

This content analysis study had two phases. The first phase created three independent weighted-average scores to determine if the word choices were vague or clear in the mission statement analysis (Rajasekar, 2013). The second phase conducted the communication analysis for measuring connotative meaning by using the Fog index to determine statement readability (Rajasekar, 2013). The data was gathered using the corporations’ websites and categorized into seven industry types: financial services, food and beverage, industrial manufacturing, general investments, natural resources, utilities, and infrastructure and human services (Rajasekar, 2013).

The study found the financial services group of companies scored the highest \( (M = 0.9841) \) by having eight of the nine Pearce and David (1987) and David (1989) word components in their mission statements (Rajasekar, 2013). This was followed by the average scores of food and beverage firms \( (M = 0.9505) \); investment groups \( (M > 0.5555) \); natural resources \( (M = 0.8666) \); industrial manufacturing \( (M = 0.716) \); and utilities \( (M = 0.5555) \) showing varying word components in their mission statements (Rajasekar, 2013). In conducting the Fog index analysis for readability, all but two service groups received average scores ranging from \( M = 7.0 \) to \( M = 8.96 \), indicating text with good readability levels (Rajasekar, 2013). The two companies with average scores for industrial manufacturing \( (M = 10.5) \) and infrastructure and human services \( (M = 11.0) \) showed that the mission statements of these companies were difficult to read and needed revising (Rajasekar, 2013).
Limitations of the study included broad classification of firms by industry types may have impacted the average word scores of the identified components in the mission statements (Rajasekar, 2013). Several of the mission statements in the sample were incomplete, demonstrating that companies needed to improve their public documents (Rajasekar, 2013). Last, the mission statements gathered during the data-collection process were not edited to exclude vision statements, and the mission statements fell below the 100-word requirement for the Fog index readability analysis (Rajasekar, 2013).

When reviewing the collective average scores of the companies’ mission statements for word choice and pattern of text for readability, most included the word components of philosophy and products/services (Rajasekar, 2013). This indicated a positive relationship between the mission statements sentiments that included products/services, values, beliefs, and business ethics to stakeholders (Rajasekar, 2013). Consequently, the study also concluded that the remaining seven-word components from the Pearce and David (1987) framework were not present or consistent in the mission statements of all of the corporations. This finding implied stakeholders and constituencies gained no significant knowledge from the firm through the mission statement due to the lack of identified word components (Rajasekar, 2013). The word technology was also the least-used component in the examination of the mission statements for the sample (Rajasekar, 2013). The study recommended further research of mission statements to identify the gaps and discover new word components that would be relevant in the 21st century (Rajasekar, 2013).

In these more recent studies of mission statements in the business sector, Williams (2008) and Rajasekar (2013) concluded what corporations view as important to
communicate to their internal and external stakeholders has remained consistent with the word components of the Pearce and David (1987) and David (1989) frameworks. Further research was recommended by both scholars to explore word choices in the text of mission statements to better understand the influence on internal and external stakeholders’ effects on corporate performance, planning, and governance, and on the methods required to create effective mission statements (Rajasekar, 2013; Williams, 2008). As studies with minor variations are explored using the seminal work of Pearce and David (1987) and David (1989), perceptions of the mission statement’s prominence remain strong within the business sector. However, there have been no recent studies on the Pearce and David (1987) and David (1989) word component frameworks or study results to address changes or evolution happening in corporations in the business sector that could be reflected in the mission statement and communicated to internal and external stakeholders.

**Mission Statement Utility and Analysis in Higher Education**

A review of the literature of empirical studies of mission statements in the higher education sector reveals a gap of recent in-depth studies on mission statements. The most recent research of higher education institutions revealed limited studies of mission statements in community colleges (Abelman & Dalessandro, 2008; Lake & Mrozinski, 2011); special focus mission statements in historical Black colleges and universities (HBCUs) (Abelman & Dalessandro, 2009); tribal community colleges (Abelman, 2011); 4-year institutions (Morphew & Hartley, 2006); and baccalaureate colleges (Taylor & Morphew, 2010). Although there is a lack of research on mission statements in higher education institutions, similar to the business sector, it highlights a gap and need for
This study was designed to research words found in mission statements of higher education institutions. The early studies on mission statements in postsecondary institutions introduced a key component framework from the business sector as a benchmark for comparison.

Newsom and Hayes (1991) conducted one of the first studies of mission statements in higher education institutions by applying the Pearce and David (1987) business word choices and patterns of text framework. The purpose of the study by Newsom and Hayes (1991) was to determine if mission statements of colleges and universities were concise and directly linked to institutional objectives and activities. Their hypothesis was based on the mission statement being the start of all college goals and objectives (Newsom & Hayes, 1991). A random sample of 142 public, private, and secular higher education institutions was selected from the southeastern region of the United States (Newsom & Hayes, 1991). To test the hypothesis, Newsom and Hayes sent a questionnaire to the president of each campus, requesting a copy of the institution’s mission statement.

Of the 93 institutions that responded with some form of a mission statement, 62 were public universities, 12 were private colleges, and 19 were sectarian institutions (Newsom & Hayes, 1991). Of the 93 higher education institution mission statements examined, seven key components from the Pearce and David (1987) study were found: targeting clientele, products, geography, commitment, philosophy, self-definition, and public image (Newsom & Hayes, 1991). The study found that 84% of the institutions had reassessed their mission statement in the past 5 years, and 70% had completed a revision (Newsom & Hayes, 1991).
Three primary reasons why the colleges and universities kept their mission statements updated were: (a) accreditation purposes, (b) administrative reasons, and (c) strategic planning (Newsom & Hayes, 1991). Although the institutions indicated that the mission statement was important, use of the identified key components of the mission statements were inconsistent. The study found that 74% of the public universities relied on the key mission statement component of geography; 75% of the private colleges focused on public image; and 67% of the private colleges focused on philosophy (Newsom & Hayes, 1991). The study also found that 94% of the secular institutions almost exclusively were dependent upon public image (Newsom & Hayes, 1991).

The study found that the mission statements of higher education institutions contained seven specific purposes: a) targeting clientele; b) identifying institutional products and output beyond teaching, research, and service; c) identifying the geography the college served; d) emphasizing the commitment to survival and growth; e) identifying philosophical beliefs, values, and priorities; f) conveying the institution’s self-perception; and g) conveying the institution’s external perception (Newsom & Hayes, 1991). These findings were aligned with previous studies on corporations’ mission statements and the Pearce and David (1987) key component framework. However, Newsom and Hayes (1991) discovered that while a standard mission statement was mandatory, most colleges found little use for them, and most of the mission statements were “vague, evasive, or rhetorical, lacking specificity, or clear purposes” (Newsom & Hayes, 1991, p. 29).

The Newsom and Hayes (1991) study was one of the first content analysis studies that used the Pearce and David (1987) component framework in the higher education sector. Using content analysis from this business sector framework, the study
demonstrated the alignment of the business sector and higher education sector mission statements (Newsom & Hayes, 1991; Pearce & David, 1987). Since the Newsom and Hayes (1991) study, researchers have not sought to explore if mission statements accurately align with institutional differences (Morphew & Hartley, 2006). This study will identify word choices and patterns of text in mission statements of higher education institutions to determine what words are used in mission statements. Recent research of mission statements from the business sector have led the way for exploratory examination of how mission statements are used, and it informs the higher education sector in the areas of institutional identity and purpose, strategic planning, and educational outcomes (Abelman, 2011; Lake & Mrozinski, 2011; Morphew & Hartley, 2006).

**Institutional purpose and identity.** Morphew and Hartley (2006) connected the mission statement to institutional purpose by examining higher education institutions to understand and explore the relationship between the word choices used in mission statements and the institution type. The hypothesis assumed higher education institutions’ mission statements differ in content, and those differences reflect the colleges or universities’ institutional type (Morphew & Hartley, 2006). The study sampled 299 randomly selected U.S. 4-year colleges and university’s mission statements from different Carnegie Classifications (Morphew & Hartley, 2006).

The mission statement data was collected from the Internet, printed, and reviewed by graduate students and co-authors of the study; coded separately, and to ensure reliability word components of the study, they were separately discussed and re-named (Morphew & Hartley, 2006). The study identified 118 distinctive elements (combination
of different word choices and patterns of text) from the sample of mission statements (Morphew & Hartley, 2006).

When analyzing the mission statement data, Morphew and Hartley (2006) found exercising institutional control (public versus private) was more influential than the varying Carnegie Classification. The mission statements of public universities highlighted service or a student’s civic duty, while private institutions focused on student growth and development (Morphew & Hartley, 2006). Furthermore, public universities developed mission statements using word choices and patterns of text more similar to each other than of their private institutional peers (Morphew & Hartley, 2006). Morphew and Hartley (2006) argued that this was indicative of institutions symbolically signaling to external constituents that all public universities share similar values and goals.

The limitations of the study identified some word elements in the institutional mission statements that used words and text patterns that were superficially similar and aspirational (Morphew & Hartley, 2006). While smaller in number, these mission statements offered no direction to guide strategic planning or demonstrate that mission statements may be used as communication tools to external constituents (Morphew & Hartley, 2006). The study also found that the foundational thinking of the purpose of mission statements should be rethought. Given that signaling and symbolizing are one part of their purpose, the mission statements of higher education institutions may be more complex in their utility and willingness to serve constituents (Morphew & Hartley, 2006).

The study’s identification of 118 different word elements in the mission statements of private and public institutions broadly speaks to the variety of challenges these institutions face in the changing higher education sector (Morphew & Hartley,
Both public and private higher education institutions are mindful of the need to signal and demonstrate their relevance in the marketplace to internal and external constituents (Morphew & Hartley, 2006). While controlling for institutional type provided interesting patterns of text for public and private institutions, the study recommended continued research on comparing institutions with common descriptive elements to reveal mission statement similarities in categories other than Carnegie Classification (Morphew & Hartley, 2006). Subsequently, additional studies were conducted to identify elements in mission statement research by using advanced technology.

Several related studies were conducted using the content analysis software DICTION 5.0 to identify word choices in mission and vision statements of higher education community colleges (Abelman & Dalessandro, 2008) and HBCUs (Abelman & Dalessandro, 2009). The purposes of these two studies were to examine and identify the word choices in institutional mission and vision statements that constitute well-conceived, viable, and easily diffused institutional identity (Abelman & Dalessandro, 2008, 2009). The studies conducted a review of a population of 240 community colleges (Abelman & Dalessandro, 2008) and 105 HBCUs (Abelman & Dalessandro, 2009).

The first study conducted by Abelman and Dalessandro (2008) focused on approximately 1,000 public community colleges in the United States which enrolled half of all undergraduates in the country and represented a significant point of entry into higher education for many Americans. During the time of the study, there were many challenges facing community colleges due to growing enrollments, increased economic and workforce development pressures, and a decline in state and local funding (Abelman
& Dalessandro, 2008; Glaeser et al., 2007; Zaback et al., 2012). These challenges along
with an increased emphasis on outcome-based accountability generated additional
assessments and workload responsibilities for administrators, educators, and student
support services at community colleges (Abelman & Dalessandro, 2008).

To address some of the challenges that community colleges were facing in 2008,
Abelman & Dalessandro (2008) took a closer look at the mission and vision statements
from the institutional websites of community colleges. The words from these statements
were coded by four research assistants searching for the words mission statement,
mission, vision statement, and vision and selecting the appropriate information (Abelman
& Dalessandro, 2008). If data were not found on the institutional website, electronic
versions of the school catalog were accessed to provide the information (Abelman &
Dalessandro, 2008). Each search was duplicated for quality control, labeled, and had
intercoder reliability exceeding .95 (Abelman & Dalessandro, 2008).

Abelman & Dalessandro (2008, 2009) used DICTION 5.0 text analysis software
as a content analysis tool to examine and analyze the institutional mission and vision
statements. The software examined and analyzed the mission statement data for six-word
constructs defined internally by DICTION 5.0 a) shared, b) clear, c) compelling, d)
relative advantage, e) observability, and f) complexity (Abelman & Dalessandro, 2008).
The additional descriptive identifiers of the word constructs for DICTION 5.0 are
available in Appendix C. The dependent variables included the six predetermined word
variables with the institutional mission and vision statements as the independent variables
(Abelman & Dalessandro, 2008).
The study of community colleges’ vision and mission statements found the vision statements were more shared ($p < .001$) and complex ($p < .01$). The mission statements comprised more words and had greater observability ($p < .01$) and relative advantage ($p < .001$) (Abelman & Dalessandro, 2008). The standard scores calculated by DICTION 5.0 suggest community colleges continue to be open-access institutions that unify and align the college experience (shared), provide commonly obtainable values (observable), be pragmatic, and offer concrete outcomes (complex) (Abelman & Dalessandro, 2008). Moreover, vision statements of community colleges were found to be not clear or compelling ($p < .001$), lack enthusiasm, and void of motivational incentives for students to aspire beyond market-driven outcomes and preparing to join the workforce (Abelman & Dalessandro, 2008). A lack of clarity in the mission and vision statements of community colleges in the study contributed to areas, such as student support services and academic advising, needing significant improvements in word choices to become more accessible and less convoluted (Abelman & Dalessandro, 2008).

Investing in the institutional renewal of the mission, philosophy, and functions, argued Abelman and Dalessandro (2008), would help community colleges be successful and survive the higher education sector challenges. Equally important are the challenges community colleges, in particular, are encountering when competing with for-profit institutions for students in similar socio-economic groups (Abelman & Dalessandro, 2008). Enhancing word choices in developing the mission and vision statements of community colleges would potentially inspire reflection, encourage institutional program review and effectiveness, and outline educational outcomes for internal and external constituents (Abelman & Dalessandro, 2008). Extended research utilizing DICTION
software was recommended to further explore ways to improve word choices and patterns of text in mission and vision statements as an effort to revise and revisit the ever-changing complexities of the competitive higher education marketplace (Abelman & Dalessandro, 2008).

The second study conducted by Abelman and Dalessandro (2009) focused on the institutional mission and vision statements of historical Black colleges and universities (HBCUs). HBCU institutions with unique special-focus mission statements represent 3% of postsecondary institutions in the United States, enroll 11%, graduate 28%, and have the largest number of academically disadvantaged African American students (Abelman & Dalessandro, 2009). HBCUs have been publicly criticized and challenged with competition for quality students, qualified faculty, student retention, declining enrollment, financial instability, accreditation, and technology (Abelman & Dalessandro, 2009). Historically, the HBCUs have a reputation in the media of “never measuring up,” (p. 34) and this has influenced how the higher education sector and the general public perceive these institutions (Abelman, 2014). Abelman & Dalessandro (2009) examining 105 mission statements from HBCUs, discovered that the institutional vision statements were not clearly defined and were severely lacking in several areas. These resulted have contributed to the communication challenges of HBCUs to external constituents (Abelman & Dalessandro, 2009).

Abelman & Dalessandro (2009) collected data by downloading the mission and vision statements from the institutional websites of community colleges. The data was coded by searching for the words mission statement, mission, vision statement, and vision and selecting the appropriate information (Abelman & Dalessandro, 2009). If data were
not found on the institutional website, electronic versions of the school catalog were accessed to provide the information (Abelman & Dalessandro, 2009). Each search was duplicated for quality control, labeled, and had intercoder reliability exceeding .95 (Abelman & Dalessandro, 2009).

DICTION 5.0 text analysis software was utilized as the research method to examine and analyze the institutional mission and vision statements in the two studies (Abelman & Dalessandro, 2009). DICTION 5.0 examined and analyzed the data for six-word constructs a) shared, b) clear, c) compelling, d) relative advantage, e) observability, and f) complexity (Abelman & Dalessandro, 2009). The additional descriptive identifiers of the word constructs for DICTION 5.0 are available in Appendix C. The dependent variables in each study included the six predetermined word variables with the institutional mission and vision statements as the independent variables (Abelman & Dalessandro, 2009).

The study found that only 20.9% of HBCUs had a vision statement and significant differences in mission and vision statements were present (Abelman & Dalessandro, 2009). The word choice analysis through DICTION 5.0 determined vision statements were less compelling \((p < .01)\), had less observability \((p < .001)\), less relative advantage \((p < .05)\), complexity \((p < .05)\), and clarity \((p < .01)\) (Abelman & Dalessandro, 2009). In spite of the study findings, 100% of the HBCUs had mission statements, but the analysis determined they were also considerably less clear \((p \leq .05)\) (Abelman & Dalessandro, 2009). Overall, the study found that mission and vision statements of HBCUs lacked the word choices required to be effective communication tools to external constituents (Abelman & Dalessandro, 2009).
Echoing the findings in the study, HBCUs have recognized the institutional vision statements that currently guide HBCUs lack of vision (Abelman & Dalessandro, 2009). The analysis of the word choices indicated mission and vision statements of the HBCUs lacked clarity and were neither shared, compelling, inspiring, nor motivating to internal or external constituents (Abelman & Dalessandro, 2009). The educational leaders of HBCUs have acknowledged that “these colleges must find a way to articulate consistent, meaningful and relevant visions” (Abelman & Dalessandro, 2009, p. 122). The study suggests the survival of HBCUs is dependent upon having a “rejuvenated institutional commitment and new found vision” (Abelman & Dalessandro, 2009, p. 124).

The Abelman and Dalessandro (2008, 2009) studies highlighted the advantages of conducting content analysis with computerized software for stability in coding themes, where coding rules produce reliable results and perfect reliability and offer ease of text manipulation and ease in discovering co-occurrences of important concepts (Abelman & Dalessandro, 2008, 2009). The introduction of text analytics in content studies affords more opportunity to generalize and examine larger volumes of data more easily and accurately than using human coders (Abelman & Dalessandro, 2008, 2009). However, the content analysis software had limitations in processing ambiguous concepts, recognizing negation and irony, and not having an exhaustive list of words (Abelman & Dalessandro, 2008, 2009). DICTION 5.0 had limited functionality to resolve certain word references throughout the text and lost the meaning of words as they were analyzed to create representative scores (Abelman & Dalessandro, 2008, 2009).

