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Are There Whiter Shades of Pale in Marketing the Ivory Tower? An Examination of Differentiation in Institutional Public Service Announcements through Content Analysis

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ARE THERE WHITER SHADES OF PALE IN MARKETING THE IVORY TOWER? AN EXAMINATION OF DIFFERENTIATION IN INSTITUTIONAL PUBLIC SERVICE ANNOUNCEMENTS THROUGH CONTENT ANALYSIS

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by
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DEDICATION

To my mom, who taught me to be confident and independent in so many ways, not the least of which was making me call in pizza orders as a child.

To my dad, for passing on to me his sense of humor and storytelling ability. They have served me incredibly well in all aspects of my life.

And to Jeff, for filling my life with laughter and music.

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ABSTRACT

This study explored the public service announcements (PSAs) produced by institutions of higher education that competed in the National Collegiate Athletic Association's 2013-14 post-season football bowl games. Utilizing content analysis and survey results, the researcher examined the level of content distinction between and within institutional groups based on athletic conference, Carnegie classification, total student enrollment, and primary target audience. The researcher also investigated the role the PSAs played in marketing campaigns conducted by the institutions and the additional marketing strategies used in those campaigns. The analysis showed limited distinction between institutional groups and little to no distinction within groups. Further, the study revealed moderate use of marketing campaigns, with a wide range of marketing strategies utilized within them.

CHAPTER ONE: INTRODUCTION

The United States' economic downturn of 2008 and lingering weak recovery have exerted a three-pronged financial effect on institutions of higher education (IHEs). Flat or reduced appropriations from state legislatures (Grovum, 2013; Illinois State University, 2013; Kiley, 2013), weak endowment earnings and fundraising results (Moody's, 2013; NACUBO, 2013; Stuart, 2013) and declines in traditional student populations (Martin, 2013; Reuters, 2013; Schnoebelen, 2013) have all placed financial pressure on IHEs, particularly publicly supported ones. As a result, higher education has seen a steady escalation in tuition, steep competition for the waning numbers of traditional-age college students, and an increased importance of alumni engagement.

With increased competition for the active engagement of their varying constituencies, the importance of effective marketing is at its greatest height for IHEs. However, institutions face a myriad of challenges in building and executing effective marketing plans. Many in the faculty and administrative ranks of higher education find marketing distasteful, believing it more fitting for commodities than for the experience of education (Gibbs, 2007). As Lauer (2002) explained, "The conventional wisdom for many in higher education used to be that advertising was too expensive, and that if you had to use it you were probably in trouble. Those who advertised were seen as desperate" (p. 107). Further, IHEs are faced with trying to market an indistinct service to a diverse group of constituents (Anctil, 2008; Harris, 2009).

Although the need for quality marketing may be at an all-time high, it is not a new phenomenon. More than 40 years ago, A. R. Krachenberg (1972) asserted that higher education was already in the business of marketing, but the marketing was not being executed well. He identified issues of a lack of distinctiveness between institutions, the failure to address the needs

of different market groups (including prospective students, alumni, lawmakers, and the general public), and an isolated rather than cohesive approach to promotional efforts. Unfortunately, these issues continue to be seen in most aspects of university marketing (Goldgehn, 1991; Newman, 2002).

This study sought to analyze one common form of marketing for IHEs: the public service announcements (PSA) televised during intercollegiate football broadcasts. Aired at no charge to the institution as part of the broadcasting contract, these 30-second "commercials" give institutions the opportunity to highlight their best qualities to the audience. Unfortunately, a single 30-second ad cannot effectively appeal simultaneously to both a 17-year-old prospective student and a middle-aged alumnus. Yet many institutions identify a broad intended target audience for their institutional PSAs (Wolfe, 2012). This study examined the extent to which institutions addressed Krachenberg's three areas of concern (institutional distinctiveness, audience targeting, and development of campaigns) with their PSAs.

Background

Need for Marketing of Higher Education

Following a peak in 2011, the population of high school graduates in the United States is currently in decline, heightening the competition between institutions for student enrollment (Prescott & Bransberger, 2012). Not only are there fewer students to recruit, but the increasing role of online college search resources has led to an explosion of stealth applicants: students whose first known contact with a university occurs when they submit an admission application (Hoover, 2008). More than any other time in history, name recognition and top-of-mind awareness of a university serve as drivers in a student's college search, and the visibility

provided by effective marketing can not only heighten this awareness but can also increase a student's likelihood to apply to and enroll in a particular institution (Pope & Pope, 2009).

Further, the benefits of marketing in higher education can extend beyond increased student enrollment. The University of Maryland, with its *Zoom* campaign launched in 2001, targeted "powerful and affluent constituents in the 35- to 54-year old age group" (Pulley, 2003). Through this focus on branding, Maryland saw significant increases in alumni and donor support and involvement.

Additionally, the public perception of an IHE can influence the level of support given by state legislators and community leaders. Toma (2003) saw athletics, external relations (marketing), and the university president as playing important roles in this realm of constituency building:

> At public universities, spectator sports offer a particularly useful tool in state relations. As with all external relations functions, the primary use of football in state relations is *to help people from the state capital become more familiar with the university—and thus more loyal to it and supportive of it* [emphasis added]. Even as state appropriations decline at many institutions as a percentage of the overall budget, these funds continue to be essential to the operation of public universities. Accordingly, the success of any public university president will depend on his or her success working with influential people in the state capital. (p. 231)

As student enrollment, alumni involvement, and state support become more critical to the success and survival of IHEs, the need for effective marketing will continue to grow.

Challenges in Higher Education Marketing

Lack of distinction. Multiple writers have emphasized the challenge IHEs face in distinguishing themselves from other institutions (Anctil, 2008; Harris, 2009; Moore, 2004; Natale & Doran, 2012; Strout, 2006; Tobolowsky & Lowery, 2006; Toma, 2003; Townsend, Newell, & Wiese, 1992). Indeed, when each institution is selling a degree, only the most venerable ones (e.g., Harvard, Yale, Duke) can stand on name alone as having some level of distinction. As Toma (2003) explained:

> Apart from particular collegiate traditions, like those linked directly with spectator sports, large state universities often look alike, act alike, sound alike—and smell alike (particularly where there are agriculture schools) to the average person. Even those who work in academe are unlikely to know how the overall academic programs at places like the University of Nebraska differ from other flagship state universities on the Great Plains—Iowa State University, the University of Kansas, the University of Oklahoma….Even colleagues in the same discipline at other universities are unlikely to be able to identify how these programs are distinctive, although they are likely to know the work of selected colleagues. Even for those in the higher education industry—and undoubtedly for others—it is football and geography that give these institutions unique identities in a national context. (p. 96)

When institutions lack distinctiveness, those charged with their marketing face an incredible challenge. Instead of distinguishing itself through its product, the institution must use other, less important factors (name, logo, location, tag line) to make itself stand out among the competition (Natale & Doran, 2012). Although this may be effective in the selling of commodities, where the

investment of money and time are minimal, these criteria are not sufficient for a student to select a particular institution to attend. Therefore, the marketing message must be compelling: "From the student's perspective, it is difficult to evaluate higher education as a consumer product and, for many students, the brand image of the institution as presented in such materials as the view books becomes the deciding factor" (Natale & Doran, 2012).

Intangibility. Because higher education is a service rather than a product, it is an inherently intangible experience that is variable even among students at the same institution in the same area of study. Even though institutions can show activities related to pursuing an education, it remains, as Anctil (2008) said,

> ….an intangible product that largely depends on a diploma as the only tangible evidence of the lived experience and learning that occurred—which is not to suggest that there are no tangible characteristics of a college or university. Finding and marketing them, however, requires more creativity than marketing a widget that people can plainly see, evaluate, and use. (p. 31)

Further, the intangible nature of education makes image and brand development even more critical for marketing success (Onkvisit & Shaw, 1989). Anctil (2008) identified three areas in which universities can obtain tangibility: academics, amenities/perceived social life, and athletics. However, each of these areas is limited in the ways it can be illustrated, leading to significant overlap in the type of imaging institutions use in PSAs. A study of 64 PSAs from the 2011-12 National Collegiate Athletic Association (NCAA) football bowl season found that 57 (89%) used at least one of Anctil's three areas of tangibility in their visual imagery (Wolfe, 2012).

Another implication of the intangibility of higher education is the use of proxy measures to assess the quality of an institution. Students associate a variety of characteristics including winning athletic teams (Anctil, 2008; Toma, 2003; Zemsky, Wegner, & Massy, 2005), history and tradition (Harris, 2009) and "impressive buildings with ivy-covered walls" (Brewer, Gates, & Goldman, 2002, p. 19) with academic quality, as quality itself is difficult to measure. Even the college rankings that attempt to provide varying quantitative assessments of the relative quality of institutions — such as those produced by *US News and World Report*, the *Princeton Review* and *Forbes* — utilize proxy quality measures such as alumni giving (Gladwell, 2011) and require significant investments of resources to affect any real change in standing (Gnolek, Falciano, & Kuncl, 2014). Further, none of these measures can account for the concept of "fit" in the selection process, a key factor in student satisfaction and success (Allen, 2014; Wiese, 1994), which is another intangible aspect of the collegiate experience.

Lack of effective marketing practices. Many factors contribute to the shortcomings of higher education marketing including ineffective planning, resistance by faculty and administration, and lack of resources dedicated to marketing (Jugenheimer, 1995). In a 1991 study of marketing techniques used by universities, Goldgehn found that nearly a quarter of institutions failed to utilize market segmentation and fewer than half used advertising research in the development of their marketing strategies. A 2002 study discovered that less than half of the institutions surveyed had an institution-wide marketing plan (Newman). When a university's marketing and advertising strategy is based on something other than quality market research, it is more likely to be a "complete waste of time, money and effort" (Jugenheimer, 1995, p. 13).

Further, institutions have to overcome the resistance that exists among their internal stakeholders who often feel that advertising commoditizes education (Gibbs, 2007; Pulley,

2003). Faculty may not prevent an institution from advertising, but they need to be supportive of the advertising claims that are made so there is not a disconnect between the institution's assertions and the services they deliver (Jugenheimer, 1995). If marketing messages portray an institution as having caring faculty who get to know their students, faculty need to demonstrate this or students will feel mislead.

Finally, nonprofit higher education institutions rarely invest heavily in marketing and advertising. Some estimates indicate that nonprofit institutions dedicate up to 5% of their total operating budgets on marketing, whereas for-profit institutions spend approximately 20% of their budgets on marketing (Strout, 2006). This underfunding presents a significant barrier to effective marketing, as institutions not only compete with each other for students' attention, but they also must stand out among other industries investing much more heavily on their advertising strategies (Hesel, 2004; McGrath, 2002).

Brand development. The concept of a brand is a simple one: "a distinguishing name and/or symbol (such as a logo, trademark, or package design) intended to identify the goods or services of either one seller or a group of sellers, and to differentiate those goods or services from those of competitors" (Aaker, 1991, p. 7). Yet universities struggle with the execution of brand development. The successful development of a distinctive and known brand offers incredible value and benefits to institutions, as consumers (or potential students) will gravitate toward known brands and spend little time investigating unknown ones (Brewer et al., 2002; Macdonald & Sharp, 1996/2003). Further, success in branding allows an institution to move from interruption marketing, where message upon message is sent to the target audience hoping to eventually break through, to permission marketing where the target audience welcomes and even invites more messaging and information (Sevier, 2001). Intercollegiate athletics, particularly

Division I football and men's basketball, often serve as the basis of an institution's public image, largely due to the widespread visibility they offer (Anctil, 2003, 2008; Brewer et al., 2002; Harris, 2009; McDonald, 2003; Potter, 2008; Sperber, 2000; Toma, 2003; Zemsky et al., 2005). Ultimately, though, an institution's brand must communicate "the real merits of the institution and the value it holds" for its stakeholders (Moore, 2004, p. 61). It is imperative that institutions utilize effective branding strategy if they are to accomplish this key goal.

Statement of Problem

There are myriad ways IHEs attempt to communicate with and influence their constituents, from traditional print publications to a wide range of social media platforms. Communication plans built on face-to-face meetings, telephone calls, direct mail pieces and email correspondence are commonplace in admissions, university marketing, and advancement offices. For the 125 institutions who compete in the NCAA Football Bowl Subdivision (FBS), football season brings varying numbers of regionally and nationally televised games. Along with the exposure that comes from three-plus hours of a television appearance, institutions receive a complimentary airing of a 30-second PSA promoting their institution during each telecast. Broadcast on a variety of national networks, particularly by the ESPN and FOX conglomerates, collegiate football games are aired every Thursday through Saturday from late August to early November, followed by postseason bowl games in December and January. In the fall of 2013, 505 regular season and conference championship games and 35 bowl games featuring 154 different teams were broadcast to a national or large regional audience (Sports Media Watch, 2013). These audiences ranged from an average of 62,000 viewers on the NBC Sports Network to 7.35 million on CBS (Karp, 2013), providing universities brand promotion opportunities that are unmatched by any other strategy they employ. However, the messages within these PSAs

often lack distinctiveness that would set them apart from the thousands of other institutions searching for new students, larger donations, and greater legislative support (Tobolowsky & Lowery, 2006). Only a few studies have examined the content of collegiate PSAs (Clayton, Cavanagh, & Hettche, 2012; Harris, 2009; Tobolowsky & Lowery, 2006, 2014), with three focusing on the PSAs appearing in bowl game broadcasts (Harris, 2009; Tobolowsky & Lowery, 2006, 2014). This study further contributed to the body of research exploring the content of institutional PSAs, and examined previously uninvestigated relationships between the PSAs, institutional identity, target audience, and marketing strategy.

Research Questions

In order to determine whether institutions are addressing the marketing concerns presented by Krachenberg (1972), the following research questions were explored:

1. To what extent is there distinction in the content of the PSAs relative to institutional characteristics so as to differentiate institutions within and between athletic conference groupings, Carnegie classifications, and enrollment ranges?
2. To what extent is there distinction in the content of the PSAs when examined within and between groupings based on the intended target audience as identified by the sponsoring institution?
3. To what extent are the PSAs part of a comprehensive marketing campaign, and what other marketing strategies are utilized along with the PSA in these campaigns?

Definitions

Institution of higher education (IHE) - a college or university that awards bachelors degrees. This study excluded community colleges and those that primarily award associates degrees.

Public service announcement (PSA) - a 15- to 60-second video production sponsored by a college or university to promote the institution to a variety of potential viewers. Historically, these promotional spots have been considered PSAs (as opposed to 'commercials') due to the non-profit status of the colleges and universities producing them. However, in this study, the terms *PSA*, *ad*, *commercial*, and *spot* were used interchangeably.

Message device - the visual or auditory factors used to portray various aspects of an institution's image in a PSA as established by Clayton et al. (2012).

Significance of Study

In the first half of 2013, colleges and universities invested $570.5 million in paid advertising, with more than half ($302.0 million) coming from non-profit institutions (Brock, 2013). Further, a survey by Lipman Hearne (2010) found the median marketing spending for IHEs with 6,000 students or more increased from $620,540 (in 2010 dollars) in fiscal year 2001 to $1,400,000 in fiscal year 2009. With growing financial investment in marketing, university administrators, especially those in the areas of university communications and marketing, should be concerned that the time and money being devoted to the production and delivery of advertising and marketing materials are sufficiently distinguishing the institution between audiences and from its peers. Further, it is imperative for university presidents to recognize the crucial role of marketing in institutional competitiveness and lead the institution's efforts in integrated marketing. As Lauer (2002) explained, such initiatives "will not get very far without presidential leadership and cooperation from the executive cabinet. It is a total institutional enterprise that works when top leadership is not only on board, but when they are leading the way" (p. 46). Leaders who do not support and provide appropriate resources to marketing efforts

may find their institution lagging in enrollment, alumni engagement, donations, and legislative support (in the case of public institutions).

Significant financial and human resources are expended each year by institutions in the production of the PSAs they submit to television networks as either paid advertising or in-kind benefits from sporting event broadcasts. As colleges and universities face dwindling resources and increased competition for enrollment, communications officers should strive to maximize the positive impact of their PSAs by creating a distinctive image, crafting the message for a specific audience, and integrating them into larger campaigns.

Additionally, leaders from all levels need to recognize the importance of their own role in communicating the critical qualities of their institutions. As Anctil (2008) challenged those in leadership positions:

> As we make our way deeper into the new realities of higher education, we are embarking on an era marked by dwindling support and increased competition; it is incumbent on administrators and higher education leaders at colleges and universities to broadcast who they are, what they do, and what makes them valuable. The business of higher education depends on it. (p. 100)

Particularly for institutions' top officers, today's expectations include being the university's "public face, representing them to students as well as parents, government officials, and donors" (Gardner, 2015). Yet all in university leadership positions, from directors to deans, provosts to presidents to trustees, must champion the institution's marketing efforts, recognize quality work in communications, and be active partners in the effort to share the institution's qualities with the world.

Limitations of Study

This study included only institutions from the NCAA's Football Bowl Subdivision (FBS) whose football teams were awarded berths in the 2013 post-season bowl games, as these games were broadcast to a national audience and thus provided the greatest potential for variety among intended target audiences. Due to a number of varying institutional factors among schools in the Football Championship Subdivision (FCS), Division II, and Division III classifications of the NCAA, this study may not be applicable to institutions outside of the FBS. This study did not consider the level of institutional resources dedicated to the production of the PSA, including whether an advertising agency or marketing firm was involved in the development or production of the PSA. It should be noted that in the 2014 football season, the NCAA replaced the Bowl Championship Series with the College Football Playoff that expanded the number of bowl games from 35 to 39 (National Collegiate Athletic Association, 2014). Further, athletic conference affiliation was based on the 2013-14 season rather than the conference membership of each institution at the time of this study.

Summary

The environment of higher education is highly competitive, one in which institutions must set out to be distinctive if they are to successfully attract students, gain new donors, and convince policy makers to support their efforts. Though many universities have been resistant to implementing marketing plans and few significantly invest in the promotion of the institution, more and more administrators are realizing the necessity of effective marketing and advertising. Whereas intercollegiate athletics provide visibility far beyond that of academic departments, allowing "schools to showcase the whole campus on a national platform" (Anctil, 2003, p. 58), university leaders would be well-advised to capitalize on media exposure through athletics. The

airing of institutionally-sponsored PSAs during football broadcasts is one way in which universities can build their brand beyond athletics. However, the extent to which institutions are building distinctive messages, clearly focusing on target audiences, and building broad campaigns needs to be explored. By analyzing the content of institutional PSAs and exploring the role they play in the larger marketing mix, this study will take an important step in determining whether universities have progressed beyond the shortcomings of higher education marketing first identified more than 40 years ago.

CHAPTER TWO: REVIEW OF THE LITERATURE

Introduction

Institutions of higher education (IHEs) have four primary streams of revenue: student tuition, state support, private donations, and research funding (Anctil, 2008; Brewer et al., 2002), and all have become more difficult to obtain, leading to "greater academic commercialization and increased pressure on institutions to develop marketing plans and business models" (Anctil, 2008, p. 28). With the exception of research funding, which is overwhelmingly awarded through grant application processes, these revenue sources are subject to being influenced through effective marketing and the strength of the institutional brand:

> Institutions must convince tuition-paying students (or their parents), private donors, and state legislators (if public) that they are worthy of support. These characteristics make building institutional identification—both internally (with students) and externally (with alumni)—and enhancing the equity that comes with a strong brand so critical. (Toma, Dubrow, & Hartley, 2005, p. 7)

Indeed, building awareness of a strong, positive brand identity should be the goal of every IHE's marketing or communications office. As the varying constituencies decide whether to enroll in, donate to, or lend political support to an institution, the perception they have of the university can be just as or even more influential than objective, factual information related to their decision (Aaker, 1996; Toma, 2003; Toma et al., 2005). These perceptions can be significantly influenced through branding and marketing efforts. Although many in academia, particularly faculty members, bemoan marketing as a sign of commercialization of education (Gibbs, 2007; Pulley, 2003), effective branding can actually counteract the commoditization of higher education by creating distinctiveness beyond just the difference in the cost of attendance (Aaker, 1991).

