Public Relations Models and Dialogic Communication in the Twitterverse: An Analysis of How Colleges and Universities are Engaging Their Publics Through Twitter

Jason Antwuan Beverly
University of Southern Mississippi

Follow this and additional works at: https://aquila.usm.edu/dissertations

Part of the Higher Education Commons, Mass Communication Commons, Public Relations and Advertising Commons, and the Social Media Commons

Recommended Citation
https://aquila.usm.edu/dissertations/159

This Dissertation is brought to you for free and open access by The Aquila Digital Community. It has been accepted for inclusion in Dissertations by an authorized administrator of The Aquila Digital Community. For more information, please contact Joshua.Cromwell@usm.edu.
PUBLIC RELATIONS MODELS AND DIALOGIC COMMUNICATION IN THE TWITTERVERSE: AN ANALYSIS OF HOW COLLEGES AND UNIVERSITIES ARE ENGAGING THEIR PUBLICS THROUGH TWITTER

by

Jason Antwuan Beverly

Abstract of a Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

August 2013
ABSTRACT

PUBLIC RELATIONS MODELS AND DIALOGIC COMMUNICATION IN THE TWITTERVERSE: AN ANALYSIS OF HOW COLLEGES AND UNIVERSITIES ARE ENGAGING THEIR PUBLICS THROUGH TWITTER

by Jason Antwuan Beverly

August 2013

Colleges and universities throughout this world are realizing the importance of engaging in and building mutually-beneficial relationships with their key publics through social media. The introduction of the microblogging tool known as Twitter extends the use of social media in higher education, beyond the classroom, and into the realm of public relations where it can be just as effective. Now, colleges and universities are capitalizing off of its potential as a public relations tool. Twitter allows colleges and universities to better connect with their technology-consumed publics through dialogic and interactive two-way communication. This study examines how 155 colleges and universities use Twitter as a relationship-building and communication tool.

Grounded in Kent and Taylor’s (1998) dialogic principles and Grunig and Hunt’s (1984) four models of public relations, this dissertation is based on a content analysis that examined higher education use of Twitter as a means of communication. This study analyzed the individual tweets (N = 1,550) of 155 colleges and universities during a two-week sampling period.

The data revealed that 38.5% of the tweets aligned with the dialogic principle of Conservation of Return Visitors, while 49.7% of the tweets aligned with the Press Agentry/Publicity model of public relations. Medium interactivity was featured in the
majority of the tweets. In addition, the general community was the most targeted public of the tweets, while self-promotion was the most featured theme of the tweets. When analyzing the individual tweets, it was confirmed that many colleges and universities are not following the most-commonly accepted relationship-building strategies, such as dialogic and two-way communication.

As one of the first studies of its kind, this dissertation offers insight into how colleges and universities are using Twitter to communicate and build relationships with their key publics. It extends upon the existing knowledge of how social media, such as Twitter, can be used in a dialogic public relations context. Furthermore, it offers insight into how Twitter can be used in collaboration with traditional public relations theories, such as the four models of public relations. It concludes with implications of how colleges and universities can use Twitter to build and maintain mutually-beneficial relationships.
COPYRIGHT BY
JASON ANTWUAN BEVERLY
2013
The University of Southern Mississippi

PUBLIC RELATIONS MODELS AND DIALOGIC COMMUNICATION IN THE TWITTERVERSE: AN ANALYSIS OF HOW COLLEGES AND UNIVERSITIES ARE ENGAGING THEIR PUBLIC THROUGH TWITTER

by

Jason Antwuan Beverly

A Dissertation
Submitted to the Graduate School of The University of Southern Mississippi in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

Approved:

Jae-Hwa Shin
Director

David R. Davies

Kim. M. LeDuff

Cheryl D. Jenkins

Fei Xue

Susan A. Siltanen
Dean of the Graduate School

August 2013
ACKNOWLEDGMENTS

The writer would like to thank the dissertation director, Dr. Jae-Hwa Shin, and the other committee members, Dr. David Davies, Dr. Kim LeDuff, Dr. Cheryl Jenkins, and Dr. Fei Xue, for their advice and support throughout the duration of this project. I would especially like to thank Dr. Jae-Hwa Shin for her enormous patience and understanding and Dr. David Davies for calming me down when I thought I was experiencing one of many crises.
# TABLE OF CONTENTS

ABSTRACT ........................................................................................................... ii

ACKNOWLEDGMENTS ......................................................................................... iv

LIST OF TABLES .................................................................................................. vii

CHAPTER

I. INTRODUCTION ................................................................................................. 1
   Statement of the Problem
   Purpose of the Study

II. REVIEW OF RELATED LITERATURE ................................................................. 7
   Social Media as a Public Relations Medium
   Four Models of Public Relations
   A Theoretical Progression to Relational Public Relations
   Dialogic Communication as a Public Relations Theory
   Public Relations in Higher Education
   Twitter as a Public Relations Medium

III. RESEARCH QUESTIONS ...................................................................................... 64

IV. METHODOLOGY .................................................................................................. 69
   Sample and Units of Analysis
   Operational Definitions and Coding Scheme
   Coder Training and Inter-coder Reliability

V. RESULTS ............................................................................................................... 86
   Interactivity
   Targeted Publics
   Message Theme
   Dialogic Principles
   Public Relations Models
   Other Key Findings
VI. DISCUSSION

Summary of Findings
Targeted Publics
Message Theme
Dialogic Principles
Public Relations Models
Implications
Limitations
Future Research
Conclusion

APPENDIXES

REFERENCES
LIST OF TABLES

Table

1. Frequency Table Highlighting the Variable of Level of Interactivity ..................86
2. Frequency Table Highlighting the Variable of Targeted Audience ......................88
3. Frequency Table Highlighting the Variable of Self Promotion ..........................91
4. Frequency Table Highlighting the Variable of News ........................................92
5. Frequency Table Highlighting the Variable of Response to a Question ..............92
6. Frequency Table Highlighting the Variable of Random Statements or Thoughts .................................................................93
7. Frequency Table Highlighting the Variable of Opinions/Complaints .................94
8. Frequency Table Highlighting the Variable of Questions to Followers .............94
9. Frequency Table Highlighting the Variable of External Promotion ..................95
10. Frequency Table Highlighting the Variable of Conservation of Return Visitors .................................................................96
11. Frequency Table Highlighting the Variable of Dialogic Feedback ..................97
12. Frequency Table Highlighting the Variable of Usefulness of Information ..........98
13. Frequency Table Highlighting the Variable of Generation of Return Visitors .................................................................98
14. Frequency Table Highlighting the Variable of Press Agency/Publicity .............100
15. Frequency Table Highlighting the Variable of Public Information ..................101
16. Frequency Table Highlighting the Variable of Two-Way Symmetrical ............102
17. Frequency Table Highlighting the Variable of Two-Way Asymmetrical ..........103
18. Crosstab Table Highlighting the Tweets that Featured the Dialogic Feedback Loop Principle, by Comparing Private and Public Institutions .........................105
19. Crosstab Table Highlighting the Tweets that Featured the Two-Way Symmetrical Public Relations Model, by Comparing Private and Public Institutions ......................106
20. Crosstab Table Highlighting the Tweets that Featured the Two-Way Asymmetrical Public Relations Model, by Comparing Private and Public Institutions ..................................................................................................................107
21. Crosstab Table Highlighting the Tweets that Featured the Theme of Questions to Followers, by Comparing Private and Public Institutions .................................................108
22. Crosstab Table Highlighting the Tweets that Featured the Theme of Response to a Question, by Comparing Private and Public Institutions ..................................................109
23. Crosstab Table Highlighting the Tweets that Featured the Dialogic Feedback Loop Principle, Posted by the Top 100 Social Media Colleges .................................110
24. Crosstab Table Highlighting the Tweets that Featured the Dialogic Feedback Loop Principle, Posted by the U.S. News & World Report Best Colleges ..............111
25. Crosstab Table Highlighting the Tweets that Featured the Theme of Response to a Question, Posted by the Top 100 Social Media Colleges ........................................113
26. Crosstab Table Highlighting the Tweets that Featured the Theme of Questions to Followers, Posted by the U.S. News & World Report Best Colleges .................114
27. Crosstab Table Highlighting the Tweets that Featured the Theme of Questions to Followers, Posted by the Top 100 Social Media Colleges .................................116
28. Frequency Table Highlighting the Variable of Type of Tweet ..............................117
CHAPTER I

INTRODUCTION

Technological advancements such as the Internet continue to impact our daily lives. From leisure and entertainment, even to news, these significant technological milestones often consume us and force mankind to adapt to them for survival. From online shopping to staying in contact with family and friends, technology is restructuring how people live their lives. Social media seems to be at the forefront of this new wave of technology. It’s fun. It’s easy to access. It’s everywhere. It’s changing how we communicate and with whom we communicate.

The use of social media is quickly becoming a standard public relations practice among many nonprofit and for-profit organizations, such as colleges and universities that are hoping to creatively connect with their technology-consumed publics. With the arrival of social media, these institutions are now able to reach donors, potential donors, volunteers, and the media quicker and more effectively (Elliott, Katsioloudes, & Weldon, 1998), resulting in improved relationships. Colleges and universities are also using social media as a tool to communicate, connect, respond, and build mutually-beneficial relationships with their key publics. The fact remains that these institutions are hoping social media will allow them to build and maintain mutually-beneficial relationships with their key publics, the majority of which are now heavily consumed with technology.

Social media has been proven to offer up many benefits to colleges and universities, especially in the area of public relations. In fact, there is much scholarly research that indicates that social media is reshaping how practitioners approach organization-public relationships (Seltzer & Mitrook, 2007). However, scholars are only
in the initial stages of evaluating the effects of social media on organization-public relationships.

For the past few years, many colleges and universities throughout this country have been using social media, such as Facebook, in the classroom in hopes of being able to better relate to their tech-savvy students. The introduction of the microblogging tool known as Twitter extends the use of social media in higher education, beyond the classroom, and into the realm of public relations where it can be just as effective. This is important because a college’s public relations efforts not only target students, but several internal and external publics as well. In fact, regardless of demographics, research has shown that these university publics include prospective students, current students, and even alumni, all of whom are accustomed to using social media such as Twitter.

In the classroom Twitter has already proven to be valuable because it allows instructors to utilize another method that can measure a student’s understanding (Retelny, Birnholtz, & Hancock, 2012). Now, colleges and universities are capitalizing off of its potential as a public relations tool. Nearly every college and university across this country has a Twitter profile, with some institutions having multiple ones.

Twitter is quickly becoming a leading force in a new era of public relations for colleges and universities across this country because of its ability to allow these institutions to share information, interact with their different publics, and build mutually-beneficial relationships. It’s one of the most significant dialogical social media tools available. This is important because “dialogic public relations theory provides a foundation for public relations practitioners to successfully exchange and maintain conversations with their publics” (Linvill, McGee, & Hicks, 2012, p. 636), especially in
an online environment, which is where the future of public relations is likely headed. In fact, online communication has been identified by many scholars as the perfect environment to administer dialogue and build relationships (Linvill et al., 2012). As a dialogical tool, Twitter claims that organizations such as colleges and universities can use it “to quickly share information with people interested in their products and services, gather real-time market intelligence and feedback, and build relationships with customers, partners and influential people” (Twitter, 2012).

Furthermore, because of its interactive ability as a communication tool, Twitter also allows colleges and universities to continue practicing traditional methods of public relations such as Grunig and Hunt’s (1984) four models of public relations. “Until the late 1990s, the four models of public relations were widely researched in a variety of professional settings (e.g. agencies, corporations, government agencies), public relations specializations (e.g. fund-raising, public diplomacy), and countries around the globe” (Waters & Williams, 2011, p. 355).

Based on its ever growing popularity over the past year, there is now a legitimate need to study Twitter as a dominant social media and communication tool, as opposed to examining other well-known social media sites, such as Facebook. Although Facebook has the most active members, GlobalWebIndex (GWI) recently released the results of a study that found Twitter to be the fastest growing social network in 2012, growing to 288 million active users, which reflects a growth rate in active users of 714% since 2009 (Bhushan, 2013). Even in 2011, Twitter beat out Facebook as the most popular social network of the year after data from Highbeam Research revealed that the microblogging tool was mentioned in about 50% of all media coverage of social networks throughout the
year, compared to the 45% of media coverage received by Facebook. Statistics like these reaffirm Twitter’s potential as a dominant communication tool that can offer up benefits to institutions such as colleges and universities, which merits a closer examination of the medium.

Statement of the Problem

Nearly every college and university in this country has at least one primary Twitter profile, which, as mentioned earlier, is a very powerful and interactive dialogical public relations tool that can be utilized to build mutually-beneficial relationships between an institution and its key publics. Although Kent and Taylor (1998) provided the blueprint for practitioners to incorporate dialogic features into their online public relations efforts, many colleges and universities are failing to do so. During a recent study, Linvill et al. (2012) found that many colleges and universities are mostly using Twitter to generate news instead of engaging in relationship-building dialogue with their key publics. In their research study, Gordon and Berhow (2009) also found evidence to suggest that colleges and universities have not fully committed to even using basic dialogic features in their websites. Studies like these are important because they allow the opportunity for skeptics to question whether or not social media is an effective public relations tool that can be utilized to build relationships between an organization and its key publics.

Furthermore, although Grunig and Hunt (1984) provided the blueprint for practitioners to incorporate the four models of public relations into their public relations efforts, there hasn’t been much research on how this theory can be incorporated into online public relations (Waters & Williams, 2011). This is important because two-way
communication, an important aspect of the four models, continues to be a key component of public relations. Analyzing Twitter-use within the context of the traditional four models of public relations allows scholars to gain an understanding of “how organizations are communicating with their public so that they can draw conclusions on the likelihood of future engagement online whether on their own websites or in the Web 2.0 environment with social media applications such as Twitter” (Waters & Williams, 2011, p. 355).

Purpose of the Study

Twitter is being analyzed because of its potential as an interactive, dialogic communication and relationship-building tool, as well as the fact that nearly every college and university in this country has at least one Twitter profile. The purpose of this research is to analyze the individual tweets of colleges and universities to determine if they align closely with Kent and Taylor’s (1998) dialogical principles and Grunig and Hunt’s (1984) four models of public relations, as well as the level of interactivity and theme of the tweet and which audience the tweet is targeting. There have been only a few studies conducted that analyzed the dialogic features of college and university websites, and even fewer studies that examined how the four models of public relations can be incorporated through social media. Furthermore, there have been only a couple of research studies that analyzed the dialogic features of colleges’ and universities’ Twitter activity. Linvill et al. (2012) conducted a successful content analysis of the dialogic principles of the actual tweets posted by universities. Similarly, Waters and Williams (2011) conducted a successful content analysis on how the actual tweets of government agencies align with the four models of public relations.
Not only does this research examine the dialogic features of the actual tweets posted by colleges and universities, but it also analyzes those tweets to determine if they closely align with the four models of public relations, making it more comprehensive in nature and the first of its kind. In essence, it contributes to the ongoing conversation of Twitter’s effectiveness as a dialogical tool that organizations can utilize to build relationships with their key publics, as well as how organizations can use it as an interactive tool to practice the traditional four models of public relations. In the grand scheme of things, this research also extends the existing knowledge of how social media is used in a dialogic context and within the context of the four models of public relations, as there has not been much research conducted in these areas (Linvill et al., 2012).

This research also extends the existing knowledge of the different uses of social media within higher education. It’s significant because examining how colleges and universities use Twitter to build relationships with their publics can offer insight into the effectiveness of social media as a public relations tool, which can hopefully clear up any misconceptions that scholars may have regarding its use by colleges and universities.
CHAPTER II

REVIEW OF RELATED LITERATURE

This research study explores whether or not colleges and universities incorporate the features of dialogic communication and the four models of public relations within their Twitter activity to build and maintain mutually-beneficial relationships with their key publics. The primary purpose of this research study is to analyze these features of dialogic communication and four models of public relations by conducting a content analysis of the individual tweets of all the colleges and universities that were identified in the 2013 edition of the *U.S. News & World Report* Best College Rankings and the Top 100 Social Media Colleges as determined by Studentadvisor.com, one of the leading college-search websites owned by the *Washington Post*. The review of the literature is organized into six major subsections: Social Media as a Public Relations Medium, Four Models of Public Relations, A Theoretical Progression to Relational Public Relations, Dialogic Communication as a Public Relations Theory, Public Relations in Higher Education, and Twitter as a Public Relations Medium.

Social Media as a Public Relations Medium

*Technology and Social Media*

Technology, such as the Internet, has forever changed the face of mass communications. The Internet has changed how news is distributed throughout the world. For instance, people have used cell phones and the Internet throughout the world to organize rallies and protests because the Internet offers an environment for debate (Hiebert, 2004). The Internet constantly competes with the newspaper and television
industry as a key form of information dissemination due to the fact that it’s accessible by so many more people.

Some scholars credit part of the rise of this digital age to the lack of attention that mainstream media gives to the idea of freedom (Katz, 1997). The public started to lose trust in the journalism industry because advertisers started to control the content, causing the news to become less important and more opinion-filled (Skoler, 2009). Traditional media is now trending around what people want, even if it is not news because profit is most important and core news is on the backburner (Jones, 2010). People simply believe that traditional media are doing a poor job of delivering the news. For this reason, bloggers thrive off of digital technology even though they don’t have the education and skills of traditional journalists, such as ethics and credibility (Rosenberg & Feldman, 2008). Because of its digital capabilities, the Internet has proven to be a very powerful tool. Traditional media outlets are being overtaken by uneducated and unskilled amateurs thanks to this new wave of technology known as Web 2.0, which is considered by many to be social media (Keen, 2007).