The Abelman and Dalessandro (2008) study on community colleges and the Abelman and Dalessandro (2009) study on HBCUs represented unique approaches of
examining word choices in mission and vision statements. Beyond comparative word analysis, word count frequencies, or applying an existing word component framework to a dataset of text, this new approach to text analysis allows for the interpretation of meaning. DICTION’s technological capability affords the opportunity to scrutinize the words, interpret characteristics of word choices, and assess meaning in patterns of text in a way that adds value when examining textual data (Hart & Carroll, 2015). Given the visible status and importance of mission and vision statements in higher education, assessment of these documents to guide strategic planning and communicate to internal and external constituents will continue to be called upon by proponents and critics of higher education. Like Morphew and Hartley (2006), Abelman and Dalessandro (2008, 2009) found value in exploring mission statement content and meaning as relevant and important aspects of higher education leadership in the 21st century.

Taylor and Morphew (2010), also building on the Morphew and Hartley (2006) study, examined mission statements of higher education institutions categorized using the Carnegie Classification as baccalaureate colleges. The aim of the study was to better understand how colleges and universities with baccalaureate classifications and liberal arts characteristics presented themselves to potential students and other constituent groups (Taylor & Morphew, 2010). The study included 100 mission statements from a population of U.S. baccalaureate colleges and universities (Taylor & Morphew, 2010).

The exclusive sample of participants consisted of a broad selection of baccalaureate colleges compromising higher education institutions with no graduate students and representing all accrediting agencies across the US (Taylor & Morphew, 2010). This unique study examined two mission statements from each college: (a) the
version submitted to the *U.S. News and World Report* and (b) the version available on the institutional website (Taylor & Morphew, 2010). Because of these two versions of mission statements, often varied for the same institution, Taylor and Morphew (2010) hypothesized that institutions had modified the statements to communicate with prospective students who read the *U.S. News and World Report* college rankings (Taylor & Morphew, 2010). To test the hypothesis, the study conducted an identical analysis from the same group of baccalaureate colleges on the institutional mission statements obtained from the websites (Taylor & Morphew, 2010).

The study applied the Urciuoli (2003) word framework and Cell and Breneman’s (1994) definition of a liberal arts college to the mission statements obtained from the *U.S. News and World Report* and the institutional website (Taylor & Morphew, 2010). Cell and Breneman’s (1994) characterization of a liberal arts college is defined as a college that is committed to a residential life experience on campus, compromising traditionally aged students, with an enrollment level of fewer than 2,500 students, that promotes regular interaction between students and faculty, and awards 40% or more degrees (Taylor & Morphew, 2010). Urciuoli’s (2003) word framework identifies four key “strategically deployed shifters” (p. 396) (SDSs) of excellence, leadership, skills, and diversity to describe how specific terms transmit positive, descriptive images and legitimacy to other terms and images (Taylor & Morphew, 2010). To ensure inter-rater reliability, multiple coders and raters were used to analyze the mission statements several times, a coding system was developed, and several meetings were held to discuss and analyze the coding patterns (Taylor & Morphew, 2010).
Among the 98 participants, the study found substantive differences in the *U.S. News and World Report* mission statements and the mission statements available on the institutional websites of the institutions (Taylor & Morphew, 2010). The analysis found that when mission statements were compared, the data revealed 52 institutions had dissimilar statements, 26 were syntactically similar, 14 were substantively and syntactically similar, and only six institutions were found to have identical mission statements (Taylor & Morphew, 2010). The study found the majority of the institutions had significantly different versions of mission statements they use to communicate to different constituents of the *U.S. News and World Report* or the institutional website (Taylor & Morphew).

The analysis further revealed the mission statements of baccalaureate institutions were found to be “vague and idiosyncratic” (Taylor & Morphew, 2010). The mission statements found in the *U.S. News and World Report* consisted of words more closely resembling recruitment and marketing materials for prospective students (Taylor & Morphew, 2010). On the other hand, the mission statements found on the institutional websites were more descriptive and aligned with Cell and Breneman’s (1994) prescribed definition of an education in the liberal arts tradition (Taylor & Morphew, 2010). Echoing the findings in the Morphew & Hartley (2006) study, institutions recognize the important role mission statements play in signaling to internal and external constituents (Taylor & Morphew, 2010).

While the study found that most institutions adapt word choices in the mission statements to maximize enrollment prospects in the *U.S. News and World Report* college ranking, the one exception was religiously affiliated institutions that intentionally limit
their student prospects by emphasizing their distinctive missions (Taylor & Morphew, 2010). Furthermore, the study warned that educational leaders should pay attention to how institutional mission statements can be used to communicate different signals to constituents and how that differentiation may erode confidence in the institutional purpose (Taylor & Morphew, 2010). The study reiterated the need for continued exploration into the motivations and strategies behind word choice and developing mission statements in the higher education sector (Taylor & Morphew, 2010).

**Strategic planning.** A recent study by Lake and Mrozinski (2011) reinforced the need for continued research of mission statements, and they tested the hypothesis that mission statements play a role in strategic planning in higher education institutions. A content analysis study was conducted to discover if, and how well, mission statements serve a role in the strategic planning process of community colleges (Lake & Mrozinski, 2011). The hypothesis was based on the research literature that mission statements provide the starting block to guide the strategic planning process (Klemm et al., 1991; Pearce & David, 1987).

To test this hypothesis, Lake and Mrozinski (2011) conducted a study to examine the mission statements of nine nationally dispersed community colleges. The selection process for the participant community colleges consisted of the Society for College and University Planning (SCUP) organization that identified colleges with a reputation for excellence and innovation in strategic planning. Application of additional criteria included geographic dispersion, institutional size, and degree of urbanization (Lake & Mrozinski, 2011).
Data was collected from each participating community college by receiving a pre-interview questionnaire, an interview with an executive-level person responsible for strategic planning, and submitting a copy of the college’s strategic plan (Lake & Mrozinski, 2011). As part of the data collection process, priori themes were used as a framework in the data analysis process, which resulted in five roles (a) goal clarification, (b) smokescreen for opportunism, (c) description of things as they are, (d) aspirations, and (e) mission statement as a marketing tool (Lake & Mrozinski, 2011). In addition, two emergent roles resulted: accreditation and a team-building tool (Lake & Mrozinski, 2011). The data analysis included a priori theming and coding of the interviews, transcripts, and strategic plans. Lang and Lopers-Sweeman’s (1991) framework for the roles of mission statements were used in analyzing the mission statements (Lake & Mrozinski, 2011). NVivo software was used in the qualitative transcription process to assist with data analysis (Lake & Mrozinski, 2011).

While the results of the study found all community college participants were clear and understood their mission statements, the level of ambiguity increased when the vision statement was discussed (Lake & Mrozinski, 2011). Similarly, considerations for funding challenges, accreditation requirements, and marketing functions further conflicted the multiple roles and demands of the mission statements in 2-year institutions (Lake & Mrozinski, 2011). Regardless of the Carnegie Classification, the pressures from constituents, policy makers, and educational leaders in the higher education sector apply to all institution types (Gaston, 2013; MSCHE, 2015a; Volkwein, 2010a). Community colleges, like all higher education institutions, will continue to face a variety of institutional challenges, such as reduced funding from state and federal sources and how
to effectively communicate with constituents (Eaton & Neal, 2015; Zaback et al., 2012). As a result, mission statements in community colleges will continue to have multiple meanings as they attempt to communicate different messages to various constituent groups (Lake & Mrozinski, 2011). The Lake and Mrozinski (2011) study identified new roles that mission statements will need to play in the 21st century in higher education. Beyond defining the institutional purpose and guiding a strategic planning, needs that are specific to accreditation, marketing, and institutional visioning are becoming increasingly more relevant (Lake & Mrozinski, 2011).

A limitation of the study was the small sample size of nine community colleges. However, despite the small size, the study highlighted two important areas for future discussion (Lake & Mrozinski, 2011). The first was the introduction of business management strategies as tools to guide future planning in the area of mission statements and strategic planning in higher education (Lake & Mrozinski, 2011; Pearce & David, 1987; Rajasekar, 2013). The business concepts of Mintzberg’s (2007) strategy continuum for process improvement, Bryson’s (2011) strategic planning processes, and key performance indicators (KPIs) were introduced to guide and align mission statement development with institutional strategic planning (Lake & Mrozinski, 2011). Despite previous thinking (Birnbaum, 2000), the academe benefits from continued discussion and adoption of appropriate business concepts and ideas in the higher education sector to obtain greater efficiencies and effectiveness. The Lake and Mrozinski (2011) study supports the need for continued research of mission statements to guide strategic planning in the higher education sector.
Educational outcomes. Abelman (2011) studied the potential of mission and vision statements becoming leading institutional documents and their ability to communicate educational outcomes. The purpose of the study was to examine institutional mission and vision statements to identify their potential to guide and govern documents and to communicate concrete educational outcomes (Abelman, 2011). The study examined a random sample of 34 tribal community colleges based on the Carnegie Classification of US and Canadian higher education institutions (Abelman, 2011).

It is important to note that tribal community colleges have a specific focus on providing postsecondary education to Native Americans (Abelman, 2011). Serving over 30,000 students from more than 250 tribal nations, 37 tribal colleges incorporate Native American values and traditions in ways that support the economic, legal, and environmental interests of the tribes (Abelman, 2011). Unfortunately, many of these important Native American traditional achievements are difficult to demonstrate and translate into educational outcomes to meet institutional accreditation requirements (Abelman, 2011). While the desire to serve this distinct community with a different focus from other community colleges and non-Indian communities, due to federal funding, transfer credits, and requirements for educational quality and educational outcomes, tribal colleges are not exempt from accrediting agency requirements (Abelman, 2011). These colleges must redefine how they enhance performance accountability, measure success, define the institution, and clearly demonstrate educational outcomes to meet accreditation requirements (Abelman, 2011).

Abelman’s (2011) collection process replicated the Abelman and Dalessandro (2008, 2009) studies and included downloading the mission and vision statements from
the respective institutional websites of the tribal community colleges (Abelman, 2011). This was done by four trained research assistants who were searching for the words of *mission statement, mission, vision statement, and vision*, and then selecting the appropriate information (Abelman 2011; Abelman & Dalessandro, 2008, 2009). If data were not found on the institutional website, electronic versions of the school catalog were accessed to provide the information. Each search was duplicated for quality control, labeled by two coders, and intercoder reliability exceeded .95 (Abelman 2011; Abelman & Dalessandro, 2008, 2009).

In the study of 34 tribal community colleges, 33 (97%) presented combined mission and vision statements, 14 (41%) had a separate vision statement, and one institution had neither a mission nor a vision statement (Abelman, 2011). The study found significant differences in the six-word constructs of shared, clear, compelling, relative advantage, observability, and complexity (Abelman, 2011). The study found that the mission statements were more shared (*p* < .001), more compelling (*p* < .001), and had more relative advantage (*p* < .05) and observability (*p* < .01) than the vision statements (Abelman, 2011). Vision statements were less shared (*p* = .001), less compelling (*p* = .001), and had less relative advantage (*p* = .05) and observability (*p* = .01) when compared to the mission statements (Abelman, 2011).

Tribal leaders knew the importance of word choices, which was evidenced by their careful and deliberate selection of naming conventions for the tribal colleges. For example, many are named after tribal heroes, and some have names in the Native American language (Abelman, 2011). However, the word choices used in the institutionally defining documents of the mission and vision statements were not as
functional or deliberate as the words used in naming the institution (Abelman, 2011). At a time when communication to constituents and demonstrating educational outcomes is critical in higher education, the study found that tribal colleges’ mission and vision statements lacking relative advantage, and they failed to identify educational outcomes (Abelman, 2011).

Similar to Abelman and Dalessandro (2008, 2009), the Abelman (2011) study of mission and vision statements in tribal community colleges found that additional focus on word choices to bolster clarity in both documents would add value to the tribal colleges. Abelman (2011) recommended that tribal educational leaders emulate other educational colleagues in the higher education sector and revise their intuitional mission and vision statements to address the need to define the institutional purpose, determine measures of success, meet accreditation requirements, and to state and achieve educational outcomes (Abelman, 2011).

This literature review regarding mission statements outlined selected empirical research of the business sector studies (David, 1989; Pearce & David, 1987; Rajasekar, 2013; Williams, 2008) and the higher education sector (Abelman, 2011; Abelman & Dalessandro 2008, 2009; Lake & Mrozinski, 2011; Morphew & Hartley, 2006; Newsom & Hayes, 1991; Taylor & Morphew, 2010). The studies are a representative sample of how the business and higher education sectors have leveraged word component comparisons using the Pearce & David (1987) model to frame discussions on word choices and patterns of text in developing mission statements.

This review of the literature highlights a gap and need for continued research on mission statements in the business and higher education sectors. The literature has not
revealed any new developments of word choice or patterns of text frameworks for business or higher education mission statements since Pearce and David’s (1987) seminal study. The literature review examined mission statements in both sectors with a focus on higher education institutional identity and purpose, strategic planning, and educational outcomes. What has remained unexamined is a study that explores the mission statement content of public and private higher education institutions within an accrediting region to identify word choices and text patterns and how the mission statement is used to communicate to internal and external constituents.

**Methodological Review**

Over the past 40 years, content analysis studies have evolved to include more technological approaches to analyzing narrative data. Although content analysis studies have traditionally been qualitatively designed, software advances in content analytics have provided more opportunities to conduct quantitative studies by examining larger volumes of text data in scientific and numerical ways (Hart & Carroll, 2015). Of the selected empirical studies reviewed for this study, the research literature represented qualitative and quantitative methods. Technological advancements in content analysis of text were introduced by using software packages such as DICTION 5.0 and Oxford Wordsmart 4.0 (Abelman, 2011; Abelman & Dalessandro, 2008, 2009; Williams, 2008).

This literature review examined 11 empirical studies. Seven of the studies were qualitative and included David (1989), Lake and Mrozinski (2011), Morphew and Hartley (2006), Newsom and Hayes (1991), Pearce and David (1987), Rajasekar (2013), and Taylor and Morphew (2010). These studies used qualitative approaches to conduct comparison analysis of mission statements to industry standards (David, 1989; Newsom
& Hayes; 1991; Pearce & David, 1987; Rajasekar, 2013) and institutional identity and strategic planning (Lake & Mrozinski, 2011; Morphew & Hartley, 2006; Taylor & Morphew, 2010). The remaining quantitative studies used content analysis software programs of DICTION 5.0 (Abelman, 2011; Abelman and Dalessandro, 2008, 2009) and Oxford Wordsmart 4.0 (Williams, 2008) to identify word frequencies and meaning of the text in mission statements. Due to the technological advancements in context analytics, DICTION 5.0 represented 3 out of 4 (75%) of the quantitative methods.

The study aimed to gain a better understanding of the word choices and patterns of text in mission statements of higher education institutions. Private and public higher education institutions must discover better ways to use word choices and text patterns in mission statements as signals to constituents. This study examined the word choices and text patterns used in mission statements to define institutional identity and communicate institutional purpose to constituents in public and private higher education institutions that confer baccalaureate and master’s degrees in the MSCHE region.

**Chapter Summary**

and Morphew (2010) informed the body of knowledge of mission statements in higher education. However, as communication to internal constituents such as provost, deans, accreditation liaisons, and faculty becomes increasingly important, additional empirical studies are needed. This study may inform accreditors, policy makers, and institutional leaders such as senior vice presidents, directors, and managers, on word choices and text patterns of mission statements that define institutional identity and may improve communication to internal and external constituents.

The empirical literature review on mission statements in higher education was limited. What continues to remain under-researched are studies that focus on word choices and patterns of text in mission statements of public universities and private colleges who confer baccalaureate and master’s degrees in the MSCHE region. The next chapter provides a detailed methodological plan that includes the research context, research participants, and the instruments used in this study.
Chapter 3: Research Design Methodology

Introduction

Given the financial challenges of rising tuition costs, affordability, and demands for increased transparency, the communication to constituents by colleges and universities is important (Eaton, 2009; Eaton & Neal, 2015). At a time when the general public wants greater insights into the higher education sector, the institutional mission statement plays a role in defining the institution’s identity and effectively communicating to internal and external constituencies (MSCHE, 2015a). Accrediting agencies, such as MSCHE, have made the institutional mission statement critical in articulating institutional purpose, whom the institution serves, and what it intends to accomplish (MSCHE, 2015a). Analyzing the word choices and text patterns in the mission statements of private and public higher education institutions may provide clarity on how language is used in mission statements to describe institutional identity and communicate purpose to constituents.

The purpose of this content analysis study was to determine how public and private higher education institutions use language in mission statements to define the institutional purpose and communicate to internal and external constituents. This was demonstrated by the exploration of word choices, message tones, and text patterns of public and private colleges and universities mission statements. Examining the content of these statements will (a) highlight the type of language used, (b) convey the attitude
reflected in the words, and (c) signify how content is used throughout the text (Hart & Carroll, 2015).

This study explored institutional mission statements of higher education colleges and universities in the MSCHE region and addressed the following research questions:

1. Do public versus private institutions of higher education within the MSCHE region use different word choices and message tones in the text of their institutional mission statements?

2. Do higher education institutions that confer baccalaureate versus master’s degrees within the MSCHE region use different word choices and message tones in the text of their institutional mission statements?

3. Do public versus private institutions of higher education within the MSCHE region use different text patterns in the content of their institutional mission statements?

4. Do baccalaureate versus master’s degree institutions of higher education within the MSCHE region use different text patterns in the content of their institutional mission statements?