Specifically, the benefit of developing a distinctive brand is "to reduce the primacy of price upon the purchase decision, and accentuate the basis of differentiation" (Aaker, 1991, p. 8).

Although many in higher education leadership are recognizing the value effective marketing can bring to an institution within today's highly competitive landscape, institutions face incredible challenges in executing such strategies. First, IHEs are markedly similar in many ways and "exhibit remarkable homogeneity in basic missions and educational agendas" (Townsend et al., 1992, p. 1), making it difficult for an institution to stand out in a crowded market. Second, education is an individual process that is inherently intangible, and therefore difficult to portray directly through advertising media (Anctil, 2008). Instead, institutions have to rely on showing the activities *related to* obtaining an education. Third, the constituencies IHEs must appeal to—prospective students and their families, alumni, potential donors, internal audiences, institutional and state policymakers, and more—represent widely varying demographics and levels of interest related to an institution. The medium and message that would best appeal to a prospective freshman are quite different than those that would appeal to a state legislator. Fourth, institutions often fail to dedicate the human and financial resources needed to develop and execute marketing plans, perhaps because of a fundamental misunderstanding of effective advertising and marketing strategy (Brook & Hammons, 1993; Goldgehn, 1991; Jugenheimer, 1995; Kittle, 2000; McGrath, 2002; Newman, 2002). Yet institutions can look to the corporate realm, particularly in the area of service marketing, for best practices and leverage the visibility that accompanies intercollegiate athletics into strong institutional brands.

Increased Competition

For much of the history of higher education in America, college enrollment was limited to the privileged of society. A handful of institutions served a small segment of the population, and geography and family tradition largely dictated where a student would enroll. Institutions had no real need to promote themselves in order to enroll students. However, as higher education opened its doors to a more diverse student population and federal financial aid programs such as the GI Bill, Pell Grant, and Stafford Loans were created, access to higher education exploded and institutions had an entirely new audience of potential students to attract. The Interstate highway system increased the physical accessibility of many locales, and the post-World War II economy increased family wealth. This combination of factors contributed to the following growth in higher education since 1940:

- From 1940 to 2010, the percentage of the United States population with a bachelor's degree expanded from 5% to 28% (United States Census Bureau, 2010).
- In 1940 there were 1,252 four-year colleges and universities in the United States (United States Census Bureau, 1975). This number increased by 122% to 2,774 in 2009 (United States Census Bureau, 2012).
- During the same period (1940 - 2009), the number of students enrolled in institutions of higher education increased 764% (United States Census Bureau, 2003, 2012).

Although the expansion of institutions was outpaced by the increase in the number of students enrolling in higher education, increased mobility and access to information broadened the scope of institutions students consider in their college selection process, heightening competition for enrollment. In 1990, 61% of students applied to three or more universities and 9% applied to seven or more institutions. By 2012, these percentages had increased to 77 and 28, respectively

(Weston, 2014). Meanwhile, the percentage of accepted students who eventually enrolled in an institution dropped from 49% in 2002 to 37% in 2009 (Weston, 2014). In the hunt for prospective students, institutions are facing greater competition as students invest their time and dollars (in application fees) in more institutions each year. In large part, this is due to the ease with which families can access information, ask questions, and compare qualities of institutions through online resources (Lauer, 2002). The competition for students is heightened by an overall decrease in the number of high school graduates immediately enrolling in college, created by a combined decline in both the number of high school graduates (Prescott & Bransberger, 2012) and in the percentage of those students who go to college directly from high school (US Department of Education, 2013).

Not only do institutions vie for student enrollment, active alumni participation, and donor and legislator support, they battle with a wide range of competitors, both in and out of the field of education. Universities can not focus solely on their peer institutions, as they compete with institutions of different types and sizes (Anctil, 2008). A single student may consider both public and private universities, those known for liberal arts as well as research, and a wide range of institutional sizes. Further, when executing marketing plans universities must realize that they also contend against all the other "enterprises attempting to push their brands and messages into the sensory overloaded hearts and minds of the same audiences" (Hesel, 2004, p. B9). Unfortunately, high-powered brands like Apple, Google, and Coca-Cola utilize much more sophisticated, frequent, and expensive marketing plans than universities could ever hope to execute (Hesel, 2004; Jugenheimer, 1995). Competition for support and enrollment has made higher education marketing a necessity, but to be effective institutions must recognize what they are fighting *for* and *against*.

Importance of Institutional Brand Awareness

Institutional brand awareness is another competitive advantage that can be developed through effective marketing and advertising (Anctil, 2008). Whereas this advantage can pay dividends among all constituencies, it is particularly crucial in the prospective student market. Hoover's (2006) article, "The Rise of 'Stealth Applicants,'" informed readers of *The Chronicle of Higher Education* about the rapidly expanding population of students whose first identified contact with an institution of higher education came from the submission of an admission application, not the more traditional student contact card or campus visit. Made possible by the vast information available on institutional websites and the ease of accessing online applications, stealth applicants increased from 23% of freshmen applicants in 2007 to 33% in 2012 (Noel Levitz, 2012). For transfer students, the phenomenon is even more significant, with 62% of 2012 transfer applicants using their application as their first contact with an institution (Noel Levitz, 2012). Dupaul and Harris (2012) conducted a qualitative study of 23 students enrolled in a private doctoral university who were stealth applicants to the institution for the 2009-10 academic year. Through the course of their interviews, they found that students are "naturally biased" toward schools with which they are already familiar (p. 12). Top of mind awareness then becomes a crucial aspect in the possible influencing of prospective students in the admissions process. Sevier (2001), put it this way:

> If they don't know you—and don't know what you are all about—you will not be included in their choice set because, in their minds, you are not a brand but a commodity. And because you are a commodity, prospective students, donors, and other audiences will differentiate you from other commodities on two variables: price and convenience. Instead of Sunkist, a trusted brand able to charge a higher price, you are, as someone once said,

just another orange. (p. 77)

In order to successfully build brand awareness, institutional administrators must first understand the levels of brand awareness Aaker (1991, 1996) identified as unaware of brand, brand recognition, brand recall, top of mind, and dominant, and constantly work to move their audiences to higher levels of awareness (Figure 1). Intercollegiate athletics, particularly football and men's basketball, typically move audiences from unaware of brand to brand recognition (Anctil, 2003, 2008; Toma, 2003), especially during television broadcasts that repeatedly show the participating institutions' names and logos, use shots of campus when entering or exiting commercial breaks, and share human interest stories about the competing athletes during pauses in the game's action.

Figure 1. Levels of Brand Awareness

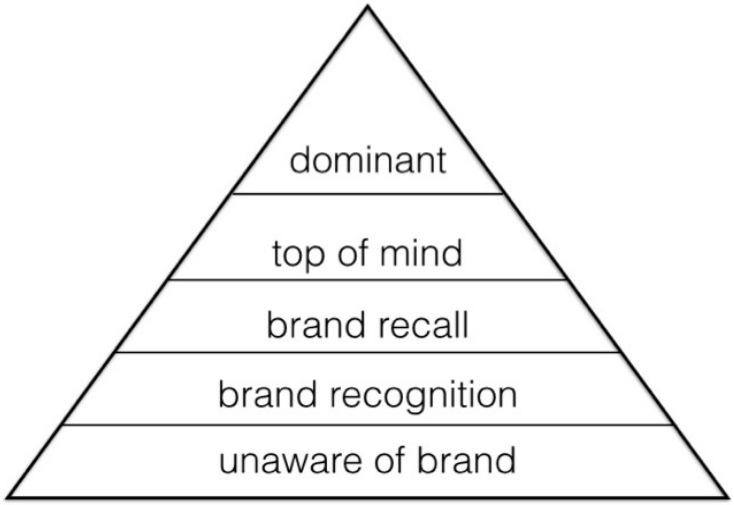

Figure 1: The progressive levels of brand awareness that build through increased positive exposure to the brand. Adapted from *Managing Brand Equity: Capitalizing on the Value of a Brand Name* (1991) and *Building Strong Brands* (1996) by D. A. Aaker. Copyright by The Free Press.

The fact that the broadcast itself creates brand recognition provides the opportunity for institutions to leverage their PSAs toward the communication of brand personality (Figure 2), because "it usually is wasteful to attempt to communicate brand attributes until a name is established with which to associate the attributes" (Aaker, 1991, p. 63).

Figure 2. Brand Personality Framework

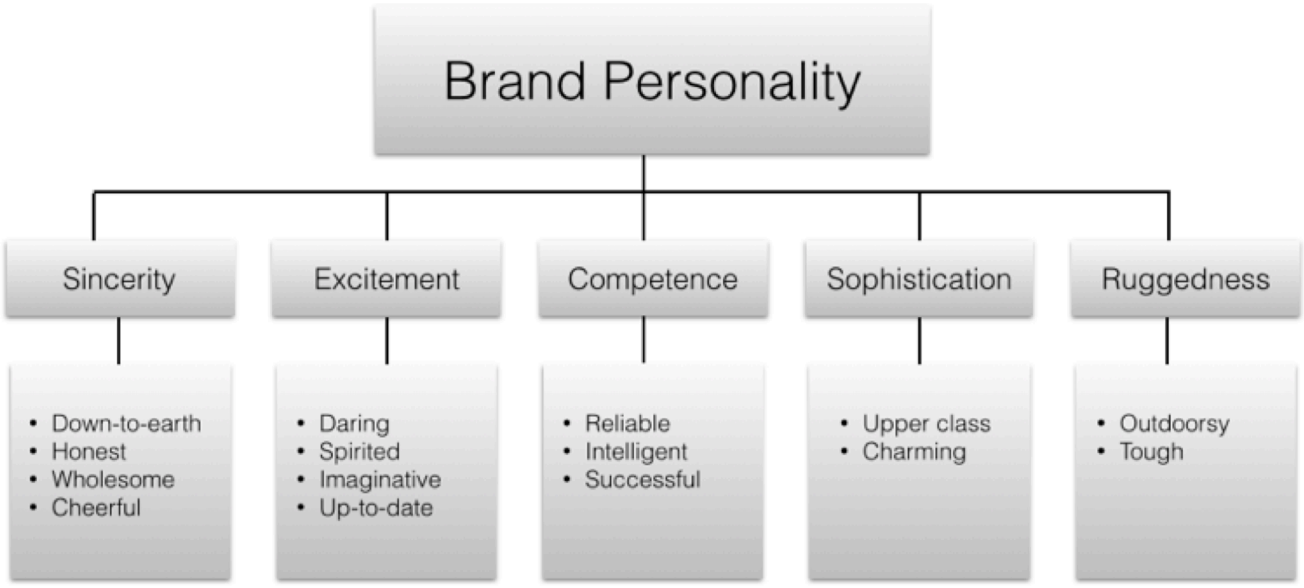

Figure 2: The five dimensions of brand personality and their qualities. Adapted from *Managing Brand Equity: Capitalizing on the Value of a Brand Name* by D. A. Aaker. Copyright 1991 by The Free Press.

Many positive outcomes result from increasing brand awareness through the levels of Aaker's (1991) awareness pyramid. First, audiences often assume that if they recognize a brand name, there must be a positive reason: it is successful, used by others, or has the resources to advertise extensively (Aaker, 1991; Macdonald & Sharp, 1996/2003). This favorable frame of reference can build to what Aaker (1996) called strategic awareness: being remembered for positive, rather than negative, reasons.

Second, greater awareness of an institution makes it more likely to be included in a consideration set of schools to attend or support. As it is not practical for a prospective student to research every IHE in the country, a small group of potential universities must be chosen for consideration. Aaker (1991) indicated that "brand recall can be crucial to getting into this group" (p. 67), and Macdonald and Sharp (1996/2003) stated that once a "consumer is aware of a number of brands which fit the relevant criteria, he or she is unlikely to expend much effort in seeking out information on unfamiliar brands. A brand that has some level of brand awareness is far more likely to be considered, and therefore chosen, than brands which the consumer is unaware of" (p. 1-2). In the realm of admissions, "even brief contact with a potential applicant could stimulate enough interest for a student to further investigate a school and submit an application" (Anctil, 2003, p. 144).

Third, the level of brand awareness can influence final decisions on engaging with an institution, particularly when the decision comes down to a few, very similar universities. As Aaker (1991) explained, "when there is no clear winner after extensive analyses…the strength of brand awareness can be pivotal" (p. 65). Though a high level of brand awareness cannot come from athletic broadcasts alone, they can play a major role in establishing the brand awareness necessary for an ultimate positive decision on institutional engagement.

Finally, brand awareness must occur before a student can consider brand equity, found by Mourad, Ennew, and Kortam (2011) to exert significant influence on students when selecting a university. In their study of 135 prospective university students and 165 current university students in Egypt, Mourad et al. (2011) found the symbolic attributes of an institution—social image, personality (exhibiting characteristics such as honesty), price (as associated with value), tradition, and history—played the greatest role in building a student's sense of brand equity,

which Aaker (1996) described as the assets, such as name awareness, brand loyalty, and perceived quality, that contribute value to the brand. In other words, brand equity is the value of and associated with a particular brand, an important aspect in the college selection process.

Lack of Distinction Between Institutions

The average U.S. television viewer in 2014 could likely associate Flo with Progressive Insurance, "the gecko" with Geico, Aaron Rogers and the "Discount Double Check" with State Farm, and the "mayhem guy" with Allstate, but probably could not tell you which company would provide the best policy for his or her needs. Insurance is not a particularly distinctive product based on the originator, so companies such as State Farm and Geico utilize creative characters and personalities within their advertising to set them apart and garner attention from prospective clients.

Likewise, the "product" of a university degree (and the process involved in earning one) typically lacks distinction from one institution to the next. A quick review of university websites will reveal that institutions tend to promote the same qualities through their marketing — research, accomplished alumni, tradition, and national recognition — making it difficult for audiences to identify what makes a particular university different from the rest (Harris, 2009; Toma, 2003; Twitchell, 2004).

This lack of distinction in marketing materials was parodied through the commercials and promotional website for the 2013 Pixar movie, *Monsters University*. During the height of the 2012-13 collegiate football bowl season, Pixar released a commercial to promote the movie which modeled itself after the "typical" (Blumenstyk, 2006; Tobolowsky & Lowery, 2014) university public service announcement. In fact, if a viewer only listened to the voiceover and

did not see the visuals which included fanciful buildings and non-human students, they might believe that the spot was promoting an actual university. The script read as follows:

Narrator: Imagine an education where extraordinary comes standard. And the power that drives us can't be contained. Where those who embrace their history become those who create it. Imagine a university…

Student 1: Where I…

Student 2: Where I…

Student 3: Where I can be unique.

Student 4: In a family of thousands.

Student 5: Where I can love to learn.

Student 6: And learn what I love.

Narrator: Your future is knocking. Open the door. Monsters University. (Disney/Pixar, 2013)

Combined with visual components of aerial shots of campus, students in classrooms and the library, laboratories, and a crew team rowing down a river, this commercial perfectly modeled itself after institutional PSAs and in doing so, highlighted just how similar all these ads are. This ease of parody reflects the questions posed by Harris (2009): "What difference exists between institutions? If every institution is performing cutting edge research, has famous alumni, a rich tradition of excellence, and is nationally ranked, how are external audiences able to judge the quality of the institution (and its brand)?" (p. 294). Here is where effective branding is needed. A giant in the advertising world, Rosser Reeves, would reportedly meet with clients, pull two quarters from his pocket, and then tell the client that "his job was to convince the consumer that the quarter in this right hand was worth more than the one in his left" (Twitchell, 2004, p. 5).

Rather than making an institution distinctive, the primary characteristics of a university serve to associate it with a category: research, liberal arts, etc. (Moore, 2004). Therefore, to truly set itself apart, an institution must become incredibly focused and find unique elements that separate it from a crowded market. These factors may at first appear minor and may not be directly relevant to all fields of study offered by a university, but they can demonstrate some level of difference between institutions. As Tobolowsky and Lowery (2014) found, this could mean highlighting a unique attribute such as the University of Oklahoma's weather research center, or the scenic views that are found only at the University of Hawaii. Athletics can also provide institutional distinction and prestige (Anctil, 2003; Chu, 1989; Hart-Nibbrig & Cottingham, 1986; Potter, 2008; Sack & Staurowsky, 1998; Sperber, 2000; Toma, 2003). Fans recognize mascots, logos, and traditions (e.g. Notre Dame players slapping the "Play like a champion today" sign as they exit the locker room to the field before games), and success on the football field or basketball court will often translate to a feeling that the institution's academic programs are quality ones as well (Brewer et al., 2002; Zemsky et al., 2005).

A fair question to raise, in light of the similarities found in institutional marketing, is whether institutions truly want to be distinctive. Despite Aaker's (1991) warning that the "fatal error" in branding "is to be a 'me too' entry," (p. 158), the attempt to be everything to everyone is a common approach in higher education (Scarborough, 2007). It takes courage for an institution to truly work toward being distinctive in the marketplace, for once distinctiveness is achieved the scope of appeal is reduced (Townsend et al., 1992). A distinctive message will be more effective in drawing in the desired market, but it will also be more likely to dissuade those outside the target audience (Sevier, 2006).

Intangibility and Brand Image

As a service, education faces marketing challenges distinct from those of goods, namely in its intangibility, inseparability, variability, and perishability (Brook & Hammons, 1993; Enache, 2011; Zeithaml, Parasuraman, & Berry, 1985), with the greatest challenge arguably being that education is intangible. Indeed, a commercial cannot *show* an education. Instead, colleges and universities can only illustrate the activities *related to* obtaining a degree. Anctil (2008) identified three primary areas in which institutions can achieve tangibility for the collegiate experience: academics, amenities and social life, and athletics. Further, Harris's (2009) content analysis of bowl game PSAs revealed five recurring themes within the PSAs: campus characteristics, academics, co-curricular engagement, prestige building, and mission/purpose. Each institutional messaging device used in this study (adapted from Clayton et al., 2012), illustrates one or more of these themes (Table 1).

Table 1

Messaging Devices and Related Areas of Tangibility

Messaging Device (adapted from Clayton et al., 2012) *Altered from or added to original	**Area(s) of Tangibility** (from Anctil, 2008; Harris, 2009)
Scenic beauty	Campus characteristics
Students in classroom	Academics
Individuals in laboratory	Academics
NCAA athletics	Athletics, Co-curricular engagement
Non-NCAA athletics	Athletics, Co-curricular engagement
Fine arts*	Academics, Co-curricular engagement
Graduation	Academics, Mission/purpose
Alumni of distinction	Academics, Prestige building
Faculty of distinction	Academics, Prestige building
History/nostalgia	Prestige building
University administrator	Academics
Belonging	Amenities/social life, Co-curricular engagement
International reach	Prestige building
Study abroad	Academics, Mission/purpose
Student scholars	Academics, Prestige building
Student oriented	Amenities/social life, Co-curricular engagement
Spirit traditions*	Amenities/social life, Athletics
Campus amenities*	Campus characteristics, Amenities/social life
Geographic area*	Campus characteristics

These images can be used, along with the university name, logo, and colors, to establish a more tangible sense of an institution, solidify its image, and to develop its brand. Certainly, the near-constant showing of a school's symbols during the course of a football game broadcast provides an initial awareness of an institution's brand, but "acquiring, maintaining, and enhancing equity

in a brand — the value that results from it — requires strategy and execution" (Toma, 2003, p. 196).

It is quite easy to build an institutional image and brand on factors that are at best tangential to the actual quality of education. Some audiences will associate athletic success (Brewer et al., 2002; Toma, 2003; Zemsky et al., 2005), higher price/tuition (Aaker, 1996), or impressive and "collegiate" buildings (Brewer et al., 2002; Onkvisit & Shaw, 1989; Toma, 2003; Zeithaml et al., 1985) with academic quality. The issues with attempting to establish a brand with such qualities, however, are many.