Much of the current literature associated with social media focuses on trying to define exactly what it is and how it’s impacting nearly every aspect of everyday life. Social media is proving to be one of the most effective and universal innovations to have ever been adopted into mainstream society. Although this popular medium doesn’t seem to be slowing down, researchers and scholars have debated for years the definition of what social media really is. Some describe it as Web 2.0-based resources used to communicate and allow for the open exchange of user-generated content (Lin, Le, Khalil, & Cheng, 2012).
Social media is part of the technology revolution that derived from Web 2.0 and user-generated content, which granted greater access to the World Wide Web. User-generated content is a significant aspect of social media. The Organization of Economic Co-Operation and Development (2007) argue that user-generated content must be publicly accessible to individuals, must display creative potential, and must have been created outside the normal realm of thinking. Furthermore, user-generated content must be published on a publicly-accessible website, space for individuals to upload content, and must be created with the intention of connecting to others and expressing one’s personal views. This is what social media is all about.

According to Davis, Deil-Amen, Rios-Aguilar, and Canche (2012), social media are “Web-based and mobile applications that allow individuals and organizations to create, engage, and share new user-generated or existing content, in digital environments through multi-way communication” (p. 1). Some describe it as communication resources that offer an environment for collaboration and the sharing of user-generated content (Sarringhaus, 2011). It is a technological innovation that allows for social interaction and collaboration (Bryer & Zavattaro, 2011). It’s also a resource that allows connection, communication, and interaction in a social environment (Correa, Hinsley, & Del Zuniga, 2010).

Although there are many definitions of what social media is, Mayfield (2008) argues that social media is a group of new media that is based on connectedness, openness, participation, community, and conversation. Mayfield (2008) describes these features as Connectedness, which states that social media is a group of new media that excels at linking people and resources; Openness, which states that social media is a
group of new media that is open to comments and criticism without any significant barriers and obstacles; Participation, which states that social media is a group of new media that allows contributions and feedback from all participants; Community, which states that social media is a group of new media that encourages the formation of communities to enjoy mutual interests; and Conversation, which states that social media is a group of new media that allows extensive two-way communication.

Social networking sites are by far some of the most popular forms of social media to have ever been introduced to mainstream society. Much of the current literature regarding social network sites focus on defining them, their benefits, and their consequences. This web-based technology allows individuals to develop a profile within a bounded environment, identify other individuals with whom they can communicate, and view the connections made by those other individuals (Boyd, 2008). They are virtual communities that are developed when individuals create profiles and make virtual connections to existing friends or acquaintances (Dwyer, Hiltz, & Passerini, 2007).

Social networks are successful because of their ability to allow a short distance between individuals in regards to personal relationships (Kautz, Selman, & Shah, 1997). Social networks are also successful because they allows users to show all of their social network connections and profiles (Boyd, 2008). It is critical for society that individuals come together to form social networks. With the continuous introduction of new technology more social networks are now forming online thanks to social networking sites (Backstrom, Huttenlocher, Kleinberg, & Lan, 2006).

Social networking sites are also popular because of the many benefits they offer individuals. Not only can a person make new friends and stay in contact with old friends,
but social networking sites can also allow individuals to find dates, share photos, share videos, and create environments for group interaction (Gangadharbatla, 2008). They also provide individuals a location and opportunity to promote and express their ideas, values, and beliefs.

Although there are many social networking sites, two of the largest and most popular sites are Facebook and Myspace. These social networking sites, along with several others, now have more than a billion users (Shneiderman, Preece, & Pirolli, 2011). Not only does that figure display the level of popularity, but it also offers insight into how social media can impact a significant portion of society.

Launched in 2004, Facebook originally started as a social networking site for only Harvard University students, but it has now grown to more than 500 million users (BRASS Program Planning Committee, 2011). A great deal of Facebook’s success can be attributed to the fact that the social networking site allows individuals to create and operate different applications on the site free of charge (Mayfield, 2008). With its 500 million users, the social network now has a membership base that represents almost 7% of the world’s population (Lin et al., 2012). According to the 2011 BRASS Committee, Myspace, another popular social networking site, once had more members than Facebook, but could no longer compete with Facebook’s demand. Now primarily a site that focuses on music services for its more than 200 million users, millions of bands and musicians use Myspace to reach fans (Mayfield, 2008).

Blogs are another popular form of social media that continues to rise in popularity as well. Much of the current literature surrounding blogs focuses on what they are, their benefits, the different types of blogs, and how they are being introduced for use in the
professional and educational world. A blog is a Web 2.0 technology that allows individuals to express experiences and opinions over time (McGee, 2007). They are nothing more than a website with information listed in chronological order (Duffy & Bruns, 2006). A blog is a web-based communication tool that allows quick and easy micropublishing (Jacobs & Williams, 2004). Microblogging, such as the ever-popular Twitter, is a web resource that combines social networking, blogging, and instant messaging (Mayfield, 2008).

Blogs are inexpensive to produce and only require Internet access as the foundation. In fact, many institutions have realized the significance of blogs (Drezner & Farrell, 2004). Blogs offer advantages such as the creation of new pages, linking to other interactive communities, personal writing environments, the filtering of content, and the promotion of creativity and analytic thinking (Duffy & Bruns, 2006). Also, blogs can be used for advice columns, chat, communities, political commentaries, and digital diaries (Drezner & Farrell, 2004).

Blogs started out in the form of email lists and instant messaging communities and can now reach a wider audience (Jacobs & Williams, 2004). Furthermore, it’s important to note that the practice of blogging hasn’t been around that long. In fact, blogging has only been around since 1996 when developers first began posting information in a specific order on web pages (Farmer & Bartlett Bragg, 2005).

Although blogs have not been around that long they have definitely made their impact on society. Blogs are rising in popularity because of characteristics such as RSS feeds and the fact that bloggers no longer have to keep checking other links and sites for updated information (Hyung, 2008). Really Simple Syndication or RSS is a significant
aspect of blogs that allows individual users to subscribe to and receive continuous information from web communities (Farmer & Bartlett-Bragg, 2005). Blogs are also thriving because of their ability to create an environment that allows comments, communication, and the dissemination of information (Jacobs & Williams, 2004).

Wikis are another type of social media that continue to rise in popularity. Wikis can be classified as a collaborative web tool that allows extensive interaction and feedback from multiple users (Matthew & Callaway, 2008). They are web-based tools that allow easily accessible collaboration (Larusson, 2009). A wiki is a digital and technology-based system that allows the dissemination and storage of information (Ravid, Kalman, & Rafaeli, 2008).

Podcasts are a type of social media that are part of the new media revolution, which allows people to listen or watch content at their convenience (Mayfield, 2008). Podcasts can also be described as audio and files that can be downloaded from Internet web feeds (Crawford, Smith, & Smith, 2005). A podcast is an audio-content digital tool that operates in conjunction with protocols such as RSS (Cebeci & Tekdal, 2006). Podcasting is unique because it is an inexpensive technical tool that allows individuals to receive continuous updated information through their private computers (Lee, McLoughlin, & Chan, 2008).

Social media offers personal space for online conversations where individuals can represent themselves to others through their personal information, interests, photographs, and social networks (Selwyn, 2009). This trendy technology can be used to gather and send information, to learn about others, or as a means of just wasting time (Stutzman, 2006). Others use social media for networking and developing networking skills (Selwyn,
From social networking sites and blogs to wikis and podcasts, social media continues to touch nearly every aspect of society. Because of this, the public relations industry has taken notice.

**Practitioners’ Perception of Social Media**

Over the past few years, technological advancements, such as social media, have changed the face of public relations, as well as how and to whom public relations institutions direct messages (Johnson, 1997). Gone are the days in which public relations practitioners relied primarily on their hopes and dreams that a television, radio, or newspaper reporter would broadcast or print their press release or attend their scheduled press conference in hope of getting help relaying the company’s message to a specific public. Also gone are the days in which public relations practitioners believed that town hall meetings at places such as the local library or convention center and special events, such as the annual summer fair of fall festival, would be the best options for interpersonal interactions with targeted publics.

The Internet has completely changed how organizations build relationships with their key publics (Kent & Taylor, 1998). Although public relations still rely somewhat on traditional tactics, it’s pretty obvious that the game has changed because there is now such a huge reliance on technology-based tactics such as social media. Social media is successful and effective because it simply offers an avenue for better two-way communication (Safko & Brake, 2009). Social media are proving to be very valuable tools for public relations practitioners because they offer a creative way to build relationships with key publics (Kelleher & Sweetser, 2012). Kirat (2007) praises online
capabilities because “online is a major medium that PR practitioners should use
efficiently and rationally for effective public relations” (p. 170).

The adoption of the professional use of social media among public relations
practitioners is widespread. Much of the current scholarship regarding social media
adoption suggests that social media has been adopted by many public relations
practitioners who hold membership in prominent organizations (Kelleher & Sweetser,
2012). Research has shown that practitioners are extremely comfortable with using basic
social media, such as email and intranet, and are starting to warm up to the idea of using
popular social media such as texting, blogs, and social networking sites more often
(Eyrich, Padman, & Sweetser, 2008). In an effort to gain an understanding of how social
media is being used in public relations, Wright and Hinson (2009) conducted a survey of
574 public relations practitioners from the International Public Relations Association and
found that the majority of the practitioners use some form of social media on a daily basis
for work-related initiatives.

Regardless of any skepticism associated with the effectiveness of using social
media in public relations, many practitioners continue to use it to reach a public that is
now consumed by technology. This is very important for an era that is highlighted by
public relations practitioners seeking creative ways to build and maintain mutually-
beneficial online relationships with their key publics.

Building Online Relationships

A great deal of scholarship has failed to focus on how the Internet is used to build
and improve relationships between an organization and its key publics (Kent & Taylor,
1998). There is also a lack of scholarly research that focuses on how public relations
practitioners can effectively utilize Internet capabilities such as social media to build relationships with their key publics (Mitra, 1997). Because of its many unique features and capabilities, the Internet and social media are allowing organizations, such as colleges and universities, a more creative environment to engage in interactive and dialogic communication with their key publics.

According to Grunig (2009), “The new digital media have dialogical, interactive, relational, and global properties that make them perfectly suited for a strategic management paradigm of public relations—properties that one would think would force public relations practitioners to abandon their traditional one-way, message-oriented, asymmetrical and ethnocentric paradigm of practice” (p. 6). Technology such as the Internet and social media is a very valuable tool for dialogical communication that can be used to build online relationships (Kent & Taylor, 1998). In an effort to gain a comprehensive understanding of the importance of dialogical communication, many researchers have started analyzing website features, such as site maps, search boxes, and content (Kelleher & Sweetser, 2012).

Researchers have also identified the following three principles that are required for organizations to build online relationships with their key publics: Disclosure, which describes when an organization purposely attempts to engage in direct communication with their key publics; Information Dissemination, which describes an organization’s focus on the needs and interests of their key publics during the process of disseminating information; and Interactivity and Involvement, which describes how interactive organizations are willing to be with their key publics online (Men & Tsai, 2011).
Key Publics

An organization’s key publics are essential in determining the nature of the online relationship the organization is attempting to build. Public relations could be conducted more effectively if practitioners would aggressively identify the key publics (Grunig & Repper, 1992). Identifying these key publics is the foundation of the situational theory. These publics can be either active or passive in nature. In other words, active publics are those who aggressively seek information about an organization or a particular issue. Passive publics are those who may have inadvertently received information about a particular organization or issue. These publics are situational. Because publics are situational, Grunig and Hunt (1984) attempted to distinguish between active and passive through three independent variables. Lattimore, Baskin, Heiman, Toth, and Van Leuven (2004) describes these variables as Problem Recognition, which states that publics be aware of any issues and recognize any dangers those issues may pose to them; Constraint Recognition, which states that when publics identify challenges they face when trying to solve problems, they will seek information about that problem if they really believe they can have an influence on the outcome of the issue; and Level of Involvement, which is based on how much a public is concerned about a particular issue. If they care a lot, they will likely be active when seeking information about the issue.

In other words, the specific publics will oftentimes depend on the nature of the organization. In an effort to determine the target publics of community college websites and the dialogic features of those websites, McAllister and Taylor (2007) conducted a content analysis of all 19 institutions with the New Jersey Community College System. The study revealed that the target publics were students/prospective students,
employees/prospective employees, external stakeholders such as political leaders, and the media. If these online publics can be identified, organizations can effectively build relationships to engage them.

The overall effectiveness of social media is visibly noticeable in the ever-changing landscape of a society that is relying more and more on technology as a means of communication, disseminating information, and building relationships. According to Gregory (2004), “the advent of the Internet and electronic communication has transformed public relations, just as it has transformed many areas of organizational and business life” (p. 245). This is a very powerful statement because many organizations and institutions are starting to conduct some type of business efforts online.

For instance, social media is even being used in the healthcare field. When integrated with marketing, social media can provide a powerful communication tool for health care professionals (Thackeray, Neiger, & Keller, 2012). Social media also allows healthcare professionals to communicate better with patients and potential patients (Sarringhaus, 2011). Because of the emerging digital age, cost concerns, and a need to reach younger constituents, The American Red Cross is also using social media, such as Twitter, to build relationships with their key publics (Briones, Kuch, Liu, & Jin, 2011). If used strategically, these organizations can also practice traditional forms of public relations such as the four models of public relations, one of the most heavily-researched theories.

Four Models of Public Relations

A theory can be defined as a way to predict how actions and events are related (Lattimore et al., 2004). Much of the past scholarship and research regarding public
relations theory promoted two-way symmetrical relationships between organizations and their publics as the best means for conducting public relations and for building and maintaining mutually-beneficial relationships. Public relations practitioners should always have knowledge of different theories so they can initiate the appropriate public relations for their organization when needed in order to build and maintain strong relationships with their key publics (Lattimore et al., 2004). The four models of public relations is one of the most utilized theories.

Grunig and Hunt (1984) described the direction of the communication as either one-way or two-way, while they described the purpose of the communication as either asymmetrical or symmetrical. Public relations practitioners determine their success based on how public relations can have a positive financial return on their investment, including an increase in revenue and a reduction in litigation, legislation, and regulation costs. This is very important in relationship-building (Grunig, 2006b). Organizations can be effective and successful by properly communicating with their publics and various stakeholders (Grunig, 2006a). There is much evidence to suggest that effective communication can lead to mutually-beneficial relationships between an organization and its key publics. The four models of public relations exemplify this well.

The original models of public relations were press agentry, public information, two-way asymmetrical, and two-way symmetrical (Grunig & Hunt, 1984). These models can be either symmetrical or asymmetrical in nature. Grunig (1990) defined symmetrical communication as “public relations that attempts to reach a compromise between the interests of the organization and its publics and asymmetrical communication as public relations whose objective is to change the ideas, attitudes and behaviors of publics but not
those of the organization” (p. 20). Furthermore, two-way asymmetrical practitioners use scientific means to encourage their publics to act in a certain way, while two-way symmetrical practitioners use research to change the behavior of their publics (Grunig, 2001).

The original four models of public relations were used to describe how public relations has been historically developed and practiced in the United States (Grunig, 2001). In other words, this theory can be described as the historical summarization of how an organization has practiced public relations (Grunig & Grunig, 1992). The models describe the universal practice of public relations regardless of politics and culture and are useful because they are beneficial and relatable to many practitioners, are strong teaching tools for basic and advanced public relations practices, and because they can be used to examine why public relations may be practiced in a particular way (Grunig, 2001).

**Press Agentry/Publicity**

Under the press agentry/publicity model, public relations practitioners attempt to gain publicity and/or media attention for their organization through an asymmetrical approach (Grunig, 1990). Press agentry and publicity is simply a one-way effort for an organization to get information to the media (Grunig & Grunig, 1992). Under this public relations model, practitioners utilize propaganda strategies such as celebrity spokespersons, free stuff, grand openings, and even parades (Lattimore et al., 2004). The press agentry/publicity model of public relations is most often practiced in sports and product promotion (Grunig & Grunig, 1992).
Public Information

In regards to the public information model, this is public relations conducted by practitioners familiar with the ideas and practices of journalism (Grunig, 1990). This type of public relations is asymmetrical in nature and often involves the positive dissemination of information about the organization. The public information model was pretty much a response to the negative impact that muckraking journalism had on big business and big government (Grunig & Hunt, 1984). During this time period, many businesses started to fight fire with fire and hire former journalists to fight off the media (Grunig & Grunig, 1992). So in actuality, public information practitioners were nothing more than former journalists who were hired to provide positive and favorable information about the organization (Grunig, 2001). This type of public relations is most often practiced in government, educational institutions, nonprofit organizations, and big corporations (Lattimore et al., 2004).

Two-way Asymmetrical

Grunig (1990) described the two-way asymmetrical model of public relations as one that utilizes means of determining the messages that could gain the support of key publics without having to change the organization’s behavior. Under the two-way asymmetrical model of public relations, practitioners use tactics such as interviews, surveys, and focus groups in order to determine the nature of the relationship between their organization and key publics (Lattimore et al., 2004). This is important because once the practitioners can measure the relationships they can initiate public relations efforts more effectively. The two-way asymmetrical model of public relations is often practiced by public relations and marketing firms (Grunig & Grunig, 1992).
Two-way Symmetrical

In regards to the two-way symmetrical model of public relations, practitioners rely on bargaining and negotiation in hopes of changing the relationship between their organization and its publics (Grunig, 1990). All of the models, especially two-way symmetrical are very popular because using two-way symmetrical or a combination of two-way symmetrical and asymmetrical could increase the overall effectiveness of public relations (Grunig, 2001). Many scholars argue that the two-way symmetrical model is the perfect way for public relations to be conducted (Grunig & Grunig, 1992).