The literature review revealed text analysis with DICTION software as the preferred technology method in the higher education studies (Abelman, 2011, 2014; Abelman & Dalessandro, 2008, 2009). The introduction of DICTION as a comprehensive analysis tool presents a unique opportunity to discover insights into word choice selection and meanings of patterns of text (Hart & Carroll, 2015).
**Research Context**

The research design for this study was a quantitative, cross-sectional analysis of archival data. All of the colleges and universities selected to participate in the study were accredited by MSCHE and had baccalaureate or master’s Carnegie Classifications. The MSCHE region consists of institutions of higher education in Delaware, the District of Columbia, Maryland, New Jersey, New York, Pennsylvania, Puerto Rico, and the U.S. Virgin Islands (CHEA, 2016; MSCHE, 2015a).

**Research Participants**

Higher education institutions in the United States were the population of interest for this study. This population was too large for the present study, so a representative sample was selected (Singleton & Straits, 2005). The sampling frame was the MSCHE region as of 2014. The 2014 MSCHE region included 524 accredited institutions. Inclusion and exclusion criteria were applied to select a sample from that sampling frame. Each institution had to meet the following inclusion criteria:

- Be public or private,
- Have a Carnegie Classification of baccalaureate or master’s institution,
- Be accredited by MSCHE, and
- Have a mission statement publicly available in English on the institution’s website.

An institution was not included in the study if it met one or more of the following exclusion criteria:

- Have a Carnegie Classification of doctoral/research, research, associate’s, special focus, or tribal institution;
• Have a combined mission and vision statement; or
• Did not make their mission statements available publicly on the institution’s website; or
• Have a website that was in Spanish.

After a review of the websites and the available mission statements, additional exclusions from the 2014 sample of MSCHE-accredited institutions of 256 participants were required. There were 29 higher education institutions located in Puerto Rico that were excluded due to the website and researcher not having the ability to translate mission statement content from Spanish to English and thereby prohibiting data collection. A total of eight institutions were excluded because the website mission statement was not clearly indicated; one institution’s website was being redesigned, under construction, and not available; and one institution lost MSCHE accreditation prior to the commencement of the study. The exclusion of these additional institutions ensured that only mission statements from MSCHE-accredited institutions, available on the institutional website, and written in English would be included in the study.

Based on these inclusion and exclusion criteria, the sampling frame of 524 higher education institutions in the MSCHE region was reduced to a final sample of 206 institutions. Public and private institutions represent 49% of the total number of colleges and universities in the MSCHE region of accredited colleges (MSCHE, 2015). Using this sampling criterion, the final sample consisted of 74 (36%) public universities and 132 (64%) private colleges. The sample included 82 (40%) baccalaureate and 124 (60%) master’s Carnegie Classifications as described in Table 3.1.
**Table 3.1**

**MSCHE Sample Demographics**

<table>
<thead>
<tr>
<th>Geographic State</th>
<th>Institutions</th>
<th>Public</th>
<th>Private</th>
<th>Baccalaureate</th>
<th>Master’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pennsylvania</td>
<td>85</td>
<td>28</td>
<td>57</td>
<td>44</td>
<td>41</td>
</tr>
<tr>
<td>New York</td>
<td>81</td>
<td>26</td>
<td>55</td>
<td>30</td>
<td>51</td>
</tr>
<tr>
<td>New Jersey</td>
<td>17</td>
<td>9</td>
<td>8</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Maryland</td>
<td>18</td>
<td>9</td>
<td>9</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Delaware</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>206</strong></td>
<td><strong>74</strong></td>
<td><strong>132</strong></td>
<td><strong>82</strong></td>
<td><strong>124</strong></td>
</tr>
</tbody>
</table>

**Methods**

The methodology chosen for this study was a content analysis, which began in the 1940s as a research methodology in the area of mass communication and has been defined by scholars in various ways over the years (White & Marsh, 2006). The study of content analysis has been referred to as a broad family of techniques and procedures that allow researchers to examine recorded human communications (Leedy & Ormrod, 2001); make valid inferences from texts to the context of their use (Krippendorff, 2004); and create “systematic, replicable analysis of text” (Rose, Spinks, & Canhoto, 2015, p. 1). White and Marsh (2006) described content analysis as being based on the basic communication model of having a sender, a message to communicate, and a receiver. Content analysis has been used to study a cross-section of different fields such as media, education, political science, management, and communication (Franzosi, 2008).

Content analysis techniques have been used to identify word frequencies and explore the meaning of the narrative text (as cited in Franzosi, 2008; Rose, Spinks, & Canhoto, 2014; White & Marsh, 2006). However, content methodology has evolved...
from frequency counts towards greater focus on making inferences by identifying specified characteristics generated from written text (speeches, articles, reports) to multimedia such as pictures, e-commerce, online gaming and videos (Rose, Spinks, & Canhoto, 2014; Skalski, Neuendorf, & Cajigas, 2011; Wu & Neuendorf, 2011). Content analysis can be applied to both manifest and latent content data. For example, using the manifest content of pictures in recruitment brochures of students on college campuses participating in a class might be taken as a latent content signal that going to college increases knowledge and intelligence. While both types of content data require interpretation, manifest data is visible with countable components of messages such as images of people used in marketing and media; and latent content refers to the meaning that can be implied by the manifest information (Rose, Spinks, & Canhoto, 2014).

Scholars have utilized content analysis techniques in many research fields including management, political sciences, sociology, and psychology (White & Marsh, 2006). This literature review assessed studies in the fields of business (Peyrefitte & David, 2006; Williams, 2008) and higher education (Morphew & Hartley, 2006; Palmer & Short, 2008) where mission statement content was examined to identify language characteristics, analyze text, and make meaning from narrative communication to stakeholders and constituents. The content analysis research technique was selected for this study due to the examination of mission statements of higher education institutions on institutional websites. The content analysis method provides an opportunity to explore publicly available statements from colleges and universities about their institutional purpose, characteristics of the message, and what they communicate to internal and external constituents. Known for being systematic and rigorous, content
analysis characterizes content, analyzes the use of language and words, and demonstrates how concepts are communicated and inferred in written or visual text (White & Marsh, 2006).

**Advantages and disadvantages of content analysis.** Content analysis research approaches have advantages and disadvantages. Holsti (1969) and Franzosi (2008) describe advantages of content analysis as being able to analyze and interpret messages in communication, inexpensive, unobtrusive, and lends itself to examining large volumes of data. In addition, content analysis is also a flexible research method that allows the researcher to make inferences from text to the content of study (Rose, Spinks, & Canhoto, 2014). Krippendorff (2004) distinguishes this as a unique advantage of content analysis because the use of constructs or frames of inference allows the researcher to transition from text to inferring meaning in the communication to answer research questions. White and Marsh (2006) suggests content analysis, as a model of communication, can be used to focus inferences and make conclusions about the communicator, the message/text, and the effect of the message to the receiver.

Content analysis is not without disadvantages. Due to the nature of this research approach, content analysis is often challenged with the interpretation of content. While content is readily available (Skalski, Neuendorf, & Cajigas, 2011), the accuracy of extracting meaning from the text is dependent upon the reliability of coding schemes and human coders (White & Marsh, 2006). Maintaining consistency between coding schemes and limiting the bias of human coders can be challenging and is crucial to increasing dependability in content analysis methodology (Holsti, 1969; Rose, Spinks, & Canhoto, 2014). Validity and ensuring that agreement exists between the human coders
and how the text is interpreted is also a disadvantage (Holsti, 1969; Rose, Spinks, & Canhoto, 2014). While computerized coding and other research methods can mitigate these disadvantages, the challenges that exist with both dependability and validity in content analysis limits generalizability for population samples (Holsti, 1969).

**Quantitative content analysis.** While often associated with qualitative techniques, content analysis is also used in quantitative research methods (Hsieh & Shannon, 2005). Neuendorf (2002) explains that content analysis is the fastest growing methodological approach in quantitative research. Franzosi (2008) describes content analysis originating from quantitative methods in the 1940s due to the original reliance upon counting frequencies of words. Franzosi (2008) further explains that non-frequency content analysis provides for a more accurate reality of the text. Quantitative approaches to content analysis have been described as any research technique that: (a) “makes inferences by systematically and objectively identifying specified characteristics within text” (as cited in Franzosi, 2008, p. XXX); (b) “makes replicable and valid inferences from data to their text (as cited in White & Marsh, 2006, p. 23); and (c) “draws inferences about contextual and text-based variables” (as cited in Franzosi, 2008, p. XXX).

Utilizing a quantitative approach for this study allowed for deductive analysis of examining the relationships among dependent and independent variables (White & Marsh, 2006). Furthermore, applying quantitative methods supported the objective to generalize the findings of the study (Creswell, 2013; White & Marsh, 2006). Unlike the smaller sample size of a qualitative study, the larger sample size of this quantitative study allowed for the generalization of the findings, predictions, and interpretations of mission statements for the greater population of MSCHE-accredited colleges and universities.
**Content analysis using DICTION 7.1.** The introduction of DICTION 7.1 as a computerized tool presented a unique opportunity to gain insights into the words of college and university mission statement content (Hart & Carroll, 2015). DICTION 7.1 is a software data analysis tool in which content analysis is able to go beyond simple word frequencies by using more complex algorithms to measure word choice, message tones, and text patterns. DICTION 7.1 has been used in previous empirical studies of higher education institutions (Abelman, 2011, 2014; Abelman & Dalessandro, 2008, 2009). Conducting a quantitative research study and using DICTION 7.1 created stability in coding schemes, standardized coding rules that allowed for comparable results, and facilitated the comparison of large volumes of data (Abelman & Dalessandro, 2009). This is particularly relevant in light of the growing use of content analytics in multiple research areas. Using a common tool that applies the same algorithms to a wide variety of texts will contribute to the broader body of knowledge about how word choices, message tones, and text patterns are used by institutions.

DICTION 7.1 calculates nine scores based on internal formulas and definitional constructs. The nine scores are broken down into five master variables and four calculated variables. The master variables represent word choices pertaining to *activity*, *optimism*, *realism*, *commonality*, and *certainty*. Calculated variables indicate how text patterns represent *variety*, *insistence*, *embellishment*, and *complexity*.

For this study, DICTION 7.1 computed word choice and text pattern scores for each variable. This was done by searching the content of MSCHE public and private college and university mission statements for passages and words through a series of general features, 31 dictionaries, 35 sub-features, and a 10,000-word corpus (Hart &
Carroll, 2015). Based on the words that occur in the content, a quantitative indicator of raw or standardized scores is calculated for each of the nine dependent variables where higher scores reflect more use of that particular word choice or text pattern variable.

DICTION 7.1 is a noteworthy content analysis tool due to the software’s grounding in linguistics and communication theory. Each DICTION 7.1 variable was intentionally chosen and stimulated by the theoretical work of a social thinker (Short & Palmer, 2007). As shown in Table 3.2, the master variables were influenced by a scholar that defined the definitional construct. DICTION 7.1 created the associated formulas that are used to calculate and measure the variable scores. Table 3.2 outlines how the DICTION 7.1 variable, theoretical scholar, definition, and formula align to construct the meaning of the associated variable.

The calculated variables that comprise the text pattern determinations are outlined in Table 3.3. Several of the master variables for word choices are also used as part of the formulas that compute the calculated variables for text patterns. The calculated variables were also influenced by scholarly research and form the basis of how the definitional constructs are determined. A combination of the master and calculated dependent variables were used to analyze the words, text patterns, and message tones in mission statements of higher education institutions (Hart & Carroll, 2015). The calculated variables (variety, insistence, embellishment, and complexity), assumptions, measurements, and calculation formulas used by DICTION 7.1 are itemized in Table 3.3.
<table>
<thead>
<tr>
<th>Master Variable</th>
<th>Source</th>
<th>Definition</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
<td>Osgood, Suci, &amp; Tannenbaum, 1957</td>
<td>Language featuring movement, change, the implementation of ideas and the avoidance of inertia.</td>
<td>([\text{Aggression} + \text{Accomplishment} + \text{Communication} + \text{Motion}] - [\text{Cognition} + \text{Passivity} + \text{Embellishment}] )</td>
</tr>
<tr>
<td>Certainty</td>
<td>Johnson, 1943</td>
<td>Language indicating resoluteness, inflexibility, and completeness and a tendency to speak ex-cathedra</td>
<td>([\text{Tenacity} + \text{Leveling} + \text{Collectives} + \text{Insistence}] - [\text{Numerical Terms} + \text{Ambivalence} + \text{Self Reference} + \text{Variety}] )</td>
</tr>
<tr>
<td>Optimism</td>
<td>Barber, 1992</td>
<td>Language endorsing some person, group, concept or event or highlighting their positive entailments. This also indicates message tone.</td>
<td>([\text{Praise} + \text{Satisfaction} + \text{Inspiration}] - [\text{Blame} + \text{Hardship} + \text{Denial}] )</td>
</tr>
<tr>
<td>Commonality</td>
<td>Etzioni, 1993</td>
<td>Language highlighting the agreed-upon values of a group and rejecting idiosyncratic modes of engagement.</td>
<td>([\text{Centrality} + \text{Cooperation} + \text{Rapport}] - [\text{Diversity} + \text{Exclusion} + \text{Liberation}] )</td>
</tr>
<tr>
<td>Realism</td>
<td>Dewey &amp; Rogers, 2012</td>
<td>Language describing tangible, immediate, recognizable matters that affect people’s everyday lives.</td>
<td>([\text{Familiarity} + \text{Spatial Terms} + \text{Temporal Terms} + \text{Present Concern} + \text{Human Interest} + \text{Concreteness}] - [\text{Past Concern} + \text{Complexity}] )</td>
</tr>
<tr>
<td>Calculated Variables</td>
<td>Source</td>
<td>Assumptions</td>
<td>Measurement</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Insistence           | DICTION 7.1, 2015 | Repetition of key terms indicates a preference for a limited, ordered world. It becomes a measure of whether text “stays on topic” | A measure of code restriction. All words occurring three or more times that function as nouns or noun-derived adjectives are identified (either cybernetically or with your assistance) | \[
\text{[Number of Eligible Words x Sum of their Occurrences]} \div 10
\] |
| Embellishment        | Boder, 1940       | Heavy modification slows down a verbal passage by de-emphasizing human and material action | A selective ratio of adjectives to verbs | Calculated according to the following formula:  
\[
\frac{\text{Praise} + \text{Blame} + 1}{\text{Present Concern} + \text{Past Concern} + 1}
\] |
| Variety              | Johnson, 1946     | A high score indicates a speaker’s avoidance of overstatement and a preference for precise, molecular statements | The ratio of descriptive to functional words | Measure divides the number of different words in a passage by the passage’s total words. |
| Variety              | Flesch, 1951      | Convoluted phrasings make a text’s ideas abstract and its implications | Word size | Average number of characters per word in a given input file. |

DICTION 7.1 is a technological advancement in content analysis that provides insight into the narrative on what is being said and how it relates to other DICTION 7.1 defined variables (Hart & Carroll, 2015). DICTION 7.1 concatenates 31 dictionaries and uses nouns, verbs, adjectives, and formulas to identify words, define meaning, and assess the verbal tone of messages (Abelman, 2014; English, 2006; Hart & Carroll, 2015). DICTION’s 7.1 master variables for word choices (activity, optimism, realism, commonality, and certainty), calculated variables for text patterns (variety, insistence, embellishment, and complexity), definitional constructs, and examples of sample words are outlined in Appendix D.

DICTION 7.1 uses formulas to evaluate and determine the raw scores for master and calculated variables. For example, the calculated variable embellishment is computed by the formula “[praise + blame +1] ÷ [present concern + past concern +1]” where praise, blame, past and present concerns are defined and represented in the 31 dictionaries database of words (Hart & Carroll, 2015, p. 8). DICTION’s 7.1 variable components for word choices (activity, optimism, realism, commonality, and certainty), text patterns (variety, insistence, embellishment, and complexity), definitional constructs, and examples of sample words are outlined in Appendix D. As noted in the DICTION 7.1 user manual, “DICTION always standardizes each score against its normative database of 50,000 texts before doing any calculations for the master variables. Simply adding and subtracting the raw scores won’t provide comparable scores’ (Hart & Carroll, 2015, p. 42).

DICTION 7.1 computes standard or raw scores for the word choice and text pattern variables. DICTION 7.1 is equipped with a variety of definitional norms that
provide a comparative “snapshot” of a given text or body of texts (Hart & Carroll, 2015). Results from DICTION 7.1 can be compared against the total normative database of 40 scores based on a 50,000-item sample of discourse or any of its 36 sub-categories, including speeches, poetry, newspaper editorials, business reports, scientific documents, television scripts, telephone conversations, etc. for more fine-grained understanding of a given text or body of texts (Hart & Carroll, 2015). The text that comprises the word databases in the 31 dictionaries of DICTION 7.1 were produced in the United States between 1950 and 2000 (Hart & Carroll, 2015).

The standard scores measure constructs relative to approximately 50,000 texts and were created using the 31 dictionaries in the DICTION 7.1 databases (Hart & Carroll, 2015). Selecting the standardized scoring option is appropriate when a study is comparing selected text to the normative database of DICTION’s 36 sub-categories. The means are analyzed from the depository of texts representing a variety of sectors from business, politics, fiction, and others (Hart & Carroll, 2015). The resulting standardized scores are measured in standard deviation units, normalized against the text database, and measured against a predetermined scale based on the words in the database (Hart & Carroll, 2015).

In contrast, the raw scores measure the frequency of the master and calculated variable scores and automatically make a statistical accommodation for homographs within the selected text (Hart & Carroll, 2015). The research questions in this study compared the mission statements between the different institutional types and Carnegie Classifications within the MSCHE region and are not against DICTION’s word database. For purposes of this study, the raw scores of the mission statements within the selected
sample of MSCHE-accredited higher education institutions were compared to other institutions within the sample. The resulting raw scores were used to answer the research questions referencing the words and language used in mission statements of higher education institutions within the MSCHE region.