First, such attributes are ubiquitous and easily surpassed by another institution (Aaker, 1996), weakening an institution's claim. Further, institutions face the temptation to promote as many of these attributes as possible. Aaker (1991) warned against this, saying:

> It is always tempting to try to associate a brand with several attributes, so that no selling argument or market segment is ignored. However, a positioning strategy which involves too many product attributes can result in a fuzzy, and sometimes contradictory, confused image. (p. 115)

It is important to remember that the narrower the focus, the stronger the brand; as Anctil (2008) advised: "The goals and expectations [of a branding campaign] should be clearly articulated and they should focus on a single or fixed outcomes. The goal is not to be everything to everyone" (p. 37). Achieving this focus is not easy work. In order for a brand to be authentic and lasting, it must be built on the strengths of the institution (Aaker, 1996). Often times, however, these strengths and values go undefined by colleges and universities (Zemsky et al., 2005). Toma et al. (2005) emphasized the need to identify institutional values:

> In higher education, strong brands are also linked to institutions having clear values that they articulate through a variety of forms. These institutions have distinctive identities — norms, values, and beliefs that they continually announce and reinforce through symbols, language, narratives and practices. (p. 34)

When executed properly, the identification and communication of an institution's core values will not only establish a strong brand, but will make the most intangible aspects of the educational process tangible.

Audience

More than perhaps any other service or product, the audiences IHEs seek to influence are diverse in demographics, geographic location, influence, and impressionability. Even singular categories such as prospective students are not homogeneous in their demographic makeup; there can be a significant range from the seventeen-year-old prospective freshman to an established professional seeking the credentials needed for a career change. Other key audiences include prospective faculty, current students and employees, alumni, donors, and policy makers from the institutional to the federal level. Market segmentation is essential for effective advertising and communication (Jugenheimer, 1995; Lauer, 2002; Newman, 2002), yet institutions often fail to differentiate their messaging for varying audiences.

Aaker and Joachimsthaler (2000) emphasized the need to establish a brand identity specifically for a *target* audience [emphasis added], yet Kittle (2000) found universities sometimes struggle with the prioritization of audiences. In a study of 59 colleges and universities advertising in local, regional, and national media, "several respondents" identified each of the 21 potential audiences as being "important" or "very important" in institutional advertising (Kittle, 2000, p. 50). In fact, more than half of the audiences (11) received an average rating of 4.0 or

higher on the 5-point Likert scale. A number of authors (Clayton et al., 2012; Furey, Springer, & Parsons, 2014; Harris, 2009; Herr, 2001) have discussed the veritable impossibility of creating a brand message that is equally appealing to all stakeholders, still institutions routinely fail to segment advertising for different audiences. This failure may be due in part to a fear of alienating non-target audiences (Ali-Choudhury, Bennett, & Savani, 2009). Aaker (1991) discussed the challenge of making:

> …an overt decision to ignore large parts of the market and concentrate only on certain segments, namely those interested in the associations selected for the brand. Such an approach requires commitment and discipline, because it is not easy to turn your back on potential buyers. Yet the effect of generating a distinct, meaningful position is to focus on the target segments and not be constrained by the reaction of other segments. (p. 164)

Clayton et al. (2012) also cautioned that "while directing messages to just one audience may alienate others, the result of trying to be all things to all people risks watering down the message and decreasing the efficacy of the communication" (p. 198). As Jugenheimer (1995) further explained, "To communicate effectively, one must know the audience: who they are, where they are, what they like and dislike, what may motivate or stimulate them" (p. 14).

Conversely, there is danger as well in developing completely different brand images for every potential audience, as this can lead to confusion. Because audiences overlap in every media, an institution's constituents are likely to be exposed to more than one brand image (Aaker, 1996). Lack of clarity in brand image is why Toma et al. (2005) advocated for the establishment of a strong institutional culture that can serve as a foundation for messaging to which all members of the university community can relate.

Complicating the issue for determining the ideal target audience for institutional PSAs is the opportunity bowl games present to reach a larger and more diverse audience than through almost any other advertising approach universities use (Clayton et al., 2012; Harris, 2009; Tobolowsky & Lowery, 2006). Silver (2011) reported that between 75 and 80 million Americans regularly follow college football. The CBS network averaged 7.4 million viewers per collegiate football game in 2013 (Karp, 2013) and the 2014 Florida State-Auburn Bowl Championship Series title game alone drew 25.6 million viewers (Crupi, 2014). Perhaps institutions would be wise to consider that their PSAs will, like all commercials, reach people who are not in the market for their services (Wells, 1993), and remember the advertisement will be most effective with those audience members who are familiar with or searching for information on the institution's attributes (Kirmani & Zeithaml, 1993).

Dedication of Resources to Marketing

Despite more than doubling the expenditures on higher education marketing from 2001 to 2009 (Lipman Hearne, 2010) and the majority of universities in a 2011 poll indicating an intent to increase marketing spending (Klie, 2011), higher education, particularly in the non-profit sector, invests relatively few dollars in marketing and advertising. In 2009, UCLA spent $1.25 million on its marketing campaign, which represented a meager 0.03% of the institution's operating revenue (Miley, 2009). Of course, in a time of limited resources, there is no question marketing expenditures can be controversial (McGrath, 2002). Further, it would be impossible for institutions to match the advertising investment of private companies. For instance, Anheuser-Busch spent $100 million a year for nearly a decade on the "For All You Do, This Bud's For You" campaign to make it the best-selling beer in the country by a 2-to-1 margin (Fickes, 2003). As institutions face increased financial pressures it can be difficult, if not

impossible, to muster the political will to invest greater human and financial resources into promoting the university, especially when it is so difficult to measure the effectiveness of advertising (Jugenheimer, 1995). However, not doing so in an age of twenty-four hour media is short sighted. As Hesel (2004) admonished:

> Higher education, with comparatively paltry means [compared to private industry] at its disposal, must spend every marketing penny as if it were the last. Intelligent, highly coordinated, tightfisted management of marketing activities is essential. Every activity must be part of an integrated scheme, each serving the same overarching strategic goals and communicating related themes and messages. Anything short of that enervates the entire effort. (p. B9)

Complicating the marketing resource issue is the fact that for many institutions, marketing efforts are decentralized with admissions responsible for prospective student outreach, alumni and donor communications conducted by the development team, and the university communications office charged with public relations and general awareness (Jugenheimer, 1995). Only recently have institutions committed to centralizing marketing efforts by establishing chief marketing officer positions (Miley, 2009; Morrison, 2013) and merging communications and enrollment management offices (Hoover, 2012). Not only can centralizing marketing efforts bring together disparate resources to strengthen buying power, it also lends greater consistency to the brand messaging and image, a crucial component in successful communications with higher education constituencies (Toma et al., 2005).

Effective Advertising and Marketing Strategies

A close examination of higher education marketing reveals significant disparities between established best practices in marketing and the actual strategies utilized in higher

education, in addition to the issues with clear audience identification discussed earlier in this chapter. These differences can be attributed to a number of possible factors, including a general distaste for advertising among faculty and administrators, a resistance to investing in something that is difficult to measure in terms of effectiveness, and a lack of familiarity with and understanding of advertising strategy (Jugenheimer, 1995). There are several areas in which universities can look to marketing and advertising best practices in order to effectively promote themselves to all of their constituencies.

First, universities need to conduct appropriate research to determine the best course of action with their advertising efforts. Goldgehn's (1991) survey of 791 members of the American Association of College Registrars and Admissions Officers (AACRAO) sought to determine both the use and perceived effectiveness of 15 marketing techniques. The results pointed to a consistent disconnect between execution of certain strategies and the precursors necessary for maximum effectiveness. Market positioning (defined as the "development of a strategy to clearly and positively differentiate the product…to find a niche in the marketplace") and marketing segmentation should both be utilized in the development of target marketing (Goldgehn, 1991, p. 49). However, Goldgehn found that while 90.7% of the institutions were utilizing target marketing, only 77.7% had conducted market segmentation, and only 75.3% carried out market positioning. Similar disparities occurred with advertising (76.9%) and advertising research (40.7%) as well as marketing plans (63.5%) often being developed without first conducting a marketing audit (31%) (Goldgehn, 1991).

In their study of 7 "successfully marketed" private colleges (as determined by enrollment growth and peer evaluations of marketing practices), Brook and Hammons (1993) found that despite their success in implementing marketing strategies, many institutions lacked

comprehensive marketing plans based on "sound services marketing principles" (p. 41). Newman's (2002) study of 367 chief admissions/enrollment officers at four-year colleges and universities also found a discrepancy between institutions claiming to engage in target marketing (84.5%) and those conducting market research (76.8%) and market segmentation (64.0%). This disconnect is an issue because:

> …standard marketing procedure dictates that one's ability to engage in target marketing is dependent upon and preceded by the practice of segmenting the market. This finding suggests a misunderstanding and misuse of the relationship between the two activities by at least one-fifth of the administrators at the responding institutions. (Newman, 2002, p. 21)

Bingham (1996) further admonished higher education institutions to conduct periodic market research, in part because of the change in student's needs, wants, and attitudes over time.

Second, institutions need to commit to long-term, consistent messages in their advertising. In a longitudinal study of the PSAs appearing in the Orange, Rose, Sugar, and Fiesta Bowls and the National Championship Game from 2003-2009, Tobolowsky and Lowery (2014) found that fewer than half of the institutions with multiple bowl appearances in that period used consistent themes in their PSAs from year to year. Yet best practices show that a well-crafted campaign can have years of success (Aaker, 1991; Martin, 1989; Rudd & Mills, 2011), and that messages must be received multiple times over an extended period in order to demonstrate measurable effects (Jugenheimer, 1995). The desire to "freshen up" tag lines and other marketing messages may be attributed to burn out on the part of internal constituents who hear and see the marketing materials over and over (Aaker, 1996), or a mistaken belief that the audience is tired of the advertising (Aaker, 1991). However, it is difficult to make an audience weary of a

particular ad or campaign message. Martin (1989) explained it thus: "Consumers are indifferent bystanders….There is too much clamor for their attention for them to tire of a specific advertisement. It won't happen unless they are bombarded by the same commercial, incessantly, over a short span of time" (p. 96-97). Further, Aaker (1991) cited studies showing "a positive relationship between the number of exposures and liking" (p. 65), and emphasized the importance of brand familiarity when a choice must be made between two very similar products or services.

Third, universities may be tempted to view the PSAs as throw away efforts, seeing as they are not paying for the airtime and they are aired in isolation. If the free airing is the only use of the spot, this is a valid consideration. As Jugenheimer (1995) explained, "if the advertisements are so small, so brief, so rare and so buried that they do not reach the threshold of the audience's attentions, there is no positive outcome and the advertising investment is wasted" (p. 9). However, if an institution uses the PSA as one component in a larger multimedia campaign, its reach and effectiveness can increase exponentially. As Aaker and Joachimsthaler (2000) advised: "Brilliant execution requires the right communication tools….One key is to access alternative media. The strong brands of tomorrow are going to understand and use interactive media, direct response, promotions, and other devices that provide relationship-building experiences" (p. 27).

To compliment their "Go Gator" PSA in 2011, the University of Florida created an outreach campaign that included print ads, a direct mail campaign, transparency boards in Florida airports, additional airtime buys for the PSA during state legislative sessions, and a virtual community (gogatornation.com) for alumni to share their U of F experiences (D. Williams, personal communication, April 10, 2012). This campaign utilized multiple media

forms while reaching out to all major constituencies including prospective students, alumni, and policy makers.

Finally, institutions must avoid the temptation of "me too" marketing and stand strong on their own identity. Aaker (1991) provided two cautions against claiming to be something the institution is not: "To create a position different from that which the brand delivers is extremely wasteful. It is also strategically damaging, as it will undermine the basic equity of the brand: Consumers will be skeptical about future claims" (p. 157). Moore (2004) echoed this warning about students (or parents) choosing a college based on advertised promises: "If you choose a college or university — or trust your child to one — based on the promise of a specific experience and then that promise is not fulfilled, the impact can be profound, embittering, and lasting" (p. 58). A marketing message that draws students in only to lead to disappointment damages the institution's image with current students, alumni, and members of the community.

Summary

The current competition universities face for students, support, donations, and funding is as high as it has ever been. While the economy continues its weak recovery and the number of high school graduates remains below the 2011 peak, these pressures do not show signs of lessening in the near future. Thus, the importance of a strong, effectively communicated institutional brand remains crucial in institutional success and even survival. Universities must overcome a long-held resistance to advertising (Gibbs, 2007) and dedicate the human and financial resources necessary to the effective promotion of the institution. If not, they risk falling into irrelevancy, or worse, insolvency. Certainly, there are many challenges including rapid changes in competition, difficulty in establishing distinction, a diverse set of target audiences,

and a lack of resources. Yet the consequences of failing to effectively market the institution are dire. Anctil (2008) succinctly described what institutions need to do:

> Strong institutional identity requires clearly recognizing one's organizational strengths, effectively communicating how one is different in a crowded marketplace, and building collaborative partnerships internally and externally to promote greater awareness and recognition among key stakeholders….
>
> Confronting an era marked by dwindling support and increased competition, administrators and higher education leaders at colleges and universities must broadcast who they are, what they do, and what makes them valuable. The business of higher education depends on it. (p. ix)

Institutions must maximize every opportunity to communicate their identity to all possible audiences. Not the least of these opportunities are the PSAs aired during football broadcasts. Further examination and study of these PSAs is a crucial step necessary to take full advantage of this national stage.

CHAPTER THREE: METHODS

Introduction

The effective marketing of institutions of higher education plays an increasingly important role in influencing key constituencies of prospective students, alumni, donors, and policy makers. Universities cannot match the financial investment large corporations commit to advertising and need to maximize every opportunity they have to promote their brand. One such opportunity is the public service announcements (PSAs) aired during televised football games. The purpose of this study was to determine whether these PSAs address the three areas of concern for higher education marketing identified by Krachenberg (1972):

1. To what extent is there distinction in the content of the PSAs relative to institutional characteristics so as to differentiate institutions within and between athletic conference groupings, Carnegie classifications, and enrollment ranges?
2. To what extent is there distinction in the content of the PSAs when examined within and between groupings based on the intended target audience as identified by the sponsoring institution?
3. To what extent are the PSAs part of a comprehensive marketing campaign, and what other marketing strategies are utilized along with the PSA in those campaigns?

This chapter presents the research design, selected population, content analysis instrument, data collection process, and data analysis methods employed to answer the research questions and develop effective recommendations for further study and strategies for university marketing and communications offices.

Research Design

To determine the extent to which the institutional PSAs provided distinctive content relative to institutional characteristics and intended target audiences, this study utilized ex post facto content analysis of the PSAs. Frequency counts of each message device as defined in the codebook (see Appendix B) were used to determine distinctiveness of each PSA within and between categories of institutions and audiences. Johnson (2001) described this research as descriptive non-experimental as there was no manipulation of variables and the research seeks to document the characteristics of a phenomenon, namely the content approaches used in each PSA.

Content analysis is a careful, close classification of the elements of a particular work that is systematic and objective (Holsti, 1969; Neuendorf, 2002). Holsti (1969) defined systematic analysis as the "inclusion and exclusion of content or categories…according to consistently applied rules" (p. 4). Systematic analysis was achieved in the present study by utilizing a priori coding where the categories were defined prior to the analytical process (Stemler, 2001). Likewise, utilization of explicit rules established the condition of objectivity by minimizing the possibility of influence from the analyst's presuppositions (Holsti, 1969).

More specifically, this study employed what Riffe, Lacy, and Fico (1998) called a quantitative content analysis of manifest content. The analysis is quantitative in that PSA content was reduced to numeric frequency counts for greater ease of statistical evaluation, and manifest in that coding focused on content that was physically present rather than indirectly represented and left to the coders' interpretation (Neuendorf, 2002).

In order to determine the target audience and the extent to which each PSA was part of a cohesive marketing campaign, institutional communications officials were surveyed during the process of identifying the PSAs (see Appendix C). Participants were provided multiple possible

responses to each question, with answers defined to reduce error due to individual respondents' interpretations of terms.

Population

In 2013 the Football Bowl Subdivision (FBS) of the National Collegiate Athletic Association (NCAA) consisted of 125 institutions affiliated with eleven conferences (Kirk, 2013). Of these, 70 were invited to compete in 35 bowl games at the conclusion of the 2013 season. The institutions that competed in the 2013-14 bowl games were identified as the population for this study, as each institution's PSA would be televised nationally at least once.

The researcher emailed the university marketing/communications office of each bowl competitor to request a video file (or online link to video) of the institution's PSA for the 2013 bowl game, identification of the audience(s) the institution sought to influence through the PSA, and information related to whether the PSA was part of a larger marketing campaign. Following Kittle's (2000) identification of key marketing audiences for higher education, institutions were given the following options for intended target audience: prospective students, alumni, potential donors, internal constituents, policy makers/political leaders, general public, and other (identified by the institution). Participants could select more than one target audience, but were asked to identify a single audience as being the most important to influence. Institutional representatives were also asked whether the PSA was part of a larger marketing campaign, and if so, to identify and describe the other strategies, media, and messages utilized in the campaign (Appendix C). Follow up requests were conducted by email and phone to increase institutional participation. Once an institution provided the information necessary for inclusion in the study, the institution's Carnegie classification, athletic conference affiliation, and 2013-14 student enrollment were

gathered from publicly accessible sources and recorded for inclusion in analysis (see Appendix D).

Instrument

For their 2012 study on institutional branding through PSAs, Clayton et al. developed a codebook to define various aspects of university life and experiences that could be portrayed visually or though auditory description. The researcher utilized this codebook for the content analysis, modifying one description in the codebook by changing "Performance arts" to "Fine arts" in order to include the depiction creating visual art. Further, "Spirit Traditions," the depiction of mascots, cheerleaders, bands, or other groups related to school spirit, "Campus Amenities," the depiction of amenities such as recreation centers, and residence and dining halls, and "Geographic Area," the city, state, and or region where the institution is located, were added as distinct items for study, for a total of 24 devices (see Appendix B). A checklist of all message devices was used by the reviewers to determine a simple present/not present status for each visual and auditory device (Appendix B). Coders also noted the content of a tag line (if present) and whether the PSA referenced a website and/or social media page.

PSAs from institutions not included in the study or from years other than 2013 were utilized for a beta test to determine inter-coder reliability. Measuring inter-coder reliability and establishing benchmarks for acceptable agreement is an important aspect of content analysis research (Lombard, Snyder-Duch & Campanella Bracken, 2002). Lombard et al. (2002) suggested using multiple indices and establishing minimum agreement levels that account for the conservativeness or liberality of the measure. For this study, average pairwise percent agreement and Fleiss's Kappa were used as inter-coder reliability measures. Average pairwise percent agreement is considered a liberal index, as it does not account for agreement due solely to

chance. Thus, a minimum demonstrated agreement of 80% was required for each coding example (Frey, Botan, Friedman & Kreps, 1991). Fleiss's (1971) Kappa is a three-coder variation of Cohen's (1960) Kappa for two coders that measures reliability beyond what would be expected from pure chance, making it a more conservative measure of inter-coder reliability. In both cases, the kappa value is calculated as $K = (Pa - Pc)/(1 - Pc)$ where Pa represents the proportion of units where the raters agree, and Pc is the proportion of units for which agreement is expected by chance. Using the benchmarks established by Landis and Koch (1977), where $K > 0.40$ indicates "moderate" agreement, beta testing continued until the coders consistently reached $K > 0.40$ and average pairwise percent agreement of 80% or greater when analyzing PSAs.

Data Collection

The 70 institutions of higher education that participated in 2013 post-season football bowls within the National Collegiate Athletic Association's Football Bowl Subdivision were identified for inclusion in the study. The communications/marketing office for each institution was contacted via email to request (1) access to a video file of the PSA used during the 2013 bowl season, (2) identification of the intended audience for the PSA, including the distinction of the primary intended audience, and (3) information related to the larger marketing campaign, if any, involving the PSA. Each email included an introductory message describing the purpose of the study, instructions for participation, and the means used to aggregate and summarize data to ensure confidentiality (Appendix C). Institutional representatives were also given the option to request the results of the study, regardless of their participation. The target return rate was 50% plus one (36 responses). Follow up requests by phone and email were made to ensure maximum participation. In all, 41 institutions participated in the study, resulting in a 58.6% response rate. Concurrently, two external coders and the researcher performed beta-test coding on PSAs from

institutions outside the population utilizing the established codebook. Fleiss's Kappa and average pairwise percent agreement results were utilized to ensure an acceptable level of inter-coder reliability before proceeding to the coding phase.