All of the four models of public relations have proven to be very valuable theories for explaining how public relations should be practiced. This is important because examining these four models can help explain, in detail, how and why public relations is practiced in the manner it is (Grunig & Grunig, 1992). The two-way symmetrical model of public relations has also been one of the most criticized (Grunig, Grunig, & Dozier, 2002). Although the models offer many benefits, they have also come under criticism by scholars for having too much overlap.

Cancel, Cameron, Sallot, and Mitrook (1997) stated that, “the practice of public relations is too complex, too fluid, and impinged by far too many variables for the academy to force it into the four boxes known as the four models of public relations” (p. 32). Leichy and Springston (1993) argued that organizations practice all models of public relations eventually because there is not a set way of conducting public relations. They argued that public relations should be situational since organizations should be trying to strategically reach their publics (Leichy & Springston, 1993).
Many scholars argue that a variety of factors determine what type of public relations an individual or organization practices (Cancel et al., 1997). Eventually, Cancel et al. (1997) developed and presented a continuum between pure advocacy and pure accommodation that helps explain how the contingency theory breaks down the practice of public relations than the four models. Cancel and colleagues (1997) argued that the contingency theory “provides an alternative to normative theory and a structure for better understanding the dynamics of accommodation as well as the efficacy of accommodation in public relations practice” (p. 56). This is important, as many critics argued against the four models of public relations because they seem to be only a normative theory of how practitioners should be practicing public relations instead of how they are actually practicing it (Grunig et al., 2002).

Although there hasn’t been much research conducted on how the four models of public relations can be utilized within the context of social media, many scholars suggest that key aspects of the theory such as two-way symmetrical is still the perfect way for how public relations should be conducted (Grunig & Grunig, 1992). Two-way symmetrical communications are effective in measuring relationships between organizations and key publics because they rely a great deal on interpersonal communication (Hon & Grunig, 1999). Public relations practitioners must strive to build and establish long-term relationships, because they allow practitioners to assess how they impact the organization’s overall effectiveness (Grunig, 2006a). Many organizations believe that public relations should only focus on producing and disseminating information, instead of managing relationships. Many organizations simply believe that an effective message can solve any problem, which is hardly the case at all. When
placing too much emphasis on the message, many organizations fail to measure the behavior of the key publics by not focusing in on the relationships (Bruning & Ledingham, 2000).

A Theoretical Progression to Relational Public Relations

Due to factors such as technological advancements and placing an emphasis on relationships, more and more public relations efforts are becoming based on relational theories, such as dialogic communication, which can effectively highlight the relationship management aspect in traditional and online environments. Relationship management is one of the most appropriate theories that can generalize how public relations should be practiced and how organizations can effectively build mutually-beneficial relationships (Ledingham, 2003). After all, many scholars argue that public relations is built upon establishing and managing relationships between an organization and its key publics. Cutlip, Center, and Broom (1985) define public relations as “the management function that establishes and maintains mutually beneficial relationships between an organization and the publics on whom its success or failure depends” (p. 1). On the other hand, Smith (2009) defines public relations as “a strategic relationship management function that provides value to an organization by building and maintaining mutually-beneficial relationships” (p. 27).

Some public relations scholars argue that relationships should be built on mutually-beneficial characteristics of interaction (Smith, 2009). Relationships are significant to organizing structure, and strategic relationship management should focus on management, which is planning, control, and performance; strategy, which is prioritization and relevance; and relationships, which are based on dependency and
mutual adaptation (Hutton, 1999). Most scholarship in the strategic management paradigm of public relations should focus on relationship management (Smith, 2009).

The areas of theoretical development in the strategic management paradigm are determining who the stakeholders are, creating communication tools that help build and foster relationships, and measuring the success of the organization by examining the quality of its public relations efforts (Grunig, 2006b). Following these theoretical approaches, practitioners can develop a variety of different relationships. In fact, scholars have already identified several types of relationships.

These relationships can be described as exploitive, manipulative, contractual, symbiotic, conventional, and mutual communal (Smith, 2009). Exploitive relationships are based on one taking advantage of another party. Manipulative relationships are based on organizations using asymmetrical techniques to influence the behavior of its key publics. Contractual relationships are based on an agreement between parties. Symbiotic relationships are based on parties recognizing their interdependence to work together. Conventional relationships are based on having two parties working together for a common good. Mutual communal relationships are based on the parties attempting to protect the well-being of each other.

Comprehensive public relations should focus on the relationship between an organization and its publics, the foundation of how the relationship was built, and the impact the relationship can have on the organization and its publics (Ledingham & Bruning, 1998). This is important because public relations practitioners must pay close attention to the behavior of the relationships surrounding an organization and its publics (Grunig, 1993). Furthermore, focusing on the relationship between symbolic messages
and organizational behavior is important because public relations practitioners should be more concerned with how their organization’s strategies can influence how and what their key publics think (Ledingham & Bruning, 1998).

There are five stages for building relationships (Ledingham, 2000). These phases can be described as introductory, exploration, escalation, assimilation, and fidelity (Smith, 2009). The introductory phase is when organizations attempt to use communication tools in hopes of laying down the foundation to create relationships with their key publics. The exploration phase is when the organization and its targeted public attempt to determine if it’s even possible to develop a mutually-beneficial relationship. The escalation phase is when the organization and its targeted publics gain comfort in knowing the other’s needs. The assimilation phase is when the mutual parties come to some kind of agreement on how decisions will be made. The fidelity phase is when the key publics begin to show loyalty towards the organization.

There are five phases for relationship collapse (Ledingham, 2000). These phases can be described as contrasting, spiraling, idling, evading, and discontinuance (Smith, 2009). The contrasting phase is when the key publics begin to identify discrepancies between their own perspective and that of the organization. The spiraling phase begins when communication efforts targeting the key publics start to decrease. During the idling phase, the relationship between the organization and its publics is at a standstill. During the evading phase, the organization and its publics attempt to avoid each other. The discontinuance phase is when the relationship is dissolved between the organization and its publics.
Public relations is now being considered relationship management, which is a shift from the traditional form of public relations, which was based primarily on communication efforts (Ledingham & Bruning, 1998). Organizations should build behavioral and symbolic relationships to maximize public relations efforts (Grunig, 1993). Furthermore, organizations must build and maintain effective relationships to gain favorable behavior from key publics (Grunig, 1993). Many public relations practitioners believe that the relationship management approach is the best method for examining and maintaining organization-public relationships (Broom, Casey, & Ritchey, 1997).

According to the Excellence Study, positive, long-term relationships symbolize how valuable public relations can be to an organization because these relationships can encourage supporting behavior, such as favorable legislation, while preventing possible unsupportive behavior, such as litigation and boycotts (Grunig et al., 2002). In order to maximize the return of investments, organization must remember to strategically develop healthy long-term relationships with their key publics (Ledingham & Bruning, 1998). The idea of relationship management changes the nature of public relations from one that is based on changing public opinion to one that is based on combining symbolic messages with organizational behavior, which allows organizations to build and maintain healthy relationships with key publics (Bruning & Ledingham, 2000).

Towards a Dialogic Future

Scholars believe that it is important for practitioners to come to an understanding of the relationships that exist between an organization and its publics (Ledingham & Bruning, 1998). For this reason, Ledingham and Bruning (2000), soon began to promote the dialogic perspective, another type of relational approach, as one of the best ways to
practice public relations because dialogue “serves as a platform for developing public relations initiatives that generate benefit for organizations and for the publics they serve” (p. xvii).

As the public relations industry continues its shift towards a relational approach, dialogue is quickly becoming one of the most effective theories practitioners can utilize to build relationships with their publics (Taylor, Kent, & White, 2001). According to many scholars, the two-way symmetrical is the perfect way for how public relations should be conducted (Grunig & Grunig, 1992). Two-way symmetrical communications are effective in measuring relationships between organizations and key publics because they rely a great deal on interpersonal communication (Hon & Grunig, 1999). Taylor et al. (2001) suggest that “dialogue appears to be joining and perhaps even replacing the concept of symmetry as an organizing principle in public relations” (p. 265). Grunig (2001) himself suggested that it was time that public relations theory move away from the four models of public relations to a better and even more excellent model known as dialogic public relations. This is important because Taylor et al. (2001) suggest that “dialogue is more than a framework for understanding interpersonal relationships, it can also be used to understand mediated relationships such as those created by communication through the Internet” (p. 266). This is the future of relationship building in public relations.

Dialogic Communication as a Public Relations Theory

Historically, a great deal of public relations theory research has focused on Grunig and Hunt’s (1984) four models of public relations—press agentry/publicity, public information, two-way asymmetrical, and two-way symmetrical—as how public
relations has been practiced. However, it’s important to note that relationship-building is now considered to be the cornerstone of successful public relations. More and more organizations are beginning to build and maintain these mutually-beneficial relationships with their key publics through the use of online dialogue. Successful public relations is now based on using dialogue to negotiate relationships with key publics (Botan, 1992).

Whereas the two-way symmetrical model of public relations is based on how an organization can interact with its publics, dialogic communication describes the type of relationship that results from that interaction (Kent & Taylor, 1998). Dialogic communication is an important relationship-building theory in public relations. Public relations practitioners strive to build and maintain mutually-beneficial relationships with their key publics. Dialogic communication is a key aspect in achieving this.

**History of Dialogic Communication**

The very idea of dialogue is rooted in a variety of disciplines including rhetoric, psychology, and relational communication, with many philosophers and rhetoricians believing it to be one of the most important types of communication that separates truth from lies (Kent & Taylor, 2002). Dialogic communication is based on the attitude between an organization and its publics (Johannesen, 1990). Martin Buber is the philosopher who is often associated with this theory because he often argued that communication was based on the openness and respect that parties have for each other (Kent & Taylor, 1998). “Among contemporary existentialist philosophers, Buber is the primary one who places the concept of dialogue at the heart of his view of human communication and existence” (Johannesen, 1990, p. 58). His characteristics of dialogue include authenticity, spirit of mutual equality, inclusion, supportive climate, and
confirmation. Buber is not alone in promoting dialogic communication, as other well-known scholars have also been associated with the theory.

From the field of relational communication, Johannesen was one of the most well-known proponents of using dialogue to build relationships (Kent & Taylor, 1998). He argued that dialogue is at the foundation of any ethical relationship. The five characteristics of dialogue are described as supportive psychological climate, presentness, spirit of mutual equality, unconditional positive regard, and empathetic understanding (Johannesen, 1990).

Most scholars seem to agree that the use of dialogue must be ethical from all angles. According to Heath (2000), “Dialogue consists of exchange and challenge” (p. 44). He explained this by arguing that dialogue should be in debate form that offers opportunity for statements and counterstatements, which he related to rhetorical dialogue. Some of the challenges of dialogue include shared control between mutual parties, clash of ideas, and the potential of parties to risk their personal points of view (Heath, 2000). Nevertheless, Heath (2000) argued that “through dialogue, an expedient relativism can be forged as sides concur and co-create a mutually acceptable view of reality” (p. 44).

Although Buber, Johannesen, and Heath were instrumental in promoting dialogue as a relationship-building tool, Sullivan was one of the first scholars to define the term when he identified his values of public relations (Lerbinger & Sullivan, 1965). It was argued that organizations must protect the rights of their publics to have access to true and accurate information and the ability to participate in discussions by initiating public relations that are value-based with the possibilities of mutual benefits for the organization and its publics (Lerbinger & Sullivan, 1965).
Many scholars have used the term dialogue when discussing successful and effective public relations (Kent & Taylor, 2002). One of the most important aspects of public relations is the management of interpersonal dialect (Pearson, 1989). Dialogue helps practitioners change the nature of the relationship an organization has with its public by focusing primarily on the relationship because organizations must make an effort to engage its publics dialogically (Kent & Taylor, 2002).

Kent and Taylor (2002) believe that “because of the recent shift to a relational approach to public relations theory development, it is now necessary to more fully understand the many aspects of dialogue and ensure that we all understand the implicit and explicit assumptions of dialogic communication” (p. 23). Pearson (1989) argues that “it is morally right to establish and maintain communication relationships with all publics affected by organizational action and, by implication, morally wrong not to do so” (p. 329).

Kent and Taylor (1998) described dialogic communication as “any negotiated exchange of ideas and opinions” (p. 325). Dialogue has five conceptual features known as mutuality, propinquity, empathy, risk, and commitment. Although each concept is unique in its own way, Kent and Taylor (2002) still acknowledge the fact that some concepts overlaps with others because dialogue is not necessarily based on a set of rules.

McAllister-Spooner (2009) describes mutuality as “the recognition of organization–public relationships” (p. 320). Kent and Taylor (2002) described mutuality as an acknowledgment that exists between an organization and its publics that the parties are tied together. They argue that “organizations must extend the communication
perspectives that they take when they plan, conduct and evaluate the effectiveness of their
communication efforts” (p. 25). Kent and Taylor (2002) identified the two principles of
mutuality as collaboration and spirit of mutual equality.

Under the concept of collaboration, “All individuals engaged in a dialogue should
have positions of their own, and should advocate for those positions vigorously” (Kent &
Taylor, 2002, p. 25). This is important because this aspect of the theory suggests that
individuals must work towards a common goal, without giving up their personal points of
view. Kent and Taylor (2002) argue that collaboration is quickly becoming a significant
component of public relations research. Grunig (2000) echoes similar sentiments, as he
believes that collaboration could increase the overall professionalism of the public
relations industry.

Under the concept of spirit of mutuality, Kent and Taylor (2002) suggest that
“participants in dialogue should be viewed as persons and not as object and the exercise
of power of superiority should be avoided” (p. 25). This is important because one party
should not look down on another party regardless of status. The parties should feel
comfortable to discuss anything without fear of being criticized or frowned upon (Kent &
Taylor, 2002).

McAllister-Spooner (2009) describes propinquity as “the temporality and
spontaneity of interactions with publics” (p. 320). Kent and Taylor (2002) described
propinquity as a rhetorical exchange, and that “for organizations, dialogic propinquity
means that publics are consulted in matters that influence them, and for publics, it means
that they are willing and able to articulate their demands to organizations” (p. 26).
Kent and Taylor (2002) identified the three aspects of propinquity as immediacy of presence, which clarifies that the parties are discussing relevant issues in the present time; temporal flow, which suggests that dialogue is relational and aims to protect future relationships; and engagement, which suggests that parties must always be accessible and ready to participate.

McAllister-Spooner (2009) describes empathy as “the supportiveness and confirmation of public goals and interests” (p. 320). Kent and Taylor (2002) describe empathy as the environment of trust and support for successful dialogue. Kent and Taylor (2002) argue that “empathetic communication is important because practitioners can improve their communication by walking in the shoes of their publics” (p. 26). They identified the components of empathy as supportiveness, communal orientation, and confirmation of others.

Under the concept of supportiveness, Kent and Taylor (2002) argue that “dialogue involves creating a climate in which others are not only encouraged to participate but their participation is facilitated” (p. 26). This is important because the parties want to engage in conversation rather than debate. Kent and Taylor (2002) also suggest that supportiveness should be based on making efforts to come to mutual understandings.

According to Kent and Taylor (2002), under the concept of communal orientation, “Dialogue presupposes a communal orientation between interactants, whether they are individuals, organizations or publics” (p. 26). This is important because so many different publics are becoming linked together. Kent and Taylor (2002) also suggest organizations must reach out to local and international publics in order to enhance their practice of public relations.
In regards to confirmation of others, Kent and Taylor (2002) argue that “the practice of confirmation refers to acknowledging the voice of the other in spite of one’s ability to ignore it” (p. 26). This is important because having tolerance goes a long way in building trust. Kent and Taylor (2002) also suggest that once an organization loses the trust of its publics, it’s hard to regain the trust.

McAllister-Spooner (2009) describes risk as “the willingness to interact with individuals and publics on their own terms” (p. 320). Kent and Taylor (2002) identify the three components of risk as vulnerability, unanticipated consequences, and recognition of strange otherness.

According to Kent and Taylor (2002), under the concept of vulnerability, “Dialogue, by necessity, involves the sharing of information, individual beliefs, and desires, with others” (p. 26). This is important because when one party opens up to another, they are risking criticism from others. Kent and Taylor (2002) also suggest that parties must be willing to improve and grow through dialogic communication.

According to Kent and Taylor (2002), under the concept of unanticipated consequences, “Dialogic exchanges are not scripted nor are they predictable” (p. 28). This is important because dialogue between parties must be spontaneous and real. Kent and Taylor (2002) also suggest that spontaneity helps decrease the likelihood of manipulation.

According to Kent and Taylor (2002), under the concept of recognition of strange otherness, “This feature of risk is the unconditional acceptance of the uniqueness and individuality of one’s interlocutor” (p. 28). This is important because sometimes parties may have to engage in dialogue with unknown parties.
McAllister-Spooner (2009) describes commitment as “the extent to which an organization gives itself over to dialogue, interpretation, and understanding in its interactions with publics” (p. 320). This is the final principle. Kent and Taylor (2002) identified the three components of commitment as genuineness, commitment to conversation, and commitment to interpretation.