The content of mission statements from higher education institutions were coded to yield quantitative scores that reflect specific word choices, message tones, and patterns of text. Those scores were then analyzed using inferential statistics to identify if there were differences in word choices, message tones, and patterns of text between public versus private institutions and between baccalaureates versus master’s Carnegie Classifications. The nine DICTION 7.1 word choice and text pattern scores were dependent variables, and the independent variables were private versus public institutions and baccalaureate versus master’s Carnegie Classifications. The study looked at the means and standard deviations for each dependent word choice and text pattern variable (activity, certainty, optimism, realism, commonality, variety, embellishment, insistence, and complexity) and tested for whether there were statistically significant differences between private versus public and baccalaureate versus master’s Carnegie Classifications.

**Procedures for Data Collection**

The data collection was conducted by copying the mission statements from the institutional websites of each college and university in the sample and importing them into DICTION 7.1. Each website was searched for the words *mission* or *mission statement*. The search for mission statements was completed by the researcher and verified by two research assistants by cross-referencing the institutional website, its published mission statement, and a corresponding file that was input into DICTION 7.1.
The researcher was the sole analyst for the computation of the word choice (activity, optimism, realism, commonality, and certainty) and text pattern (variety, embellishment, insistence, and complexity) variables as defined by DICTION 7.1. Then the resulting scores from DICTION 7.1 were imported into SPSS version 22 for statistical analysis.

**Procedures for Data Analysis**

The first phase of data analysis was the computation of the word choice, message tone, and text pattern variables in DICTION 7.1. Higher raw scores reflect an increased use of selected words and text in the mission statements from the word choice, message tones, and text pattern categories (Hart & Carroll, 2015). In the second phase of data analysis, DICTION’s raw scores were imported into SPSS to analyze for differences in word choice, message tone, and text patterns between public versus private institutions and baccalaureate versus master’s Carnegie Classifications using a multivariate analysis of variance or MANOVA.

MANOVA tests for differences on multiple dependent variables between two or more independent grouping variables, (Ferguson, 2015; Jaeger, 1990; Statistics Solutions, 2016). The benefits of using the MANOVA test include:

- Using dependent variables that are moderately correlated,
- Minimizing the chances of making a Type I error,
- Considering dependent variable intercorrelation by examining the variance matrices,
- Examining relationships between dependent variables at each level of the independent variable,
- Reducing a large set of dependent variables to a smaller set,
• Identifying dependent variables that produce the most group (independent variable) separation, and
• Using increased power in the multivariate to isolate group differences
  (Meyers, Gamst, and Guarino, 2013).

The MANOVA test assumes the data are independent, an absence of multicollinearity among the variables exist, the dependent variables are normally distributed, and there is homogeneity of variance (Tabachnick & Fidell, 2012).

Additionally, MANOVA requires dependent variables are scaled and the independent variables are categorical. The dependent variables in this study used the nominal scale of word choice and text patterns; the independent variables were categorized by public or private institutions and baccalaureate or master’s Carnegie Classifications. In this study, the nine dependent variables were the DICTION 7.1 scores for each type of word choice (certainty, optimism, activity, realism, and commonality), message tone (optimism), and text pattern (variety, insistence, realism, and complexity). The independent variables were the type of institution (public versus. private) and the Carnegie Classification (baccalaureate versus master’s).

The MANOVA test yields three types of information (Meyers et al., 2013). The first type is the descriptive statistics, which are the means and standard deviations for public and private institutions and baccalaureate and master’s Carnegie Classifications calculated to allow for interpreting any significant group differences that are found in the multivariate F tests.

The second type of information comes from the multivariate F test (Meyers et al., 2013). The preliminary Box’s M test is used to verify that the word choice (activity,
optimism, realism, commonality, and certainty) and text pattern (variety, insistence, embellishment, and complexity) variables are sufficiently correlated to proceed with the MANOVA and to determine whether two or more covariance matrices are equal (Meyers et al., 2013). The multivariate F tests word choice (activity, optimism, realism, commonality, and certainty) and text pattern (variety, insistence, embellishment, and complexity) and calculates them as two dependent variables. Then a multivariate F test is performed to determine if there is a significant difference between public versus private and baccalaureate versus master’s institutions. A multivariate effect size is also calculated (Meyers et al., 2013). This along with the Pillai’s trace test is also used as a test statistic in the MANOVA as a positively valued statistic ranging from 0 to 1 (Meyers et al., 2013).

The last type of information in the MANOVA test is the Univariate effects. If there is a significance difference in the multivariate F test, then the word choice (activity, optimism, realism, commonality, and certainty) and text pattern (variety, insistence, embellishment, and complexity) variables are analyzed individually (Meyers et al., 2013). The preliminary test is Levene’s test of equality of error variances to verify that the groups being compared meet the assumption of equal variances and if needed, to correct for a violation of that assumption (Meyers et al., 2013). Then univariate F tests are performed on each word choice and text pattern variable by itself to determine if there is a significant difference between public versus private and baccalaureate versus master’s institutions for each of those outcomes. Univariate effect sizes are also calculated (Meyers et al., 2013).
The analysis for this study had three phases. First, the mission statements were input into DICTION 7.1 to calculate the five master variable raw scores for word choice (certainty, optimism, activity, realism, and commonality) and four calculated variable raw scores for text pattern (variety, insistence, realism, and complexity) as dependent variables. The resulting variable components and raw scores were reported. Then, DICTION’s scores were uploaded into SPSS for statistical testing. Last, the SPSS MANOVA test was conducted to calculate the mean, standard deviation, and significance between the nine dependent variables (activity, optimism, realism, commonality, certainty, variety, insistence, embellishment, and complexity) and independent (public, private, baccalaureate, and master’s) variables.

The following procedures were followed to answer the research questions:

1. Do public versus private institutions of higher education within the MSCHE region use different word choices and message tones in the text of their institutional mission statements?

This question was answered by comparing the significance of the mean and standard deviation of the master variables scores of the mission statements from the higher education institutions in the MSCHE region sample. First, DICTION 7.1 was run to calculate the master variables for word choices (activity, optimism, realism, commonality, and certainty) as dependent variables and public versus private institutions as independent variables that generated the raw scores. Next, the verbal tone of messages was measured by using the dependent variable of optimism as defined and computed by DICTION 7.1. Last, the SPSS MANOVA test was conducted to calculate the mean, standard deviation, and significance between the word choice variables (activity,
optimism, realism, commonality, and certainty) and independent (public versus private) variables.

2. Do higher education institutions that confer baccalaureate versus master’s degrees within the MSCHE region use different word choices and message tones in the text of their institutional mission statements?

This question was answered by comparing the significance of the mean and standard deviation of the master variables scores of the mission statements from the higher education institutions in the MSCHE region sample. First, DICTION 7.1 was run to calculate the master variables for word choices (activity, optimism, realism, commonality, and certainty) as dependent variables and baccalaureate versus master’s Carnegie Classifications as independent variables that generated the raw scores. Next, the verbal tone of messages was measured by using the dependent variable of optimism as defined and computed by DICTION 7.1. Last, the SPSS MANOVA test was conducted to calculate the mean, standard deviation, and significance between the word choice variables (activity, optimism, realism, commonality, and certainty) and independent (baccalaureate and master’s) variables.

3. Do public versus private institutions of higher education within the MSCHE region use different text patterns in the content of their institutional mission statements?

This question was answered by comparing the significance of the mean and standard deviation of the calculated variables scores of the mission statements from the higher education institutions in the MSCHE region sample. First, DICTION 7.1 was run to calculate the calculated variables for text patterns (variety, insistence, embellishment,
and complexity) as dependent variables and public versus private institutions as independent variables that generated the raw scores. Then, the SPSS MANOVA test was conducted to calculate the mean, standard deviation, and significance between the text pattern variables (variety, insistence, embellishment, and complexity) and independent (public versus private) variables.

4. Do baccalaureate versus master’s degree institutions of higher education within the MSCHE region use different text patterns in the content of their institutional mission statements?

This question was answered by comparing the significance of the mean and standard deviation of the calculated variables scores of the mission statements from the higher education institutions in the MSCHE region sample. First, DICTION 7.1 was run to calculate the calculated variables for text patterns (variety, insistence, embellishment, and complexity) as dependent variables and baccalaureate and master’s Carnegie Classifications as independent variables that generated the raw scores. Then, the SPSS MANOVA test was conducted to calculate the mean, standard deviation, and significance between the text pattern variables (variety, insistence, embellishment, and complexity) and independent (baccalaureate and master’s) variables.

Summary

Every higher education institution in the MSCHE region is required to demonstrate how the institution defines its purpose as outlined in the Standards for Accreditation and Requirements for Affiliation (13th ed.) Standard I (MSCHE, 2015a). Mission statements play a critical role in determining the educational quality and communicating the institutional purpose to internal and external constituents (Eaton,
The content analysis of DICTION 7.1 allowed for a more thorough examination of the mission statement content than a word count or word frequency analysis used in developing mission statements (Hart & Carroll, 2015).

The use of the MANOVA provided an opportunity to analyze the mission statements for the correlated variables of word choice (activity, optimism, realism, commonality, and certainty) and text patterns (variety, insistence, embellishment, and complexity). This analysis determined how the words and text patterns in the mission statements related to each dependent variable. In addition, the independent variable comparisons of private versus public institutions and baccalaureate versus master’s degree Carnegie Classifications, also allowed for the exploration of these independent variables to determine if they influence the dependent variables of the mission statements.

As the value and centrality of mission statements continue to rise (MSCHE, 2015a; USDOE, 2016), their composition and how they are used to communicate to constituents becomes increasingly critical. Since MSCHE accredited institution’s mission statements are mandated and publicly available on institutional websites (MSCHE, 2015a), the words and text should effectively communicate information to internal and external constituents. In a competitive postsecondary marketplace of colleges and universities, mission statements should strengthen and signal first impressions that describe institutional uniqueness and the institutional purpose and value to prospective students, MSCHE accreditors, and leaders in the higher education sector.
Chapter 4: Results

Introduction

The purpose of the study was to identify differences in word choices (activity, optimism, realism, commonality, and certainty) and text patterns (variety, insistence, complexity, and embellishment) in mission statements between public versus private institutions and baccalaureate versus master’s Carnegie Classifications. The mission statements of higher education institutions in the MSCHE region were examined. The research goals were to (a) determine how higher education institutions use words in mission statements to define the institutional purpose, and (b) gain insight into how words are used in mission statements to communicate institutional purpose to internal and external constituencies.

This chapter presents the results of the study based on the content analysis from DICTION 7.1 and the statistical analysis from SPSS. The chapter is organized into six discussion areas. The first area details the additional data screening conducted to finalize the study sample. The second area is devoted to describing DICTION’s raw scores and variable component results that comprise the constructs, definitions, and sample words for the comparative analysis. The third area reports the study findings and results by research question. The fourth area relates the results of the word choice and (activity, optimism, realism, commonality, and certainty) message tone (optimism) analysis. The fifth area explains the study results of the text pattern analysis for variety, insistence,
complexity, and embellishment and text pattern definitional constructs. Finally, the last section provides a summary of the overall study results.

**Raw Scores and Variable Components**

Each formula in DICTION 7.1 for word choices (activity, optimism, realism, commonality, and certainty) and text patterns (variety, insistence, embellishment, and complexity), consists of a set of variables that are predetermined or calculated based on a formula or definitional construct (Hart & Carroll, 2015). Since the samples of MSCHE higher education institutions were not normalized against the DICTION 7.1 text database, the raw scores were calculated to reflect the software’s analysis of the component variables. The raw scores of the component variables, in conjunction with additional internal software calculations, collectively determine how the mission statement analysis was calculated.

For example, the DICTION 7.1 formula and construct to calculate the word choice of activity is: \[\text{aggression} + \text{accomplishment} + \text{communication} + \text{motion} - \text{cognition} - \text{passivity} - \text{embellishment}\]. The raw scores for aggression, accomplishment, communication, and motion were added together and totaled; and the raw scores for cognition, passivity, and embellishment were added together and subtracted from the previous total. Even though the internal adjustments for homographs are not known to the researcher, this total calculation yields the total raw score sum for the word choice variable and construct of activity.

The component variables in DICTION 7.1 represent the elements of the formula calculations that are used to determine the raw scores for the word meanings in the mission statement comparisons. For this sample of MSCHE public and private
institutions, these are the component variables that represent the words used in the mission statements. The component variable raw scores ranged from 0.03 to 118.43, with Self-Reliance being the lowest score and Familiarity being the highest. Although, Self-Reliance had the lowest raw score of 0.03, DICTION 7.1 defines this term of being comprised of words such as *I, I’d, I’ll, I’m, I’ve, me, mine, my, and myself* and Familiarity with a high score of 118.43, is defined with words such as *across, over, through, this, that, who, what, a, for, and so*. Given the context of mission statements, this is expected because these statements are not written for individuals and are often filled with prepositions, adverbs, and demonstratives. The complete list of raw scores and component variables are outlined in Table 4.1.

Table 4.1

*DICTION 7.1 Output List of Component Variables and Raw Scores*

<table>
<thead>
<tr>
<th>Component Variable</th>
<th>Raw Scores</th>
<th>Component Variable</th>
<th>Raw Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Reference</td>
<td>0.03*</td>
<td>Diversity</td>
<td>6.40</td>
</tr>
<tr>
<td>Blame</td>
<td>0.07</td>
<td>Liberation</td>
<td>6.57</td>
</tr>
<tr>
<td>Denial</td>
<td>0.13</td>
<td>Numerical Terms</td>
<td>6.89</td>
</tr>
<tr>
<td>Motion</td>
<td>0.22</td>
<td>Cooperation</td>
<td>7.70</td>
</tr>
<tr>
<td>Past Concern</td>
<td>0.65</td>
<td>Praise</td>
<td>8.57</td>
</tr>
<tr>
<td>Exclusion</td>
<td>0.77</td>
<td>Present Concern</td>
<td>9.07</td>
</tr>
<tr>
<td>Hardship</td>
<td>0.91</td>
<td>Tenacity</td>
<td>10.37</td>
</tr>
<tr>
<td>Rapport</td>
<td>1.48</td>
<td>Collectives</td>
<td>12.96</td>
</tr>
<tr>
<td>Ambivalence</td>
<td>1.60</td>
<td>Human Interest</td>
<td>13.31</td>
</tr>
<tr>
<td>Communication</td>
<td>2.27</td>
<td>Spatial Terms</td>
<td>15.13</td>
</tr>
<tr>
<td>Passivity</td>
<td>2.43</td>
<td>Inspiration</td>
<td>19.15</td>
</tr>
<tr>
<td>Aggression</td>
<td>3.12</td>
<td>Accomplishment</td>
<td>22.33</td>
</tr>
<tr>
<td>Leveling Terms</td>
<td>3.96</td>
<td>Concreteness</td>
<td>30.93</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>4.40</td>
<td>Cognition</td>
<td>35.33</td>
</tr>
<tr>
<td>Temporal Terms</td>
<td>5.82</td>
<td>Familiarity</td>
<td>118.43*</td>
</tr>
<tr>
<td>Centrality</td>
<td>5.93</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Raw scores may also contain fractionated integers or integers of less than 1 because of its treatment of homographs (Hart & Carroll, 2015).


### Table 4.2

**DICTION 7.1 Component Variables by Word Choice (Dependent Variables)**

<table>
<thead>
<tr>
<th>Word Choice</th>
<th>Component Variable</th>
<th>Raw Score</th>
<th>Word Choice</th>
<th>Component Variable</th>
<th>Raw Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimism</td>
<td>Satisfaction</td>
<td>4.40</td>
<td>Commonality</td>
<td>Rapport</td>
<td>1.48</td>
</tr>
<tr>
<td></td>
<td>Praise</td>
<td>8.57</td>
<td>Centrality</td>
<td></td>
<td>5.93</td>
</tr>
<tr>
<td></td>
<td>Inspiration</td>
<td>19.15</td>
<td>Cooperation</td>
<td></td>
<td>7.70</td>
</tr>
<tr>
<td></td>
<td>Blame</td>
<td>0.07</td>
<td>Exclusion</td>
<td></td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td>Denial</td>
<td>0.13</td>
<td>Diversity</td>
<td></td>
<td>6.40</td>
</tr>
<tr>
<td></td>
<td>Hardship</td>
<td>0.91</td>
<td>Liberation</td>
<td></td>
<td>6.57</td>
</tr>
<tr>
<td>Activity</td>
<td>Motion</td>
<td>0.22</td>
<td>Realism</td>
<td>Temporal Terms</td>
<td>5.82</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
<td>2.27</td>
<td>Present Concern</td>
<td></td>
<td>8.57</td>
</tr>
<tr>
<td></td>
<td>Aggression</td>
<td>3.12</td>
<td>Human Interest</td>
<td></td>
<td>13.31</td>
</tr>
<tr>
<td></td>
<td>Accomplishment</td>
<td>22.33</td>
<td>Spatial Terms</td>
<td></td>
<td>15.13</td>
</tr>
<tr>
<td></td>
<td>Passivity</td>
<td>2.43</td>
<td>Concreteness</td>
<td></td>
<td>30.93</td>
</tr>
<tr>
<td></td>
<td>Cognition</td>
<td>35.33</td>
<td>Familiarity</td>
<td></td>
<td>118.43</td>
</tr>
<tr>
<td></td>
<td>Embellishment</td>
<td>*</td>
<td>Past Concern</td>
<td></td>
<td>0.65</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Complexity</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Certainty</td>
<td>Leveling Terms</td>
<td>3.96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tenacity</td>
<td>10.37</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Collectives</td>
<td>12.96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Insistence</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-Reliance</td>
<td>0.03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ambivalence</td>
<td>1.60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Numerical Terms</td>
<td>6.89</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Variety</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* The text pattern variables of variety, insistence, embellishment, and complexity are calculated values.