Once the participating institutions were determined, the coders were provided with access to all PSA video files through the file-sharing site Dropbox. Coders again utilized the established codebook and device check sheet (see Appendix B) to document the visual and auditory presence or absence of 24 depictions of the collegiate experience. Fleiss's Kappa and average pairwise percent agreement were again used to verify reliability. Any PSA with a $K < 0.41$ or an average pairwise percent agreement < 80% was flagged for recoding by the coder demonstrating the lowest level of agreement. Recoding occurred until the established benchmark values for agreement were reached.

Data Analysis

Descriptive statistics were used to analyze the data collected in the study. To address the first two research questions regarding the distinctiveness of content within and between institutional characteristic and intended audience groups, frequencies of each device appearance and the percent similarity of content were determined using SPSS 21 and ReCal3 (Freelon, 2010). SPSS 21 was utilized to calculate Chi-square significance for between-group distinction. To address the third research question related to marketing campaigns, descriptive statistics of marketing strategy frequencies were compiled.

Summary

This study utilized content analysis of PSAs produced by universities for broadcast during televised football bowl games. The visual and/or auditory presence of 24 aspects related to the college experience were compared to the target audience for each PSA and the profile of

each sponsoring institution to determine what relationships, if any, existed. Descriptive and inferential statistics were used to analyze the data through IBM SPSS Statistics 21 and ReCal3. Further, surveys of institutional communications officers revealed whether the PSA was part of a larger marketing campaign, and if so, what other marketing strategies were employed in the campaign.

As competition for students, charitable donations, and legislative support increases among universities, the branding and image of each institution plays a larger role in its relative success. The PSAs aired during football bowl games reach large and broad audiences. Whether the PSAs are distinctive relative to the intended audience and the institutional profile will play a significant role in whether they can successfully reach their audience and make the sponsoring institution stand out from its competition.

CHAPTER FOUR: PRESENTATION AND ANALYSIS OF DATA

Introduction

This study was designed to examine the public service announcements (PSAs) produced by institutions of higher education participating in the 2013-14 National Collegiate Athletic Association (NCAA) football bowl games. Particularly, the researcher sought to analyze distinctiveness of PSA content relative to a number of factors: athletic conference membership, Carnegie classification, total student enrollment, and identified PSA target audience. The researcher further studied the role the PSAs played in comprehensive marketing campaigns and other media utilized by institutions in those campaigns. Specifically, the researcher gathered and analyzed data in order to answer the following research questions:

1. To what extent is there distinction in the content of the PSAs relative to institutional characteristics so as to differentiate institutions within and between athletic conference groupings, Carnegie classifications, and enrollment ranges?
2. To what extent is there distinction in the content of the PSAs when examined within and between groupings based on the intended target audience as identified by the sponsoring institution?
3. To what extent are the PSAs part of a comprehensive marketing campaign, and what other marketing strategies are utilized along with the PSA in those campaigns?

This chapter presents and analyzes the data collected through institutional surveys and PSA content analysis.

Population Profile and Demographics

The researcher identified the 70 institutions appearing in 2013-14 NCAA bowl games and utilized online institutional directories to obtain email and phone contact information for key

staff members in university communications/marketing offices. An initial inquiry was emailed along with the survey instrument to the identified contacts on November 18, 2014 (Appendix C). Eleven institutions (15.7%) responded with fully completed surveys following this first contact. A second email inquiry sent on December 1, 2014 (Appendix C), resulted in an additional 20 completed surveys, bringing the response rate to 44.3%. Finally, the remaining institutions that had not returned the survey nor actively declined participation in the study were contacted by phone, leading to 9 additional completed surveys. In all, 41 institutions elected to participate in the study (58.6% participation rate), 7 institutions actively declined participation, and 22 did not respond to the survey. A complete list of participating institutions, their 2013 athletic conference affiliation, Carnegie classification, and total student enrollment can be found in Appendix D.

Content Analysis Procedure

Each of the 41 participating institutions provided access to their 2013 PSA by sharing the URL of the website hosting the spot or by emailing a video file of the commercial. The researcher and two additional trained coders utilized the approved codebook to analyze the content of each PSA. The researcher utilized ReCal3, an intercoder reliability program developed by Deen Freelon to calculate the Fleiss Kappa and average pairwise percent agreement of the coding results (Freelon, 2010). Values of kappa = 0.41 (Landis & Koch, 1977) and pairwise percent agreement = 80% (Frey et al., 1991) were established as minimum values for acceptable intercoder reliability. Any PSA with a kappa < 0.41 or average pairwise percent agreement < 80.0% was flagged for reevaluation by the coder with the lowest agreement level and repeated until the benchmark kappa and percent agreement levels were reached. The final intercoder reliability values for each PSA are listed in Appendix E.

Overall Content Analysis

Frequency counts of the presence of all 48 visual and auditory devices within the 41 PSAs studied revealed the ten most frequently used devices as scenic beauty - visual (present in 29 PSAs), belonging - visual (21 PSAs), fine arts - visual (20 PSAs), individuals in laboratory - visual (19 PSAs), future opportunities - auditory (18 PSAs), NCAA athletics - visual and spirit traditions - visual (17 PSAs), and research accomplishments - auditory, human knowledge - auditory, and international reach - auditory (15 PSAs). Six of these devices were also among the ten most frequently used devices in the Clayton et al. (2012) study. Five auditory devices—university administrator, graduation, non-NCAA athletics, individuals in laboratory, and students in classroom—were not present in any PSA studied. In all, 10 of the 48 devices studied appeared in a third or more of the PSAs. On average, a PSA featured 5.76 different visual devices and 3.17 auditory devices, which is markedly higher than the average of 3.86 total devices Clayton et al. (2012) found in their study. A full listing of all devices and the frequency of their use is provided in Appendix F.

Research Findings

Research Question 1: To what extent is there distinction in the content of the PSAs relative to institutional characteristics so as to differentiate institutions within and between athletic conference groupings, Carnegie classifications, and enrollment ranges?

For the purpose of this study, institutional profile was defined as an institution's 2013 athletic conference affiliation (Kirk, 2013), Carnegie classification (Indiana University Center for Postsecondary Research, 2010), and total student enrollment for the 2013-14 academic year (US Department of Education, 2014). Due to small individual group sizes, the Carnegie classifications of Master's Large (four institutions) and Doctoral/Research Universities (two

institutions) were combined into one group for comparison purposes. Also, the Mountain West conference (two institutions), Sun Belt conference (two institutions), and the lone Independent institution were grouped together as "Other" conference for the between conference comparisons and excluded from the within conference analysis.

Frequency counts of content devices within institutional groupings and Chi-square analysis of significance between institutional groupings were obtained through SPSS 21. For within group comparisons, a unique content percentage was calculated for each PSA in comparison to other PSAs in the same group. Those with unique content of 50% or greater were designated as distinctive within a characteristic grouping. A summary of these results is provided here, with additional statistical data found in Appendix G.

***Content distinction between institutional profile groups*.** To determine whether there was significant difference in PSA content between groups in the athletic conference, Carnegie classification, and enrollment categories, SPSS 21 was utilized to calculate Chi-square significance for all content devices (Appendix G). Utilizing a $p < 0.05$ level of significance, the researcher found seven cases of content distinction between institutional profile groups.

The first distinction found was geographic area - visual in the conference grouping. The cross-tabulation for this device (Table 2) shows the Pac 12 conference distinguishing itself from the other conferences with 100% of the institutions featuring visual depictions of their surrounding geographic area, whereas a majority of the other conferences did not utilize this device at all.

Table 2

Cross-tabulation of Geographic Area – Visual Device by Athletic Conference

Conference	Not Present	Present
ACC	6	0
American	3	1
Big 10	4	1
Big 12	4	0
CUSA	4	0
MAC	3	0
Pac 12	**0**	**4**
SEC	6	0
Other	4	1

Between enrollment groups, the human knowledge – auditory device emerged as distinctive for the under 20,000 and 40,001 - 50,000 student enrollment groups (Table 3).

Table 3

Cross-tabulation of Human Knowledge – Auditory Device by Enrollment Group

Student Enrollment	Not Present	Present
<20,000	**3**	**5**
20,001-30,000	12	2
30,001-40,000	5	2
40,001-50,000	**2**	**5**
50,001-60,000	4	1

The greatest frequency of distinction emerged when the institutions were grouped by Carnegie classification. There, five content devices (graduation - visual, international reach -

visual, research accomplishments - visual, belonging - auditory, and future opportunities - auditory) emerged as significantly distinctive (Table 4).

Table 4

Cross-tabulation of Distinctive Devices by Carnegie Classification Group

Content Device	Carnegie Classification	Not Present	Present
Graduation - Visual	**Master's Large and Doctoral/Research University (MLDRU)**	**2**	**4**
	Research University, High Research (RUH)	7	4
	Research University, Very High Research (RUVH)	23	1
International Reach - Visual	MLDRU	6	0
	RUH	11	0
	RUVH	**15**	**9**
Research Accomplishments - Visual	MLDRU	6	0
	RUH	11	0
	RUVH	**15**	**9**
Belonging - Auditory	MLDRU	5	1
	RUH	**5**	**6**
	RUVH	21	3
Future Opportunity - Auditory	**MLDRU**	**1**	**5**
	RUH	5	6
	RUVH	17	7

Content distinction within conferences. The athletic conference membership of the participating institutions was identified as an institutional characteristic meaningful for comparison of PSA content due to the association made between conference member institutions as they compete in multiple athletic events each year. Ten conferences were represented among the respondents in this study. However, because there were only two respondents each from the Mountain West and Sun Belt conferences, those member institutions (Boise State, California State University - Fresno, Arkansas State, and University of Louisiana at Lafayette), as well as the lone Independent institution (Brigham Young) were excluded from this portion of data analysis.

Table 5 presents the frequency counts of total content devices, number shared with other institutions from the same conference and percent unique content for each institution by conference.

Table 5

PSA Content Device Similarity and Distinction by Athletic Conference

Conference	Institution	Total Content Devices Used	Content Devices Shared with Other PSAs in Conference	% Unique Content
ACC	1	9	5	44.4
	2	12	8	33.3
	3	5	5	0
	4	4	4	0
	5	14	11	21.4
	6	8	4	50.0
American	1	5	2	60.0
	2	5	4	20.0
	3	10	5	50.0
	4	13	6	53.8
Big 10	1	7	5	28.6
	2	18	13	27.8
	3	20	17	15.0
	4	3	3	0
	5	6	5	16.7
Big 12	1	8	6	25.0
	2	8	7	12.5
	3	7	5	28.6
	4	6	4	33.3

Conference	Institution	Total Content Devices Used	Content Devices Shared with Other PSAs in Conference	% Unique Content
CUSA	1	9	5	44.4
	2	6	3	50.0
	3	5	3	40.0
	4	8	3	62.5
MAC	1	14	4	71.4
	2	8	5	37.5
	3	7	5	28.6
Pac 12	1	12	10	16.7
	2	8	5	27.5
	3	14	8	42.9
	4	10	9	10.0
SEC	1	9	7	22.2
	2	7	5	28.6
	3	8	7	12.5
	4	13	9	30.8
	5	8	7	12.5
	6	9	9	0

Using 50.0% unique content as the minimum for a PSA to be considered distinctive from its conference peers, four of the eight conferences had distinctive PSAs: ACC (1 of 6), American (3 of 4), CUSA (2 of 4), and MAC (1 of 3).

Content distinction within Carnegie classification groups. The Carnegie classification of institutions was utilized as a category for PSA comparison as the mission and focus of an institution plays a role in the student selection process, and influences the view community members and political leaders have of the institution and its place in the state and region. Due to the small numbers of institutions classified as Master's Large and Doctoral/Research Universities, those two categories were combined for this stage of analysis. Table 6 presents the frequency counts of total content devices, number shared with other institutions from the same classification and percent unique content for each institution by Carnegie classification.

Table 6

PSA Content Device Similarity and Distinction by Carnegie Classification

Carnegie Classification	Institution	Total Content Devices Used	Content Devices Shared with Other PSAs in Classification	% Unique Content
Master's Large and Doctoral/Research Universities	1	10	9	10.0
	2	10	7	30.0
	3	9	9	0
	4	6	5	16.7
	5	5	2	60.0
	6	7	7	0
Research University, High Research Activity	1	14	11	21.4
	2	9	7	22.2
	3	8	8	0
	4	6	6	0
	5	12	10	16.7
	6	8	8	0
	7	7	7	0
	8	8	7	12.5
	9	8	8	0
	10	11	9	18.2
	11	8	8	0

Carnegie Classification	Institution	Total Content Devices Used	Content Devices Shared with Other PSAs in Classification	% Unique Content
Research University, Very High Research Activity	1	5	5	0
	2	7	7	0
	3	9	9	0
	4	18	17	5.6
	5	12	11	8.3
	6	8	8	0
	7	5	5	0
	8	7	7	0
	9	8	8	0
	10	5	4	20.0
	11	10	9	10.0
	12	13	12	7.7
	13	13	12	7.7
	14	4	4	0
	15	19	19	0
	16	3	3	0
	17	9	9	0
	18	6	6	0
	19	7	6	14.3
	20	14	12	14.3
	21	14	14	0
	22	6	6	0
	23	10	10	0
	24	8	8	0

Only the Master's Large and Doctoral/Research Universities category had a PSA meeting the distinction benchmark of a minimum of 50% unique content, with 1 of 6 PSAs being considered distinctive.

Content distinction within institutional enrollment groups. Because institutional size is a common selection factor for potential students and it also determines the number of alumni an institution can seek to reach, institutional enrollment was selected as a factor for comparison of PSA content. Publicly accessible data from the United States Department of Education Integrated Postsecondary Education Data System (IPEDS) were gathered to determine the total student enrollment of each institution during the 2013-14 academic year (US Department of Education, 2014). Institutions were then grouped by the following enrollment ranges for the purpose of PSA content comparison: enrollment < 20,000; 20,000 - 30,000; 30,001 - 40,000; 40,001 - 50,000; and 50,001 - 60,000. Table 7 presents the frequency counts of total content devices, number shared with other institutions from the same conference and percent unique content for each institution by enrollment group.

Only the 50,001 - 60,000 enrollment group had PSAs meeting the benchmark for distinctiveness, with 3 of 5 PSAs having 50.0% or more unique content compared to other PSAs in the same group (Table 7).

Table 7

PSA Content Device Similarity and Distinction by Enrollment Group

Enrollment Range	Institution	Total Content Devices Used	Content Devices Shared with Other PSAs in Enrollment Range	% Unique Content
<20,000	1	10	9	10.0
	2	9	8	11.1
	3	8	5	37.5
	4	6	6	0
	5	8	6	25.0
	6	11	8	27.4
	7	4	4	0
	8	8	7	12.5
20.001-30.000	1	14	13	7.1
	2	10	10	0
	3	12	10	16.7
	4	9	9	0
	5	8	8	0
	6	5	5	0
	7	9	9	0
	8	7	7	0
	9	12	11	8.3
	10	13	12	7.7
	11	6	6	0
	12	7	5	28.6
	13	14	9	35.7
	14	7	7	0

Enrollment Range	Institution	Total Content Devices Used	Content Devices Shared with Other PSAs in Enrollment Range	% Unique Content
30,001-40,000	1	6	4	33.3
	2	8	8	0
	3	8	8	0
	4	10	8	20.0
	5	14	10	28.6
	6	9	6	33.3
	7	8	6	25.0
40,001-50,000	1	5	5	0
	2	7	6	14.3
	3	5	4	20.0
	4	8	8	0
	5	19	16	15.8
	6	14	10	28.6
	7	10	10	0
50,001-60,000	1	18	9	50.0
	2	7	6	14.3
	3	5	4	20.0
	4	3	1	66.7
	5	6	2	66.7

Summary of content distinction relative to institutional characteristic groups. Based on the Chi-square analysis between institutional characteristic groups, there was limited distinction established in these cases. Only one athletic conference, the Pacific 12 Conference, distinguished itself from the other conferences and with only one of the 48 possible content devices. Similarly,

there was little distinction established between enrollment groups; the under 20,000 and 40,001-50,000 populations showed statistically significant differences from the other ranges through their use of a single content device. The Carnegie classifications demonstrated more frequent separation between groups, with five instances of distinction occurring between the three classification groups. However, considering the number of opportunities for content differentiation, the distinction between groups is quite limited.

Likewise, comparisons within groups revealed modest distinction between institutions. Of the eight athletic conferences examined, half had PSAs determined to be distinctive. Of particular note, the institutions of the American Conference stood out in this analysis, with 3 of 4 PSAs meeting the benchmark for distinction. The comparisons within Carnegie classification and enrollment groups showed far less variation, with only one PSA meeting the required unique content level within Carnegie classifications, and three PSAs in the enrollment groups reaching the distinctiveness level. Interestingly, within enrollment groups, all three PSAs with greater than 50% unique content were from institutions with 50,001-60,000 students.

As Moore (2004) explained: "Differentiating an institution depends on recognizing the core attributes—and attendant benefits—of the category in which you operate, plus what makes you *different from others in the category*" (p. 59, emphasis added). As the institutional characteristic analysis demonstrated, this differentiation is not regularly achieved.

Research Question 2: To what extent is there distinction in the content of the PSAs when examined within and between groupings based on the intended target audience as identified by the sponsoring institution?

Marketing/communications staff members from participating institutions provided crucial information regarding the audience(s) they intended to influence with their PSA. Given

the options of prospective students, alumni, potential donors, internal constituents, policy makers, general public, and other: institution defined, institutions were first asked to identify all audiences they were targeting with their PSA. They then were asked to identify the single audience they considered most important to influence.

The total number of target audiences per PSA ranged from one to eight, with an average of 4.32 target audiences per PSA. More than half of the PSAs targeted five or more audiences. These results support Kittle's (2000) finding of institutions wanting to influence multiple audiences. Table 8 presents the number of target audiences per PSA.

Table 8

Number of Audiences Targeted in PSAs

Number of Audiences Targeted	Number of Institutions N = 41	Percent of Total	Cumulative Percent
1	2	4.88	4.88
2	8	19.51	24.39
3	6	14.63	39.02
4	4	9.76	48.78
5	5	12.20	60.98
6	13	31.71	92.69
7	2	4.88	97.57
8	1	2.44	100.00

Frequency counts of all audiences targeted within the PSAs revealed three audiences (prospective students, alumni, and general public) were a focus for more than three-quarters of the institutions. Two audiences (internal constituents and policy makers) were targeted by more than half of the participating institutions. The full frequency count of all target audiences is presented in Table 9.

Table 9

Frequency of All Target Audiences in PSAs

Target Audience	**Number of Institutions Targeting N = 41**	**Percent of Total**
Prospective Students	37	90.24
Alumni	33	80.49
General Public	32	78.05
Potential Donors	25	60.98
Internal Constituents	24	58.54
Policy Makers	18	43.90
Other: Parents of Current/Prospective Students	3	7.32
Other: Presidents, Provosts, Heads of Admission at Peer Schools	2	4.88
Other: Counselors at Top High Schools	1	2.44
Other: Prospective Employers of Graduates	1	2.44

Finally, institutional representatives were asked to identify the single most important audience from all those targeted. Nearly half (48.78%) of the participating institutions identified prospective students as the most important audience for their PSAs, with nearly a quarter (24.39%) choosing alumni as their primary target audience. Table 10 presents the results from that survey question.

Table 10

Frequency of Primary Target Audiences in PSAs

Primary Target Audience	Number of Institutions N = 41	Percentage of Total	Cumulative Percent
Prospective Students	20	48.78	48.78
Alumni	10	24.39	73.17
General Public	5	12.20	85.37
Internal Constituents	2	4.88	90.25
Policy Makers	2	4.88	95.13
Other: Parents of Prospective Students	1	2.44	97.57
Other: Presidents/ Provosts/ Admissions Heads of Peer Institutions and Counselors at Top High Schools	1	2.44	100.00

In order to provide adequate group sizes, the audiences of prospective students, alumni, general public, and "other" (all remaining audiences combined) were used for the between group content comparisons. The "other" audience group was excluded from the within group analysis.