Under the component of genuineness, Kent and Taylor (2002) argue that “dialogue is honest and forthright” (p. 28). This is important because successful dialogue should be built on trust and ethics. Kent and Taylor (2002) also suggest that genuineness between an organization and its publics can often result in mutual benefits for both parties.

Under the component of commitment to conversation, Kent and Taylor (2002) suggest that “sharing the same meanings or working toward common understandings is crucial to dialogic relationships” (p. 28). This is important because successful conversation should be about learning from each other rather than calling out the other party’s weaknesses.

Under the component of commitment to interpretation, Kent and Taylor (2002) suggest that “dialogue necessitates that all participants are willing to work at dialogue to understand often-diverse positions” (p. 28). This is important because successful conversation should be about really making an effort to understanding what the other party is trying to say.

*Principles of Dialogic Communication for Online Public Relations*

Due to the ever-changing technological landscape, more and more organizations are beginning to use social media to engage their publics (Men & Tsai, 2011). There
have been several studies conducted on how organizations utilize social media to build relationships with their publics. Sites like Twitter have been praised for their relationship-building capabilities (Smith, 2010).

Many scholars have found that there are number of strategies that practitioners use to build relationships offline with their key publics (Men & Tsai, 2011). Now, Kent and Taylor’s (1998) introduction of the theory of dialogic communication has opened up an avenue for practitioners to build mutually-beneficial online relationships with their key publics. The foundation of this theory is based on the following principles: dialogic loop, usefulness of information, generation of return visits, intuitiveness of the interface, and conservation of visitors (Kent & Taylor, 1998).

McAllister-Spooner (2009) describes dialogic feedback loops as a website’s ability to “allow publics to query organizations and offers organizations the opportunity to respond to questions” (p. 321). Kent and Taylor (1998) describe the dialogic feedback loop as the beginning point at which an organization can engage in dialogue with its publics on the web. Kent and Taylor (1998) argue that “for dialogic communication to take place on the web requires a commitment of resources on the part of the Web site providers” (p. 326). Kent and Taylor (1998) identified the two issues of dialogic feedback loop as incomplete dialogic loops and lack of training of those who respond to electronic communications.

In regards to incomplete dialogic loops, Kent and Taylor (1998) suggest that organizations must have “an individual available to respond to public concerns, questions, and requests” (p. 327). This is important because it defeats the purpose for an
organization to allow its publics to ask questions or submit requests if the organization doesn’t have an individual to respond to those issues.

In regards to lack of training of those who respond to electronic communications, organizations that wish to create dialogic communication with publics through the Internet need to specially train the organizational members who respond to electronic communication. This is very important because organizations must treat their online public relations with the same professionalism as traditional forms of public relations. Organizations must remember to properly and accurately respond to any question, concern, or request from their publics that are submitted through the Internet.

McAllister-Spooner (2009) describes useful information as when “organizations provide information of general value to all publics in a logical hierarchical structure” (p. 320). Kent and Taylor (1998) describe useful information as being contact information such as historical information, background information, and contact information such as telephone numbers, email addresses, web addresses, fax numbers, and mailing addresses. Kent and Taylor (1998) argue that useful information is important because “relationships with publics must be cultivated not only to serve the public relations goals of an organization, but so that the interests, values, and concerns of publics are addressed” (p. 328).

McAllister-Spooner (2009) describes ease of interface as the involvement of “the intuitiveness and/or ease of the site’s interface” (p. 321). Kent and Taylor (1998) describe the ease of interface as a website that is organized, easy to navigate, easy to find information, loads quickly, is textual in nature, and at least has the organization’s image on it. According to Kent and Taylor (1998), “Visitors, who come to websites for
informational purposes, or even for curiosity, should find the sites easy to figure out and understand” (p. 329).

McAllister-Spooner (2009) describes conservation of visitors as a website’s ability to “offer features and links that value and conserve visit time” (p. 321). Kent and Taylor (1998) describe the conservation of visitors an organization’s attempt to keep visitors on their site as long as possible. This is important because organizations don’t want to make the mistake of providing several links that take the parties away from the organization’s page and to another site. Oftentimes, those visitors may not be able to return to the organization’s site. Kent and Taylor (1998) argue that “if the goal of public relations in webbed environments is to create and foster relationships with publics, and not to entertain them, websites should only include essential links with clearly marked paths for visitors to return to your site” (p. 330).

McAllister-Spooner (2009) describes generation of return visitors as a website’s ability to “create the foundation for long lasting relationships by offering features that generate return visits” (p. 321). Kent and Taylor (1998) describe the generation of return visitors as an organization’s attempt to make strong efforts to ensure that visitors keep returning to the organization’s website. This is important because publics will often respond favorably to an organization if the organization can get their attention somehow. Kent and Taylor (1998) argue that “sites should contain features that make them attractive for repeat visits such as updated information, online-question and answer sessions, changing issues, special forums, new commentaries, and on-line experts to answer questions for interested visitors” (p. 329).


**Dialogic Research Studies**

Kent and Taylor’s (1998) dialogic principles have been used to examine online relationship-building in a variety of public relations genres including nonprofits, colleges and universities, businesses and corporations, and litigation public relations firms (McAllister-Spooner, 2009).

Rybalko and Seltzer (2010) recently conducted a content analysis of Twitter activity by Fortune 500 companies in an effort to examine how these companies use Twitter to engage in dialogic communication with their key publics. The results of the study revealed that 61% of the companies’ Twitter activity focused on conservation of visitors, while only 39% of the activity focused on the generation of return visits.

Seltzer and Mitrook (2007) conducted a recent study and content analysis of environmental weblogs to determine the dialogic features of those sites. The results of the study suggest that weblogs often incorporate the use of more dialogic features than traditional websites. The researchers concluded that this was significant in those environmental organizations building strong relationships with their key publics.

Ingenhoff and Koelling (2009) conducted a content analysis of the websites of 134 Swiss charitable fundraising nonprofit organizations to determine how they are using dialogic communication to build relationships with donors and potential donors. Although the results found that those nonprofit organizations were not effectively utilizing dialogic communication, the researchers still suggest that nonprofit organizations are aware of the importance of engaging in dialogue with their key publics.

Gordon and Berhow (2009) conducted a content analysis of university websites to determine the presence of Kent and Taylor’s (1998) dialogic principles. The results
revealed that only a few colleges and universities are, indeed, engaging in dialogic communication with their key publics. Some school are utilizing more than others.

In an effort to investigate the dialogic features of corporate websites and to explore how corporations use their websites to build relationships with their publics, Park and Reber (2008) conducted a content analysis of 100 corporation websites. In regards to dialogic features of the websites, the researchers coded for interface ease, usefulness of media information, customer information, investor information, internal audience information, conservation of visitors, and dialogic loop. Park and Reber (2008) concluded that the corporations designed their websites to serve and inform key publics and to initiate dialogic communication.

Although many scholars have utilized Kent and Taylor’s (1998) dialogic principles, this concept of dialogue in public relations is not perfect. It’s not without fault. It has been criticized just as other public relations theories have been criticized. Dialogue can be a vulnerable approach because it can be easily exploited, it may not measure up to the organization’s aspirations, and there is skepticism regarding the theory’s reputation of being ethical public relations (Kent & Taylor, 2002). Nevertheless, this theory has proven to be successful for organizations that have attempted to build interpersonal, mediated, and organizational relationships online. This is especially important for organizations such as colleges and universities that are seeking creative ways to build relationships with their many technology-consuming publics.

Public Relations in Higher Education

Much of the current scholarship surrounding public relations in higher education focuses on how it has been historically practiced. Strong and effective public relations
can set the foundation for the overall success of any college or university. Szymańska (2003) argues that “the main goal of public relations in higher education institutions is the thoughtful creation of a positive image of them in the social and economic environment in such a way that the clarity and distinctiveness of the image enables clear-cut identification” (p. 471). Another one of the goals of higher education public relations is to garner public support and promote the value and benefits of an education (Cutlip, 1950).

Public relations in higher education should be created to secure financial support, clear up misunderstandings, build strong ties to the local community, and to promote the mission and goals of the institution (Grossley, 1944). Public relations in higher education should also focus on the unique attributes of an institution including its name, logo, culture, history, and tradition (Syzmanska, 2003). Institutions must attempt to mold public opinion in an effort to support the university’s mission (Hutchins, 1951).

Public relations at colleges and universities must be based on all or some of the following elements: Communicators working from a set of goals that support short and long term goals of the institution, communicators identifying the key stakeholders and determining how they fit in with the institution’s short and long term goals, communicators keeping institutional departments well-informed, communicators identifying the key opinion leaders and how they contribute to the overall success of the institution, communicators relaying information in one institutional voice, and communicators remembering that effective public relations is necessary for the overall success of the institution (Syzmanska, 2003).

Public relations is very important in higher education because it can be extremely beneficial in establishing and maintaining the two-way communication that can
strengthen the relationship between a college and its publics (Cutlip, 1950). The type of public relations utilized in higher education is normally based on the target public. The different publics in higher education are considered customers. The satisfaction of these customers can determine the success of an institution. Customer satisfaction is one of the most important aspects of predicting success in higher education (Maguad, 2007). Higher education public relations includes the internal market, which consists of students, faculty, and staff, and external markets, which include the media, prospective students, parents of students, alumni, opinion leaders, the local community, and local and state political leaders (Syzmanska, 2003).

Much of the current literature also suggests that the local community is one of the most important publics for any college or university. Oftentimes, community support for an institution will be based on how that community perceives the institution. That is why higher education institutions must make aggressive efforts to build and maintain mutually-beneficial relationships with their host communities. In order to gain an understanding of the role community relations play in higher education, Kim, Brunner, and Fitch-Hauser (2006) conducted a telephone survey of local residents. The results of the survey revealed that colleges and universities are normally perceived favorably by local communities when they make continuous contributions to the communities. The success of a college or university can depend on how well that institution builds and maintains effective relationships with its host community (Kim et al., 2006).

The success of an institution’s public relations also depends on the policies it initiates, its faculty and staff, how it performs, and the publicity it receives (Cutlip, 1950). Effective public relations can influence an institution’s publics into accepting the
institution’s beliefs, ideas, and philosophies (Grossley, 1944). In order to accomplish this, colleges and universities must go above and beyond in order to effectively foster relationships with their key publics. Colleges and universities that promote quality will often jump through hoops to satisfy those customers (Magaud, 2007). Sometimes, this calls for strategic and effective public relations efforts. Unfortunately, the availability of funding can sometimes impact the success of a college’s public relations efforts. This is another reason why colleges and universities should consider utilizing inexpensive tools such as social media for public relation efforts.

Social Media and Public Relations in Higher Education

Today’s college students and college graduates are very accustomed to using social media as a means of communication. For this reason, colleges and universities must engage these publics through social media if they want to build better relationships and relay important information (Barnes & Lescault, 2011). There is evidence that some colleges and universities are shifting their tactics to more effectively build and maintain online relationships with their key publics. A great deal of the scholarship on social media use in higher education focuses on how it’s used by individual departments rather than how it is used comprehensively by these institutions to reach a common goal or complete a common mission. Still, several institutions have already begun to initiate social media technology into their public relations efforts.

Social media has transformed the way we think and connect with one another. Social media has been very instrumental in linking people together to experience traditional feelings of connection and belonging (Davis et al., 2012). The traditional college-aged population has completely embraced social media technology. In fact, the
line between online and personal communications is becoming invisible (Davis et al., 2012). Social media has proven to be a dominant resource that college students are using to communicate and seek information. Because of this heavy student-dependence on social media, colleges and universities are seeking more creative ways to use social media in order to better reach out to students.

Many colleges and universities have already begun to use social media in their recruitment, marketing, and student involvement efforts because of the popularity of social media tools such as iPhone, Facebook, Myspace, Flickr, YouTube, and Google Earth (Koehler & Mishra, 2009). In an effort to determine how higher education institutions are using social media to recruit students, researchers found that colleges and universities are aggressively using social media to recruit and research prospective students (Barnes & Lescault, 2011). Blogs are also being heavily utilized by admissions offices at many higher education institutions across the country (Harris, 2008). Many colleges and universities hire students to share their personal college experiences with prospective students and their parents (Davis et al., 2012). This has proven to be a very valuable public relations strategy. Blogs are a beneficial tool for colleges and universities because they appeal to the traditional college-age population of students (Rudolph, 2007). Blogs are normally controlled by marketing and public relations departments at colleges and universities (Barnes & Lescault, 2011).

Barnes and Lescault (2011) interviewed admissions representatives at four-year institutions in every state to examine their use of social media as a recruitment tool. The results of the study revealed some interesting things regarding cost effectiveness. The report found that colleges spent 33% less on printing, 24% less on newspaper
advertisements, and 17% less on television and radio advertisements all thanks to the availability and effectiveness of social media. The report found that many schools believe social media has changed the way they recruit because it is more effective than traditional media in reaching students. The report also found that many colleges will invest more in social media because they perceive social media to be an important investment.

Libraries at universities and colleges across the country are also utilizing social media as a means of reaching their targeted publics. Libraries such as Cumberland University’s Doris and Harry Vise’s Library utilize social media tools such as Twitter, blogs, and websites to effectively reach students. Colleges and universities can improve their libraries’ web presence by having a more user-friendly website, maintaining a presence on social media sites such as Twitter, Facebook, and Myspace, utilizing an informational blog, utilizing text messaging, and utilizing YouTube to creatively promote library services and resources (Woodard, 2009).

Connell (2009) conducted a survey of 366 university freshmen to determine their feelings on how libraries use social media as an outreach tool. The results found that students are not likely to be proactive about *friending* the library, but would do so willingly if the library offered an invitation to them. The study also revealed that many students are willing to accept library news and information via social media. Many librarians are somewhat apprehensive about using social media, such as Facebook, because they don’t believe students will respond to it productively. Librarians can effectively use Facebook if they befriend all of the library’s student workers, ask all students to become friends, display library profiles during instructional sessions with
students, and provide computer access to students who want to befriend the library (Miller & Jensen, 2007).

In an effort to determine how colleges and universities utilize the web for public relations purposes, Kang and Norton (2006) conducted a content analysis of the websites of 129 of the best universities in the United States as determined by *U.S. News & World Report*. The results found that institutions that lack academic superiority made aggressive efforts to use the web as a public relations tool in hopes of compensating for their lack of academic achievements. This is significant because it shows that colleges and universities are stepping out of the box of traditional public relations and into the realm of public relations that is integrated with web tools, such as social media that allows them to foster organization-public relationships. Not only do these technological tools allow institutions to foster relationships, but they also allow institutions to effectively measure the relationships they have with their key publics. Students are also demanding that social media be included in instruction and curriculum.

*Social Media in the Classroom*

Social media impacts the most basic level of education. According to the National School Boards Association (2007), 96% of students with online access use social media for at least nine hours per week to text, chat, blog, and discuss school work. Some teachers argue that social media can help students become more engaged. In fact, even the most basic forms of social media, such as email, have already been shown to breakdown communication barriers in the classroom to engage students in conversations with their instructors and fellow students (Robbins-Bell, 2008).
The traditional students who are now entering college rely heavily upon digital technology and have spent the majority of their lives in an environment that demands it (Davis et al., 2012). Today’s college students have integrated technology such as social media into their everyday lives (Junco & Cole-Avant, 2008). Furthermore, many students report that technology, such as social media, plays an important role in their education (Rhoades, Irani, Telg, & Myers, 2008).

Social media is here to stay. So many people rely on it just to get through their normal day. The reliance upon social media has become almost addictive. In 2010, Harrisburg University of Science and Technology (HUST) conducted a research study in which it banned its entire campus community from social media access for an entire week. The study was intended to raise the awareness of the uses and abuses associated with social media. College officials surveyed students, faculty, and staff on the first day of the social media blackout and the week after. The results from this study were interesting. They confirmed that social media can have the same addictive effects as substances such as alcohol and nicotine. The results concluded:

- 25% of students reported better concentration in the classroom during the blackout.
- 23% of students found lectures more interesting during the blackout.
- 6% of students reported eating better and exercising more during the blackout.
- 21% of the students used the time that they usually spent on Facebook to do homework.
- 10% of the students used the time usually spent on Facebook to read online news.
• 44% of the students reported that they learned something new from the blackout.

• 76% of faculty and staff reported learning something from the blackout.

The University of Maryland conducted a similar study called 24 Hours: Unplugged (Nauert, 2010). For this study, 200 university students gave up all media for 24 hours. They were then asked to blog about their experiences. Many students claimed they suffered from extreme anxiety and boredom. Other students admitted that they were addicted to social media. The results from the study confirmed that social media can be addictive. The anxiety comments place social media in the same category as smoking and alcohol addiction.

Although the research suggests that social media can have negative effects, there remains a glimmer of hope, especially in the area of higher education. There is much research that suggests college students are positively using social media in their educational endeavors. In a non-participant ethnographic study of undergraduate students at a United Kingdom university, the research revealed that students rely on social media sites such as Facebook as a place where they can work through conflicts caused by relationships with their college, faculty, and academic expectations (Selwyn, 2009).