The component variables are part of DICTION’s language construct that defines the word choices for activity, optimism, realism, commonality, and certainty. These raw scores have a relationship with each word choice and are used to create values for the...
study’s comparison of public and private institutional mission statements. In addition, each text pattern variable (variety, insistence, embellishment, and complexity) also play a role in the language construct for each word choice, however, these are calculated values and not represented by raw scores. The word choice variables are calculated by a formula consisting of the component variable raw scores. Each word choice dependent variable is computed based on a formula combination that adds and subtracts the raw scores. The list of component variables and their relation to the word choice dependent variable compilations of activity, optimism, realism, commonality, and certainty are outlined in Table 4.2.

Analysis and Results Pertaining to Research Questions

**Research question 1.** Do public versus private institutions of higher education within the MSCHE region use different word choices and message tones in the text of their institutional mission statements? The initial step entailed determining the DICTION 7.1 calculated raw scores for the five-word choice dependent variables using the independent variables of private and public institutions. Then those raw scores were used to run the statistical MANOVA test in SPSS.

The five-word choice dependent variables were activity, commonality, realism, optimism, and certainty. According to DICTION 7.1, activity examines the movement, change, and implementation of ideas. Commonality identifies agreed-upon values in a group and rejects idiosyncratic modes of engagement. Realism looks for word choices that are tangible, immediate and recognizable. Optimism supports a person, group, concept, or event and measures message tone. Certainty represents resoluteness, inflexibility, completeness, and a tendency to speak with authority. As DICTION’s
norms were not used for comparative purposes, raw scores were calculated for the study. The independent variables were the mission statements of private and public institutions.

A MANOVA was then computed to determine if there was a statistically significant difference in word choices between the mission statements of public and private institutions. A statistically significant ($p < .002$) Box’s test of equality of the variance-covariance matrices indicated that the observed covariance matrices of the dependent variables (activity, optimism, realism, commonality, and certainty) were unequal across independent variable groups for public and private institutions. As a result, Pillai’s trace was employed to evaluate all multivariate effects. Using Pillai’s trace as the criterion, the composite dependent variate was significantly affected by institutional type (Pillai’s trace = .155, $F(5, 200) = 7.35, p < .001$). Univariate tests were then conducted on each dependent measure separately to determine the locus of significant multivariate effect. A statistically significant univariate effect was associated with certainty ($F(1, 204) = 12.43, p < .001, n^2 = .057$); public institutions used words in the mission statement indicating higher levels of Certainty ($M = 44.1, SD = 5.13$) than private institutions ($M = 41.6, SD = 4.65$). Since DICTION’s scores are relative to the mission statements being analyzed and are not based on a normative scale against the database dictionary, having a higher score of Certainty means that public institutions used more word choices that reflect resoluteness, inflexibility, completeness, and a tendency to speak with authority than private institutions within the MSCHE sample.

The word choice certainty is calculated using raw scores in the DICTION 7.1 formula represented as $[\text{tenacity} + \text{leveling terms} + \text{collectives} + \text{insistence}] - [\text{numerical terms} + \text{ambivalence} + \text{self-reference} + \text{variety}]$. This construct represents a variety of
variable components, which consists of definitions for tenacity, collections, leveling terms, insistence, numerical terms, ambivalence, and variety. Each variable component that characterizes text in the construct and denotes an example of sample words used in DICTION’s dictionaries and sub-category comparisons during the study is listed in Appendix D.

There was also a statistically significant univariate effect associated with Commonality (F(1, 204) = 13.05, p < .001, n² = .060); public institutions used words in the mission statement indicating higher levels of Commonality (M = 49.3, SD = 6.75) than private institutions (M = 46.1, SD = 5.79). These findings indicate that public institutions with higher raw scores for Commonality also used more word choices that identify agreed-upon values in the group of public colleges and universities and reject idiosyncratic modes of engagement more so than private institutions.

Commonality is calculated using raw scores in the DICTION 7.1 formula represented as [centrality + cooperation + rapport] – [diversity + exclusion + liberation]. This construct represents a variety of variable components, which consist of definitions for centrality, cooperation, rapport, diversity, exclusion and liberation. The formula, construct, and examples of sample words used in the DICTION 7.1 dictionary and sub-category comparisons of the mission statements are detailed in Appendix D.

While the DICTION 7.1 software also analyzed data for optimism (supporting a person, group, concept, event, and message tone), activity (examines movement, change, and implementation of ideas), and realism (looks for words that are tangible, immediate, and recognizable), those comparisons were not significant.
For the public and private institutions, means and standard deviations were calculated for activity, optimism, realism, commonality, and certainty. The statistic results indicate significance found in the public institution scores for certainty (44.11) and commonality (49.36) where the public scores are higher than the private institutional scores. The descriptive statistic results for public and private institutions are summarized in Table 4.3.

Table 4.3

*DICTION 7.1 Word Choice Mean and Standard Deviations by Institutional Type*

<table>
<thead>
<tr>
<th>Word Choice</th>
<th>Institutions</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certainty</td>
<td>Public</td>
<td>44.11</td>
<td>5.13</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>41.60</td>
<td>4.65</td>
<td>132</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>42.52</td>
<td>4.96</td>
<td>206</td>
<td>.001*</td>
</tr>
<tr>
<td>Commonality</td>
<td>Public</td>
<td>49.36</td>
<td>6.75</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>46.13</td>
<td>5.79</td>
<td>132</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>47.29</td>
<td>6.33</td>
<td>206</td>
<td>.001*</td>
</tr>
<tr>
<td>Activity</td>
<td>Private</td>
<td>40.67</td>
<td>10.42</td>
<td>132</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>41.10</td>
<td>9.32</td>
<td>206</td>
<td>.380</td>
</tr>
<tr>
<td></td>
<td>Public</td>
<td>56.66</td>
<td>4.47</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td>Optimism</td>
<td>Private</td>
<td>57.71</td>
<td>5.12</td>
<td>132</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>57.34</td>
<td>4.91</td>
<td>206</td>
<td>.142</td>
</tr>
<tr>
<td>Realism</td>
<td>Private</td>
<td>44.78</td>
<td>4.32</td>
<td>132</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>44.36</td>
<td>4.15</td>
<td>206</td>
<td>.053</td>
</tr>
</tbody>
</table>

**Research question 2.** Do higher education institutions that confer baccalaureate versus master’s degrees within the MSCHE region use different word choices and message tones in the text of their institutional mission statements? The initial step entailed determining the DICTION 7.1 calculated raw scores for the five-word choice
dependent variables using the independent variables of baccalaureate and master’s Carnegie Classifications. Then those raw scores were used to run the statistical MANOVA test in SPSS.

The five-word choice dependent variables were activity, commonality, realism, optimism, and certainty. According to DICTION 7.1, activity examines the movement, change, and implementation of ideas. Commonality identifies agreed-upon values in a group and rejects idiosyncratic modes of engagement. Realism looks for word choices that are tangible, immediate and recognizable. Optimism supports a person, group, concept, or event and measures message tone. Certainty represents resoluteness, inflexibility, completeness, and a tendency to speak with authority. As DICTION’s 7.1 norms were not used for comparative purposes, raw scores for the five-word choice dependent variables were calculated for the study. The independent variables were the mission statements of baccalaureate and master’s Carnegie Classifications.

A MANOVA was then computed to determine if there was a statistically significant difference in word choices between the mission statements of baccalaureate and master’s Carnegie Classifications. A statistically significant (\( p < .093 \)) Box’s test of equality of the variance-covariance matrices indicated that the observed covariance matrices of the dependent variables of activity, commonality, realism, optimism, and certainty were unequal across independent variable groups for baccalaureate and master’s Carnegie Classifications. As a result, Pillai’s trace was employed to evaluate all multivariate effects. Using Pillai’s trace as the criterion, the composite dependent variate was significantly affected by institutional type (Pillai’s trace = .155, \( F(5, 200) = 7.35, p < .230 \)).
For the baccalaureate and master’s Carnegie Classifications, means and standard deviations were calculated for activity, realism, optimism, commonality, and certainty. The highest total scores for mean (57.34) was represented by optimism and the lowest total mean (41.10) was represented by activity. The descriptive statistics for word choices by Carnegie Classifications are presented in Table 4.4.

Table 4.4.

<table>
<thead>
<tr>
<th>Word Choice</th>
<th>Carnegie Classification</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>p</th>
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</thead>
<tbody>
<tr>
<td>Activity</td>
<td>Baccalaureate</td>
<td>41.55</td>
<td>7.35</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Master’s</td>
<td>40.80</td>
<td>10.44</td>
<td>124</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>41.10</td>
<td>9.32</td>
<td>206</td>
<td>.577</td>
</tr>
<tr>
<td>Optimism</td>
<td>Baccalaureate</td>
<td>56.79</td>
<td>5.06</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Master’s</td>
<td>57.70</td>
<td>4.80</td>
<td>124</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>57.34</td>
<td>4.91</td>
<td>206</td>
<td>.195</td>
</tr>
<tr>
<td>Certainty</td>
<td>Baccalaureate</td>
<td>41.93</td>
<td>5.18</td>
<td>82</td>
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</tr>
<tr>
<td></td>
<td>Master’s</td>
<td>42.91</td>
<td>4.79</td>
<td>124</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>42.52</td>
<td>4.96</td>
<td>206</td>
<td>.164</td>
</tr>
<tr>
<td>Realism</td>
<td>Baccalaureate</td>
<td>44.60</td>
<td>4.07</td>
<td>82</td>
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<td></td>
<td>Master’s</td>
<td>44.19</td>
<td>4.21</td>
<td>124</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
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<td>4.15</td>
<td>206</td>
<td>.164</td>
</tr>
<tr>
<td></td>
<td>Baccalaureate</td>
<td>46.44</td>
<td>6.81</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Master’s</td>
<td>47.85</td>
<td>5.96</td>
<td>124</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>47.29</td>
<td>6.33</td>
<td>206</td>
<td>.117</td>
</tr>
</tbody>
</table>

There was no statistically significant multivariate difference between baccalaureate and master’s Carnegie Classifications for the use of DICTION 7.1’s word choice variables ($F(1, 204) = 1.39, p > .05$). These results indicate that there were no significant word choice or message tone differences in the of the sample mission statements for activity, certainty, commonality, optimism, or realism between
baccalaureate and master’s Carnegie Classifications. Each variable component that characterizes text in the construct and denotes an example of sample words used in DICTION’s dictionaries and sub-category comparisons during the study is listed in Appendix D.

**Research question 3.** Do public versus private institutions of higher education within the MSCHE region use different text patterns in the text of their institutional mission statements? The initial step entailed determining the DICTION 7.1 calculated raw scores for the four-text pattern dependent variables using the independent variables of private and public institutions. Then those raw scores were used to run the statistical MANOVA test in SPSS.

The four-text pattern dependent variables were variety, insistence, embellishment, and complexity. According to DICTION 7.1, Variety represents avoidance of overstatement and preference for precise statements and is calculated by dividing the number of different words in a passage by the passage’s total words. Insistence represents repetition by isolating words used three or more times and takes the number of eligible words, multiplied by the sum of their occurrences, and divides by 10. Embellishment is the ratio of adjectives to verbs and is calculated based on DICTION’s internal formula of \([praise + blame +1] ÷ [present concern + past concern +1]\). Complexity represents a value for convoluted phrases, abstract ideas, and lack of clarity, it calculates the average number of characters per word in a passage. As DICTION’s 7.1 norms were not used for comparative purposes, raw scores for the four-text pattern dependent variables were calculated for the study. The independent variables were the mission statements of public and private institutions.
A MANOVA was then computed to determine if there was a statistically significant difference in text patterns between the mission statements of public and private institutions. Due to a statistically significant value of less than 1 ($p < .000$), a Box’s test of equality of the variance-covariance matrices was carried out. This statistical difference indicates that the observed covariance matrices of the dependent variables (variety, insistence, embellishment, and complexity) were unequal across independent variable groups of public versus private institutions. Pillai’s trace was employed to evaluate the multivariate effects. Using Pillai’s trace as the criterion, the composite dependent variate was significantly affected by institutional type, (Pillai’s trace = .167, $F(4, 201) = 10.05, p < .000$). Univariate tests were conducted on each dependent measure for variety, insistence, embellishment, and complexity separately to determine the locus of the significant multivariate effect. A statistically significant univariate effect was associated with DICTION 7.1 text pattern score of Insistence ($F(1, 204) = 11.66, p < .001$, $\eta^2 = .054$); public institutions used words in the mission statement indicating Insistence ($M = 41.5, SD = 65.48$) more than private institutions ($M = 18.3, SD = 32.09$).

The high score for Insistence indicates public colleges and universities used text patterns in the mission statement by repeating words three times or more than private institutions demonstrated in their mission statements. DICTION 7.1 calculated this variable by taking the words in the sample mission statements, multiplying by the sum of the occurrences of the words, and dividing by 10. Insistence is a variable component of the formula used for certainty. It is calculated by counting all words occurring three or more times that function as nouns or noun-derived adjectives and are identified and then calculated by multiplying by the sum of their occurrences and dividing by 10 (Hart &
Carroll, 2015). The raw scores for Insistence are added to the other component variables of tenacity, leveling terms, and collectives as part of the formula to calculate certainty. The formula, construct, and examples of sample words used in the DICTION 7.1 dictionary and sub-category comparisons of the mission statements are detailed in Appendix D.

There was also a statistically significant univariate effect associated with complexity $F(1, 204) = 21.58, p < .000, n^2 = .096$; public institutions used words in the mission statement indicating higher levels of complexity ($M = 6.1, SD = 0.66$) than private institutions ($M = 5.7, SD = 0.47$). The high score of complexity indicates that public colleges and universities used text patterns in the mission statement that had convoluted phrases, abstract ideas, and a lack of clarity more than text patterns of the mission statements in private institutions. This value is calculated by using the average number of characters per word in the mission statements. The analysis for variety (representing avoidance of overstatement and preference for precise statements by dividing the number of different words by the total words in the mission statements) and embellishment (the ratio of adjectives to verbs by using a predetermined formula) were not found to be significant.

The raw score for complexity is computed by calculating the average number of characters-per-word. Complexity is a variable component of the word choice variable of Realism. The raw score of complexity is added to the other component variables of past concern as part of the formula to calculate realism. DICTION’s variable components for word choices (activity, optimism, realism, commonality, and certainty), text patterns
(variety, insistence, embellishment, and complexity), definitional constructs, and examples of sample words are outlined in Appendix D.

For the public and private institutions, means and standard deviations were calculated for variety, insistence, embellishment, and complexity. The results indicate significance found in the public institution scores for insistence (41.51) and complexity (6.12). The descriptive statistic results of all text pattern variables for public and private institutions are summarized in Table 4.5.

Table 4.5

<table>
<thead>
<tr>
<th>Text Patterns</th>
<th>Institutions</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insistence</td>
<td>Public</td>
<td>41.51</td>
<td>65.48</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>18.27</td>
<td>32.09</td>
<td>132</td>
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<td></td>
<td>Total</td>
<td>26.61</td>
<td>48.06</td>
<td>206</td>
<td>.001*</td>
</tr>
<tr>
<td>Complexity</td>
<td>Public</td>
<td>6.12</td>
<td>.66</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>5.75</td>
<td>.47</td>
<td>132</td>
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<tr>
<td></td>
<td>Total</td>
<td>5.88</td>
<td>.58</td>
<td>206</td>
<td>.000*</td>
</tr>
<tr>
<td>Embellishment</td>
<td>Public</td>
<td>1.75</td>
<td>3.058</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>2.30</td>
<td>4.65</td>
<td>132</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.11</td>
<td>4.15</td>
<td>206</td>
<td>.356</td>
</tr>
<tr>
<td>Variety</td>
<td>Public</td>
<td>.73</td>
<td>.13</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private</td>
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<td></td>
<td>Total</td>
<td>.75</td>
<td>.11</td>
<td>206</td>
<td>.172</td>
</tr>
</tbody>
</table>

Research question 4. Do baccalaureate versus master’s degree institutions of higher education within the MSCHE region use different text patterns in the text of their institutional mission statements? The initial step entailed determining the DICTION 7.1 calculated raw scores for the four-text pattern dependent variables using the independent
variables of baccalaureate and master’s Carnegie Classifications. Then those raw scores were used to run the statistical MANOVA test in SPSS.

The four-text pattern dependent variables were variety, insistence, embellishment, and complexity. According to DICTION 7.1, variety represents avoidance of overstatement and preference for precise statements and is calculated by dividing the number of different words in a passage by the passage’s total words. Insistence represents repetition by isolating words used three or more times and takes the number of eligible words, multiplied by the sum of their occurrences, and divides by 10. Embellishment is the ratio of adjectives to verbs and is calculated based on DICTION’s internal formula of \( \frac{\text{praise + blame} + 1}{\text{present concern + past concern} + 1} \). Complexity represents a value for convoluted phrases, abstract ideas, and lack of clarity, it calculates the average number of characters per word in a passage. As DICTION’s norms were not used for comparative purposes, raw scores were calculated for the study.

The independent variables were the mission statements of baccalaureate and master’s Carnegie Classifications.

A MANOVA was then computed to determine if there was a statistically significant difference in text patterns between the mission statements of baccalaureate and master’s Carnegie Classifications. A statistically significant \( p < .000 \) Box’s test of equality of the variance-covariance matrices indicated that the observed covariance matrices of the dependent variables of variety, optimism, realism, and complexity were equal across the independent variable groups for baccalaureate and master’s Carnegie Classifications. A Pillai’s trace was employed to evaluate all multivariate effects. Using Pillai’s trace as the criterion, the composite dependent variate was significantly affected
by institutional type (Pillai’s trace = .155, F(5, 200) = 7.35, p < .001.). The formula, construct, and examples of sample words used in the DICTION 7.1 dictionary and sub-category comparisons of the mission statements are detailed in Appendix D.