Content distinction between primary target audience groups. To determine whether there was distinction in PSA content between target audience groups, SPSS 21 was utilized to calculate Chi-square significance for all content devices (Appendix G). Applying a $p < 0.05$ level of significance, the researcher identified four instances of content distinction between target audience groups.

Three of these areas of distinction occurred with the "other" audience group distinguishing itself with the student oriented - visual, research accomplishments - visual, and study abroad - auditory devices. The alumni audience group distinguished itself with the use of

the alumni of distinction – visual device. Table 11 presents the cross-tabulation results for these four areas of significant difference.

Table 11

Cross-tabulation of Distinctive Devices in Primary Target Audience Grouping

Content Device	Primary Target Audience	Not Present	Present
Alumni of Distinction - Visual	General Public	5	0
	Alumni	**5**	**5**
	Prospective Students	17	3
	Other	6	0
Student Oriented - Visual	General Public	5	0
	Alumni	10	0
	Prospective Students	12	8
	Other	**2**	**4**
Research Accomplishments - Visual	General Public	4	1
	Alumni	9	1
	Prospective Students	17	3
	Other	**2**	**4**
Study Abroad - Auditory	General Public	4	1
	Alumni	10	0
	Prospective Students	20	0
	Other	**4**	**2**

Content distinction within primary target audience groups. The examination of content distinction within primary target audience groups revealed none of the 35 institutional PSAs included in this segment reached the established benchmark of 50% unique content to be considered distinctive. Further, more than half (51.4%) of the PSAs in the general public,

alumni, and prospective student target audience groups had no unique content when compared to institutions within the same category. Table 12 presents the percent unique content for all institutions targeting these three audiences.

Table 12

PSA Content Device Similarity and Distinction by Primary Target Audience

Primary Target Audience	Institution	Total Content Devices Used	Content Devices Shared with Other PSAs in Audience Group	% Unique Content
General Public	1	6	6	0
	2	5	3	40.0
	3	7	4	42.9
	4	13	9	30.8
	5	10	8	20.0
Alumni	1	6	5	16.7
	2	7	5	29.6
	3	7	6	14.3
	4	8	8	0
	5	8	5	37.5
	6	4	4	0
	7	9	8	11.1
	8	7	6	14.3
	9	6	6	0
	10	7	7	0

Primary Target Audience	Institution	Total Content Devices Used	Content Devices Shared with Other PSAs in Audience Group	% Unique Content
Prospective Students	1	10	10	0
	2	10	10	0
	3	9	9	0
	4	8	8	0
	5	12	12	0
	6	9	9	0
	7	5	5	0
	8	5	5	0
	9	12	11	8.3
	10	8	8	0
	11	5	5	0
	12	10	9	10.0
	13	13	12	7.7
	14	11	10	9.1
	15	19	18	5.3
	16	8	8	0
	17	6	6	0
	18	14	12	14.3
	19	14	13	7.1
	20	8	8	0

Summary of content distinction relative to target audience groups. Considering the Chi-square analysis between intended target audience groups, minimal distinction emerged with four devices measuring as significantly different: alumni of distinction – visual for the alumni target

audience, and student oriented – visual, research accomplishments – visual, and study abroad – auditory for the "other" target audience group.

The within audience group examination revealed a lack of differentiation on all fronts. None of the 35 PSAs from the general public, alumni, and prospective student target groups met the unique content benchmark to be considered distinctive, and 18 of the PSAs had no unique content when compared to PSAs targeting the same audience.

As Sevier (2001) reminds us, "They [successful messages] strike a chord with the recipient. They meet a need, provide an answer, act on a dream, or resolve an issue. Because they were designed with the recipient—and not the sender—in mind, they resonate" (p. 93). The attempt to target multiple audiences, limited distinction between audiences and complete lack of distinction within audience groups indicate that institutions have tremendous opportunities to improve their efforts with regard to designing messaging with the target recipient in mind.

Research Question 3: To what extent are the PSAs part of a comprehensive marketing campaign, and what other marketing strategies are utilized along with the PSA in those campaigns?

To answer the third research question, institutional representatives were asked whether the PSA was part of a larger campaign and if so, what media were utilized in the campaign. Institutions were given the options of radio ad, print ad, Facebook ad, other online ad, specialized landing page, hashtag campaign, additional purchased airtime for PSA, billboards, direct mail, admissions/recruitment pieces, and other: institution defined. Of the 41 participating institutions, 25 (60.98%) indicated that the PSA was part of a broader marketing campaign. The number of additional media used in these campaigns ranged from a low of 1 to a high of 11, with

an average of 7.4 types of media employed per campaign. Full frequency counts of media used are presented in Table 13.

Table 13

Number of Media Types Utilized in Institutional Marketing Campaigns

Number of Media Types Used in Campaign	Number of Institutions N = 25	%	Cumulative %
1	1	4.0	4.0
2	1	4.0	8.0
3	1	4.0	12.0
4	3	12.0	24.0
5	1	4.0	28.0
6	3	12.0	40.0
7	4	16.0	56.0
8	4	16.0	72.0
9	4	16.0	88.0
10	2	8.0	96.0
11	1	4.0	100.0

Ten of the eleven media presented as choices in the survey question were utilized by half or more of the institutions executing marketing campaigns with their PSA (Table 14). Print ads were the most popular medium, with online ads and admissions/recruitment materials following close behind. In the self-reported other category, institutions demonstrated a wide range of alternate media including transit, in-theater, and airport ads, and unique promotional items including an anniversary coffee table book and a newly-designed university paisley print. Although traditional advertising played a dominant role in these campaigns, there were examples

of the alternative media Aaker and Joachimsthaler (2000) advocated would strengthen brands in the future.

Table 14

Frequency of Media Types Used in Institutional Marketing Campaigns

Campaign Media Type	Number of Institutions Utilizing N = 25	% Utilizing
Print Ad	20	80.0
Other (not Facebook) Online Ad	18	72.0
Admissions/Recruitment Materials	18	72.0
Landing Page	17	68.0
Billboard	17	68.0
Radio Ad	16	64.0
Facebook Ad	15	60.0
Purchased Airtime for PSA	14	56.0
Direct Mail	13	52.0
Hashtag Campaign	11	44.0
Other: Events	2	8.0
Other: Transit Ad	1	4.0
Other: In-Theater Ad	1	4.0
Other: Promotional Items	1	4.0
Other: Email Blasts	1	4.0
Other: Airport Ad	1	4.0
Other: Coffee Table Book	1	4.0
Other: Campus Signage	1	4.0
Other: Designed University Paisley	1	4.0
Other: Other Social Media	1	4.0

Ancillary Findings

In addition to the data collected to answer the three stated research questions, data related to the presence of URLs and tag lines in the PSAs were noted during the content analysis process. Further, the communications officials were asked whether marketing research was utilized in the development of the PSA content. Examining these results with respect to the institutions' use of a marketing campaign reveal some connections of note.

Institutions using the PSAs as part of a full campaign were more likely to have a URL present and utilize a tag line at the end of the PSA. They were also more likely than their non-campaign counterparts to have utilized market research in the development of their PSA (Table 15). However, only 41.5% of institutions in the study utilized market research, which is lower than Newman's (2002) finding of 76.8% of institutions conducting market research as part of their communication plans.

Table 15

Cross-tabulation of Additional Strategies with Campaign Execution

	URL		Tag Line		Market Research	
Campaign	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**
No	11	5	7	9	13	3
Yes	5	20	7	18	11	14

Anecdotally, the researcher noticed two of the PSAs in the current study were ones appearing in the 2011 bowl season, the time of her original study on institutional spots. This continuation of use indicates that some institutions are following the best practice of developing long-term messaging for lasting impact (Aaker, 1991; Martin, 1989; Rudd & Mills, 2011).

Summary

Through the collection and analysis of the data presented in this chapter, the researcher was able to identify specific examples of PSA content distinction both within and between institutional groupings of athletic conference, Carnegie classification, and enrollment range. Content distinction was also discovered between, but not within, target audience groups. Further, this study revealed the moderate use of the PSA as part of a larger marketing campaign, with the majority of institutions utilizing similar media in their campaigns. The following chapter will further discuss these findings and provide recommendations for institutional practice as well as future study.

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

Introduction

This study sought to explore the public service announcements (PSAs) produced by universities for broadcast during the 2013 National Collegiate Athletic Association (NCAA) football bowl games. Based on the work of A. R. Krachenberg (1972), the researcher utilized content analysis and survey responses to answer the following research questions:

1. To what extent is there distinction in the content of the PSAs relative to institutional characteristics so as to differentiate institutions within and between athletic conference groupings, Carnegie classifications, and enrollment ranges?
2. To what extent is there distinction in the content of the PSAs when examined within and between groupings based on the intended target audience as identified by the sponsoring institution?
3. To what extent are the PSAs part of a comprehensive marketing campaign, and what other marketing strategies are utilized along with the PSA in those campaigns?

This chapter will summarize the procedures and findings, discuss the conclusions drawn from and implications of the results, and present recommendations for future related study.

Summary of Procedures

Seventy institutions participating in the 2013-14 NCAA football bowl games were invited to participate in this study. The 41 institutions electing to do so provided access to the PSA broadcast during their bowl appearance. Three trained coders (including the researcher) utilized the codebook found in Appendix B to determine the presence of 24 visual and 24 auditory content devices within each PSA. Those data, along with the institutional responses to five survey questions, were analyzed to answer the research questions posed in this study.

Summary of Findings

Chi-square analysis was utilized to determine the extent of distinction created between groupings defined by institutional characteristics and primary target audiences. Those results indicated limited differentiation based on PSA content. Of note, the Pacific 12 conference distinguished itself from the other conferences by every Pac 12 institution utilizing the geographic area – visual device in their PSAs. In the total student enrollment groupings, the less than 20,000 and 40,001-50,000 groups set themselves apart with the use of the human knowledge – auditory device. Comparison between Carnegie classification groups presented the highest frequencies of distinction with five examples: Master's Large and Doctoral/Research Universities with the use of the graduation –visual and future opportunity – auditory devices; Research Universities, High Research Activity with the belonging – auditory device; and Research Universities, Very High Research Activity with the international reach – visual and research accomplishments – visual devices. This supports Moore's (2004) assertion that the primary characteristics of a university serve to associate it with a category such as research or liberal arts.

Between primary target audience groups, the alumni group separated itself with the use of the alumni of distinction – visual device. The "other" audience group (made up of all PSAs not targeting prospective students, alumni, or the general public) established distinction with its use of the student oriented – visual, research accomplishments – visual, and study abroad – auditory devices. This is likely due to the fact that it was a composite audience group, rather than a singular one such as the prospective student, alumni, and general public audience groups.

To determine distinction within groupings, percent unique content was calculated for each PSA in comparison to the other PSAs in the group. In this part of the analysis, the highest

frequency of distinction came in the athletic conference comparisons where 7 PSAs demonstrated 50.0% or greater unique content. Here, the American conference stood out from the others with three of four PSAs meeting the unique content benchmark necessary to be considered distinctive. Only three PSAs within the enrollment groups and only one within the Carnegie classifications met the distinction benchmark. When examining within target audience groups, none of the PSAs demonstrated the 50.0% unique content level to be considered distinctive, and 18 of the PSAs had 0% unique content when compared to the other PSAs in their groups.

Additionally, the survey questions related to the audiences institutions were attempting to influence revealed that 60% of the institutions sought to influence between four and eight different audiences with their PSA, and nearly a third (31%) were targeting six different audiences. This is concerning, for as Ali-Choudhury et al. (2009) and Harris (2009) suggested, it is nearly impossible for institutions to find a message that will truly speak to multiple audiences without alienating any of them. Additionally, 90% of institutions included prospective students as one of the audiences they wanted to influence. When identifying the primary target audience, prospective students were again the most popular, with 20 of 41 (48.8%) institutions choosing that audience as most important.

More than half (25 of 41, or 60.98%) of the institutions indicated their PSA was part of a broad marketing campaign, with an average of 7.4 types of media being used in those campaigns. Print ads were the most popular strategy used in these campaigns, with 20 of 25 (80.0%) institutions utilizing them, followed closely by online advertising and admissions/recruitment materials (18 of 25) and specialized landing pages and billboards (17 of 25). Of the ten most frequently used media types, six (print ads, admissions materials, billboards, radio ads,

purchased airtime for PSA, and direct mail) would be considered traditional media, while four (online ads, landing pages, Facebook ads, and hashtag campaigns) could be categorized as new, or interactive media. Institutions may want to examine these strategies, as the traditional media tend to be more expensive while having less reach with the prospective student demographic. Not only are the new media tactics less expensive overall, they also allow for connections between the institution and the audience, as well as between members of the target audience. Further, the researcher found that institutions executing marketing campaigns were more likely to conduct market research, utilize a tag line in the PSA, and have a URL appear on screen than the institutions without campaigns.

Discussion of Findings

Considering the previous studies related to institutional PSAs (Clayton et al., 2012; Harris, 2009; Tobolowsky & Lowery, 2006, 2014) and her own preliminary research (Wolfe, 2012), the researcher did not anticipate finding widespread examples of PSA content distinction whether within or between the various groups into which the institutions were divided. Indeed, the successful parody employed by the *Monsters University* ad (as described in Chapter 2) highlights the consistent generalities of institutional PSAs upon which Disney/Pixar was able to play. Further, the researcher anticipated a proliferation of multiple messaging themes. However, finding an average of 8.93 devices per PSA was a startling increase compared to the research of Clayton et al. (2012) that revealed the presence of 3.86 devices per PSA.

Likewise, the researcher expected to see multiple target audiences identified by institutions, although seeing a high of 8 target audiences by one institution was surprising. Also, finding prospective students as the most frequent overall audience and primary target audience was not unexpected, although institutions may want to explore whether this market is

predominant in the viewership of the televised games. One unexpected audience identified by two institutions was that of presidents, provosts, and heads of admission at peer schools, which may illustrate the desire many schools have to rise in the rankings developed by *US News* and other publications that factor ratings by peer administrators into the overall score. Whether PSAs can be effective in this manner or whether the peer rating can have a significant impact on the overall ranking could be areas for additional study.

While conducting the content analysis, notable observations related to the production of the PSAs emerged. Each reviewer reported needing to watch the PSAs multiple times in order to feel confident they had successfully coded all of the content devices present in the spot. Some PSAs used so many devices in such rapid succession that a near frame-by-frame viewing was necessary to determine all the content elements. With these PSAs, it would be virtually impossible for a viewer to process all of these images with a single viewing, leading one to wonder whether the institutions were truly trying to emphasize these elements or if their goal was simply to have a fast-paced, energetic feel to the spot. Also, three institutions elected to forego a voiceover and utilize a music soundtrack for the PSA audio. With a clear emphasis on the visual elements of the PSA, these spots exceeded the average number of visual devices (5.76) with six, seven, and ten visual elements present, respectively.

In regard to extending the PSA reach online, two interesting elements were noted. First, whereas more than half of the PSAs (25 of 41) promoted a URL on the closing screen, only nine of those URLs were for pages other than the university's main .edu site, despite 17 institutions reporting using a specialized landing page as part of their marketing efforts. Here, institutions are failing to truly connect elements of their marketing campaigns, while missing out on a way to measure the impact of the PSA by counting site visits to a page specifically linked to the

commercial. Even if the university wanted to ultimately direct viewers to their main institutional page or another commonly visited site (admissions, alumni association, etc.) they could do so with a specialized URL that would facilitate the measurement of visitors driven by the PSA. Second, only two of the 41 PSAs promoted a specific hashtag for social media users, even though 11 reported using a hashtag campaign as part of their marketing efforts. According to a Pew Research Center report on social media usage among the 18-29 age group, 87% used Facebook, 37% used Twitter, and 53% used Instagram, all platforms that facilitate connecting with other users who are posting using a specific phrase preceded by a hashtag (#) (Duggan, Ellison, Lampe, Lenhart, & Madden, 2015). Although the researcher expects this to be a tactic that expands in the near future, she was surprised at the near absence of this strategy in the PSAs in this study.

The researcher is indebted to Clayton et al. for permission to use their codebook (2012) in this study, and found that many of the devices they identified continue to play a significant part in PSA content. However, were she to repeat this study, the researcher would utilize the codebook to analyze the visual content of the PSAs and then use transcriptions of the PSA voiceovers to identify thematic elements from an auditory standpoint. As the results of the content analysis demonstrated, several of the content devices (university administrator, graduation, non-NCAA athletics, individuals in laboratory, and students in classroom), albeit effective from a visual standpoint, did not translate to the auditory side of the PSAs. Likewise, new themes, such as financial value, could work much better from an auditory than a visual standpoint, and utilizing a thematic analysis would allow new areas of emphasis to emerge.

Recommendations for Future Study

As the research conducted to date on institutional PSAs is limited (Clayton et al., 2012; Harris, 2009; Tobolowsky & Lowery, 2006, 2014), this subject is still ripe for exploration. The recent establishment of a college football playoff, the expansion of the number of bowl games in the Football Bowl Subdivision, and the separation of conferences into the so-called Power Five (ACC, Big 10, Big 12, Pac 12, and SEC) and the Group of Five (American, CUSA, MAC, Mountain West, and Sun Belt) will have implications on the visibility of the institutions in these conferences through game broadcasts. Additionally, individual conferences have begun producing PSAs that are aired during games in which member institutions appear. What the conferences hope to achieve with these spots and whether they are successful is another possible area for future research.

This study focused on the thematic content of the PSAs, but did not examine the method in which the content was delivered. Though anecdotally the researcher can attest to an overall sameness of the production style of the PSAs, Indiana University's 2015 "Fulfilling the Promise" PSA was noticeably different in approach. It opened with an actor playing a young Mark Cuban when he was a student at Indiana University in the late 1970s and early 1980s, and finished with Mr. Cuban standing in front of the Dallas Mavericks' arena saying he would not be there without Indiana University. The commercial still portrayed many of the common themes seen in this study—students in classroom, NCAA athletics, scenic beauty, belonging, student oriented, future opportunities, alumni of distinction—but did so in a way unlike any of the PSAs in this current study. An analysis of differentiation through production approach would be a way to further expand the findings of this study.

Further, an aspect that has not yet been explored is the audience composition during the bowl game telecasts as reported by Nielsen ratings and the implications they may have for which audiences institutions should seek to influence through these PSAs. As the TV audiences for the 2014 bowls ranged from 1.11 million for the Camellia Bowl to 34.15 million for the National Championship game (Sports Media Watch, 2015), the opportunity for audience reach varies significantly depending on the profile of the bowl game. Institutions participating in high-profile bowls may find it beneficial to produce a PSA specifically for that audience. Continuing with the theme of target audiences, a focus group study to determine the content that best resonates with the various constituencies institutions wish to influence would be beneficial to professionals in higher education communications and marketing.

Finally, there is significant opportunity for additional research related to the use of marketing campaigns and the effectiveness of the strategies utilized. Such studies may provide guidance to higher education administrators seeking to raise their institution's level of brand awareness with specific constituencies.

Implications of Study

The demonstrated increases in spending on paid advertising (Klie, 2011; Lipman Hearne, 2010) and the expanding appointments of chief marketing officers (CMOs) and vice presidents of communication (Miley, 2009; Morrison, 2013) indicate institutions of higher education recognize the importance of marketing in today's competitive environment. Yet, this study shows there remains significant room for improvement in the marketing approaches institutions are using. There are still many examples of message dilution due to lack of audience and message focus, failure to maximize exposure through marketing campaigns, and an absence of market research as the basis of PSA development. It simply is not enough to invest more

resources into marketing, as there will always be another entity that can outspend you. Once again, the words of Hesel (2004) charge those in higher education marketing to conduct "intelligent, highly coordinated, tightfisted management of marketing activities" (p. B9). Such marketing begins with defining a focused message for a limited audience based on sound research to determine the best target for these efforts. Even though some institutions are demonstrating this discipline, it is far from being the standard of practice in higher education.

Lauer (2002) emphasized the critical role of leadership in successful higher education marketing:

> Integrated marketing doesn't happen without leadership. All the materials in the world, no matter how well-produced or well-organized, will not generate any more than a short-lived ripple unless the right people saying the right thing to the right people at the right time lead the whole process. There is something about enterprises and people that absolutely requires [sic] articulate leaders with vision standing out front. (p. 172)

Leaders in higher education can no longer rely on others to communicate the institution's values. The very viability of an institution grows increasingly reliant on the ability of each of its leaders, regardless of level, to be a champion for its image in the world.