Colleges and universities have heard this demand loud and clear. Some experts argue that social media share some of the same qualities of good educational learning, such as peer feedback, and the social contexts of learning in college and in the community (Mason, 2006). Social media is very important in higher education because more and more people are using it in the classroom to communicate ideas, form relationships, and express ideas.
Many faculty members have adopted social media to be included in their classroom efforts to meet this growing demand from students. In 2011, Pearson Learning Solutions conducted a research study on how today’s higher education faculty members use social media (Moran, Seaman, & Tinti-Kane, 2011). Although the research examined faculty members’ familiarity with and personal use of social media, it also offered insight into how college faculty use it in the classroom. The research revealed that over 90% of college faculty members are using social media in the classes they teach and for their professional careers outside the classroom. Nearly two-thirds of college faculty members have used social media during a class session, about 30% of faculty members have used social media to post content for students to read or view, 20% of faculty members have required students to comment or post on social media sites, and 80% of faculty members reported using some type of online video during class (Moran et al., 2011). The use of Web 2.0 technologies such as social media continues to transform higher education. Not only do they improve the interaction between students and faculty members, but their use in higher education has also presented educators with a variety of ways to engage students (Li & Pitts, 2009).

Although there are plenty of options for incorporating social media into higher education, Facebook is the most popular choice for educational instruction among college students because of its ability to provide an interactive environment in which students can comment on course-related activities and materials (Wankel, 2009). Facebook is unlike other social media sites because it is primarily designated for students on college campuses, connecting faculty and students across and within academic communities (Mazer, Murphy, & Simonds, 2007). Educators have caught on to the popularity of social
media sites such as Facebook. In fact, more than 300,000 Facebook members identify themselves as higher education faculty or staff members (Mazer et al., 2007).

Facebook thrives in higher education because it appeals to students and offers outreach potential for teachers (Bowers-Campbell, 2008). There have been many studies to support this argument. Students who view a teacher’s Facebook page will experience a greater desire to learn, a more comfortable academic environment, and a higher degree of affective learning (Mazer et al., 2007).

Social media sites such as Facebook are significant because they can serve as a tool for students to display their interests and concerns in an environment where they are the experts (Bowers-Campbell, 2008). This is why social media is thriving in higher education. Today’s students feel as if the instructors should meet them on student turf, which happens to be in the realm of social media.

Applications such as wikis, blogs, and bookmarking continue to meet the social media demand of today’s college students. This is their world. This millennial generation grew up with iPhones, Myspace, and Facebook, and the future will be full of technological surprises (Nikirk, 2009). Because they are digitally-literate, colleges and universities will have to continue to find more creative ways to meet their demands (Ras & Rech, 2009).

Benefits and Consequences of Social Media as an Educational Tool

Since it was first launched in 1996, blogging has been used in a variety of professional fields, especially in the areas of education. Blogs have risen to become a
significant educational tool that allows students to complete a variety of tasks including self-publishing, facilitating group discussions, and collaborating with others (Churchill, 2009).

One of the main struggles for blog-use in education is getting individuals to participate in the digital learning environment (Farmer & Bartlett-Bragg, 2005). However, some of the benefits of educational blogging are that it creates an environment for offering comments and receiving peer feedback on assignments and discussions (Churchill, 2009). Many colleges and universities across the country, such as Harvard University, seem to realize the benefits that blogs offer and have implemented their use (Jacobs & Williams, 2004). Regarding blogs in education, an interesting study was conducted to determine how blogs can increase the learning and teaching environment in a classroom setting. Researchers found that students agreed that blogging had enhanced their learning experience and made for a better academic environment (Churchill, 2009).

A great deal of the literature also focuses on the technical issues surrounding the use of wikis in education (Ramanau & Geng, 2009). Educators are finally started to realize the significance of this tool in an academic environment, and that is why we are starting to see so many published studies regarding wiki-use in education (Parker & Chao, 2007). Also, wikis have made a huge splash in the education industry because they allow students and teachers to engage in creative learning methods, including group collaboration (Hughes & Narayan, 2009).

Wiki-use in education is normally based on one of the following categories: Single User, which provides an environment for individuals to write and edit personal
experiences; Lab Book, which allows space for peer review notes; and Collaborative Writing, which allows space for joint research and team collaboration (Cole, 2009).

A research study to determine students’ perceptions of wiki-use for coursework and collaboration found that students felt wikis enhanced their learning and collaboration efforts (Hughes & Narayan, 2009). In another study to determine how collaborative learning tools such as a wiki could benefit students in an undergraduate language arts methods class, researchers found that students view wikis as most beneficial when they feel comfortable using them (Matthew & Callaway, 2008). Regarding the technical issues surround wiki-use in education, research that was conducted to determine if wikis can support student engagement found that wikis are not necessarily adopted by all students (Cole, 2009).

Wikis are successful in education because of their following characteristics: they are plastic, which means they are easy to develop and they can easily support a variety of learning collaborations; malleability, which means they allow for collaborators to create additional environments for collaboration; and non-hierarchical, which means they have no centralized, governing body (Larusson, 2009).

Much of the literature involving podcasting focuses on how it’s used in the education field. Researchers accept the idea that podcasts are an instrumental tool for e-learning initiatives (Saeed & Yang, 2008). Most podcasts in higher education are normally used to deliver lecture and other instructional information (Lee et al., 2008). Podcasts are significant in education because they allow students to listen to course information while engaging in other things (Bell, Cockburn, Wingkvist, & Green, 2007).
Many institutions, such as Duke, Harvard, and Berkley, use podcasts and make their lectures publicly available through this podcasting (Bell et al., 2007).

Studies have shown that students really appreciate the use of podcasts in their academic activities. Podcasting is very attractive because some students simply prefer listening to reading (Cebeci & Tekdal, 2006). In an effort to understand why students favor podcasts, researchers conducted a study and found that podcasting allows convenient learning for students because they can access the class material anytime and anywhere (Nataatmadja & Dyson, 2008). The same study revealed that students enjoy the benefits of podcasts because they allow them to catch up with information they may miss, and podcasts also allow them to gain a clearer understanding of the information presented in class. Among other things, podcasts can also be used to give feedback, answer questions, and provide class materials. Students also respond favorably to podcasting because its technology allows them to increase studying time without having to discontinue many of their other activities (Bell et al., 2007).

Although the literature shows that social media is used in a variety of areas within higher education, the fact remains that it is most effective when utilized as a public relations tool to build relationships with a college’s or university’s digitally-consumed publics. Because of its two-way interactive and dialogic features, the microblogging tool Twitter is one of the most popular social media tools that can be used to accomplish this goal.

**Twitter as a Public Relations Medium**

Microblogging is a popular form of communication in which users can relay their status in brief posts that are made via instant message, email, mobile phones, or the web.
Twitter is probably the most popular and utilized microblogging tool (Grosseck & Holotescu, 2008). This microblogging tool has more than 17 million registered users. It made its public debut in October 2006 after initially launching as an internal communication tool for employees at the Twitter Company (Safko & Brake, 2009). Twitter is one of the most successful social media tools of all time. The Nielson Wire Website found that “unique visitors to Twitter increased 1,382 percent year-over-year, from 475,000 unique visitors in February 2008 to 7 million in February 2009, making it the fastest growing site in the Member Communities category for the month” (Nielson, 2009).

Twitter is definitely one of the most popular forms of microblogging (Wright, 2010). It’s a combination of blogging, texting, and social networking that allows people to keep in touch and communicate with each other (Miller, 2008). Twitter is a beneficial communication tool because it allows individuals to share information about their status, opinions, and activities, (Java et al., 2007). Its impact is global because the social network of its users crosses continental boundaries (Java et al., 2007).

This Web 2.0 technology is thriving because it allows users to instantly send out a very engaging 140-character message to thousands of people at one time (Janusz, 2009). Also known as tweets, these engaging messages can shed light on the overall effectiveness of social media (Marshall & Shipman, 2011). Furthermore, microblogging tools such as Twitter are also gaining in popularity because they allow users to easily share social statuses publicly or within a social network (Java et al., 2007). One of the main benefits of Twitter is its openness, while some of its disadvantages are its limited
search capabilities, limited number of characters, and restricted history (Markham & Belkasim, 2011). Nevertheless, it’s here to stay.

Individuals and organizations use Twitter for a number of reasons. Those who tweet either post messages to talk about themselves or share information (Bollen, Pepe, & Mao, 2011). Some user intentions on Twitter include daily chatter, which describes posts that discuss what people are currently doing or their daily routines; conversations, which describes posts that are replies to other users for the sake of conversing; sharing information, which describes posts that contain at least one URL; and reporting news, which describes posts that describe current events, weather reports, and news stories (Java et al., 2007).

Twitter is all around us. It’s quickly becoming a part of everything we do. Although it’s only in a stage of infancy, Twitter is now one of only a few dominant social media tools that are used for a variety of communication purposes. Although Twitter began as a social networking tool for personal use, there is much evidence to suggest that many businesses and organizations use the microblogging tool for official business (Priem & Costello, 2010). Now, companies such as Kodak, Southwest Airlines, Comcast, and Dell are using Twitter to keep up with what customers are saying about their respective companies (Janusz, 2009).

People are using Twitter for a number of different reasons including reporting news, building relationships, professional development, and creating and spreading news (Wigand, 2010). One need look no further than the Twitter Revolution that occurred in Iran. Many people claim that Twitter was the driving force behind the post-election protest (Morozov, 2009). Twitter has also been instrumental in promoting recent
newsworthy current events such as the U.S. Airways plane crash on the Hudson River and the American student who was jailed in Egypt (Kwak, Lee, Park, & Moon, 2010).

Twitter is one of the most dominant social media platforms that serve as a news outlet because it lets the average citizen be part of the news creation and dissemination process (Schmierbach & Oeldorf-Hirsch, 2012). It’s instrumental in disseminating breaking news because it can effectively deliver real-time information to large groups of people (Castillo, Mendoza, & Poblete, 2011). Twitter has also been used to relay newsworthy information such as wildfires, floods, hurricanes, and earthquakes, making it a power news medium (Castillo et al., 2011).

The downside to Twitter’s open access is that sometimes users may relay inaccurate information (Castillo et al., 2011). Some critics remain skeptical of news created and submitted via social media because people will believe anything. In fact, in an effort to understand user-perception of tweet credibility, researchers found that users are poor judges of truthfulness based on Twitter content alone (Morris, Counts, Roseway, Hoff, & Schwarz, 2012). Nevertheless, Twitter can still be a credible news source. In fact, researchers recently conducted a content analysis and found that news was the most frequently occurring item on local television station Twitter sites (Greer & Ferguson, 2011).

Another downside to Twitter is the fact that users cannot create user groups or classify the notes by tagging (Grosseck & Holotescu, 2008). Twitter can also become addictive, time-consuming, too distracting, and increase the likelihood of relaying information with grammatical errors (Grosseck & Holotescu, 2008). Because of its many users, it’s not unusual for Twitter to have a system overload, which many critics see as
another weakness (Tsai, 2008). Needless to say, Twitter is still redefining the way news is created and delivered.

There are many different types of individuals and organizations taking advantage of Twitter’s benefits. Some of the main categories of users are information sources, which describes users who post tweets on a regular basis and have a large number of followers, and information seekers, or users who do not post often, but like to follow others (Java et al., 2007). The unique culture of Twitter allows users to engage with others they might not even know (Thornton, 2013).

Furthermore, people use Twitter to talk about themselves, show pictures, or as a tool for celebrities to promote their platforms (Anderson, 2011). In fact, celebrities are quickly becoming heavy users of Twitter, with professional athletes leading the way. Professional athletes are using Twitter for a number of different reasons including sharing information and interacting with fans. Researchers recently conducted a content analysis to determine the nature of Twitter-use among professional athletes who use Twitter to communicate with fans and others. They found that 34% of professional athletes used Twitter for interactivity, while only 5% used it for promotional and branding purposes (Hambrick, Simmons, Greenhalgh, & Greenwell, 2011).

Other celebrities are also utilizing Twitter on a daily basis, including stars such as Ashton Kutcher, Brittany Spears, Ellen DeGeneres, and Lady Gaga just to name a few. Politicians such as Barack Obama and John Edwards are also taking advantage of interactive ability of Twitter. In fact, both used Twitter as a campaign tool during the democratic presidential primary (Safko & Brake, 2009).
Twitter is one of the most influential social media tools because users can encourage other users to act in a certain way, whether it is following other users, retweeting other posts, or mentioning others (Cha, Haddadi, Benevenuto, & Gummadi, 2010). Following, retweeting, and mentioning represent the following types of Twitter influences: Indegree Influence, which argues that the number of followers a user has correlates with how big their audience is; Retweet Influence, which argues that users whose messages are mentioned in retweets increases their social status; and Mention Influence, which argues that the mention of a user’s name also correlates with their social status (Cha et al., 2010). Another unique aspect of Twitter is the fact that users can post direct and indirect updates. Direct updates are directed at individual users through Twitter’s @-reply functionality, while indirect updates can target any user who has an interest in reading it (Huberman, Romero, & Wu, 2008).

Twitter has also made its way into the higher education landscape where it has proven to be beneficial in the classroom as well, particularly with online classes (Dunlap & Lowenthal, 2009). In an effort to determine how higher education faculty members utilize Twitter, Faculty Focus (2009) conducted a survey of college and university educators. They found that faculty members mostly use Twitter to keep up with current events and communicate with colleagues.

Twitter can be a very important and useful tool for colleges and universities because it can allow these institutions to promote news about the campus and serve as an environment for campus conversations in academia (Mansfield, 2009). In the classroom, Twitter has proven to be valuable because it allows instructors to utilize another method that can measure a student’s understanding (Retelny et al., 2012). Researchers recently
conducted a study to determine if using Twitter in the classroom can impact college students’ levels of engagement and academic performance. The results of the study found evidence to suggest that Twitter can positively impact a student’s academic performance and engagement (Junco, Heiberger, & Loken, 2011). Some scholars use Twitter to connect with other educators and stay on top of current events (Young, 2009). Recent studies also seem to indicate that Twitter is very popular among higher education faculty (Veletsianos, 2012), which is another reason why colleges and universities should be strategically and effectively using this medium.

Many higher education administrators are using Twitter to post news, connect with students, and to pitch potential stories to journalists and reporters (Young, 2009). Many colleges and universities are also using Twitter in athletics as a tool to connect with fans (Watson, 2009). Alumni association offices at higher education institutions across the country are also using social media, such as Twitter, as a means for fundraising efforts and connecting with graduates (Davis et al., 2012). Nevertheless, this medium can be most effective as a public relations tool.

**Twitter and Public Relations**

Java et al. (2007) describes microblogging as “a new form of communication in which users describe their current status in short posts distributed by instant messages, mobile phones, email or the Web” (p. 118). Microblogging, such as the ever-popular Twitter, is a web resource that combines social networking, blogging, and instant messaging (Mayfield, 2008). There are many types of microblogging, but Twitter seems to be the most popular (Grosseck & Holotescu, 2008). Twitter is unique because it allows users to post messages called tweets in 140 characters or less to disseminate information
or solicit feedback. It has proven to be a very valuable communication tool. Twitter is an interface that allows users to share user-generated content to many people at a time. Twitter is an important form of social media because “Within this interface, communication exchange is central, and the creation and sharing of user profiles is not necessary, but Twitter can link to user profiles that exist on other social media interfaces” (Davis et al., 2012, p. 1).

Twitter is ideal for public relations because it complements the traditional press release fairly well (Roach, 2012). Practitioners can provide links in tweets that lead to the press release, which is strategic in reaching technology-consumed publics that are not that familiar with the traditional print or television press releases. Twitter is not necessarily designed to replace traditional public relations, but it is designed to make it more efficient, as practitioners try to reach more people (Roach, 2012). Twitter is ideal for organizations looking to build strong digital relationships with their publics because it can impact business strategies and how people communicate (Tsai, 2008).

A huge part of online and technology-based public relations is dialogic communication features. Social media tools, such as Twitter, have the potential to provide organizations with a creative means to engage their key publics in dialogic communication (Rybalko & Seltzer, 2010). Many organizations are starting to develop two-way, interactive, dialogic public relations efforts by using social media such as Twitter (Grunig, 2009). In an effort to examine the impact that public relations conducted through Twitter can have on cognitive and attitudinal aspects, Hwang (2012) found that consumers viewed companies more favorably if their CEOs used Twitter. The study also found that microblogging can be an effective public relations tool for corporations.
Organizations can monitor the Twitterverse to see what others are saying about them (Roach, 2012), which is important in conflict resolution and relationship-building. As a public relations tool, many organizations are already using Twitter to monitor what their publics are saying about them and as a means to find creative ways to resolve customer disputes (Tsai, 2008). In fact, there are also many companies and organizations that are already effectively using Twitter to enhance their marketing, public relations, communications, and customer service efforts. Twitter has been proven to be a powerful promotional tool for many organizations and individuals (Schmierbach & Oeldorf-Hirsch, 2012). Safko and Brake (2009) explained that the following companies are well ahead of the curve by using Twitter to enhance their marketing, public relations, communications, and customer service efforts:

- Southwest Airlines uses Twitter to build up its customer service efforts and address concerns surrounding aircraft safety and inspections.

- Comcast has staff members such as Frank Eliason whose primary job responsibility is to monitor Twitter to respond to any unfavorable Tweets directed at the company. This helps enhance the company’s customer service efforts.

- Dell Computers also has staff members such as Lionel Menchaca whose primary job is to monitor Twitter and respond to any unfavorable Tweets aimed at the company. Menchaca was very instrumental in using Twitter to enhance the company’s public relations when it was experiencing customer backlash because of faulty laptop computer batteries.
• Westwinds Church, located in Jackson, Michigan, also utilizes Twitter during its worship services in an aim for a more interactive experience amongst the congregation.