For the baccalaureate and master’s Carnegie Classifications, means and standard deviations were calculated for insistence, embellishment, variety, and complexity. The highest total scores for mean (26.61) and standard deviations (48.06) was represented by insistence and the lowest total mean (0.74) and standard deviations (0.11) was represented by variety. The descriptive statistics for text patterns for Carnegie Classifications are outlined in Table 4.6.

Table 4.6

DICTION 7.1 Text Pattern Mean and Standard Deviations by Carnegie Classifications

<table>
<thead>
<tr>
<th>Text Patterns</th>
<th>Carnegie Classification</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insistence</td>
<td>Baccalaureate</td>
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<td>62.23</td>
<td>82</td>
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<tr>
<td></td>
<td>Master’s</td>
<td>24.06</td>
<td>35.82</td>
<td>124</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>26.61</td>
<td>48.06</td>
<td>206</td>
<td>.350</td>
</tr>
<tr>
<td>Embellishment</td>
<td>Baccalaureate</td>
<td>1.49</td>
<td>3.04</td>
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<td>Master’s</td>
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<td>4.70</td>
<td>124</td>
<td></td>
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<tr>
<td></td>
<td>Total</td>
<td>2.10</td>
<td>4.14</td>
<td>206</td>
<td>.084</td>
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<tr>
<td>Variety</td>
<td>Baccalaureate</td>
<td>.75</td>
<td>.10</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Master’s</td>
<td>.73</td>
<td>.11</td>
<td>124</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>.74</td>
<td>.11</td>
<td>206</td>
<td>.286</td>
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<tr>
<td>Complexity</td>
<td>Baccalaureate</td>
<td>5.78</td>
<td>.48</td>
<td>82</td>
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<tr>
<td></td>
<td>Master’s</td>
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<td>.62</td>
<td>124</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5.88</td>
<td>.57</td>
<td>206</td>
<td>.061</td>
</tr>
</tbody>
</table>

There was no statistically significant multivariate difference between baccalaureate and master’s Carnegie Classifications for the use of DICTION’s text
pattern variables ($F(1, 204) = 5.22, p > .05$). This means that there was no significant

difference in the text patterns used in sample mission statements representing variety,
embellishment, complexity, and insistence between baccalaureate and master’s Carnegie
Classifications.

**Summary**

This quantitative, cross-sectional analysis of archival data of mission statements
was designed to make generalizable observations of the MSCHE-accredited population of
higher education institutions. The study examined a total of 206 mission statements from
public and private colleges and universities who confer baccalaureate and master’s
degrees with MSCHE accreditation credentials. The results showed significant
differences in word choice (commonality and certainty) and text patterns (insistence and
complexity) between MSCHE accredited public higher education institutions and private
higher education institutions. In addition, the study found no significance for message
tone between public versus private institutions measured by the word choice variable of
optimism.

Comparisons of baccalaureate and master’s Carnegie Classifications resulted in
no significance for word choice (activity, optimism, realism, commonality, and certainty)
or text patterns (variety, insistence, embellishment, and complexity), in the mission
statements of MSCHE-accredited higher education colleges and universities. While the
study had no significance for higher education institutions who confer baccalaureate and
master’s degrees during the comparative analysis of mission statements, these Carnegie
Classifications held the highest mean scores in word choice and message tones for
optimism ($M = 57.34$) and text patterns for insistence ($M = 26.61$).
The overall study found significance in relationships between public versus private higher education institutions when examining mission statements within the MSCHE region. Public institutions in this study are using words and text patterns in their mission statements that indicate certainty, commonality, insistence, and complexity more than private higher education institutions in the MSCHE region. Conversely, Carnegie Classifications of baccalaureate and master’s degree institutions were found to have no significant relationship between word choices (activity, optimism, realism, commonality, and certainty) or text patterns (variety, insistence, embellishment, and complexity) in their mission statements. A discussion of the study’s implications, limitations, and recommendations for future research will be presented in Chapter 5.
Chapter 5: Discussion

Introduction

Colleges and universities in the United States are facing a myriad of challenges in defining themselves and competing in an increasingly competitive postsecondary education market. These challenges stem from an era of new educational models, rising tuition costs, and pressures from outside and inside the higher education sector (Carey, 2007; Eaton & Neal, 2015; Gaston, 2013). To address these challenges, the new revised standards and requirements from the U.S. Department of Education and MSCHE are more rigorous for higher education institutions and make the mission statement central to defining the institutional purpose, determining educational quality and outcomes, and demonstrating student achievement (MSCHE, 2015a; USDOE, 2016a).

This study determined how some institutions use mission statements to define the institutional purpose and use language to communicate to internal and external constituents. The purpose of this study was to examine whether a relationship exists between word choices (activity, optimism, realism, commonality, and certainty) message tone (optimism), and text patterns (variety, insistence, embellishment, and complexity) in mission statements of public versus private institutions and baccalaureate versus master’s Carnegie Classifications in the MSCHE region. Anchored in a positivist paradigm and using content analytics, this quantitative content analysis study allowed the researcher to reduce the narrative text to numerical indices while remaining objective and detached from the data and sample participants (Creswell, 2013). The results of this study showed
no significant differences in the language of mission statements between Carnegie Classifications of colleges and universities. However, the results did indicate a significant difference between public institution’s use of word choices and text patterns in their mission statements that reflect commonality, certainty, insistence, and complexity and the word choice and text patterns used in private institutions mission statements.

This study revealed and confirmed how word choices and text patterns of mission statements by some public and private institutions differentiate their identity in the higher education marketplace. DICTION 7.1 analyzed the text and suggests certain language characteristics exist in the content of the institutional mission statements of the MSCHE-accredited institutions examined in this study. These results have the potential to help postsecondary education leaders improve the content of the institutional mission statements by being more intentional about word selection and use of text patterns.

MSCHE’s revised *Standards for Accreditation and Requirements for Affiliation* (13th ed.) (2015a) and the centrality of the mission statement may bring increased attention to the mission statement. The mission statement plays a pivotal role in the accreditation process and the U.S. Department of Education’s requirements of the accrediting agencies to demonstrate student achievement (USDOE, 2016). The study results indicate that the language in public institution’s mission statements are more common, consistent, and also confusing. With such heightened reliance on the mission statement, the language used to articulate its purpose and drive institutional planning may warrant greater examination of the words and text patterns used in its development to ensure clarity in communication to constituents.
This chapter offers a discussion and interpretation of the study results and consists of four sections. The first section describes implications of the findings from the DICTION 7.1 analysis of mission statements of higher education institutions in the MSCHE region. The limitations of the study are presented in the second section. The third section includes recommendations for future research in the higher education sector. The last section contains the chapter conclusion.

**Implication of Findings**

The results of this study offer several implications related to the mission statements of public and private higher education institutions in the MSCHE region. While these results showed no significant differences in the language of mission statements between Carnegie Classifications of colleges and universities, the significant differences between language of private and public institutions leads to several implications. The implication topics that are addressed in this section include public and private institutions, institutional positioning, and scholarship and research.

**Public institutions.** The results from this study found some public institutions in the MSCHE region used language to develop their mission statements that conveyed significantly more commonality and certainty in their word choices as well as significantly more insistence, and complexity in text patterns than mission statements in private institutions. The word choices of commonality and certainty refer to language in the mission statement that is shared and consistently focused on a message. However, the text patterns of insistence and complexity also contained characteristics that indicated convoluted phrases that lacked clarity which could simultaneously send confusing messages to some internal and external constituents.
The sample of public colleges and universities who were selected for this study are all member institutions of and accredited by MSCHE and required to meet the MSCHE standards. Standard I Mission and Goals specifically defines the mission statement as:

The institution’s mission defines its purpose within the context of higher education, the students it serves, and what it intends to accomplish. The institution’s stated goals are clearly linked to its mission and specify how the institution fulfills its mission. (MSCHE, 2015a, p. 4)

Given the importance of the institutional mission statement in higher education, this study implied public institutions may be using the mission statement to meet MSCHE Standard I Mission and Goals and comply with the U.S. Department of Education regulation. There appeared to be a common language used in public colleges and university mission statements which could suggest they collectively define their institutional identity and communicate their institutional purpose to constituents of the public higher education system.

At a time when the general public is calling for greater transparency in the higher education sector, defining the institutional mission statement and communicating to constituents with clarity is paramount. Mission statements of public institutions containing text patterns that have convoluted phrases, abstract ideas, and lack clarity, may confuse and interfere with effective communication to internal and external constituents. This study’s findings implied when public institutions communicate to constituents, the mission statements might contain language that is vague and difficult for the public to understand.
One reason for the shared language in public institution’s mission statements, is public statewide educational systems may regulate or require a level of uniformity of institutional purpose that demonstrates shared commitment to the concept of a public higher education. This may compel public colleges and universities, when developing the mission statement, to market themselves and use words and text patterns in a similar and uniform way. Since public colleges and universities tend to serve large student populations and have a common State governance and hierarchical structure, the contents of the mission statement may accurately reflect a system that universally presents shared policies across all public higher education institutions.

Private institutions. This study indicated that while private institutions are using similar words in the mission statements, they are being used less frequently than in the mission statements of their public institutional peers. This may suggest private institutions are also using language in their mission statement as a way to communicate to constituents. Due to the lower frequency use of DICTION 7.1 defined word choices and text patterns found in private institutional mission statements, the results of this study may imply that private institutions may also use language differently to define their institutional purpose to communicate to internal and external constituents.

In contrast to the findings for public institutions, this study’s results for private institutions indicated the use of word choices that reflect fewer characteristics of being common and certain. This result infers the word choices in the mission statements of private institutions were less shared, more distinctive, and not consistently focused on a message. In addition, the use of text patterns in the mission statements of private institutions was less insistent and complex reflecting characteristics that indicate more
clarity and less vague and ambiguous language. The language used in the mission statements of private institutions in this study indicated less frequent use of these specific word choices and text patterns. These results may signify some uniqueness in the private higher education institutional purpose and clarity in sending clear messages to internal and external constituents.

In accordance with MSCHE Standard I Mission and Goals, some private higher education institutions may be using different words than public institutions to define their institutional purpose. Some private institutions may use language that while less intense, reflects more clarity and exclusivity. Private institutions use of this type of language in mission statements could signify to internal and external constituents a unique manner in which to describe the institutional purpose, who the institution serves, and how it plans to achieve the institutional mission.

This study found private institutions are using less common and more distinctive words and text patterns in the language of their mission statements. As a result, private institutions may be trying to answer the general public’s call for greater transparency through the mission statement. The private institution’s use of language that is less vague and less ambiguous may also provide the clarity the general public seeks from the higher education sector when communicating to internal and external constituents.

Private institutions, like public institutions, are required to comply with MSCHE accreditation standards. While MSCHE encourages colleges and universities to be distinctive based on institutional missions, unlike public institutions, private institutions are using words and text patterns in their mission statements independent from public institutions. This may imply that since private institutions are not defined by a common
State governance, they have the ability to uniquely define their institutional purpose in
the higher education marketplace.

**Institutional positioning.** Based on a mission statement study conducted by
Taylor and Morphew (2010) some higher education institutions used their mission
statements differently for enrollment purposes in the marketplace. Taylor and Morphew
(2010) found some higher education institutions altered, modified, and/or changed the
language in the mission statement on the institutional website to reflect language more
aligned with a strategy to recruit students. The results of the Taylor and Morphew (2010)
study indicated higher education institutions used different language to describe the
institutional purpose when displaying the mission statement on the U.S. News & World
Report College Ranking List. Consistent with Taylor and Morphew (2010), this study
also found language in the mission statements of public and private higher education
institutions are used differently to communicate with internal and external constituents.
These results may imply that public and private institutions, as they compete for student
enrollment and describe the institutional purpose, may also be competing in the higher
education marketplace differently.

According to Erickson’s (2012) description of the national trend, public
institutions represent 40% of the higher education institutions in the US, yet they enroll
nearly three-quarters of the population of all higher education students. Although private
institutions represent 60% of the higher education institutions in the United States, they
only enroll the remaining one-quarter of the population of higher education students
(Erickson, 2012). This highlights the competitive nature of public and private institutions
in the higher education sector across the country and outlines the need for higher education institutions to effectively communicate the institutional purpose.

As public and private colleges and universities are competing for students in the MSCHE region, effectively articulating the institutional purpose to constituents is critical. This national enrollment trend lends relevance to the composition of public and private institutions within the MSCHE region and why these institutions compete for students. The results of this study imply that public institutions need to select more words and text patterns to use in the mission statement that are less confusing to constituents and private institutions need to continue to distinguish themselves through the mission statement in the marketplace.

The use of language in the mission statements by higher education institutions to communicate their institutional purpose to constituents is becoming increasingly important to the general public and accreditors. Given the competition for students in the MSCHE region, this study implies educational leaders need to understand how the role the language in the mission statement plays in positioning the institution in the marketplace to compete for student enrollment. Figure 5.1 illustrates the application of this national enrollment trend to the MSCHE sample of public and private institutions examined in this study.
Figure 5.1. MSCHE Sample Enrollment By Institutional Type.

**Scholarship and research.** Many studies have examined and compared mission statements of different types of higher education institutions (Newsom & Hayes, 1991; Morphew & Hartley, 2006; Taylor & Morphew, 2010). Yet past studies were not specific to regional accreditors or required educational standards. The results of this study are consistent with Newsom and Hayes (1991) and Morphew and Hartley (2006) in identifying different ways that public and private institutions use language in the mission statement to communicate to constituents.

Newsom and Hayes (1991) found public institutions relied on keyword components in the mission statement indicating geography and private institutions used other keyword components in the mission statement to highlight the public image. Morphew and Hartley (2006) found private institutions focused on student growth and development, while public institutions focused on service and civic duty. Echoing prior research, this study implied public and private colleges and universities in the higher education sector are continuing to use the mission statement in various ways as a tool to communicate institutional purpose to constituents.
This study also expands the research of Abelman (2011, 2014) and Abelman and Dalessandro (2008, 2009) using DICTION 7.1 as a content analysis tool. The examination of the mission statement content of public and private higher education institutions who confer baccalaureate and master’s degrees in the MSCHE region is an area of research that has not been explored. At the time of this study, the researcher did not find any higher education studies of public and private institutions within an accrediting region that focused on the language of mission statements. The selection of intentional and deliberate words and text patterns to aid in the development of mission statements is critical to creating clear and concise mission statements that effectively communicate to constituents. This study expands the higher education mission statement research by examining mission statements to include content specific to word choices and text patterns.

**Support for Theoretical Frame**

This study used Spence’s (1973) signaling theory as a lens to explore how mission statements of higher education institutions in the MSCHE region are used to communicate to constituents. Spence’s seminal work was conducted in the labor market to demonstrate and reduce the information asymmetry that exists between job seekers and potential employers in the marketplace (Spence, 1973). Prospective job applicants used their personal credentials to signal or communicate job preparedness to potential employers (Spence, 1973).

Campbell et al. (2001) and Connelly et al. (2011) expanded Spence’s theory by arguing mission statements communicate the organization’s purpose to stakeholders and constituencies and should be included as part of the corporate disclosure. This study
focused on exploring how higher education institutions use content in the mission statement to signal institutional purpose and communicate to internal and external constituents. This study used Spence’s (1973) theory to show mission statement content varies by institutional type to signal and communicate the institution’s purpose to constituents.

The results from this study imply there is an institutional difference in how public versus private institutions use language to signal and communicate to internal and external constituents. The mission statement is one way that institutions attempt to convey information about themselves to constituents who may not be as familiar with the institution (Taylor and Morphew, 2010). Therefore, it can be inferred that the word choices and text patterns used in mission statements of public and private higher education institutions reduce the information asymmetry in the higher education marketplace.

The results from this study demonstrated colleges and universities in the MSCHE region are communicating their respective institutional purposes to constituents through the mission statement by using different words and text patterns in public and private institutions. These results support the idea that public and private institutions use diverse language to signal different institutional purposes to internal and external constituents. These implications are consistent with other scholar’s findings of how higher education institutions use the mission statement to diversify and communicate the institutional purpose to internal and external constituents (Abelman, 2011, 2014; Abelman & Dalessandro, 2008, 2009; Morphew & Hartley, 2006; Newsom & Hayes, 1991; Taylor & Morphew, 2010).
Limitations

Analyzing the mission statements of higher education institutions using a content analysis tool presented some limitations. First, the primary location of the colleges and universities in this study were only included from the MSCHE region. MSCHE places an extremely high value on the institutional mission statement and it is a critical component of the MSCHE Standards for Accreditation and Requirements for Affiliation (13th ed.) (MSCHE, 2015a). MSCHE integrates the mission statement throughout each of the new seven standards (MSCHE, 2015a). However, there are five other regional accreditors responsible for accrediting higher education institutions in assigned states across the United States (CHEA, 2015). While this study only focused on MSCHE standards, each regional accreditor has similar and different standards requirements for their respective institutions. As a result, generalizations that may be inferred by this study are limited to institutional mission statements of public and private institutions who confer baccalaureate and master’s degrees in the MSCHE region.

Second, the higher education institutions who participated in this study had MSCHE accredited status in 2014 with baccalaureate and master’s Carnegie Classifications. However, the mission statement data were collected using the most recent 2016 data available on the institutional websites. Thus, the content analysis may not reflect any changes or modifications to the mission statements of the participant institutions between the 2014 and 2016 timeframe. However, according to Palmer and Short (2008), mission statements are expected to be “revisited” every 3-5 years to engage stakeholders as part of a renewal process (p. 468). Thus, it is likely that most of the 2016
institutional mission statements were also the mission statements used in the 2014 MSCHE reaffirmation process.