Summary

Through the use of content analysis, this study found limited distinction in the content of PSAs produced by institutions of higher education for broadcast during 2013 football bowl game telecasts. Further, a survey of communications professionals from participating institutions revealed moderate utilization of market research and marketing campaigns in relation to the PSAs. There is still much to explore in the area of higher education marketing, but this study

provides additional insight to the current practices and opportunities for improvement in this growing and important field.

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APPENDIX A: LETTERS OF APPROVAL

Letter of Exemption from Marshall University's Institutional Research Board

Permission to Use Codebook from Dr. Michael Clayton

LETTER OF EXEMPTION

MARSHALL UNIVERSITY
www.marshall.edu

Office of Research Integrity
Institutional Review Board
401 11th St., Suite 1300
Huntington, WV 25701

FWA 00002704

IRB1 #00002205
IRB2 #00003206

November 18, 2014

Teresa Eagle, EdD
College of Education and Professional Development

RE: IRBNet ID# 683287-1
At: Marshall University Institutional Review Board #2 (Social/Behavioral)

Dear Dr. Eagle:

Protocol Title:	[683287-1] Are There Whiter Shades of Pale in Marketing the Ivory Tower? An Examination of Differentiation in Institutional Public Service Announcements Through Content Analysis	
Expiration Date:	November 18, 2015	
Site Location:	MUGC	
Submission Type:	New Project	APPROVED
Review Type:	Exempt Review	

In accordance with 45CFR46.101(b)(2)&(4), the above study and informed consent were granted Exempted approval today by the Marshall University Institutional Review Board #2 (Social/Behavioral) Designee for the period of 12 months. The approval will expire November 18, 2015. A continuing review request for this study must be submitted no later than 30 days prior to the expiration date.

This study is for student Elizabeth Wolfe.

If you have any questions, please contact the Marshall University Institutional Review Board #2 (Social/Behavioral) Coordinator Bruce Day, ThD, CIP at 304-696-4303 or day50@marshall.edu. Please include your study title and reference number in all correspondence with this office.

PERMISSION TO USE CODEBOOK IN STUDY

Michael Clayton October 1, 2014 at 9:57 AM

To: Beth Wolfe

Re: Permission to use codebook from institutional branding study

Beth

Yes, we're OK with you using the codebook. I can't remember was it included in the JMHE piece or do you need me to send it to you separately?

Michael J. Clayton, Ph.D.
Professorial Lecturer and MS in MKTG Program Director

Kogod School of Business
American University
4400 Massachusetts Ave. NW
Washington DC 20016-8044

-----"Wolfe, Elizabeth" <beth.wolfe@marshall.edu> wrote: -----

To: "clayts@american.edu" <clayts@american.edu>, "kevin.cavanagh.06@gmail.com" <kevin.cavanagh.06@gmail.com>, "hettche@cnu.edu" <hettche@cnu.edu>
From: "Wolfe, Elizabeth" <beth.wolfe@marshall.edu>
Date: 09/29/2014 08:31PM
Subject: Permission to use codebook from institutional branding study

Good evening, gentlemen.

My name is Beth Wolfe, and in addition to serving as Director of Recruitment at Marshall University in Huntington, West Virginia, I am also a doctoral student in Marshall's EdD program, majoring in Higher Education Leadership with an area of emphasis in the marketing and promotion of higher education. My dissertation topic involves a content analysis of institutional PSAs, examining the distinctiveness of content relative to institutional categories and intended target audience.

I am contacting you to request your permission to utilize in my research the codebook presented in your study on institutional branding that was published in the Journal of Marketing for Higher Education. I have found your manuscript to be incredibly beneficial during the development of my literature review, and the codebook would be invaluable in my data collection. I would be most appreciative to be able to incorporate your codebook into my research.

I would gladly answer any questions you may have regarding my study, and would be happy to share my final manuscript at the conclusion of my research. Thank you so much for your consideration, and I hope to hear from you soon.

Sincerely,
Beth

Beth Wolfe
Director of Recruitment
Marshall University
304.696.6007
beth.wolfe@marshall.edu<mailto:beth.wolfe@marshall.edu>

APPENDIX B: CONTENT ANALYSIS DOCUMENTS

Codebook from Clayton et al.

PSA Content Checklist

CODEBOOK

from Clayton, Cavanagh, & Hettche (2012), used with permission

Visual Device	**Definition**
Scenic beauty	Does the commercial present striking scenes of the institution's natural beauty (e.g., historic buildings, great lawn, overhead views of campus)?
Students in classroom	Does the commercial show student(s) in a conventional/traditional classroom setting (e.g., lecture hall or chairs/desks in half circle)?
Individuals in laboratory	Does the commercial present student(s) or faculty members in a scientific laboratory setting?
NCAA athletics	Does the commercial show student athletes in university uniforms participating in NCAA athletics or fans at an athletic event?
Non-NCAA athletics	Does the commercial show students participating in non-NCAA sanctioned athletics (e.g., intramural sports, throwing a Frisbee on a quad)?
Fine arts[1]	Does the commercial show student(s) acting, dancing, singing, playing musical instruments (with or without an audience) or creating visual art through any medium (e.g., paint, sculpture, fibers, ceramics, digital, multimedia, etc.)?
Graduation	Does the commercial show student(s) in cap and gown or other graduation regalia (e.g., holding a diploma or throwing a graduation cap in the air)?
Alumni of distinction	Do famous alumni appear in the commercial in either name or image (e.g., former football star now in the NFL)? If alumnus is not a household name, does the ad mention a specific accomplishment that is significantly noteworthy (e.g., NY Times best-selling author, astronaut, etc.)?
Faculty of distinction	Does the commercial show individual faculty members with visual reference to their noteworthy accomplishments or accolades (e.g., Nobel or Pulitzer prize winner)?
History/Nostalgia	Does the commercial use visuals from another time period, or black and white film to pay homage to the school's history? Are there any visual elements which date the history of the school (founded in 1898), outside of a minor inclusion in a university logo/crest?

[1] Modified from original source. Clayton et al. identified "performance arts," which did not include visual arts.

[2] The final three categories (spirit traditions, campus amenities, geographic area) were added by the

University administrator	Does a university administrator play a role in the commercial (e.g., president, provost, dean, etc.)? Administrator must be clearly identified by title.
Belonging	Does the commercial visually capture students or alumni having a unique, shared experience/bond, or focus on the community aspect of the university?
International reach	Does the commercial show imagery (including maps, globes, etc.) of the earth representing the reach of their students/research or that what happens at that university transforms the world?
Study abroad	Does the commercial show students studying in locations clearly outside of the US, or do study abroad location names outside of the US appear in the commercial?
Student scholars	Does the commercial provide visual references to students receiving well-known scholarship (e.g., Rhodes) or publishing research with faculty members?
Student oriented	Does the commercial provide visual references that emphasize the student-oriented focus of the institution? Is there evidence of an academic environment that supports the professor-student (mentor-mentee) relationship (e.g., Arkansas chiseling each name in stone)?
Research accomplishments	Does the commercial show visual cues relating to significant research accomplishments made at the university? While all schools are expected to actively engage in research, does the example noted in the commercial have significant merit that may be impressive to the lay person?
Human knowledge	Does the commercial present visual references that the institution is contributing to humankind's pursuit of knowledge (in general)? Are there visual cues that support 'knowledge for its own sake,' 'knowledge as an end-in-itself' or 'the pursuit of knowledge as a natural consequence of human curiosity'? Here 'knowledge' is viewed as external, collective, and not simply a part of one's personal experience.
Embrace of ethical discourse	Does the commercial present visual references that the institution is committed to/supports certain ethical notions when presenting itself, such as 'integrity,' 'truth,' 'excellence,' 'justice,' 'fairness,' 'freedom,' 'equality,' 'honesty,' 'compassion,' 'goodness,' 'diligence,' or 'hard work?'
Future opportunities	Does the commercial present visual references that suggest or imply that a college/university education will lead to future success in one's professional life? Are there visual clues that indicate that a college/ university education is a 'means to an end' (e.g., 'a college degree will lead to a better earning potential' or 'a college degree provides a measure of job security and/or allows for job advancement')?

Volunteerism/service	Does the commercial show faculty or students volunteering in a manner which benefits a person/group in need, or benefits the community?
Spirit traditions[2]	Does the commercial show groups or activities associated with school spirit (e.g., cheerleaders, mascot, marching/pep bands, pep rallies, post-game celebrations)?
Campus amenities	Does the commercial show facilities related to an enhanced living experience (e.g., fitness/recreation centers, residence or dining halls, campus entertainment centers, restaurants, etc.)?
Geographic area	Does the commercial show the city, region, or state in which the university is located?
Auditory Device	**Definition**
Scenic beauty[3]	Does the commercial make reference to the institution's natural beauty or acreage?
Students in classroom	Does the commercial mention students learning in a classroom?
Individuals in laboratory	Does the commercial mention student(s) or faculty members in laboratory settings or performing research?
NCAA athletics	Does the commercial make reference to student athletes in university uniforms participating in NCAA athletics?
Non-NCAA athletics	Does the commercial mention students participating in non-NCAA sanctioned athletics (e.g., intramural sports)?
Fine arts[4]	Does the commercial mention student(s) having the opportunity to embrace the arts (acting, dancing, singing, musical performances, or creating visual art)?
Graduation	Does the commercial mention student(s) achieving a diploma or using their degree to develop a career?
Alumni of distinction	Does the commercial list the names of any alumni of distinction?
Faculty of distinction	Does the commercial mention the accomplishments of individual faculty members or the faculty as a whole (e.g., Nobel or Pulitzer prize winner)?

[2] The final three categories (spirit traditions, campus amenities, geographic area) were added by the researcher and did not appear in the original codebook.
[3] Modified from original source. Clayton et al. included mention of geographic location, which is included in a separate device (geographic area) in this study.
[4] Modified from original source. Clayton et al. identified "performance arts," which did not include visual arts.

History/Nostalgia	Does the commercial mention the history of the institution in terms of longevity or historical significance?
University administrator	Does a university administrator have a speaking role in the commercial (e.g., president of the university)? Administrator must be clearly identified by title.
Belonging	Does the commercial speak to members of the institution being 'one,' or place heavy emphasis on the collective nature of the community 'we'?
International reach	Does the commercial speak to the global reach of their students/research or the fact that what happens at that university transforms the world?
Study abroad	Does the commercial mention students studying in locations outside of the US, or emphasize study abroad programs in any way?
Student scholars	Does the commercial mention students receiving well-known scholarships (e.g., Rhodes), completing undergraduate research, or publishing research with faculty members?
Student oriented	Does the commercial provide auditory references that emphasize the student-oriented focus of the institution (e.g., more than a number, faculty know students' names, student-faculty ratios, personalized degree programs)?
Research accomplishments	Does the commercial mention significant research accomplishments made at the university?
Human knowledge	Does the commercial present audio references that the institution is contributing to humankind's pursuit of knowledge (in general)? Are there audio cues that support 'knowledge for its own sake,' 'knowledge as an end-in-itself' or 'the pursuit of knowledge as a natural consequence of human curiosity'? Here 'knowledge' is viewed as external, collective, and not simply a part of one's personal experience.
Embrace of ethical discourse	Does the commercial present visual references that the institution is committed to/supports certain ethical notions when presenting itself, such as 'integrity,' 'truth,' 'excellence,' 'justice,' 'fairness,' 'freedom,' 'equality,' 'honesty,' 'compassion,' 'goodness,' 'diligence,' or 'hard work?'
Future opportunities	Does the commercial present audio references that suggest or imply that a college/university education will lead to future success in one's professional life? Are there audio clues that indicate that a college/ university education is a 'means to an end' (e.g., 'a college degree will lead to a better earning potential' or 'a college degree provides a measure of job security and/or allows for job advancement')?
Volunteerism/service	Does the commercial mention faculty or students taking an active role in making contributions to their community through volunteerism?

Spirit traditions[5]	Does the commercial mention groups or activities associated with school spirit (e.g., cheerleaders, mascot, marching/pep bands, pep rallies, post-game celebrations)?
Campus amenities	Does the commercial speak to facilities related to an enhanced living experience (e.g., fitness/recreation centers, residence or dining halls, campus entertainment centers, restaurants, etc.)?
Geographic area	Does the commercial mention the city, region, or state in which the university is located?

[5] The final three categories (spirit traditions, campus amenities, geographic area) were added by the researcher and did not appear in the original codebook.

PSA CONTENT CHECKLIST

Institution: _____ Reviewer: _____

Device	Visual Present	Auditory Present
Scenic beauty		
Students in classroom		
Individuals in laboratory		
NCAA athletics		
Non-NCAA athletics		
Fine arts		
Graduation		
Alumni of distinction		
Faculty of distinction		
History/Nostalgia		
University administrator		
Belonging		
International reach		
Study abroad		
Student scholars		
Student oriented		
Research accomplishments		
Human knowledge		
Embrace of ethical discourse		
Future opportunities		
Volunteerism/Service		
Spirit traditions		
Campus amenities		
Geographic area		

Tag line: _____
URL/Social media: _____

APPENDIX C: INSTITUTIONAL PARTICIPATION MATERIALS

Invitation Email and Survey Questions

Follow Up Email and Survey Questions

INVITATION EMAIL WITH SURVEY QUESTIONS

Dear [Name]:

[Institution] has been identified for inclusion in a research project entitled "Are There Whiter Shades of Pale in the Marketing of the Ivory Tower? An Examination of Differentiation in Institutional Public Service Announcements Through Content Analysis." This study seeks to explore three aspects of institutional PSAs: the distinctiveness of content relative to institutional characteristics, the distinctiveness of content relative to intended target audiences, and the role of the PSA within a larger marketing campaign. This research is being conducted as part of my dissertation at Marshall University in Huntington, West Virginia, and has been approved by the Marshall University Institutional Review Board.

To participate in this study, simply answer the brief questions at the conclusion of this introductory message in your email reply and provide access to the PSA your institution used in the broadcast of your 2013-14 bowl game appearance. Participation in this study is completely voluntary, and there are no known risks related to your involvement. You may choose to not answer any question at any time. All data will be compiled and reported in such a way as to generalize the results and eliminate the association of any specific data with its originating institution. Answering the questions and providing access to the PSA indicate your consent for inclusion in the study. If you have any questions about the research, you may contact my dissertation chair, Dr. Teresa Eagle, at 304.696.6703 or thardman@marshall.edu. Also, if you have questions regarding your rights as a research participant, you may contact the Marshall University Office of Research Integrity at 304.696.4303.

As a professional in higher education myself, I know how valuable your time is and I so appreciate your assistance in adding to the growing body of knowledge related to higher education marketing. I will be happy to send you my final manuscript at the conclusion of my study in the hopes that my findings may be of benefit to you. Again, thank you so much for your assistance in this effort.

Sincerely,

Beth Wolfe
Director of Recruitment
Ed.D. Candidate, Marshall University

PSA Questionnaire

1. Which of the following groups were you attempting to influence through your PSA for the 2013 football season? (Mark all that apply.)

_____ Prospective students (including undergraduate and graduate, first-time, transfer, and returning students)

_____ Alumni

_____ Potential donors (including individual and corporate donors)

_____ Internal constituents (current students, faculty, and/or staff)

_____ Policy makers/political leaders (those determining institutional and educational policy and funding from the institutional to the federal level)

_____ General public

_____ Other (please describe):

2. Of the audiences identified in question #1, which was the most important target audience? (Please choose only one).

_____ Prospective students

_____ Alumni

_____ Potential donors

_____ Internal constituents (current students, faculty, and/or staff)

_____ Policy makers/political leaders

_____ General public

_____ Other (please describe):

3. Were these audiences identified by the results of market research?

_____ Yes _____ No

If yes, when was the market research conducted?

_____ Within six months prior to PSA production

_____ 6 months - 1 year prior to PSA production

_____ 1 year - 2 years prior to PSA production

_____ More than 2 years prior to PSA production

4. Was this PSA part of a broad marketing campaign?

_____ Yes _____ No

If yes, what other strategies were utilized in the campaign? (Please mark all that apply.)

_____Radio ads

_____ Print ads

_____Facebook ads

_____Other online ads

_____ Specialized landing page

_____ Twitter hashtag campaign

_____ Purchased airtime for the PSA

_____ Billboards

_____ Direct mail pieces

_____ Admissions/recruitment materials

_____ Other (please describe):

5. Was this PSA produced specifically for the bowl game broadcast, or was it used throughout the 2013 football season?

_____ Produced for 2013 bowl game _____ Used throughout 2013 season

Video access: If your 2013 PSA is available online, please provide the URL. If not, please attach the video file to your response.

Optional information:
What is your current title? In which university office do you work?

Would you like to receive an electronic copy of the final study? If so, please indicate the email to which you would like it sent.

FOLLOW UP EMAIL AND SURVEY QUESTIONS

Dear [Name],

I hope this message finds you well and having enjoyed a wonderful Thanksgiving holiday. I am following up on my recent request to include [Institution] in my study of the PSAs used in the **2013 bowl season**. I would very much like to include your institutional spot in my research, and hope that you can take a moment to answer the survey questions included below for your convenience. All responses will be aggregated and nothing will be reported in a way to connect institutions with their responses. You can direct any questions you may have about the study to me directly or to my dissertation chair, Dr. Teresa Eagle, who may be reached at 304.696.6703 or thardman@marshall.edu.

Your time and assistance is deeply appreciated. Thank you in advance for participating in the study!

Beth Wolfe
Director of Recruitment
Marshall University
304.696.6007
beth.wolfe@marshall.edu

PSA Questionnaire

1. Which of the following groups were you attempting to influence through your PSA for the **2013 football season**? (Mark all that apply.)

_____ Prospective students (including undergraduate and graduate, first-time, transfer, and returning students)

_____ Alumni

_____ Potential donors (including individual and corporate donors)

_____ Internal constituents (current students, faculty, and/or staff)

_____ Policy makers/political leaders (those determining institutional and educational policy and funding from the institutional to the federal level)

_____ General public

_____ Other (please describe):

2. Of the audiences identified in question #1, which was the most important target audience? (Please choose **only one**).

_____ Prospective students

_____ Alumni

_____ Potential donors

_____ Internal constituents (current students, faculty, and/or staff)

_____ Policy makers/political leaders

_____ General public

_____ Other (please describe):

3. Were these audiences identified by the results of market research?

_____ Yes _____ No

If yes, when was the market research conducted?

_____ Within six months prior to PSA production

_____ 6 months - 1 year prior to PSA production

_____ 1 year - 2 years prior to PSA production

_____ More than 2 years prior to PSA production

4. Was this PSA part of a broad marketing campaign?

_____ Yes _____ No

If yes, what other strategies were utilized in the campaign? (Please mark all that apply.)

_____Radio ads

_____ Print ads

_____Facebook ads

_____Other online ads

_____ Specialized landing page

_____ Twitter hashtag campaign

_____ Purchased airtime for the PSA

_____ Billboards

_____ Direct mail pieces

_____ Admissions/recruitment materials

_____ Other (please describe):

5. Was this PSA produced specifically for the bowl game broadcast, or was it used throughout the 2013 football season?

_____ Produced for 2013 bowl game _____ Used throughout 2013 season

Video access: If your 2013 PSA is available online, please provide the URL. If not, please attach the video file to your response.

Optional information:
What is your current title? In which university office do you work?

Would you like to receive an electronic copy of the final study? If so, please indicate the email to which you would like it sent.