• NASA—and its affiliate, the International Space Station—used Twitter to disseminate news surrounding events such as potential discoveries on Mars and space shuttle missions.

• Businesses such as Cisco Systems and Whole Foods Market also use Twitter to enhance their customer service efforts by providing product and maintenance information.

• Colleges and universities, such as The University of Texas at San Antonio College of Engineering, also use Twitter in an effort to better connect and reach students. They use Twitter to provide important information to their tech-savvy student populations.

Twitter is one of the most popular forms of social media utilized by colleges and universities, with around 84% of them having at least one Twitter account (Barnes & Lescault, 2011). Twitter is a very powerful communication tool that offers up many benefits for colleges and universities. According to Serrano (2011), Twitter has more than 100 million users worldwide who post more than 230 million tweets each day. Since 2011, there has been an 80% increase in Twitter-use. The report also found that 82% of the members of the United States House of Representatives have Twitter accounts.

Although colleges and universities have not identified a primary way to use Twitter, its use must be implemented with other social media tools to promote events, news, and emergency information (Reuben, 2008). Social media such as Twitter has the
opportunity to revolutionize public relations if practitioners and scholars utilize it appropriately (Grunig, 2009). Although Twitter is becoming a valuable public relations tool, it is effective only when it’s used appropriately. This is very important because “communication professionals must produce creative, innovative and consistent digital messages that successfully represent the brand regardless of the intended audience” (Evans, Twomey, & Talan, 2011, p. 3).

Many colleges and universities use Twitter as a means to connect to students and other publics, but according to Davis et al. (2012), “Without giving students good reason for following the university’s account – by providing content that is relevant or useful to their collegiate experience – they may remain disengaged” (p. 16). Colleges and universities must strategically use Twitter to engage their publics by posting important information such as weather and alerts, answers to questions, and promotions (Davis et al., 2012). Colleges and universities must take advantage of Twitter’s dialogic and interactive features in order to enhance their institutions’ online public relations efforts. Thus, the purpose of this study is to analyze the Twitter activity of colleges and universities to determine if it aligns with Kent and Taylor’s (1998) dialogic principles and Grunig and Hunt’s (1984) four models of public relations.
CHAPTER III
RESEARCH QUESTIONS

One of the features that make Twitter unique is the fact that it allows a high-degree of communication through a limited window. In fact, twitter continues to gain praise for its many interactive capabilities. According to Twitter.com, this social media tool is one of the most interactive interfaces because you can access tweets and engage in conversation without even being an active member, and you can interact with people in nearly any other country in the world who are also using Twitter. Social media such as Twitter are built as an environment that can help facilitate the exchange of information between different users (Kaplan & Haenlein, 2010).

Users can post tweets, follow other tweeters, retweet old tweets, and post links to other sites. All of this interaction occurs through tweets, or messages, that can be no longer than 140 characters (Greer & Ferguson, 2011). The interactive capabilities are very important for colleges and universities because they want to make sure their publics are well-informed about their respective institutions. Furthermore, they want to hear the issues or concerns that their publics may have so those can be addressed. Addressing the following research question sheds light on how interactive the tweets of colleges and universities are:

RQ1: What levels of interactivity are featured in the tweets of colleges and universities?

An organization’s key publics are essential in determining the nature of the online relationship the organization is attempting to build. Public relations could be conducted more effectively if practitioners would aggressively identify the key publics (Grunig &
Repper, 1992). The type of public relations utilized in higher education is normally based on the target public. Higher education public relations includes the internal market, which consists of students, faculty, and staff, and external markets, which include the media, prospective students, parents of students, alumni, opinion leaders, the local community, and local and state political leaders (Szymanska, 2003). McAllister and Taylor (2007) conducted a content analysis of all 19 institutions with the New Jersey Community College System. The study revealed that students/prospective students were targeted the most.

Much of the current literature also suggests that the local community is one of the most important publics for any college or university. In order to gain an understanding of the role community relations play in higher education, Kim, Brunner, and Fitch-Hauser (2006) conducted a telephone survey of local residents. The results of the survey revealed that colleges and universities are normally perceived favorably by local communities when they make continuous contributions to the communities. The success of a college or university can depend on how well that institution builds and maintains effective relationships with its host community (Kim et al., 2006). Based on the literature regarding key publics, addressing the following research question will shed light on which audience colleges and universities are targeting through Twitter:

RQ2: Which publics are targeted in the tweets of universities and colleges?

Twitter seems to be gaining in popularity because it allows users to instantly send out a very engaging 140-character message to thousands of people at one time (Janusz, 2009). Also known as tweets, these engaging messages can offer insight into the overall effectiveness of social media (Marshall & Shipman, 2011). When strategically created,
the content or theme of these messages can be very powerful. Although colleges and universities post a variety of different tweets, the majority of themes seem to focus on news dissemination. In fact, during a study of how twitter is used by colleges and universities, Linvill et al. (2012) found that most institutions primarily use it as a news feed. Based on the literature, this study will address the following research question:

RQ3: What types of messages are commonly posted by universities and colleges?

Twitter is quickly becoming a leading force in a new era of public relations for colleges and universities across the country because of its ability to allow them to share information, interact with their different publics, and build mutually-beneficial relationships. It’s one of the most significant dialogical social media tools available. This is important because according to Linvill et al. (2012), “dialogic public relations theory provides a foundation for public relation practitioners to successfully exchange and maintain conversations with their publics” (p. 636), especially in an online environment, which is where the future of public relations is likely headed. Many scholars have used the term dialogue when discussing successful and effective public relations (Kent & Taylor, 2002). Sites like Twitter have been praised for their relationship-building and interactive capabilities (Smith, 2010).

Nearly every college and university in this country has at least one primary Twitter profile, which can be used as a very powerful dialogical public relations tool to build mutually-beneficial relationships between an institution and its key publics. Many research studies suggest that web features such as hyperlinks and menu bars increase accessibility of university websites, which can help generate return visits and create a dialogic loop between a university and its publics (Kang & Norton, 2006). Although Kent
and Taylor (1998) provided the blueprint for practitioners to incorporate dialogic features into their online public relation efforts, many colleges and universities are failing to take full advantage of this dialogic concept. Based on the literature, this study will address the following research question:

RQ4: Which dialogic features are present in the tweets of colleges and universities?

Twitter is successful and effective simply because it offers an avenue for better two-way communication (Safko & Brake, 2009). It allows colleges and universities to build relationships and enhance their reputations with key publics, and university administrators agree that efficiency and cost savings are very instrumental in adopting social media (Kelleher & Sweetser, 2012). Public relations practitioners rely heavily on two-way communications, which is one of the key principles of Grunig and Hunt’s (1984) four models of public relations. Social media can be very instrumental in opening up the lines of two-way communication between organizations and publics and help decrease the time it takes for an organization to properly respond to its publics (Wright & Hinson, 2009).

Not only is Twitter a valuable communication tool, but it also allows public relations practitioners to develop key relationships with their publics via two-way symmetrical communication. When colleges and universities post tweets and follow other tweeters, they are unknowingly contributing to the success of two-way communication through the use of microblogging. Understanding how institutions are using Twitter to communicate and maintain and build relationships is important because it helps us progress the ideas and functions associated with microblogging and social
media (Java et al., 2007). Addressing the following research question will shed light on how these institutions of higher learning are using Twitter as a communication tool to build and maintain relationships:

RQ5: Which public relations models are featured in the tweets of colleges and universities?
CHAPTER IV

METHODOLOGY

The purpose of this research is to examine the public relations implications of how colleges and universities utilize Kent and Taylor’s (1998) dialogic principles and Grunig and Hunt’s (1984) four models of public relations within individual tweets. This research also explores which key publics these colleges and universities are attempting to engage in dialogue through their individual tweets, as well as the level of interactivity and theme of those tweets. This study is based on a content analysis of the individual tweets (n = 1,550) of the top 100 colleges and universities identified in the 2013 edition of the U.S. News Best Colleges Rankings and all of the colleges and universities identified on the list of the Top 100 Social Media Colleges.

A content analysis proved to be the most appropriate research method to address the research questions that were highlighted for this study. Kolbe and Burnett (1991) described content analysis as “an observational research method that is used to systematically evaluate the symbolic content of all forms of recorded communication. These communications can also be analyzed at many levels (image, word, roles, etc.), thereby creating a realm of research opportunities” (p. 243). Content analysis is an appropriate research method for mass communication scholars who are studying the analysis of messages (Lombard, Snyder-Duch, & Bracken, 2002). This is important because a tweet is defined as a limited-message. Content analysis can be useful for studying patterns and trends in documents, as well as for examining shifts in public opinion (Stemler, 2001).
A content analysis is a unique research method because “Its major benefit comes from the fact that it is a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding” (Stemler, 2001, para. 3). According to Stemler (2001), the following six questions must be addressed in every content analysis:

- “Which data are analyzed?
- How are they defined?
- What is the population from which they are drawn?
- What is the context relative to which the data are analyzed?
- What are the boundaries of the analysis?
- What is the target of the inferences” (para. 6)

Communication researchers are some of the most proficient and rigorous users of the content analysis research method (Lombard et al., 2002). There have been many studies conducted using content analysis as a research method for dissertations and theses and the trend will likely continue well into the future (Riffe & Freitag, 1997). In fact, there has been a number of recent content analysis research studies conducted on Twitter and dialogic communications, as well as on Twitter and the four models of public relations.

Using the theoretical foundation from Kent and Taylor’s (1998) dialogic principles, Linvill et al. (2012) conducted a content analysis of the individual tweets posted by colleges and universities to determine whether or not the tweets met each dialogic principle. Of the 1,130 tweets, 83.5% contained useful information, 55.7% contained features related to generation of visitors, 52.2% contained features related to
conservation of visitors, and 29.6% contained features related to the dialogic feedback loop.

Also using the theoretical foundation from Kent and Taylor’s (1998) dialogic principles, Rybalko and Seltzer (2010) conducted a content analysis of the Twitter profiles and individual tweets posted by Fortune 500 companies to determine whether or not the Twitter profiles and individual tweets met each dialogic principle. The results from this study found that the majority of the companies’ dialogic Twitter use focused on conservation of visitors.

Based on the four models of public relations as a theoretical framework, Waters and Williams (2011) conducted a content analysis of information updates tweeted by government agencies in an effort to determine how those agencies use Twitter to communicate with their publics. The results from the study revealed that those agencies use Twitter as a one-way communication tool.

Also based on the four models of public relations as a theoretical framework, Edman (2010) conducted a content analysis of the tweets posted by Fortune 500 companies in an effort to determine how companies are using Twitter to communicate with their publics. The results from this study revealed that the majority of the tweets were in the form of two-way symmetrical communications.

Not only do these research studies offer insight into content analyses on Twitter dialogic communication, but they also serve as proof that this is a valid method for this type of research. Although there have not been many scholarly content analyses published regarding Twitter and dialogic communication, it is still the most appropriate research method for this study.
Sample and Units of Analysis

This research study is based on a combined total population sample of the top 100 colleges and universities identified in the 2013 edition of the *U.S. News & World Report* Best Colleges Rankings, as well as all of the colleges and universities on the list of the Top 100 Social Media Colleges as determined by Studentadvisor.com (2012), one of the leading college-search websites owned by the *Washington Post*, to determine the presence of Kent and Taylor’s (1998) dialogic principles and Grunig and Hunt’s (1984) four models of public relations within their Twitter activity. A total population sample is a type of purposive sampling in which the researcher examines the entire population.

The top 100 colleges and universities identified in the 2013 edition of the *U.S. News & World Report* Best Colleges Rankings is based on academic quality that focuses on an institution’s freshman retention, graduation rates, and the strength of its faculty, as well as the school’s mission, which is based on the breakdown of types of higher education institutions as refined by the Carnegie Foundation for the Advancement of Teaching's Basic Classification in 2010. The Top 100 Social Media Colleges list was compiled based on a review of more than 6,000 colleges and universities and their effective use of social media tools, methods, and websites. Studentadvisor.com (2012) ranks the colleges and universities by examining how effective and active these institutions are at engaging their publics on Twitter, Facebook, and YouTube. The student population is also taken into consideration for the rankings.

It can be reasonably assumed that the top 100 colleges and universities identified in the 2013 edition of the *U.S. News* Best Colleges Rankings and the Top 100 Social Media Colleges are effectively using social media to communicate with their audiences.
and creatively and strategically using Twitter to build and maintain relationships with their key publics as well. Because some institutions appeared on both lists, overlap did occur. Furthermore, some intuitions didn’t post any tweets during the designated time frame of the study. These institutions, as well as the duplicate institutions, were removed, resulting in an analysis of the Twitter activity of 155 colleges and universities.

The unit of analysis for this study is every fifth tweet (up to a maximum of 10 tweets for each institution) of each college and university [represented in the Top 100 colleges and universities identified in the 2013 edition of the U.S. News Best Colleges Rankings and the Top 100 Social Media Colleges] that was posted between November 1, 2012 and November 15, 2012, for a total of 1,550 tweets (n = 1,550). This date was chosen in an effort to represent a typical two-week period on Twitter for colleges and universities. This time frame also did not include any of the traditional special college days such as spring break, fall break, or final exams. Finally, this time frame didn’t contain any national holidays, such as Labor Day, Thanksgiving, or Christmas, for example. Although national Election Day fell within this designated time frame, the pre-test revealed that there were only a handful of tweets that referenced politics.

Examine 10 individual tweets per college/university seemed appropriate enough to determine any unique Twitter activity, such as patterns and trends that may be discovered. The individual tweets were examined to determine the use of Kent and Taylor’s (1998) dialogic principles and Grunig and Hunt’s (1984) four models of public relations, as well as the audience the tweet targeted, and the level of interactivity and theme of the tweet.
Operational Definitions and Coding Scheme

The operational definition is a very important component of content analysis research. Operational definitions are important because most research is based on observation and cannot be made without a clear understanding of what the researcher is attempting to observe (Wimmer & Dominick, 1991). It is a “procedure for measuring and defining a construct” (Gravetter & Forzano, 2008, p. 73). It’s the indicators that researchers use to determine the attributes of a concept (Rubin & Babbie, 2008).

Examining previous research involving the same variables is the best approach for researchers in determining how a variable should be measured (Gravetter & Forzano, 2008). The coding scheme for this study was developed in conjunction with Kent and Taylor’s (1998) dialogic principles that were also utilized in studies conducted by Rybalko and Seltzer (2010) and Linvill et al. (2012). Similar to those studies, Ease of Interface was not analyzed in this study because features of Twitter’s interface are the same across profiles and are designed for simplicity. All other dialogic features were coded for on the Twitter profiles and within the actual tweets to determine the absence or presence of that feature. The coding scheme was also developed in conjunction with Grunig’s and Hunt’s (1984) four models of public relations that was utilized in studies conducted by Waters and Williams (2011) and Edman (2010).

There was one code sheet used for this study. Each individual tweet could contain multiple dialogic features and themes, and could align with multiple public relations models as well. However, the individual tweets could contain only one targeted public and one level of interactivity.
The first category investigated the level of interactivity of the individual tweets. The tweets were classified as low interactivity, medium interactivity, or high interactivity. Low interactivity tweets have no links, @-replies, or any other extraordinary features. Medium interactivity tweets included links to videos, pictures, and other websites. High interactivity tweets were simply messages that were @replies to other users. Investigating the level of interactivity within the tweets will help researchers address the following research question:

RQ1: What levels of interactivity are featured in the tweets of colleges and universities?

The second category investigated which public the tweet was targeting. An organization’s key publics are essential in determining the nature of the online relationship the organization is attempting to build. Grunig and Repper (1992) argued that public relations could be conducted more effectively if practitioners would aggressively identify the key publics. The specific publics will oftentimes depend on the nature of the organization. Based on the literature, this study will code for the following targeted publics if they are clearly identified as such: Students, Employees, Alumni, and Parents. If the tweet did not clearly identify any of the mentioned audiences, the researcher coded it as General Community. The tweet was also coded as General Community if it clearly identified more than one targeted public. Investigating which public the tweet is primarily targeting will help researchers address the following research question:
RQ2: Which publics are targeted in the tweets of colleges and universities?

Theme of Message

The next several categories investigated the primary theme of the tweet. Twitter is thriving because it allows users to instantly send out a very engaging 140-character message to thousands of people at one time (Janusz, 2009). Organizations use Twitter for a number of different reasons including, branding, promotion, and news, just to name a few. Based on the literature, this study will code for the following themes: News, Self-Promotion, External Promotion, Question to Followers, Response to a Question, Opinions/Complaints, and Random Statements and Thoughts. Each tweet could contain one or multiple themes.

The third category investigated whether or not the theme of the tweet was News. The researcher coded for News if the tweet contained updates and announcements about news, breaking news, security alerts, or weather alerts. The theme of News was confirmed if the tweet contained any of these mentioned features.

The fourth category investigated whether or not the theme of the tweet was Self-Promotion. The researcher coded for Self-Promotion if the tweet contained information regarding the self-promotion or advertisement of events, services, resources, or accomplishments of the institution. The theme of Self-Promotion was confirmed if the tweet contained any of these mentioned features.

The fifth category investigated whether or not the theme of the tweet was External Promotion. The researcher coded for External Promotion if the tweet contained information regarding the self-promotion or advertisement of events, services, resources,
or accomplishments of outside organizations or individuals. The theme of External Promotion was confirmed if the tweet contained any of these mentioned features.