Last, DICTION 7.1 is a content analytic tool designed to analyze words, message tones, and text patterns based on pre-loaded calculated formulas, definitional constructs, and internal algorithms that define meaning created by the software. While the software had strength in counting word frequencies, comparing the text to the content of dictionaries, and quantifying meaning, it was limited in interpreting the intent of the text. The content analysis was restricted to the quantitative results that the software could provide.

To accomplish a more detailed analysis of content, additional qualitative methodological approaches would complement and enhance the ability to explain the meaning and interpret the intent of the mission statement data. For example a qualitative component to this study would add value in cross referencing DICTION’s variable scores for word choice (activity, optimism, realism, commonality, and certainty), message tone (optimism), and text patterns (variety, insistence, embellishment, and complexity) to the MSCHE Standards for Accreditation and Requirements for Affiliation (13th ed.) (MSCHE, 2015a). This would allow an opportunity to align the word choices and text patterns of MSCHE public and private institutions with standard requirements and criteria to better interpret meaning and alignment with the accreditation process.

Recommendations

This study revealed findings that public and private higher education institutions use words and text patterns in mission statements differently to communicate institutional purpose to internal and external constituents. This lead the researcher to identify several
recommendations for future research, accreditors, and leaders in the higher education sector.

**Future research.** Future research studies on mission statement content could expand this study’s sample population to include other regional accrediting agencies and their respective standard requirements. A content analysis study of mission statements across all regional accrediting bodies could bring a national perspective to which words and language are used in institutional mission statements and how it relates to the respective standard requirements for educational quality in the higher education sector. Identifying the words of mission statements, how they relate to associated accreditation standards, and how it’s used to communicate with constituents across the country, may add insight into the critical importance that MSCHE and U.S. Department of Education have placed on institutional mission statements (MSCHE, 2015a, USDOE, 2016). Additional research may also explore if the differences in words used in the content of mission statements are impacted by institution type, Carnegie Classification, and/or accreditation requirements specific to each accrediting agency.

Future scholarly research could also apply a mixed methods approach to better understand the meaning of the words and text patterns in the mission statement content. To date there have not been any mixed method studies that explored higher education institutional mission statements by regional accrediting agencies. According to Creswell (2013), a mixed methods approach combines quantitative and qualitative research procedures which can enhance the overall credibility of a study’s findings and data interpretation. For example, conducting a content analysis study using DICTION 7.1, coupled with internal and external constituent surveys or focus groups, may enrich the
study’s findings by including data specific to how constituents interpret the mission statement content. It may also offer insight into exploring if institutions are doing what they say they are doing.

**Accreditors.** Based on the results of this study, continued exploration using DICTION 7.1 as content analysis software could enhance the preparation of documents as institutions prepare for the MSCHE accreditation process. The addition of a content analytic tool, along with the other quantitative and qualitative assessments used in the accreditation process, could add understanding into the words, message tone, and text patterns of documents used in the higher education sector. This additional level of analysis could aid institutional leaders and accreditors in the development and review of mission statements as institutions examine the language used in the preparation of documents for the MSCHE accreditation process.

For example, Criteria F of Standard I Mission and Goals is defined as designating activities that “are publicized and widely known by the institution’s internal stakeholders” (MSCHE, 2016b, p. 4). A content analysis could assess words and text patterns of documents (i.e., strategic plans, academic, and administrative assessment reports, etc.) to ensure intentional and deliberate language is being used. Adding a step of content analytics could ensure that the content of the documents are clear and concise. It is paramount that the content of the internal documents represents and indicates succinct information that does not contain convoluted phrases that lack clarity and confuse internal stakeholders. These important institutional documents and reports provide evidence of assessment and contribute to the determination of educational quality by MSCHE.
**Higher education leaders.** The results from this study may demonstrate how institutions are defining their purpose to constituents in ways that are aligned with being a public or private institution. While all higher education institutions require a mission statement, the MSCHE region has made it critical to Standard I Mission and Goals as a declarative statement that defines the institutional purpose, the students the institution serves, and how it intends to accomplish the mission. Institutional leaders must guarantee their institutions meet MSCHE standards and comply with federal requirements to ensure educational quality standards are achieved.

In addition, boards of trustees, presidents, and vice presidents are required to have an understanding of the changes happening on the horizon of the higher education sector and adapt institutional strategies to ensure the sustained competitiveness of the institution in the marketplace. Academic and administrative leaders in roles with responsibilities such as accreditation liaisons, institutional research and assessment, and institutional effectiveness coordinators have a responsibility to work and collaborate with internal constituents to ensure alignment of institutional strategies with the mission. These institutional leaders need to place attention on the content of the institutional mission statement to ensure that the institutional purpose is clear, drives strategic planning, and successfully differentiates institutions in a competitive enrollment marketplace (Abelman & Dalessandro, 2014; Lake & Mrozinski, 2011; Taylor & Morphew, 2010).

Due to MSCHE’s robust integration of the mission statement in all standards in the new accreditation process, academic and administrative leaders need to clearly define and demonstrate strategic and institutional planning. It is important that institutional planning is mission-centric and produces expected educational and institutional outcomes.
(MSCHE, 2015a; USDOE, 2016). Collectively, all higher education leaders play a role in creating a culture that sustains the focus on defining and achieving the institutional mission beyond and in alignment with the new accreditation process and federal requirements.

According to the results obtained in this study, leaders of public institutions in the MSCHE region will need to be more intentional about using content in the mission statement that is clear and concise in communicating the institutional purpose to constituents. Conversely, this study’s results also show leaders in private institutions must understand the need to consistently select words and text patterns in the mission statement that effectively describe and communicate institutional distinctiveness to internal and external constituents to sustain areas such as enrollment in a competitive marketplace. Institutional leaders in both public and private institutions could gain knowledge from internal and external constituents of how and what the mission statements are communicating to constituents. For example, conducting focus groups made up of prospective students, internal faculty and staff, and other constituents could provide feedback to leaders on the content of the mission statement and its intended meaning. This type of data may confirm the intended messages of the mission statement are effectively being communicated to internal and external constituents. Asking constituents for feedback on the words and text patterns of mission statements could further emphasize the importance of language selection when developing content in an institution’s mission statement.

Additional information about how the institution is perceived could inform the development of the mission statement and other internal documents and reports designed
to communicate institutional purpose to internal and external constituents. For example, MSCHE highlighted the State University of New York (SUNY) at Plattsburgh’s 14-stage review process that includes assessing the mission statement and the strategic plan (MSCHE, 2016c). Elements of the SUNY at Plattsburgh process included a campus survey, department chairs, and campus-wide focus groups of internal constituents. Higher education leaders could utilize the information obtained from this type of process to align the mission statement content, adjust institutional purpose (if needed), and align institutional planning and resource allocation.

**Improvement guide.** Unlike the prescriptive frameworks of Pearce and David (1987), David (1989), and Newsom and Hayes (1991) studies, this study revealed findings that could guide a process for improved mission statement content. The Pearce and David (1987) and David (1989) frameworks established the signature nine key components for mission statements which included customers; products and services; markets; technology; survival, growth, and profitability; philosophy; self-concept; public image; and employees. These key components were followed by Newsom and Hayes (1991) research recommendations that certain language be included in higher education mission statements that link to institutional activities such as identifying institutional products and output beyond teaching, research, and service; identifying the geography the college served; and identifying philosophical beliefs, values, and priorities. While this study results suggests word choices and text patterns in mission statements could be improved, a less prescriptive method may be more helpful to revise or develop mission statement content in higher education institutions in the MSCHE region.
Based on this study, a Mission Statement Improvement Guide (see Appendix F for a figure showing the process) was developed that may assist higher education leaders in improving the content of the institutional mission statement. This guide is inclusive of the MSCHE Standards and outlines steps to help higher education leaders assess if the language of mission statements are clear, aligned to the institution’s purpose and planning, and consistently deliver intended communication to internal and external constituents. Higher education leaders could implement the steps outlined in this guide to ensure that the institutional mission statement is periodically reviewed, contains intentional and deliberate language, produces competitive outcomes in relation to regional peers, and is shared and communicated with constituents. The four-step process outlined in the Mission Statement Improvement Guide is described in detail below:

**Step 1: Develop a process to review and revise the institution’s mission statement.** The first step in this process would be to assess the need to update the mission statement. For all MSCHE institutions, the mission statement is central to Standard I Mission and Goals and subsequently all other MSCHE standards. While the trigger to begin a review process may be based on the planning cycle of the individual institution, MSCHE has specific criteria outlined in the *Standards for Accreditation and Requirements for Affiliation* (13th ed.) (MSCHE, 2015a) for each standard to ensure proper conditions are met to successfully meet the requirement. Given that mission statements play a central and critical role in higher education, it is vital that institutions develop mission statements that accurately reflect the institution’s identity, aligns with strategic planning, resource allocation, and effectively communicates to constituents the institutional purpose. Institutions should adopt a strategy to periodically assess the
relevance of the mission statement to the institutional planning process. This step would produce a documented process to ensure that the institutional goals and objectives are aligned with the mission statement.

**Step 2: Analyze the mission statement content.** The words and text patterns used in developing the language in higher education mission statements matter. Analyzing all content related to the mission statement of a college or university is the second step of this guide. This analysis could include ensuring that deliberate and intentional words and text patterns are selected to articulate the institutional purpose in ways that certify that the perception of the communication and intent of the message are consistent. The research on mission statement analytics is gaining acceptance and expanding to include more content analysis (Abelman, 2011, 2014; Abelman & Dalessandro, 2008, 2009). Using advanced content analytic tools such as DICTION 7.1 broadens the content development process to include word text (activity, commonality, certainty, optimism, and realism), message tone (optimism), and text patterns (variety, insistence, embellishment, and complexity). This level of analysis would enhance the language in the mission statement to ensure consistent delivery of words, message tones, and text patterns to describe the institutional purpose and communicate to constituents. Mission statement research in general (Abelman, 2011, 2014; Abelman & Dalessandro, 2008, 2009; Newsom & Hayes, 1991; Morphew & Hartley, 2005; Taylor & Morphew, 2010) and this study’s findings in particular, signal a need for higher education institutions to develop mission statements that are less vague, clear, consistent, and specific in describing the institutional purpose and communicating to internal and external constituents. As the mission statement drives institutional planning, the content of the language must contain words and text patterns
that are concise, void of confusing phrases and terms, and are insistent with institutional planning.

According to DICTION’s word choice and text definitions, this could mean developing mission statements that use more words that indicate activity, certainty, and realism. The mission statements may also represent positive message tones, consistent messages, and messages that are less common. In addition, it may also be advantageous to an institution to utilize language that is less convoluted and complex. Given the role mission statements play in describing the institutional purpose, words matter and are critical to the existence of higher education institutions. Improving the content of the mission statement by implementing an approach that focuses on enhancing the language may improve the overall substance of the mission statement and the diverse role it plays in representing the institution to constituents. This step has the potential to produce an outcome of increased quality in the words and text patterns used in the content of the mission statement.

Step 3: Develop accrediting region benchmarks. Public and private institutions in the MSCHE region should actively research other institutions within the region in the areas of enrollment, tuition costs, student retention, and graduation rates. The third step in the guide is to develop benchmarks among MSCHE regional peers to better understand the trends as they relate to institutions with similar institutional types and accrediting standards. As the climate continues to change in the higher education sector, institutions would be well informed to know how they compare to their MSCHE regional peers in key institutional outcome areas. While most colleges and universities compare themselves to a select group of competitive institutions and aspirational peers, the U.S.
Department of Education makes recommendations specific to the higher education sector through regional accreditors (USDOE, 2016). Assessing regional benchmarks, allows institutions to make data-driven decisions to understand and possibly improve the institution's position in the marketplace. The outcome of this step could be to identify where an institution ranks in comparison to peers within the MSCHE region. This may allow an institution to identity institutional performance gaps based on trends that are happening in the MSCHE region regarding enrollment, tuition costs, student retention, and graduation rates. This data could better inform institutional decision-making regarding mission statement assessment and subsequent institutional planning.

**Step 4: Share all recommendations and any changes to the mission statement.**

The last step of the guide is to communicate with institutional constituents. Institutional leaders do not accomplish the development of the language used in mission statements on college campuses unilaterally. This step is designed to guarantee transparency in the process of modifying or updating the institutional mission statement. The process of selecting words and text patterns is a collaborative process that involves individuals across all divisions and levels in the organization and should include external constituents. Consequently, when the mission statement is reviewed and changes are recommended, it is important to communicate and share the information with constituents. The desired outcomes for Step 4 step are to communicate the recommendations and justification for the change, encourage dialog and discussion, and secure buy-in and support to move forward with the recommendations as needed.

Creating and implementing a Mission Statement Improvement Guide is designed to enhance the language used in mission statements by developing a review process,
analyzing content, developing regional benchmarks, and sharing recommendations. The processes involved in the four steps could lead to an institution adopting or modeling a culture of continuous improvement that may formalize the importance of the institutional mission statement. The critical nature of the mission statement and its role in the new accreditation process is a crucial step to demonstrating educational quality and institutional outcomes in the MSCHE region. Incorporating, not just Standard I Mission and Goals, but all of the MSCHE standards into a process that is organic within the institution may inform decision making and ensure alignment of strategic, divisional, and unit-level plans with expected compliance to MSCHE standards. The institution’s goals must be linked to the mission statement and inform improvements and strategic planning to ensure that the institutional mission is achieved.

The mission is the declarative institutional statement that while defining the purpose drives all aspects of organizational planning of academic and administrative initiatives. The short-term annual goals and objectives and the long-term strategic planning projects that institutions approve are designed to ensure the successful achievement of the institutional mission. A resulting outcome of developing a Mission Statement Improvement Guide would demonstrate how the institution values and recognizes the importance of language in operationalizing the mission statement as a representative and signature statement that drives institutional purpose and planning.

Conclusion

Institutions in the higher education sector are experiencing challenges in addressing demands from the general public for increased transparency, access, and accountability (Carey, 2007; Eaton & Neal, 2015; Gaston, 2013). These challenges
created an opportunity to revise accreditation standards and link student success achievement to a mission-centric process for all MSCHE-accredited institutions (MSCHE, 2015a; USDOE, 2016a). As a result, the mission statement plays a critical role in the strategic future of all higher education colleges and universities within the MSCHE region.

The purpose of this study was to examine whether a relationship exists between word choices, message tone, and text patterns in mission statements of different institution types and Carnegie Classifications in the MSCHE region. The research questions were designed to guide this study by comparing private versus public institutions and baccalaureate versus master’s Carnegie Classifications for the DICTION 7.1 defined variables of activity, optimism, realism, commonality, certainty, variety, insistence, embellishment, and complexity in mission statements of MSCHE-accredited institutions. The research paradigm was a quantitative, cross-sectional analysis of archival data that assisted the researcher in conducting a content analysis of mission statements of public and private colleges and universities in the MSCHE region.

The results of this study suggest words matter when public and private institutions in the MSCHE region use different language in mission statements to define institutional identity and communicate purpose to internal and external constituents. According to DICTION 7.1, the content in mission statements matters because public institutions are using different words and text patterns to define the institutional purpose and communicate to internal and external constituents. Consistent with research in other studies identifying mission statements as critical institutional documents that defined institutional purpose (Abelman & Dalessandro, 2008, 2009; Morphew & Hartley, 2006;
Taylor & Morphew, 2010), this study also found comparable language within the mission statements of MSCHE-accredited institutions in two significant findings.

The first significant finding of this study is public institutions used word choices in the institutional mission statement different from the word choices in the mission statements of private institutions. Public institutions chose to use language in their mission statements that signaled more common and shared values, spoke with more authority, and stayed on message when communicating to constituents. The second significant finding found public institutions, when compared to private institutions, used text patterns in the mission statement that while consistently used certain words, also contained convoluted phrases and lacked clarity when communicated to constituents. The results of the study implied that public colleges and universities in the MSCHE region are using language in the institutional mission statement content to meet Standard I Mission and Goals accreditation requirement.

The results from this study also support continued expansion of research in higher education in the areas of mission statements as they relate to communication to constituents in the higher education sector (Morphew & Hartley, 2006; Taylor & Morphew, 2010). This study’s results inferred mission statement development using content analytics could continue to be a valued technology tool (Abelman 2011, 2014; Abelman & Dalessandro, 2008, 2009). The collection of recommendations in this study provides information on public and private institutions that may be helpful in operationalizing the institutional mission statement. This study’s results suggest the content of mission statements as it relates to word choices, text patterns, and message tones are significant and matter to internal and external constituents of the higher
education sector. The results of this study have implications about mission statement content that apply to the words that are chosen and text patterns that are used in developing content for this critical institutional declaration and other institutional documents in preparation for evidencing assessment during the MSCHE accreditation process.

Newsom and Hayes (1991) maintained institutional mission statements were generally updated because of accreditation, administrative purposes, and strategic planning. These three reasons are still pertinent in the 21st century due to the growing challenges and pressures from advocates and critics of the higher education sector to increase transparency, accountability, and access (Eaton & Neal, 2015; Gaston, 2013; Volkwein, 2010a). Based on the findings of this study, the researcher concurs the content of mission statements in the higher education sector matter and plays a crucial role in the accreditation process, U.S. Department of Education requirements, and subsequently the institutional planning that occurs on the campuses of colleges and universities within the MSCHE region.