APPENDIX D: PROFILES OF PARTICIPATING INSTITUTIONS

Alphabetical Listing of Participating Institutions with Carnegie Classification, 2013 Athletic Conference Affiliation, and 2013-14 Total Student Enrollment

Listing of Participating Institutions by Carnegie Classification

Listing of Participating Institutions by 2013 Athletic Conference Affiliation

Listing of Participating Institutions by 2013-14 Total Student Enrollment

Alphabetical Listing of Participating Institutions with Institutional Profile

Institution	Carnegie Classification	Athletic Conference (2013 season)	Total Student Enrollment (2013-14)
Arkansas State	Master's Large	Sun Belt	13,552
Ball State	Research University - High	MAC	20,503
Boise State	Master's Large	Mountain West	21,981
Boston College	Research University - High	ACC	14,309
Bowling Green	Research University - High	MAC	16,958
Brigham Young University	Research University - High	Independent	31,123
California State University - Fresno	Master's Large	Mountain West	23,060
Clemson	Research University - High	ACC	21,303
East Carolina University	Doctoral/Research University	CUSA	26,887
Florida State University	Research University - Very High	ACC	40,909
Kansas State	Research University - High	Big 12	24,581
Marshall	Master's Large	CUSA	13,407
Michigan State	Research University - Very High	Big 10	49,317
Middle Tennessee State	Doctoral/Research University	CUSA	23,881
Mississippi State	Research University - Very High	SEC	20,161
Ohio State	Research University - Very High	Big 10	57,466
Ohio University	Research University - High	MAC	28,786
Oregon State	Research University - Very High	PAC 12	27,902
Rice	Research University - Very High	CUSA	6,628
Rutgers	Research University - Very High	American	48,036
Texas A&M	Research University - Very High	SEC	55,697
Texas Tech	Research University - High	Big 12	33,111
University of Alabama	Research University - High	SEC	34,752

Institution	Carnegie Classification	Athletic Conference (2013 season)	Total Student Enrollment (2013-14)
University of California at Los Angeles	Research University - Very High	PAC 12	40,795
University of Central Florida	Research University - Very High	American	59,589
University of Cincinnati	Research University - Very High	American	34,379
University of Georgia	Research University - Very High	SEC	34,536
University of Louisiana - Lafayette	Research University - High	Sun Belt	16,646
University of Louisville	Research University - Very High	American	21,444
University of Miami	Research University - Very High	ACC	16,935
University of Michigan	Research University - Very High	Big 10	43,710
University of Minnesota	Research University - Very High	Big 10	51,526
University of Mississippi	Research University - High	SEC	19,431
University of Missouri	Research University - Very High	SEC	34,616
University of Nebraska	Research University - Very High	Big 10	24,445
University of Oklahoma	Research University - Very High	Big 12	27,292
University of Pittsburgh	Research University - Very High	ACC	28,649
University of Southern California	Research University - Very High	PAC 12	41,368
University of Texas	Research University - Very High	Big 12	52,059
University of Washington	Research University - Very High	PAC 12	43,762
Virginia Tech	Research University - Very High	ACC	31,205

Carnegie classification from Indiana University Center for Postsecondary Research (2010)
Conference membership from Kirk (2013)
Enrollment from United States Department of Education (2014)

Listing of Participating Institutions by Carnegie Classification

Carnegie Classification	Institutions
Master's Large	Arkansas State, Boise State, California State University - Fresno, Marshall
Doctoral/Research Universities	East Carolina, Middle Tennessee State
Research University - High Research Activity	Ball State, Boston College, Bowling Green, Brigham Young, Clemson, Kansas State, Ohio University, Texas Tech, Alabama, University of Louisiana at Lafayette, University of Mississippi
Research University - Very High Research Activity	Florida State, Michigan State, Mississippi State, Ohio State, Oregon State, Rice, Rutgers, Texas A&M, UCLA, Central Florida, Cincinnati, Georgia, Louisville, Miami, Michigan, Minnesota, Missouri, Nebraska, Oklahoma, Pittsburgh, Southern California, Texas, Washington, Virginia Tech

Listing of Participating Institutions by 2013 Athletic Conference Affiliation

Conference Affiliation	Institutions
American	Rutgers, Central Florida, Cincinnati, Louisville
Atlantic Coast (ACC)	Boston College, Clemson, Florida State, Miami, Pittsburgh, Virginia Tech
Big 10	Michigan State, Ohio State, Michigan, Minnesota, Nebraska
Big 12	Kansas State, Texas Tech, Oklahoma, Texas
Conference USA (CUSA)	East Carolina, Marshall, Middle Tennessee State, Rice
Independent	Brigham Young
Mid-American (MAC)	Ball State, Bowling Green, Ohio University
Mountain West	Boise State, California State University - Fresno
Pacific 12 (Pac 12)	Oregon State, UCLA, Southern California, Washington
South Eastern (SEC)	Mississippi State, Texas A&M, Alabama, Georgia, Mississippi, Missouri
Sun Belt	Arkansas State, University of Louisiana at Lafayette

Listing of Participating Institutions by 2013-14 Total Student Enrollment

Total Student Enrollment	**Institutions**
Less than 20,000	Arkansas State, Boston College, Bowling Green, Marshall, Rice, University of Louisiana at Lafayette, Miami, Mississippi
20,000 - 30,000	Ball State, Boise State, California State University - Fresno, Clemson, East Carolina, Kansas State, Middle Tennessee State, Ohio University, Oregon State, Louisville, Nebraska, Oklahoma, Pittsburgh
30,001 - 40,000	Brigham Young, Texas Tech, Alabama, Cincinnati, Georgia, Missouri, Virginia Tech
40,001 - 50,000	Florida State, Michigan State, Rutgers, UCLA, Michigan, Southern California, Washington
50,001 - 60,000	Ohio State, Texas A&M, Central Florida, Minnesota, Texas

APPENDIX E: INTERCODER RELIABILITY

Institution	Average Pairwise Percent Agreement	Fleiss Kappa	Observed Agreement	Expected Agreement
Arkansas State	88.89	0.663	0.889	0.670
Ball State	81.94	0.557	0.819	0.593
Boise State	90.28	0.698	0.903	0.678
Boston College	93.06	0.765	0.931	0.704
Bowling Green State	93.06	0.784	0.931	0.678
Brigham Young	94.44	0.746	0.944	0.781
California State University - Fresno	93.06	0.765	0.931	0.704
Clemson	88.89	0.723	0.889	0.599
East Carolina	87.5	0.638	0.875	0.654
Florida State	93.06	0.604	0.931	0.824
Kansas State	88.89	0.600	0.889	0.722
Marshall	88.89	0.571	0.889	0.741
Michigan State	87.50	0.550	0.875	0.722
Middle Tennessee State	88.89	0.466	0.889	0.792
Mississippi State	91.67	0.753	0.917	0.662
Ohio State	80.56	0.585	0.806	0.531
Ohio University	90.28	0.594	0.903	0.761
Oregon State	86.11	0.630	0.861	0.625
Rice	88.89	0.571	0.889	0.741
Rutgers	93.06	0.604	0.931	0.824
Texas A&M	93.06	0.732	0.931	0.741
Texas Tech	81.94	0.466	0.819	0.662
University of Alabama	94.44	0.812	0.944	0.704
University of California - Los Angeles	90.28	0.698	0.903	0.678
University of Central Florida	95.83	0.789	0.958	0.802
University of Cincinnati	90.28	0.661	0.903	0.713
University of Georgia	80.56	0.523	0.806	0.593
University of Louisiana at Lafayette	86.11	0.607	0.861	0.647

Institution	Average Pairwise Percent Agreement	Fleiss Kappa	Observed Agreement	Expected Agreement
University of Louisvillle	83.33	0.591	0.833	0.593
University of Miami	93.06	0.577	0.931	0.836
University of Michigan	81.94	0.625	0.819	0.519
University of Minnesota	95.83	0.678	0.958	0.871
University of Mississippi	83.33	0.437	0.833	0.704
University of Missouri	84.72	0.537	0.847	0.670
University of Nebraska	95.83	0.833	0.958	0.751
University of Oklahoma	94.44	0.793	0.944	0.732
University of Pittsburgh	84.72	0.635	0.847	0.581
University of Southern California	84.72	0.625	0.847	0.593
University of Texas	90.28	0.576	0.903	0.771
University of Washington	87.50	0.646	0.875	0.647
Virginia Tech	88.89	0.645	0.889	0.687

APPENDIX F: CONTENT DEVICE FREQUENCY IN PSAs

Device Frequency within All PSAs

Device Frequency by Athletic Conference

Device Frequency by Carnegie Classification

Device Frequency by Total Student Enrollment

Device Frequency by Primary Target Audience

Frequency of content devices in all PSAs

PSA Device (V - visual, A - auditory)	**Frequency within All PSAs N = 41**	**Percent of PSAs Utilizing Device**
Scenic beauty (V)	29	70.7
Belonging (V)	21	51.2
Fine arts (V)	20	48.8
Individuals in laboratory (V)	19	46.3
Future opportunities (A)	18	43.9
NCAA athletics (V), Spirit traditions (V)	17	41.5
Research accomplishments (A), Human knowledge (A), International reach (A)	15	36.6
Student oriented (V), Students in classroom (V)	12	29.3
Belonging (A), Future opportunities (V) Spirit traditions (A)	10	24.4
History/nostalgia (A), International reach (V), Research accomplishments (V), Graduation (V)	9	22.0
Alumni of distinction (V), Embrace of ethical discourse (A)	8	19.5
Volunteerism/service (V), Geographic area (V)	7	17.1
Non-NCAA athletics (V), History/nostalgia (V)	6	14.6
Alumni of distinction (A), Volunteerism/service (A)	5	12.2
Fine arts (A), Study abroad (V), Campus amenities (V)	4	9.8
University administrator (V), Student scholars (V), Study abroad (A), Student oriented (A)	3	7.3
Scenic beauty (A), NCAA athletics (A), Faculty of distinction (V), Student scholars (A), Geographic area (A)	2	4.9
Faculty of distinction (A), Human knowledge (V), Embrace of ethical discourse (V), Campus amenities (A)	1	2.4
Students in classroom (A), Individuals in laboratory (A), Non-NCAA athletics (A), Graduation (A), University administrator (A)	0	0

Frequency of Visual Devices by Athletic Conference

Visual Device	ACC N = 6 N (%)	American N = 4 N (%)	Big 10 N = 5 N (%)	Big 12 N = 4 N (%)	CUSA N = 4 N (%)	MAC N = 3 N (%)	Pac 12 N = 4 N (%)	SEC N = 6 N (%)	Other N = 5 N (%)
Scenic beauty	3 (50)	3 (75)	3 (60)	0 (0)	2 (50)	2 (66.7)	4 (100)	4 (66.7)	4 (80.0)
Students in classroom	1 (16.7)	1 (25)	3 (60)	1 (25)	0 (0)	1 (33.3)	2 (50.0)	0 (0)	3 (60.0)
Individuals in laboratory	3 (50)	2 (50)	3 (60)	2 (50)	1 (25)	1 (33.3)	2 (50.0)	3 (50.0)	2 (40.0)
NCAA athletics	1 (16.7)	2 (50)	2 (40)	0 (0)	1 (25)	2 (66.7)	2 (50.0)	4 (66.7)	3 (60.0)
Non-NCAA athletics	0 (0)	0 (0)	1 (20)	0 (0)	0 (0)	2 (66.7)	2 (50.0)	0 (0)	1 (20.0)
Fine arts	1 (16.7)	2 (50)	3 (60)	2 (50)	2 (50)	2 (66.7)	4 (100)	2 (33.3)	2 (40.0)
Graduation	1 (16.7)	0 (0)	1 (20)	0 (0)	1 (25)	1 (33.3)	0 (0)	1 (16.7)	4 (80.0)
Alumni of distinction	3 (50)	0 (0)	1 (20)	2 (50)	0 (0)	0 (0)	1 (25.0)	1 (16.7)	0 (0)
Faculty of distinction	0 (0)	1 (25)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (16.7)	0 (0)
History/Nostalgia	2 (33.3)	0 (0)	1 (20)	0 (0)	0 (0)	0 (0)	1 (25.0)	2 (33.3)	0 (0)
University administrator	0 (0)	1 (25)	0 (0)	2 (50)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Belonging	3 (50)	2 (50)	3 (60)	1 (25)	0 (0)	2 (66.7)	1 (25.0)	5 (83.3)	4 (80.0)
International reach	1 (16.7)	1 (25)	3 (60)	0 (0)	1 (25)	0 (0)	2 (50.0)	1 (16.7)	0 (0)
Study abroad	0 (0)	1 (25)	2 (40)	0 (0)	0 (0)	1 (33.3)	0 (0)	0 (0)	0 (0)
Student scholars	2 (33.3)	1 (25)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Student oriented	3 (50)	1 (25)	1 (20)	1 (25)	0 (0)	2 (66.7)	1 (25.0)	2 (33.3)	1 (20.0)
Research accomplishments	2 (33.3)	1 (25)	3 (60)	0 (0)	1 (25)	0 (0)	1 (25.0)	1 (16.7)	0 (0)
Human knowledge	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (20.0)
Embrace of ethical discourse	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (25.0)	0 (0)	0 (0)
Future opportunities	1 (16.7)	1 (25)	1 (20)	0 (0)	1 (25)	1 (33.3)	1 (25.0)	2 (33.3)	2 (40.0)
Volunteerism/Service	0 (0)	0 (0)	2 (40)	0 (0)	1 (25)	1 (33.3)	0 (0)	2 (33.3)	1 (20.0)
Spirit traditions	3 (50)	2 (50)	3 (60)	2 (50)	1 (25)	1 (33.3)	1 (25.0)	3 (50.0)	1 (20.0)
Campus amenities	1 (16.7)	1 (25)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (40.0)
Geographic area	0 (0)	1 (25)	1 (20)	0 (0)	0 (0)	0 (0)	4 (100)	0 (0)	1 (20.0)

Frequency of Auditory Devices by Athletic Conference

Auditory Device	ACC N = 6 N (%)	American N = 4 N (%)	Big 10 N = 5 N (%)	Big 12 N = 4 N (%)	CUSA N = 4 N (%)	MAC N = 3 N (%)	Pac 12 N = 4 N (%)	SEC N = 6 N (%)	Other N = 5 N (%)
Scenic beauty	2 (33.3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Students in classroom	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Individuals in laboratory	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
NCAA athletics	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (16.7)	1 (20.0)
Non-NCAA athletics	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Fine arts	0 (0)	0 (0)	2 (40)	0 (0)	0 (0)	1 (33.3)	0 (0)	1 (16.7)	0 (0)
Graduation	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Alumni of distinction	2 (33.3)	0 (0)	0 (0)	1 (25)	1 (25)	0 (0)	0 (0)	1 (16.7)	0 (0)
Faculty of distinction	1 (16.7)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
History/Nostalgia	3 (50)	0 (0)	0 (0)	1 (25)	1 (25)	0 (0)	2 (50.0)	2 (33.3)	0 (0)
University administrator	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Belonging	2 (33.3)	0 (0)	1 (20)	0 (0)	1 (25)	2 (66.7)	1 (25.0)	2 (33.3)	1 (20.0)
International reach	1 (16.7)	1 (25)	2 (40)	2 (50)	1 (25)	1 (33.3)	2 (50.0)	3 (50.0)	2 (40.0)
Study abroad	0 (0)	1 (25)	1 (20)	0 (0)	0 (0)	1 (33.3)	0 (0)	0 (0)	0 (0)
Student scholars	1 (16.7)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (16.7)	0 (0)
Student oriented	1 (16.7)	1 (25)	0 (0)	0 (0)	0 (0)	1 (33.3)	0 (0)	0 (0)	0 (0)
Research accomplishments	1 (16.7)	1 (25)	2 (40)	2 (50)	1 (25)	1 (33.3)	2 (50.0)	3 (50.0)	2 (40.0)
Human knowledge	1 (16.7)	2 (50)	3 (60)	2 (50)	3 (75)	0 (0)	2 (50.0)	0 (0)	2 (40.0)
Embrace of ethical discourse	2 (33.3)	0 (0)	1 (20)	0 (0)	2 (50)	0 (0)	2 (50.0)	1 (16.7)	0 (0)
Future opportunities	1 (16.7)	2 (50)	2 (40)	2 (50)	3 (75)	1 (33.3)	1 (25.0)	3 (50.0)	3 (60.0)
Volunteerism/Service	1 (16.7)	1 (25)	0 (0)	0 (0)	2 (50)	1 (33.3)	0 (0)	0 (0)	0 (0)
Spirit traditions	2 (33.3)	0 (0)	1 (20)	1 (25)	1 (25)	1 (33.3)	1 (25.0)	2 (33.3)	1 (20.0)
Campus amenities	0 (0)	0 (0)	0 (0)	1 (25)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Geographic area	0 (0)	0 (0)	1 (20)	0 (0)	0 (0)	0 (0)	1 (25.0)	0 (0)	0 (0)

Frequency of Visual Devices by Carnegie Classification

Visual Device	Master's Large and Doctoral/Research Universities N = 6 N (%)	Research Universities, High Research N = 11 N (%)	Research Universities, Very High Research N = 24 N (%)
Scenic beauty	5 (83.3)	7 (63.6)	17 (70.8)
Students in classroom	2 (33.3)	4 (36.4)	6 (25.0)
Individuals in laboratory	3 (50.0)	5 (45.5)	11 (45.8)
NCAA athletics	2 (33.3)	7 (63.6)	8 (33.3)
Non-NCAA athletics	1 (16.7)	2 (18.2)	3 (12.5)
Fine arts	3 (50.0)	4 (36.4)	13 (54.2)
Graduation	4 (66.7)	4 (36.4)	1 (4.2)
Alumni of distinction	0 (0)	2 (18.2)	6 (25.0)
Faculty of distinction	0 (0)	0 (0)	2 (8.3)
History/Nostalgia	0 (0)	0 (0)	6 (25.0)
University administrator	0 (0)	1 (9.1)	2 (8.3)
Belonging	2 (33.3)	6 (54.5)	13 (54.2)
International reach	0 (0)	0 (0)	9 (37.5)
Study abroad	0 (0)	1 (9.1)	3 (12.5)
Student scholars	0 (0)	1 (9.1)	2 (8.3)
Student oriented	1 (16.7)	5 (45.5)	6 (25.0)
Research accomplishments	0 (0)	0 (0)	9 (37.5)
Human knowledge	0 (0)	1 (9.1)	0 (0)
Embrace of ethical discourse	0 (0)	0 (0)	1 (4.2)
Future opportunities	2 (33.3)	4 (36.4)	4 (16.7)
Volunteerism/Service	2 (33.3)	1 (9.1)	4 (16.7)
Spirit traditions	2 (33.3)	3 (27.3)	12 (50.0)
Campus amenities	0 (0)	3 (27.3)	1 (4.2)
Geographic area	1 (16.7)	0 (0)	6 (25.0)

Frequency of Auditory Devices by Carnegie Classification

Auditory Device	Master's Large and Doctoral/Research Universities N = 6 N (%)	Research Universities, High Research N = 11 N (%)	Research Universities, Very High Research N = 24 N (%)
Scenic beauty	0 (0)	1 (9.1)	1 (4.2)
Students in classroom	0 (0)	0 (0)	0 (0)
Individuals in laboratory	0 (0)	0 (0)	0 (0)
NCAA athletics	0 (0)	1 (9.1)	1 (4.2)
Non-NCAA athletics	0 (0)	0 (0)	0 (0)
Fine arts	0 (0)	2 (18.2)	2 (8.3)
Graduation	0 (0)	0 (0)	0 (0)
Alumni of distinction	0 (0)	0 (0)	5 (20.8)
Faculty of distinction	0 (0)	0 (0)	1 (4.2)
History/Nostalgia	1 (16.7)	1 (9.1)	7 (29.2)
University administrator	0 (0)	0 (0)	0 (0)
Belonging	1 (16.7)	6 (54.5)	3 (12.5)
International reach	2 (33.3)	4 (36.4)	9 (37.5)
Study abroad	0 (0)	1 (9.1)	2 (8.3)
Student scholars	0 (0)	0 (0)	2 (8.3)
Student oriented	0 (0)	2 (18.2)	1 (4.2)
Research accomplishments	1 (16.7)	4 (36.4)	10 (41.7)
Human knowledge	3 (50.0)	4 (36.4)	8 (33.3)
Embrace of ethical discourse	1 (16.7)	1 (9.1)	6 (25.0)
Future opportunities	5 (83.3)	6 (54.5)	7 (29.2)
Volunteerism/Service	2 (33.3)	2 (18.2)	1 (4.2)
Spirit traditions	1 (16.7)	3 (27.3)	6 (25.0)
Campus amenities	0 (0)	0 (0)	1 (4.2)
Geographic area	0 (0)	0 (0)	2 (8.3)