The sixth category investigated whether or not the theme of the tweet was a Question to Followers. The researcher coded for Question to Followers if the tweet was in the form of a question that was directed towards the institution’s followers. The theme of Question to Followers was confirmed if the tweet contained any of these mentioned features.

The seventh category investigated whether or not the theme of the tweet was a Response to a Question. The researcher coded for Response to a Question if the tweet was in the form of a response to a question asked by one of the institution’s followers. The theme of Response to a Question was confirmed if the tweet contained any of these mentioned features.

The eighth category investigated whether or not the theme of the tweet was an Opinion or Complaint. The researcher coded for Opinions/Complaints if the was tweet is in the form of an opinion or complaint posted by the institution or any of its followers, such as, “State is the best.” The theme of Opinion/Complaint was confirmed if the tweet contained any of these mentioned features.

The ninth category investigated whether or not the theme of the tweet was a Random Statement or Thought. The researcher coded for Random Statements and Thoughts if the tweet was in the form of a random statement or thought posted by the institutions or one of its followers, such as “The sky is blue here in New York” or “I miss my university.” The theme of Random Statements and Thoughts was confirmed if the
tweet contained any of these mentioned features. Investigating the theme of the tweets will help researchers address the following research question:

RQ3: What types of messages are commonly posted by universities and colleges?

*Usefulness of Information*

The tenth category investigated the presence of dialogic features associated with Usefulness of Information. Kent and Taylor (1998) describe useful information as being contact information such as deadlines, emergency alerts, historical information, background information, and contact information such as telephone numbers, email addresses, web addresses, fax numbers, and mailing addresses. They argue that useful information is important because “relationships with publics must be cultivated not only to serve the public relations goals of an organization, but so that the interests, values, and concerns of publics are addressed” (Kent & Taylor, 1998, p. 328).

The researcher coded for this dialogic principle if the tweet contained information such as security, alerts, weather alerts, emergency alerts, employment information, important dates and deadlines, and information regarding special events. The principle of Usefulness of Information was confirmed if the individual tweet contained any of these mentioned features.

*Conservation of Return Visitors*

The eleventh category investigated the presence of dialogic features associated with Conservation of Return Visitors. Kent and Taylor (1998) described the conservation of visitors as an organization’s attempt to keep visitors on their site as long as possible. This is important because organizations do not want to make the mistake of providing several links that take the parties away from the organizations page and to another site.
Oftentimes, those visitors may not be able to return to the organization’s site. Kent and Taylor (1998) argue that “if the goal of public relations in webbed environments is to create and foster relationships with publics, and not to entertain them, websites should only include essential links with clearly marked paths for visitors to return to your site” (p. 330).

The researcher coded for this dialogic principle if the tweet contained links that lead to any of the institution’s other social media sites or departmental websites. The principle of Conservation of Visitors was confirmed if the individual tweet contained any of these mentioned features.

Generation of Return Visitors

The twelfth category investigated the presence of dialogic features associated with Generation of Return Visitors. Kent and Taylor (1998) describe the generation of return visitors as an organization’s attempt to make strong efforts to ensure that visitors keep returning to the organization’s website. Kent and Taylor (1998) argue that “sites should contain features that make them attractive for repeat visits such as updated information, online-question and answer sessions, changing issues, special forums, new commentaries, and on-line experts to answer questions for interested visitors” (p. 329).

The researcher coded for this dialogic principle if the tweet contained links that lead to discussion forums, FAQ pages on the college/university’s website, pages on the college/university’s website where visitors can request additional information, and internal and external pages highlighting newsworthy information about the college/university. The principle of Generation of Return Visitors was confirmed if the individual tweet contained any of these mentioned features.
**Dialogic Feedback Loop**

The thirteenth category investigated the presence of dialogic features associated with the principle of Dialogic Feedback. Kent and Taylor (1998) describe the dialogic feedback loop as the beginning point for which an organization can engage in dialogue with its publics on the web. They argue that “for dialogic communication to take place on the web requires a commitment of resources on the part of the Web site providers” (Kent & Taylor, 1998, p. 326).

The researcher coded for this dialogic principle if the tweet represented an attempt by the institution to engage in communication with their publics by posing a question, responding directly or indirectly to a question, or retweeting an original tweet posted by another individual/organization. The principle of Dialogic Feedback was confirmed if the individual tweet contained any of these mentioned features.

Investigating the presence of dialogic features associated with Usefulness of Information, Conservation of Return Visitors, Generation of Visitors, and of Dialogic Feedback will help researchers address the following research question:

**RQ4:** Which dialogic features are present in the tweets of colleges and universities?

**Press Agentry/Publicity**

The fourteenth category investigated the presence of the press agentry/publicity model of public relations. Grunig (1990) describes the press agentry/publicity model of public relations as “Propagandistic public relations that seeks publicity or media attention in almost any way possible” (p. 21).
The researcher coded for this public relations model if the tweet was in the form of a one-way communication that contained persuasive and biased language or emoticons and words that expressed emotions to describe the institution (or affiliates) or any of its accomplishments, events, or programming. These tweets demonstrated propaganda for the institution and attempted to persuade followers to act in a manner that would benefit the institution, such as attending any of the institution’s events or programming or supporting any of its causes. These tweets did not contain at-replies because at-replies are a form of two-way communications. This model of public relations was confirmed if the individual tweet contained any of these mentioned features.

Public Information

The fifteenth category investigated the presence of the information model of public relations. Grunig (1990) describes the public information model of public relations as “Public relations practiced by ‘journalists in residence’ who disseminate what generally is accurate information about the organization but do not volunteer negative information” (p. 21).

The researcher coded for this public relation model if the tweet was in the form of a one-way communication that contained updates and announcements about the institution (and its affiliated organizations) without the use of persuasive and biased language, emoticons that expressed emotions and words that expressed emotions. These tweets contained only facts, through direct and objective language that focused on information that would benefit the public, such as scores of games, current events, directions to specific locations, etc. These tweets did not contain at-replies because at-
replies are a form of two-way communications. This model of public relations was confirmed if the individual tweet contained any of these mentioned features.

Two-Way Asymmetrical

The sixteenth category investigated the presence of the two-way asymmetrical model of public relations. Grunig (1990) described the two-way asymmetrical model of public relations as “public relations that uses research to identify the messages most likely to produce the support of publics without having to change the behavior of the organization” (p. 21).

The researcher coded for this public relation model when the tweet demonstrated the institution’s efforts to advocate for feedback from its publics by asking for specific feedback, participation in a survey or poll, and for targeted publics to become more involved with the college/university by using Twitter. This model of public relations was confirmed if the individual tweet contained any of these mentioned features.

Two-Way Symmetrical

The seventeenth category investigated the presence of the two-way symmetrical model of public relations. Grunig (1990) described the two-way symmetrical model of public relations as “public relations that uses dialogue, bargaining, negotiation, and strategies of conflict management to adjust the relationship between an organization and its publics” (p. 21). These posts typically include @replies.

The researcher coded for this public relation model when the tweet demonstrated the institution’s efforts to build long-term relationships with its key public, by attempting to resolve conflict, or if the tweet was in the form of a direct message featuring Twitter’s
@-reply function for conversation. This model of public relations was confirmed if the individual tweet contained any of these mentioned features.

Investigating whether or not the individual tweets align with the Press Agentry/Publicity, Public Information, Two-Way Asymmetrical, or Two-Way Symmetrical models of public relations will help researchers address the following research question:

RQ5: Which public relations models are featured in the tweets of colleges and universities?

Coder Training and Intercoder Reliability

Intercoder reliability is a very important component of content analysis. It regards the extent to which coders reach the same conclusion after evaluating a particular characteristic of a message. “It is widely acknowledged that intercoder reliability is a critical component of content analysis and (although it does not ensure validity) when it is not established, the data and interpretations of the data can never be considered valid” (Lombard et al., 2002, p. 589). Reliability should always be a top priority for researchers conducting content analysis because the goal of this research method is to record the objective characteristics of messages (Neuendorf, 2002).

The researcher and an employee of The University of Southern Mississippi served as the primary coders for the research study. After comprehensive training sessions, the coders worked independently to code the individual tweets. However, before the actual coding began, a pretest was conducted to check intercoder reliability. This pretest consisted of 150 randomly selected individual tweets (10% of the total individual tweets).
Through SPSS, an interrater reliability analysis using the Kappa statistic was performed to determine consistency among coders.

Based on Landis and Koch’s (1977) interpretation of Kappa statistics, the interrater agreement for all variables were either in Substantial Agreement or Almost Perfect Agreement. In regards to Interactivity, the interrater reliability for the coders was found to be Kappa = 1.0. In regards to Targeted Publics, the interrater reliability for the coders was found to be Kappa = .933. In regards to Usefulness of Information, the interrater reliability for the coders was found to be Kappa = .879. In regards to Conservation of Visitors, the interrater reliability for the coders was found to be Kappa = .976. In regards to Generation of Return Visitors, the interrater reliability for the coders was found to be Kappa = .749. In regards to the Dialogic Feedback Loop, the interrater reliability for the coders was found to be Kappa = .960. In regards to Press Agentry/Publicity, the interrater reliability for the coders was found to be Kappa = .893. In regards to Public Information, the interrater reliability for the coders was found to be Kappa = .864. In regards to Two-Way Asymmetrical, the interrater reliability for the coders was found to be Kappa = .922. In regards to Two-Way Symmetrical, the interrater reliability for the coders was found to be Kappa = .892. In regards to News, the interrater reliability for the coders was found to be Kappa = .853. In regards to Self-Promotion, the interrater reliability for the coders was found to be Kappa = .887. In regards to External Promotion, the interrater reliability for the coders was found to be Kappa = .724. In regards to Question to Followers, the interrater reliability for the coders was found to be Kappa = .941. In regards to Response to a Question, the interrater reliability for the coders was found to be Kappa = .929. In regards to Opinions/Complaints, the interrater
reliability for the coders was found to be Kappa = .785. In regards to Random Statements or Thoughts, the interrater reliability for the coders was found to be Kappa = .717.
CHAPTER V
RESULTS

Interactivity

One of the features that make Twitter unique is the fact that it allows a high degree of communication through a limited window. In fact, twitter continues to gain praise for its many interactive capabilities. The interactive capabilities are very important for institutions like colleges and universities because they want to make sure their publics are well informed about institutional business. Through an SPSS frequencies analysis, the results of this study revealed that all three levels of interaction were featured in the tweets of colleges and universities (see Table 1).

Table 1

*Frequency Table Highlighting the Level of Interactivity*

<table>
<thead>
<tr>
<th>Level</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>low</td>
<td>147</td>
<td>9.5</td>
<td>9.5</td>
<td>9.5</td>
</tr>
<tr>
<td>medium</td>
<td>1260</td>
<td>81.3</td>
<td>81.3</td>
<td>90.8</td>
</tr>
<tr>
<td>high</td>
<td>143</td>
<td>9.2</td>
<td>9.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>1550</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

*Medium Interactivity*

Medium Interactivity was the most dominant level of interactivity featured in the individual tweets of colleges and universities. Of the 1,550 individual tweets analyzed in this study, 81.3% or 1,260 of them met the criteria for Medium Interactivity. These tweets included links to videos, pictures, and other websites. An example of a Medium Interactivity tweet is from the University of Vermont. It reads “Miss the spooky organ
concert in Ira Allen last night? Catch a clip here: https://www.facebook.com/photo.php?v=4210793222554 … #UVM” (Uvmvermont, 2012a). It was confirmed as Medium Interactivity because it contained a link to another website.

Low Interactivity

Low Interactivity was the second most dominant level of interactivity featured in the individual tweets of colleges and universities. Of the 1,550 individual tweets analyzed in this study, 9.5% or 147 of them met the criteria for Low Interactivity. These tweets contained no links or @replies, or any other extraordinary features. An example of a Low Interactivity tweet is from the University of Tulsa. It reads “Zarrow Center Drop-In Family Art Time, 5-8 tonight. Celebrate Mexico’s Day of the Dead festival in Brady Arts District. Free, open to public” (Utsulsa, 2012).

High Interactivity

High Interactivity was the level of interactivity featured the least within the individual tweets of colleges and universities. Of the 1,550 individual tweets analyzed in this study, 9.2% or 143 of them met the criteria for High Interactivity. High Interactivity tweets consisted of messages that were @replies to other users. An example of a High Interactivity tweet is from the University of Rochester. It reads “@jasminee_ross Please visit anytime, and let me know if you have any questions I can help with” (UofR, 2012). It was confirmed as High Interactivity because it was in the form of an @-reply to one of the universities followers.
Targeted Publics

An organization’s key publics are essential in determining the nature of the online relationship the organization is attempting to build. Grunig and Repper (1992) argued that public relations could be conducted more effectively if practitioners would aggressively identify the key publics. The type of public relations utilized in higher education normally is based on the target public. The success of a college or university can depend on how well that institution builds and maintains effective relationships with its host community (Kim et al., 2006). Through an SPSS frequencies analysis, the results of this study revealed that all categories of publics were targeted within the individual tweets of colleges and universities (see Table 2).

Table 2

*Frequency Table Highlighting the Variable of Target Audience*

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>students</td>
<td>274</td>
<td>17.7</td>
<td>17.7</td>
<td>17.7</td>
</tr>
<tr>
<td>employees</td>
<td>7</td>
<td>.5</td>
<td>.5</td>
<td>18.1</td>
</tr>
<tr>
<td>alumni</td>
<td>6</td>
<td>.4</td>
<td>.4</td>
<td>18.5</td>
</tr>
<tr>
<td>parents</td>
<td>5</td>
<td>.3</td>
<td>.3</td>
<td>18.8</td>
</tr>
<tr>
<td>general community</td>
<td>1258</td>
<td>81.2</td>
<td>81.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>1550</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

General Community

The General Community was the most targeted public of the individual tweets posted by colleges and universities. Of the 1,550 individual tweets, 1,258 or 81.2% of them targeted the General Community. An example of a tweet that targeted Multiple Audiences is from the University of California-Davis: “Join UC President Mark G.

_Students_

Students were also targeted within the individual tweets of colleges and universities. In fact, students were the second most targeted publics of the individual tweets posted by colleges and universities. Of the 1,550 individual tweets posted by colleges and universities, 274 or 17.7% of them targeted students. An example of a tweet that targeted the students is from Rutgers University. It reads “Registration for Rutgers Newark, New Brunswick students delayed until Nov. 11. Camden registration will proceed as scheduled on Nov. 4” (RutgersU, 2012). This tweet clearly identified students as the target audience.

_Employees_

Colleges and universities also use Twitter to send direct messages to their employees. Employees were the third most targeted publics of the individual tweets posted by colleges and universities. Of the 1,550 individual tweets posted by colleges and universities, 7 or .5% of them targeted employees. An example of a tweet that targeted employees is from the University of Wisconsin-Madison. It reads UW employees: See an update from OHR on the campus HR Design process: http://www.news.wisc.edu/21223” (UWMadison, 2012a). This tweet clearly identifies employees as the targeted audience.

_Alumni_

Alumni of the colleges and universities were also targeted by the individual tweets of the colleges and universities. Alumni were the fourth most targeted publics of the individual tweets posted by colleges and universities. Of the 1,550 individual tweets
posted by colleges and universities, 6 or .4% of them targeted alumni. An example of a
tweet that targeted alumni is from Vanderbilt University. It reads “MT @vanderbiltalum:
VU classroom experiences don't need to stop just bc you graduated. Enjoy a variety of
lectures here http://ow.ly/eXfvt” (VanderbiltU, 2012). Although the tweet does not
clearly identify alumni as the targeted audience, it does use language to insinuate that the
message is being directed towards alumni.

*Parents*

Parents were also targeted within the individual tweets of colleges and
universities. Parents were the fifth most targeted publics of the individual tweets posted
by colleges and universities. Of the 1,550 individual tweets posted by colleges and
universities, 5 or .3% of them targeted parents. An example of a tweet that targeted
parents is from the University of California-Los Angeles. It reads “Parents’ Weekend
2012 has begun! The campus feels festive as families of undergrads enjoy the best of
UCLA. Go Bruins! http://ucla.in/U4aFt9” (UCLA, 2012). This tweet clearly identified
parents as the target audience.

*Message Theme*

Twitter is thriving because it allows users to instantly send out a very engaging
140-character message to thousands of people at one time (Janusz, 2009). Organizations
use Twitter for a number of different reasons including, branding, promotion, and news,
just to name a few. Based on the literature, this study coded for the following themes:
News, Self-Promotion, External Promotion, Question to Followers, Response to a
Question, Opinions/Complaints, and Random Statements and Thoughts. Through an
SPSS frequencies analysis, the results of this study revealed that all seven themes were featured in the tweets of colleges and universities.

**Self-Promotion**

The theme of Self-Promotion was featured the most in the individual tweets posted by colleges and universities. Of the 1,550 individual tweets, 1,254 or 80.9% of them focused on Self Promotion (see Table 3).

**Table 3**

*Frequency Table Highlighting the Variable of Self-Promotion*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>1254</td>
<td>80.9</td>
<td>80.9</td>
<td>80.9</td>
</tr>
<tr>
<td>no</td>
<td>296</td>
<td>19.1</td>
<td>19.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>1550</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

These tweets contained information regarding the self-promotion or advertisement of events, services, resources, or accomplishments of the institution. An example of a tweet that featured a Self-Promotion theme is from the Dartmouth College. It reads, “Dartmouth student-athletes lead all NCAA Division I institutions with a 99.7% Graduation Success Rate. Go Big Green” (Dartmouth, 2012).