The content (defined by word choices and text patterns) used in mission statements represent substantive and material statements that drive and influence institutional decision-making. As a result of words and text patterns comprising and conveying the institutional identity and purpose to internal and external constituents of higher education, the mission statement is a critical document in public and private higher education institutions within the MSCHE region. The growing pressure from the general public on the higher education sector to be more transparent will intensify the need for institutional mission statements to include clear and concise content that effectively
communicates to internal and external constituents. Higher education leaders, accreditors, and policy makers must work together to ensure that the economic engine of the United States higher education sector remains strong through the 21st century and beyond.
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Appendix A

The Middle States Commission on Higher Education Characteristics of Excellence in

Higher Education Standards at a Glance 12th Edition

Institutional Context
Standard 1: Mission and Goals
The institution’s mission clearly defines its purpose within the context of higher education and indicates who the institution serves and what it intends to accomplish. The institution’s stated goals, consistent with the aspirations and expectations of higher education, clearly specify how the institution will fulfill its mission. The mission and goals are developed and recognized by the institution with the participation of its members and its governing body and are used to develop and shape its programs and practices and to evaluate its effectiveness.

Standard 2: Planning, Resource Allocation, and Institutional Renewal
An institution conducts ongoing planning and resource allocation based on its mission and goals, develops objectives to achieve them, and utilizes the results of its assessment activities for institutional renewal. Implementation and subsequent evaluation of the success of the strategic plan and resource allocation support the development and change necessary to improve and to maintain institutional quality.

Standard 3: Institutional Resources
The human, financial, technical, physical facilities, and other resources necessary to achieve an institution’s mission and goals are available and accessible. In the context of the institution’s mission, the effective and efficient uses of the institution’s resources are analyzed as part of ongoing outcomes assessment.

Standard 4: Leadership and Governance
The institution’s system of governance clearly defines the roles of institutional constituencies in policy development and decision-making. The governance structure includes an active governing body with sufficient autonomy to assure institutional integrity and to fulfill its responsibilities of policy and resource development, consistent with the mission of the institution.

Standard 5: Administration
The institution’s administrative structure and services facilitate learning and research/scholarship, foster quality improvement, and support the institution’s organization and governance.
Standard 6: Integrity
In the conduct of its programs and activities involving the public and the constituencies it
serves, the institution demonstrates adherence to ethical standards and its own stated
policies, providing support for academic and intellectual freedom.

Standard 7: Institutional Assessment
The institution has developed and implemented an assessment process that evaluates its
overall effectiveness in achieving its mission and goals and its compliance with
accreditation standards.

**Educational Effectiveness**

Standard 8: Student Admissions and Retention
The institution seeks to admit students whose interests, goals, and abilities are congruent
with its mission and seeks to retain them through the pursuit of the students’ educational
goals.

Standard 9: Student Support Services
The institution provides student support services reasonably necessary to enable each
student to achieve the institution’s goals for students.

Standard 10: Faculty
The institution’s instructional, research, and service programs are devised, developed,
monitored, and supported by qualified professionals.

Standard 11: Educational Offerings
The institution’s educational offerings display academic content, rigor, and coherence
appropriate to its higher education mission. The institution identifies student learning
goals and objectives, including knowledge and skills for its educational offerings.

Standard 12: General Education
The institution’s curricula are designed so that students acquire and demonstrate college-
level proficiency in general education and essential skills, including at least oral and
written communication, scientific and quantitative reasoning, critical analysis and
reasoning, and technological competency.

Standard 13: Related Educational Activities
The institution’s programs or activities that are characterized by particular content, focus,
location, mode of delivery, or sponsorship meet appropriate standards.

Standard 14: Assessment of Student Learning
Assessment of student learning demonstrates that, at graduation, or other appropriate
points, the institution’s students have knowledge, skills, and competencies consistent
with institutional and appropriate higher education goals.
Appendix B

Middle States Commission on Higher Education Standards for Accreditation and Requirements for Affiliation 13th Edition

Standard I: Mission and Goals
The institution’s mission defines its purpose within the context of higher education, the students it serves, and what it intends to accomplish. The institution’s stated goals are clearly linked to its mission and specify how the institution fulfills its mission.

Standard II: Ethics and Integrity
Ethics and integrity are central, indispensable, and defining hallmarks of effective higher education institutions. In all activities, whether internal or external, an institution must be faithful to its mission, honor its contracts and commitments, adhere to its policies, and represent itself truthfully.

Standard III: Design and Delivery of the Student Learning Experience
An institution provides students with learning experiences that are characterized by rigor and coherence at all program, certificate, and degree levels, regardless of instructional modality. All learning experiences, regardless of modality, program pace/schedule, level, and setting are consistent with higher education expectations.

Standard IV: Support of the Student Experience
Across all educational experiences, settings, levels, and instructional modalities, the institution recruits and admits students whose interests, abilities, experiences, and goals are congruent with its mission and educational offerings. The institution commits to student retention, persistence, completion, and success through a coherent and effective support system sustained by qualified professionals, which enhances the quality of the learning environment, contributes to the educational experience, and fosters student success.

Standard V: Educational Effectiveness Assessment
Assessment of student learning and achievement demonstrates that the institution's students have accomplished educational goals consistent with their program of study, degree level, the institution's mission, and appropriate expectations for institutions of higher education.

Standard VI: Planning, Resources, and Institutional Improvement
The institution’s planning processes, resources, and structures are aligned with each other and are sufficient to fulfill its mission and goals, to continuously assess and improve its programs and services, and to respond effectively to opportunities and challenges.

Standard VII: Governance, Leadership, and Administration
The institution is governed and administered in a manner that allows it to realize its stated mission and goals in a way that effectively benefits the institution, its students, and the other constituencies it serves. Even when supported by or affiliated with governmental, corporate, religious, educational system, or other unaccredited organizations, the institution has education as its primary purpose, and it operates as an academic institution with appropriate autonomy.
Appendix C

DICTION 5.0 Word Construct Descriptors

1. Shared – a statement that has the capacity to inspire and motivate those within an institution and to communicate its characteristics to key constituents;

2. Clear (clarity) – helps organizational members distinguish between activities and services that conform to institutional identity and imperatives and those that do not. It is unambiguous, easy to comprehend and not convoluted or abstract;

3. Compelling – generates enthusiasm among the stakeholders and stimulates them to transform vision into a pattern of meaningful activity. It is optimistic and inspiring;

4. Relative advantage – ideas or innovations presented in a way that can be successfully transformed into general or specific actions that generate benefits;

5. Observability – desired outcomes of the ideas or innovations that are practical, pragmatic, and can be observed; and

6. Complexity – desired outcomes of ideas or innovations are solid, concrete, and fully expressed robustly (as cited in Abelman, 2014).
Appendix D

DICTION 7.1 Word Choice Constructs and Dictionary Sample Words

**Activity** = \([\text{Aggression} + \text{Accomplishment} + \text{Communication} + \text{Motion}] - [\text{Cognition} + \text{Passivity} + \text{Embellishment}]\)

**Aggression** (e.g., blast, crash, explode, collide, conquest, attacking, dictatorships, violation, crusade, commanded, challenging, overcome, mastered, rambunctious, pushy, prod, poke, pound, shove, dismantle, demolish, overturn, veto, prevent, reduce, defend, curbed)

**Accomplishment** (e.g., establish, finish, influence, proceed, motivated, influence, leader, manage, buy, produce, employees, sell, grow, increase, generate, construction, handling, strengthen, succeed, outputs, agenda, enacted, working, leadership)

**Communication** (e.g., listen, interview, read, speak, film, videotape, telephone, e-mail, translate, quote, scripts, broadcast, chat, declare, flatter, demand, reporter, spokesperson, advocates, preacher, hint, rebuke, respond, persuade)

**Motion** (e.g., bustle, job, lurch, leap, circulate, momentum, revolve, twist, barnstorm, jaunt, wandering, travels, lickety-split, nimble, zip, whistle-stop, ride, fly, glide, swim)

**Cognition** (e.g., learn, deliberate, consider, compare, biology, psychology, logic, economics, question, forget, re-examine, paradoxes, graduation, teaching, classrooms, invent, perceive, speculate, interpret, estimate, examine, reasonable, strategies, diagnose, analyze, software, fact-finding)

**Passivity** (e.g., allow, tame, appeasement, submit, contented, sluggish, arrested, capitulate, refrain, yielding, backward, immobile, silence, inhibit, unconcerned, nonchalant, stoic, quietly, sleepy, vacation)

**Embellishment** (e.g., ratio of adjectives to verbs and is calculated with the formula: \([\text{Praise} + \text{Blame} + 1] ÷ [\text{Present Concern} + \text{Past Concern} + 1]\))

**Certainty** = \([\text{Tenacity} + \text{Leveling Terms} + \text{Collectives} + \text{Insistence}] - [\text{Numerical Terms} + \text{Ambivalence} + \text{Self-Reference} + \text{Variety}]\)

**Tenacity** (e.g., is, am, will, shall, has, must, do, he’ll, they’ve)

**Leveling Terms** (e.g., everybody, anyone, each, fully, always, completely, inevitably, consistently, unconditional, consummate, absolute, open-and-shut)
Collectives (e.g., crowd, choir, team, humanity, army, congress, legislature, staff, county, world, kingdom, republic)

Insistence (all words occurring three or more times that function as nouns or noun-derived adjectives are identified and then calculated by multiplying by the sum of their occurrences, and dividing by 10)

Numerical Terms (e.g., one, tenfold, hundred, zero, subtract, divide, multiply, percentage, digitize, tally, mathematics)

Ambivalence (e.g., allegedly, perhaps, might, almost, approximate, vague, somewhere, baffled, puzzling, hesitate, could, would, he’d, dilemma, guess, suppose, seems)

Self-Reference (e.g., I, I’d, I’ll, I’m, I’ve, me, mine, my, myself)

Variety (ratio which divides the number of different words in a passage by the passage’s total words)

Optimism = [Praise + Satisfaction + Inspiration] – [Blame + Hardship + Denial]

Praise (e.g., dear, delightful, witty, mighty, handsome, beautiful, shrewd, bright, vigilant, reasonable, successful, conscientious, renowned, faithful, good, noble)

Satisfaction (e.g., cheerful, passionate, happiness, thanks, smile, welcome, excited, fun, lucky, celebrating, pride, auspicious, healing, encourage, secure, relieved)

Inspiration (e.g., faith, honesty, self-sacrifice, virtue, courage, dedication, wisdom, mercy, patriotism, success, education, justice)

Blame (e.g., mean, naive, sloppy, stupid, fascist, blood-thirsty, repugnant, malicious, bankrupt, rash, morbid, embarrassing, weary, nervous, painful, detrimental, cruel, illegitimate, offensive, miserly)

Hardship (e.g., earthquake, starvation, tornado, pollution, killers, bankruptcy, enemies, vices, infidelity, despots, betrayal, injustice, slavery, exploitation, rebellion, grief, unemployment, died, apprehension, error, cop-outs, weakness)

Denial (e.g., aren’t, shouldn’t, don’t, nor, not, nay, nothing, nobody, none)

Commonality = [Centrality + Cooperation + Rapport] – [Diversity + Exclusion + Liberation]

Centrality (e.g., native, basic, innate, orthodox, decorum, constitutional, ratified, paradigm, bureaucratic, ritualistic, standardized, matter-of-fact, regularity, conformity, mandate, unanimous, expected, continuity, reliable, womankind, perennial, landmarks)

Cooperation (e.g., unions, schoolmates, caucus, chum, partner, cronies, sisterhood, friendship, comrade, consolidate, mediate, alignment, network, detente, exchange, teamwork, sharing, contribute, public-spirited, care-taking, self-sacrifice)
Rapport (e.g., congenial, camaraderie, companion, approve, vouched, warrants, tolerant, willing, permission, equivalent, resemble, consensus)

Diversity (e.g., inconsistent, contrasting, non-conformist, exceptional, unique, individualistic, illegitimate, rabble-rouser, extremist, far-flung, dispersed, diffuse, factionalism, deviancy, quirky, rare vs. queer, variety vs. jumble, distinctive vs. disobedient)

Exclusion (e.g., displaced, sequestered, self-contained, self-sufficient, outlaws, repudiated, secede, privacy, ostracize, forsake, discriminate, small-mindedness, loneliness, right-wingers, nihilism, hermit vs. derelict, refugee vs. pariah, discard vs. spurn)

Liberation (e.g., autonomous, open-minded, options, unencumbered, radical, released, eccentric, impetuous, flighty, suffrage, liberty, freedom, emancipation, exodus, riotous, deliverance, loosen, disentangle, outpouring, exemption vs. loophole, elope vs. abscond, uninhibited vs. outlandish)

**Realism** = [Familiarity + Spatial Terms + Temporal Terms + Present Concern + Human Interest + Concreteness] – [Past Concern + Complexity]

Familiarity (e.g., across, over, through, this, that, who, what, a, for, so)

Spatial Terms (e.g., abroad, elbow-room, locale, outdoors, county, fatherland, municipality, ward, east, southwest, latitude, coastal, border, snow belt, kilometer, map, spacious, quality, vacant, out-of-the-way, disoriented, pilgrimage, migrated, frontier)

Temporal Terms (e.g., century, instant, mid-morning, lingering, seniority, nowadays, autumn, year-round, weekend, spontaneously, postpone, transitional, premature, obsolete, punctual)

Present Concern (e.g., cough, taste, sing, take, canvass, touch, govern, meet, make, cook, print, paint)

Human Interest (e.g., he, his, ourselves, them, cousin, wife, grandchild, uncle, friend, baby, human, persons)

Concreteness (e.g., peasants, African-Americans, Catholics, carpenter, manufacturer, policewoman, Communists, congressman, Europeans, courthouse, temple, store, television, football, CD-ROM, mortgage, wages, finances, airplane, ship, bicycle, stomach, eyes, lips, slacks, pants, shirt, cat, insects, horse, wine, grain, sugar, oil, silk, sand)

Past Concern (past-tense forms of the verbs contained in the Present Concern Dictionary)

Complexity (the average number of characters-per-word)
### Appendix E

**MSCHE-Accredited Comparative Sample Institutions**

**Private Institutions (n = 132)**

<table>
<thead>
<tr>
<th>Institution 1</th>
<th>Institution 2</th>
<th>Institution 3</th>
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<tbody>
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<td>Albright College</td>
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<td>LIU Post</td>
<td>Susquehanna University</td>
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<td>Cooper Union for the Advancement of Science and Art</td>
<td>Lycoming College</td>
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**Baccalaureate Institutions (n = 82)**

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**Master’s Institutions (n = 124)**

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<td>Saint Francis University</td>
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| Alvernia University                          | Keuka College                          | Saint Joseph's College-New York |
| Arcadia University                          | King's College                          | Saint Joseph's University       |
| Bloomsburg University of Pennsylvania       | Kutztown University of Pennsylvania     | Saint Peter's University        |
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| Cabrini College                             | Le Moyne College                       | Shippensburg University of Pennsylvania |
| Caldwell College                            | LIU Brooklyn                            | Slippery Rock University of Pennsylvania |
| California University of Pennsylvania       | LIU Post                                | St Bonaventure University       |
| Carlow University                           | Lock Haven University                   | Stevenson University            |
| Chatham University                          | Loyola University Maryland              | SUNY at Fredonia                |
| Chestnut Hill College                       | Manhattan College                       | SUNY at New Paltz                |
| Cheyney University of Pennsylvania          | Manhattanville College                  | SUNY College at Brockport       |
| Clarion University of Pennsylvania          | Mansfield University of Pennsylvania   | SUNY College at Geneseo         |
| College of Saint Elizabeth                  | Marist College                          | SUNY College at Oswego          |
| College of Staten Island CUNY               | Marywood University                     | SUNY College at Plattsburgh     |
| Coppin State University                     | Medaille College                        | SUNY College at Potsdam         |
| CUNY Bernard M Baruch College               | Mercy College                           | SUNY Empire State College       |
| CUNY Brooklyn College                        | Mercyhurst University                   | SUNY Institute of Technology at Utica-Rome |
| CUNY City College                           | Metropolitan College of New York        | SUNY Oneonta                    |
| CUNY Hunter College                         | Millersville University of Pennsylvania | The College of New Jersey       |
| CUNY John Jay College of Criminal Justice   | Misericordia University                 | The College of New Rochelle     |
| CUNY Lehman College                          | Molloy College                          | The College of Saint Rose       |
| CUNY Queens College                         | Monmouth University                     | The Richard Stockton College of New Jersey |
| Daemen College                               | Montclair State University              | The Sage Colleges               |
| Delaware State University                   | Mount Saint Mary College                | Touro College                   |
| DeSales University                           | Mount St Mary's University              | Towson University               |
| Dominican College of Blauvelt               | Nazareth College                        | Trinity Washington University   |
| Dowling College                             | Neumann University                      | University of Baltimore         |
| D'Youville College                          | New Jersey City University              | University of Maryland Eastern Shore |
| East Stroudsburg University of Pennsylvania | New York Institute of Technology        | University of Maryland-University College |
| Eastern University                          | Niagara University                      | University of Scranton          |
| Edinboro University of Pennsylvania         | Notre Dame of Maryland University       | University of the District of Columbia |
| Fairleigh Dickinson University-Metropolitan Campus | Nyack College                            | Utica College                   |
| Felician College                            | PA State University-Penn State Erie-Behrend College | Villanova University |
| Frostburg State University                  | PA State University-Penn State Harrisburg | Wagner College                  |
| Gallaudet University                         | Point Park University                   | Waynesburg University           |
| Gannon University                           | Ramapo College of New Jersey            | West Chester University of Pennsylvania |
| Georgian Court University                   | Robert Morris University                | Wilkes University               |
| Gwynedd Mercy University                    | Rochester Institute of Technology       | William Paterson University of New Jersey |
| Hood College                                 | Rosemont College                        | York College Pennsylvania       |
| Iona College                                 | Rowan University                        |                              |
| Ithaca College                               | Rutgers University-Camden              |                              |

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Appendix F

Mission Statement Improvement Guide

1. Develop a process to review and revise the institution's mission statement
2. Analyze the mission statement content
3. Develop accrediting region benchmarks
4. Share all recommendations and any changes to the mission statement

Diagram: Cycle of processes involving reviews, analysis, development, and sharing.