Frequency of Visual Devices by Institutional Enrollment

Visual Device	<20,000 N = 8 N (%)	20,000-30,000 N = 14 N (%)	30,001-40,000 N = 7 N (%)	40,001-50,000 N = 7 N (%)	50,001-60,000 N = 5 N (%)
Scenic beauty	3 (37.5)	13 (92.9)	6 (85.7)	4 (57.1)	3 (60.0)
Students in classroom	2 (25.0)	6 (42.9)	1 (14.3)	2 (28.6)	1 (20.0)
Individuals in laboratory	2 (25.0)	8 (57.1)	4 (57.1)	4 (57.1)	1 (20.0)
NCAA athletics	5 (62.5)	4 (28.6)	3 (42.9)	3 (42.9)	2 (40.0)
Non-NCAA athletics	1 (12.5)	4 (28.6)	0 (0)	1 (14.3)	0 (0)
Fine arts	3 (37.5)	7 (50.0)	4 (57.1)	4 (57.1)	2 (40.0)
Graduation	1 (12.5)	5 (35.7)	2 (28.6)	0 (0)	1 (20.0)
Alumni of distinction	2 (25.0)	1 (7.1)	2 (28.6)	2 (28.6)	1 (20.0)
Faculty of distinction	0 (0)	0 (0)	1 (14.3)	1 (14.3)	0 (0)
History/Nostalgia	0 (0)	1 (7.1)	2 (28.6)	3 (42.9)	0 (0)
University administrator	0 (0)	1 (7.1)	2 (28.6)	0 (0)	0 (0)
Belonging	2 (25.0)	9 (64.3)	6 (85.7)	2 (28.6)	2 (40.0)
International reach	1 (12.5)	2 (14.3)	1 (14.3)	3 (42.9)	2 (40.0)
Study abroad	0 (0)	2 (14.3)	0 (0)	1 (14.3)	1 (20.0)
Student scholars	0 (0)	3 (21.4)	0 (0)	0 (0)	0 (0)
Student oriented	1 (12.5)	6 (42.9)	3 (42.9)	1 (14.3)	1 (20.0)
Research accomplishments	1 (12.5)	2 (14.3)	1 (14.3)	3 (42.9)	2 (40.0)
Human knowledge	1 (12.5)	0 (0)	0 (0)	0 (0)	0 (0)
Embrace of ethical discourse	0 (0)	1 (7.1)	0 (0)	0 (0)	0 (0)
Future opportunities	3 (37.5)	3 (21.4)	3 (42.9)	1 (14.3)	0 (0)
Volunteerism/Service	0 (0)	3 (21.4)	1 (14.3)	1 (14.3)	2 (40.0)
Spirit traditions	2 (25.0)	6 (42.9)	2 (28.6)	4 (57.1)	3 (60.0)
Campus amenities	1 (12.5)	1 (7.1)	1 (14.3)	0 (0)	1 (20.0)
Geographic area	0 (0)	2 (14.3)	1 (14.3)	3 (42.9)	1 (20.0)

Frequency of Auditory Devices by Institutional Enrollment

Auditory Device	<20,000 N = 8 N (%)	20,000-30,000 N = 14 N (%)	30,001-40,000 N = 7 N (%)	40,001-50,000 N = 7 N (%)	50,001-60,000 N = 5 N (%)
Scenic beauty	0 (0)	2 (14.3)	0 (0)	0 (0)	0 (0)
Students in classroom	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Individuals in laboratory	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
NCAA athletics	1 (12.5)	0 (0)	1 (14.3)	0 (0)	0 (0)
Non-NCAA athletics	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Fine arts	1 (12.5)	1 (7.1)	0 (0)	1 (14.3)	1 (20.0)
Graduation	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Alumni of distinction	2 (25.0)	1 (7.1)	1 (14.3)	0 (0)	1 (20.0)
Faculty of distinction	0 (0)	1 (7.1)	0 (0)	0 (0)	0 (0)
History/Nostalgia	2 (25.0)	2 (14.3)	2 (28.6)	2 (28.6)	1 (20.0)
University administrator	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Belonging	3 (37.5)	3 (21.4)	2 (28.6)	2 (28.6)	0 (0)
International reach	4 (50.0)	5 (35.7)	1 (14.3)	3 (42.9)	2 (40.0)
Study abroad	0 (0)	2 (14.3)	0 (0)	0 (0)	1 (20.0)
Student scholars	0 (0)	2 (14.3)	0 (0)	0 (0)	0 (0)
Student oriented	1 (12.5)	1 (7.1)	1 (14.3)	0 (0)	0 (0)
Research accomplishments	4 (50.0)	5 (35.7)	1 (14.3)	4 (57.1)	1 (20.0)
Human knowledge	5 (62.5)	2 (14.3)	2 (28.6)	5 (71.4)	1 (20.0)
Embrace of ethical discourse	2 (25.0)	2 (14.3)	0 (0)	3 (42.9)	1 (20.0)
Future opportunities	5 (62.5)	7 (50.0)	3 (42.9)	2 (28.6)	1 (20.0)
Volunteerism/Service	1 (12.5)	4 (28.6)	0 (0)	0 (0)	0 (0)
Spirit traditions	2 (25.0)	2 (14.3)	2 (28.6)	2 (28.6)	2 (40.0)
Campus amenities	0 (0)	1 (7.1)	0 (0)	0 (0)	0 (0)
Geographic area	0 (0)	0 (0)	0 (0)	1 (14.3)	1 (20.0)

Frequency of Visual Devices by Primary Target Audience

Visual Device	Prospective Students N = 20 N (%)	Alumni N = 10 N (%)	General Public N = 9 N (%)	Other N = 6 N (%)
Scenic beauty	14 (70.0)	8 (80.0)	7 (77.8)	4 (66.7)
Students in classroom	6 (30.0)	2 (20.0)	1 (11.1)	2 (33.3)
Individuals in laboratory	12 (60.0)	2 (20.0)	2 (22.2)	3 (50.0)
NCAA athletics	10 (50.0)	4 (40.0)	4 (44.4)	0 (0)
Non-NCAA athletics	5 (25.0)	1 (10.0)	1 (11.1)	0 (0)
Fine arts	11 (55.0)	5 (50.0)	4 (44.4)	3 (50.0)
Graduation	5 (25.0)	2 (20.0)	1 (11.1)	2 (33.3)
Alumni of distinction	3 (15.0)	5 (50.0)	5 (55.6)	0 (0)
Faculty of distinction	1 (5.0)	0 (0)	0 (0)	0 (0)
History/Nostalgia	4 (20.0)	2 (20.0)	2 (22.2)	0 (0)
University administrator	1 (5.0)	2 (20.0)	2 (22.2)	0 (0)
Belonging	12 (60.0)	4 (40.0)	3 (33.3)	3 (50.0)
International reach	3 (15.0)	1 (10.0)	1 (11.1)	2 (33.3)
Study abroad	1 (5.0)	0 (0)	0 (0)	2 (33.3)
Student scholars	2 (10.0)	0 (0)	0 (0)	0 (0)
Student oriented	8 (40.0)	0 (0)	0 (0)	4 (66.7)
Research accomplishments	3 (15.0)	1 (10.0)	1 (11.1)	4 (66.7)
Human knowledge	1 (5.0)	0 (0)	0 (0)	0 (0)
Embrace of ethical discourse	1 (5.0)	0 (0)	0 (0)	0 (0)
Future opportunities	8 (40.0)	1 (10.0)	1 (11.1)	1 (16.7)
Volunteerism/Service	3 (15.0)	1 (10.0)	1 (11.1)	2 (33.3)
Spirit traditions	7 (35.0)	5 (50.0)	5 (55.6)	2 (33.3)
Campus amenities	3 (15.0)	1 (10.0)	1 (11.1)	0 (0)
Geographic area	4 (20.0)	1 (10.0)	1 (11.1)	1 (16.7)

Frequency of Auditory Devices by Primary Target Audience

Auditory Device	Prospective Students N = 20 N (%)	Alumni N = 10 N (%)	General Public N = 9 N (%)	Other N = 6 N (%)
Scenic beauty	2 (10.0)	0 (0)	0 (0)	0 (0)
Students in classroom	0 (0)	0 (0)	0 (0)	0 (0)
Individuals in laboratory	0 (0)	0 (0)	0 (0)	0 (0)
NCAA athletics	2 (10.0)	0 (0)	0 (0)	0 (0)
Non-NCAA athletics	0 (0)	0 (0)	0 (0)	0 (0)
Fine arts	2 (10.0)	0 (0)	0 (0)	2 (33.3)
Graduation	0 (0)	0 (0)	0 (0)	0 (0)
Alumni of distinction	2 (10.0)	2 (20.0)	2 (22.2)	1 (16.7)
Faculty of distinction	1 (5.0)	0 (0)	0 (0)	0 (0)
History/Nostalgia	5 (25.0)	2 (20.0)	2 (22.2)	0 (0)
University administrator	0 (0)	0 (0)	0 (0)	0 (0)
Belonging	8 (40.0)	2 (20.0)	2 (22.2)	0 (0)
International reach	5 (25.0)	3 (30.0)	2 (22.2)	5 (83.3)
Study abroad	0 (0)	0 (0)	0 (0)	2 (33.3)
Student scholars	1 (5.0)	0 (0)	0 (0)	1 (16.7)
Student oriented	3 (15.0)	0 (0)	0 (0)	0 (0)
Research accomplishments	6 (30.0)	2 (20.0)	2 (22.2)	5 (83.3)
Human knowledge	7 (35.0)	2 (20.0)	2 (22.2)	3 (50.0)
Embrace of ethical discourse	5 (25.0)	1 (10.0)	1 (11.1)	1 (16.7)
Future opportunities	10 (50.0)	3 (30.0)	2 (22.2)	2 (33.3)
Volunteerism/Service	3 (15.0)	0 (0)	0 (0)	1 (16.7)
Spirit traditions	5 (25.0)	3 (30.0)	3 (33.3)	1 (16.7)
Campus amenities	0 (0)	1 (10.0)	1 (11.1)	0 (0)
Geographic area	1 (5.0)	0 (0)	0 (0)	1 (16.7)

APPENDIX G: DESCRIPTIVE STATISTICS

Chi-Square Significance of Content Devices in Institutional Profile Groupings

Chi-Square Significance of Content Devices in Primary Target Audience Grouping

Chi-Square Significance for Visual Devices in Institutional Profile Groupings

Visual Device	Conference Chi-Square Significance	Carnegie Chi-Square Significance	Enrollment Chi-Square Significance
Scenic beauty	0.650	0.695	0.055
Students in classroom	0.259	0.769	0.683
Individuals in laboratory	0.992	0.981	0.383
NCAA athletics	0.423	0.218	0.657
Non-NCAA athletics	0.062	0.897	0.371
Fine arts	0.429	0.618	0.916
Graduation	0.091	**0.002***	0.389
Alumni of distinction	0.272	0.382	0.690
Faculty of distinction	0.550	0.475	0.399
History/Nostalgia	0.510	0.083	0.078
University administrator	0.055	0.755	0.182
Belonging	0.203	0.638	0.085
International reach	0.289	**0.017***	0.423
Study abroad	0.186	0.651	0.608
Student scholars	0.246	0.755	0.182
Student oriented	0.703	0.356	0.416
Research accomplishments	0.413	**0.017***	0.423
Human knowledge	0.496	0.247	0.376
Embrace of ethical discourse	0.303	0.696	0.740
Future opportunities	0.957	0.388	0.392
Volunteerism/Service	0.489	0.445	0.438
Spirit traditions	0.919	0.407	0.592
Campus amenities	0.311	0.069	0.792
Geographic area	**0.002***	0.189	0.279

**Significance at $p < 0.05$ level*

Chi-Square Significance for Auditory Devices in Institutional Profile Groupings

Auditory Device	Conference Chi-Square Significance	Carnegie Chi-Square Significance	Enrollment Chi-Square Significance
Scenic beauty	0.140	0.686	0.399
NCAA athletics	0.670	0.686	0.452
Fine arts	0.242	0.451	0.792
Alumni of distinction	0.563	0.133	0.584
Faculty of distinction	0.650	0.696	0.740
History/Nostalgia	0.274	0.389	0.926
Belonging	0.634	**0.024***	0.634
International reach	0.955	0.982	0.686
Study abroad	0.403	0.755	0.416
Student scholars	0.749	0.475	0.399
Student oriented	0.451	0.254	0.779
Research accomplishments	0.955	0.524	0.407
Human knowledge	0.207	0.750	**0.045***
Embrace of ethical discourse	0.312	0.535	0.340
Future opportunities	0.772	**0.041***	0.530
Volunteerism/Service	0.222	0.116	0.189
Spirit traditions	0.980	0.883	0.814
Campus amenities	0.303	0.696	0.740
Geographic area	0.474	0.475	0.259

**Significance at $p < 0.05$ level*

Chi Square Significance Results for Primary Target Audience

Visual Device	Chi Square Significance	Auditory Device	Chi Square Significance
Scenic beauty	0.862	**Scenic beauty**	0.530
Students in classroom	0.862	**Students in classroom**	-
Individuals in laboratory	0.221	**Individuals in laboratory**	-
NCAA athletics	0.135	**NCAA athletics**	0.530
Non-NCAA athletics	0.286	**Non-NCAA athletics**	
Fine arts	0.577	**Fine arts**	0.144
Graduation	0.574	**Graduation**	-
Alumni of distinction	**0.031***	**Alumni of distinction**	0.690
Faculty of distinction	0.350	**Faculty of distinction**	0.783
History/Nostalgia	0.462	**History/Nostalgia**	0.429
University administrator	0.334	**University administrator**	-
Belonging	0.711	**Belonging**	0.098
International reach	0.108	**International reach**	0.071
Study abroad	0.113	**Study abroad**	**0.023***
Student scholars	0.447	**Student scholars**	0.463
Student oriented	**0.010***	**Student oriented**	0.334
Research accomplishments	**0.038***	**Research accomplishments**	0.065
Human knowledge	0.783	**Human knowledge**	0.415
Embrace of ethical discourse	0.783	**Embrace of ethical discourse**	0.803
Future opportunities	0.134	**Future opportunities**	0.597
Volunteerism/Service	0.667	**Volunteerism/Service**	0.587
Spirit traditions	0.679	**Spirit traditions**	0.936
Campus amenities	0.612	**Campus amenities**	0.365
Geographic area	0.918	**Geographic area**	0.463

* Significance at $p < 0.05$ level

APPENDIX H: CURRICULUM VITAE

CURRICULUM VITAE

ELIZABETH ANNE WOLFE

EDUCATION

Marshall University, Doctor of Education in Higher Education Leadership, May 2015
Marshall University, Master of Science in Engineering, Engineering Management, May 2009
Marshall University, Bachelor of Arts in Education, Language Arts and Chemistry, May 1998

PROFESSIONAL EXPERIENCE

Adjunct Faculty, Marshall University — August 2014 – December 2014
Director of Recruitment, Marshall University — 2009 – Present
Coordinator, STEM Outreach, Marshall University — 2006 – 2009
Educational Consultant, Independent Contractor — 2006 – 2009
Science Department Chair, Bloomington High School South — 2004 – 2006
Teacher, Bloomington High School South — 1999 – 2006
Teacher, Stonewall Jackson Junior High School — 1998 – 1999

PRESENTATIONS AND PUBLICATIONS

2014

"What Are They Thinking? How the Brain Development of Our Students Affects Their Decisions and Behaviors" Presentation at the West Virginia Association of Student Personnel Administrators

"Our Profession, Today and Tomorrow" Invited presentation at the West Virginia Association of College Registrars and Admissions Officers state conference

Panelist: Preparing Students for Post-Secondary Success – West Virginia Department of Education School Counselors Conference

2013

"The Pressure is On: Changes in Higher Ed Enrollment" Appearance on Admissions Live weekly webcast (August 22 edition). http://higheredlive.com/category/admissions-live/

"Tackling Admissions Problems" Appearance on Admissions Live weekly webcast (March 21 edition). http://higheredlive.com/category/admissions-live/

2012

"Painting a Portrait of the Intangible: Images of Higher Education in Bowl Game Commercials" Selected Presentation at the American Marketing Association Symposium for the Marketing of Higher Education

"What Are They Thinking? The Mindset of Prospective Students and the Impact on Enrollment Management" Presentation at the West Virginia Association of College Registrars and Admissions Officers State Conference

"iPad Apps for the Doctoral Student" Presentation at the Marshall University Fall Doctoral Student Seminar

"What Are They Thinking? Understanding the Freshman Student's Mindset, Habits, and Decisions" Presentation at the Marshall University iPED: Inquiring Pedagogies Conference on Teaching and Learning

Review of *How We Decide* by J. Lehrer Published in *College and University, 87*(4).

2011

"From Dysfunction to Function: Building Effective Teams in the Workplace" Invited Presentation at the West Virginia Association of College Registrars and Admissions Officers State Conference

"Software for Writing" and "iPad Apps for Doctoral Students" Presentations at the Marshall University Fall Doctoral Student Seminar

"What Students Need to Know When they Come to College" Published in *SouthEast Education Network (SEEN) Magazine*, Summer edition

"The One-Month Implementation Challenge: One Year Later" Invited Presentation at SunGard Summit National Conference

"In Search of the Perfect Fit: Helping Students Find the Right College" Presentation at the West Virginia School Counselor Association Winter Academy

2010

"Getting Beyond 'We've Always Done it this Way': Asking Questions to Bring About Effective Change" Presentation at the West Virginia Association of College Registrars and Admissions Officers State Conference

"Student Research at Marshall University" published in *SouthEast Education Network (SEEN) Magazine*, Fall edition

"Decisions, Decisions: How to Help Students Choose the Best College" Presentation at the College Access and Student Success Summit sponsored by WV GEAR UP and the WV Higher Education Policy Commission

2009

"Marshall University and the 21st Century Engineer: An Action Plan for West Virginia's Newest Engineering Degree Program" comprehensive project submitted in partial fulfillment of Master's Degree requirements. Passed "With Distinction."

2008

"Avoiding the Limits of Destructive Decisions: Protecting and Preserving One's Reputation, Life, and Future Success through Positive Decisions" Presentation at the Appalachian Leadership and Education Foundation fall retreat

"Engineering at Marshall: Reemerging and Reenergizing" published in *Marshall University Parent Magazine*

"Do You Have the Write Stuff? Career Advancement through Effective Writing" Presentation delivered to the Appalachian Leadership and Education Foundation Leadership Symposium

2007
"Breaking Down Barriers" keynote address delivered at West Virginia Technical Student Association state competition
"21st Century Initiatives and their Impact on the Workforce" panelist at West Virginia School Counselors Fall Conference

2006
"Reading and Writing Strategies for the Chemistry Classroom" presented at West Virginia Science Teachers Association conference

2005
"Reading and Writing in Chemistry" and "The Benefits of Mentoring" presented at the Hoosier Association of Science Teachers, Inc. state conference

2004
"Writing that Works in Chemistry Class" and "Chemistry Share-a-Thon" presented at the Hoosier Association of Science Teachers, Inc. state conference

2002
"Science Lessons for You and Your Colleagues" presented at National Science Teacher Association's national conference
"Writing Across the Curriculum Strategies" presented at Bloomington High School South Faculty Seminar

AWARDS AND GRANTS

Generation Next: 40 Under 40, WV State Journal (2013)
Monroe County Community School Foundation Grant Recipient (2003)
Bloomington Open Institute for Teachers Grant Recipient (2003)
Franklin Initiative Teacher of the Year for Monroe County, Indiana (2002)

SPECIALIZED TRAINING

Connections Service Training, Facilitator (2012)
Facilitative Leadership Training (2008)
Critical Friends Group Leader Training (2005)
Mentor Teacher Training (2004)

MEMBERSHIPS

National Association for College Admission Counseling
American Association of Collegiate Registrars and Admissions Officers
Southern Association of Collegiate Registrars and Admissions Officers
West Virginia Association of Collegiate Registrars and Admissions Officers
Phi Kappa Phi Honor Society