**News**

The theme of News was the second most featured theme in the individual tweets posted by colleges and universities. Of the 1,550 individual tweets, 509 or 32.8% of them focused on News (see Table 4).
Table 4

*Frequency Table Highlighting the Variable of News*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>509</td>
<td>32.8</td>
<td>32.8</td>
<td>32.8</td>
</tr>
<tr>
<td>no</td>
<td>1041</td>
<td>67.2</td>
<td>67.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Total 1550 100.0 100.0

These tweets contained updates and announcements about news, breaking news, security alerts, or weather alerts. An example of a tweet that featured a news theme is from Florida State University. It reads, “11/1/12 9:55AM - CORRECTION. An electrical fire has occurred at the Mag Lab, with one medical injury. TFD is ventilating the building” (Floridastate, 2012).

*Response to a Question*

The theme of Response to a Question was the third most featured theme in the individual tweets posted by colleges and universities. Of the 1,550 individual tweets, 143 or 9.2% of them were in the form of a Response to a Question (see Table 5).

Table 5

*Frequency Table Highlighting the Variable of Response to a Question*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>143</td>
<td>9.2</td>
<td>9.2</td>
<td>9.2</td>
</tr>
<tr>
<td>no</td>
<td>1407</td>
<td>90.8</td>
<td>90.8</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Total 1550 100.0 100.0
An example of a tweet that featured a Response to a Question theme is from Carnegie Mellon University. It reads, “@butta1995 Yes, double majors are an option at CMU. For more information, contact @CM_Admission” (CarnegieMellon, 2012b).

**Random Statements or Thoughts**

The theme of Random Statements or Thoughts was the fourth most featured theme in the individual tweets posted by colleges and universities. Of the 1,550 individual tweets, 109 or 7% of them focused on Random Statements or Thoughts (see Table 6).

Table 6

*Frequency Table Highlighting the Variable of Random Statements or Thoughts*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>109</td>
<td>7.0</td>
<td>7.0</td>
<td>7.0</td>
</tr>
<tr>
<td>no</td>
<td>1441</td>
<td>93.0</td>
<td>93.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>1550</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

An example of a tweet that featured a Random Statement or Thought theme is from Connecticut College. It reads, “I love working in the@cc_lgbtqcenter. They have tea! I’ve had some of my best conversations on campus in there” (ConnCollege, 2012).

**Opinions/Complaints**

The theme of Opinions/Complaints was the fifth most featured theme in the individual tweets posted by colleges and universities. Of the 1,550 individual tweets, 87 or 5.6% of them focused on Opinions/Complaints (see Table 7).
Table 7

*Frequency Table Highlighting the Variable of Opinions/Complaints*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>87</td>
<td>5.6</td>
<td>5.6</td>
<td>5.6</td>
</tr>
<tr>
<td>no</td>
<td>1463</td>
<td>94.4</td>
<td>94.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>1550</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

These tweets were in the form of an opinion or complaint posted by the institution or any of its followers. An example of a tweet that featured the Opinions/Complaints theme is from Brandeis University. It reads, “I LOVE my deisians! @BrandeisU #TYP” (BrandeisU, 2012a).

*Question to Followers*

The theme of Question to Followers was the sixth most featured theme in the individual tweets posted by colleges and universities. Of the 1,550 individual tweets, 36 or 2.3% of them focused on Question to Followers (see Table 8).

Table 8

*Frequency Table Highlighting the Variable of Question to Followers*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>36</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>no</td>
<td>1514</td>
<td>97.7</td>
<td>97.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>1550</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
These tweets were in the form of a question directed towards the institution’s followers. An example of a tweet that featured a Question to Followers theme is from the University of California-San Diego. It reads, “You tell us, which is more important: what you say or how you say it?”

External Promotion

The theme of External Promotion was the seventh most featured theme in the individual tweets posted by colleges and universities. Of the 1,550 individual tweets, 29 or 1.9% of them focused on External Promotion (see Table 9).

Table 9

*Frequency Table Highlighting the Variable of External Promotion*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>29</td>
<td>1.9</td>
<td>1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>no</td>
<td>1521</td>
<td>98.1</td>
<td>98.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>1550</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

These tweets contained information regarding the self-promotion or advertisement of events, services, resources, or accomplishments of outside organizations or individuals. An example of a tweet that featured an External Promotion theme is from the University of Wisconsin-Madison: “#Badgers: Text REDCROSS to 90999 to give $10 to American@RedCross Disaster Relief, support #Sandy victims. Please RT” (UWMadison, 2012b).

Dialogic Principles

Twitter is quickly becoming a leading force in a new era of public relations for colleges and universities across this country because of its ability to allow them to share
information, interact with their different publics, and build mutually-beneficial relationships. It’s one of the most significant dialogical social media tools available.

Twitter can be used as a very powerful dialogical public relations tool that can be utilized to build mutually-beneficial relationships between an institution and its key publics. Through an SPSS frequencies analysis, the results of this study revealed that all four dialogic principles were featured in the tweets of colleges and universities.

Conservation of Return Visitors

Conservation of Return Visitors was the most featured dialogic principle within the individual tweets of colleges and universities. Of the 1,550 individual tweets, 597 or 38.5% of them met the principle of Conservation of Return Visitors (see Table 10).

Table 10

*Frequency Table Highlighting the Variable of Conservation of Return Visitors*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>597</td>
<td>38.5</td>
<td>38.5</td>
<td>38.5</td>
</tr>
<tr>
<td>no</td>
<td>953</td>
<td>61.5</td>
<td>61.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>1550</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The dialogic principle of Conservation of Return Visitors was featured in tweets that contained links to any of the institutions’ other social media sites or departmental websites. An example of a tweet meeting the principle of Conservation of Return Visitors is from Bates College. It reads “Inspiring shots from Bates’ win over @BowdoinCollege on Nov 3: http://www.bates.edu/news/2012/11/05/cbb-football/#GoCats#BatesCollege” (BatesCollege, 2012). It meets the dialogic principle of Conservation of Return Visitors because it contains a link that a lead to one of the college’s other websites.
**Dialogic Feedback Loop**

The second most featured dialogic principle within the individual tweets of colleges and universities was the principle of the Dialogic Feedback Loop. Of the 1,550 individual tweets, 473 or 30.5% met the principle of the Dialogic Feedback Loop (see Table 11).

Table 11

*Frequency Table Highlighting the Variable of Dialogic Feedback Loop*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>473</td>
<td>30.5</td>
<td>30.5</td>
<td>30.5</td>
</tr>
<tr>
<td>no</td>
<td>1077</td>
<td>69.5</td>
<td>69.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>1550</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The principle of the Dialogic Feedback Loop was featured in tweets that posed a question, responded directly to a question, responded indirectly to a question, or was in the form of a retweet of an original tweet that was posted by another individual/organization. An example of a tweet meeting the principle of the Dialogic Feedback Loop is from Art Center College of Design. It reads "@vatman_Freedom Hi, our servers went down last night but we’re back up now. You can also email admissions@artcenter.edu" (Art_center, 2012).

**Usefulness of Information**

The third most featured dialogic principle within the individual tweets of colleges and universities was the principle of Usefulness of Information. Of the 1,550 individual tweets, 421 or 27.2% met the principle of Usefulness of Information (see Table 12).
Table 12

*Frequency Table Highlighting the Variable of Usefulness of Information*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>421</td>
<td>27.2</td>
<td>27.2</td>
<td>27.2</td>
</tr>
<tr>
<td>no</td>
<td>1129</td>
<td>72.8</td>
<td>72.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>1550</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The dialogic principle of Usefulness of Information was evident in tweets that contained information regarding security alerts, weather alerts, important updates, employment, important dates and deadlines, and special events. An example of a tweet meeting the principle of Usefulness of Information is from the University of Vermont. It reads “A woman with a toy gun entered Angell hall around 8:30 am. She has been apprehended by UVM Police. There is no threat to the community” (Uvmvermont, 2012b).

*Generation of Return Visitors*

The fourth most featured dialogic principle within the individual tweets of colleges and universities was the principle of Generation of Return Visitors. Of the 1,550 individual tweets, 379 or 24.5% met the principle of Generation of Return Visitors (see Table 13).

Table 13

*Frequency Table Highlighting the Variable of Generation of Return Visitors*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>379</td>
<td>24.5</td>
<td>24.5</td>
<td>24.5</td>
</tr>
<tr>
<td>no</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 13 (continued).

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>no</td>
<td>1171</td>
<td>75.5</td>
<td>75.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>1550</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Public Relations Models

Twitter is successful and effective because it simply offers an avenue for better two-way communication (Safko & Brake, 2009). Public relations practitioners rely heavily on two-way communications, which is one of the key principles of Grunig and Hunt’s (1984) four models of public relations (Safko & Brake, 2009). Wright and Hinson (2009) believe that social media can be very instrumental in opening up the lines of two-way communication between organizations and publics and help decrease the time it takes for an organization to properly respond to its publics. Through an SPSS frequencies analysis, the results of this study revealed that all four models of public relations were represented within the tweets of colleges and universities.

Press Agentry/Publicity

Press Agentry/Publicity was the most featured model of public relations within individual tweets of colleges and universities. Of the 1,550 individual tweets, 770 or 49.7% of them aligned with the model of Press Agentry/Publicity. The Press Agentry/Publicity model of public relations was evident in tweets that used persuasive and biased language, as well as words or emoticons express emotions, to describe or promote an event/program or to describe an institutional accomplishment (see Table 14).
Table 14

*Frequency Table Highlighting the Variable of Press Agentry/Publicity*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>770</td>
<td>49.7</td>
<td>49.7</td>
<td>49.7</td>
</tr>
<tr>
<td>no</td>
<td>780</td>
<td>50.3</td>
<td>50.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1550</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

These tweets demonstrated propaganda for the institution and attempted to persuade followers to act in a manner that would benefit the institution, such as attending any of the institution’s events or programming or supporting any of its causes. These tweets did not contain @-replies because @-replies are a form of two-way communications. An example of a tweet aligning with the Press Agentry/Publicity model of public relations is from Brigham Young University. It reads “The winners were impressive! Have a read MT @byucet: If You Missed our Student Innovator of the Ye[150] | 100.0 | 100.0 | [150] | Competition: http://bit.ly/Xy34nt” (BYU, 2012). It was confirmed as meeting the Press Agentry/Publicity model of public relations because it used biased and emotional language in this tweet to describe the university’s special event.

*Public Information*

Of the 1,550 individual tweets, 664 or 42.8% aligned with the model of Public Information. The Public Information model of public relations was featured in tweets that contained updates and announcements about the institution or from other organizations without the use of persuasive and biased language or emoticons and words that express emotions (see Table 15).
Table 15

*Frequency Table Highlighting the Variable of Public Information*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>664</td>
<td>42.8</td>
<td>42.8</td>
<td>42.8</td>
</tr>
<tr>
<td>no</td>
<td>886</td>
<td>57.2</td>
<td>57.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>1550</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

These tweets contained only facts, through direct and objective language that focused on information that would benefit the public, such as scores to a game, current events, directions to specific locations, etc. These tweets did not contain @-replies because @-replies are a form of two-way communications. An example of a tweet aligning with Public Information model of public relations was from Rhodes College. It reads “Early Decision Applications will be accepted until November 9 for students in areas affected by Hurricane Sandy... http://fb.me/159pJJp1X” (RhodesCollege, 2012).

*Two-Way Symmetrical*

The third most featured public relations model within the individual tweets of colleges and universities was the model of Two-Way Symmetrical. Of the 1,550 individual tweets, 35 or 2.3% aligned with the model of Two-Way Symmetrical. The Two-Way Symmetrical model of public relations was featured in tweets that attempted to resolve conflict or were in the form of direct messages featuring Twitter’s @-reply function for conversation (see Table 16).
Table 16

*Frequency Table Highlighting the Variable of Two-Way Symmetrical*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>35</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>no</td>
<td>1515</td>
<td>97.7</td>
<td>97.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>1550</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

An example of a tweet aligning with the Two-Way Symmetrical model of public relations is from Carnegie Mellon University. It reads “@alcouponcommuni Sorry to hear about the problem with the shuttle on Friday. You can try contacting the Shuttle Service at @AndysBuses” (CarnegieMellon, 2012a). This tweet was confirmed as meeting the Two-Way Symmetrical model of public relations because, through Twitter’s @-reply function, the university attempted to resolve a conflict.

*Two-Way Asymmetrical*

The fourth most featured public relations model within the individual tweets of colleges and universities was the model of Two-Way Asymmetrical. Of the 1,550 individual tweets, 25 or 1.6% aligned with the model of Two-Way Asymmetrical. The Two-Way Asymmetrical model of public relations was featured in tweets that asked for specific feedback, asked for participation in a survey or poll, or asked for targeted publics to become more involved with the institution by using Twitter (see Table 17).
Table 17

*Frequency Table Highlighting the Variable of Two-Way Asymmetrical*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>25</td>
<td>1.6</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>no</td>
<td>1525</td>
<td>98.4</td>
<td>98.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Valid</td>
<td>1550</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An example of a tweet aligning with the Two-Way Asymmetrical model of public relations is from Colgate University. It reads “Please RT this message to the Colgate Community from President Herbst http://bit.ly/Wb0eVK” (Colgateuniv, 2012). It was confirmed as meeting the Two-Way Asymmetrical model of public relations because it asks for other users to become more involved with Twitter by retweeting a specific message.

Other Key Findings

This research study analyzed the individual tweets of public and private colleges and universities that were featured in the 2013 edition of the *U.S. News & World Report’s* Best Colleges Rankings, as well as the colleges and universities featured on the list of the Top 100 Social Media Colleges. Based on the notion that practitioners strive for dialogic and interactive two-way communication within their public relations efforts, these findings indicate that colleges and universities are not completely embracing the idea of incorporating dialogic capabilities and two-way communication features within their Twitter activity, regardless of whether the institution is a member of the *U.S. News & World Report* Best Colleges Rankings or Top 100 Social Media Colleges, or even if it’s private or public.
Through an SPSS descriptive crosstabs analysis, each tweet was examined based on which list (U.S. News & World Report Best Colleges Rankings or Top 100 Social Media Colleges) they appear on and what type (public or private) of institution they are, in regards to the variables of Response to a Question, Question to Followers, Dialogic Feedback Loop, Two-Way Symmetrical, and Two-Way Asymmetrical public relations models.

**Private versus Public Institutions**

When examining how private colleges and universities incorporate this principle into their Twitter activity, compared to how public colleges and universities incorporate it, the results revealed that private colleges and universities are more likely to incorporate the Dialogic Feedback principle in their tweets than public colleges and universities are. In regards to the type of colleges and universities, the data reveals that out of the 1,550 tweets that were analyzed, 810 or 52.3% of the tweets were posted by private colleges and universities, while 740 or 47.7%, of the tweets were posted by public colleges and universities. Furthermore, out of all 1,550 tweets that were analyzed, 473 or 30.5% contained features that aligned with the Dialogic Feedback Loop principle. As mentioned, the dialogic principle of the Dialogic Feedback Loop was featured in tweets that posed a question, responded directly to a question, responded indirectly to a question, or was in the form of a Retweet of an original tweet that was posted by another individual/organization.

Of the 473 tweets that aligned with the Dialogic Feedback Loop principle, 251 or 53.1% were posted by private colleges and universities, while 222 or 46.9% were posted by public colleges and universities. Based on the results of this study, it appears that
private colleges and universities are incorporating Dialogic Feedback features within their tweets more often than public colleges and universities (see Table 18).

Table 18

*Crosstab Table Highlighting the Tweets that Featured the Dialogic Feedback Loop Principle, by Comparing Private and Public Institutions*

<table>
<thead>
<tr>
<th>Dialogic Feedback Loop</th>
<th>Public</th>
<th>Private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>Count</td>
<td>222</td>
<td>251</td>
</tr>
<tr>
<td></td>
<td>% within Dialogic Feedback Loop</td>
<td>46.9%</td>
<td>53.1%</td>
</tr>
<tr>
<td></td>
<td>% within Institution Type</td>
<td>30.0%</td>
<td>31.0%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>14.3%</td>
<td>16.2%</td>
</tr>
<tr>
<td></td>
<td>Count</td>
<td>518</td>
<td>559</td>
</tr>
<tr>
<td>no</td>
<td>% within Dialogic Feedback Loop</td>
<td>48.1%</td>
<td>51.9%</td>
</tr>
<tr>
<td></td>
<td>% within Institution Type</td>
<td>70.0%</td>
<td>69.0%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>33.4%</td>
<td>36.1%</td>
</tr>
<tr>
<td></td>
<td>Count</td>
<td>740</td>
<td>810</td>
</tr>
<tr>
<td>Total</td>
<td>% within Dialogic Feedback Loop</td>
<td>47.7%</td>
<td>52.3%</td>
</tr>
<tr>
<td></td>
<td>% within Institution Type</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>47.7%</td>
<td>52.3%</td>
</tr>
</tbody>
</table>

The Two-Way Symmetrical model of public relations was featured in tweets that attempted to resolve conflict or was in the form of a direct message featuring Twitter’s @-reply function for conversation. Of the 35 tweets that aligned with the Two-Way Symmetrical public relations model, 18 or 51.4% were posted by public colleges and
universities, while 17 or 48.6% were posted by private colleges and universities (see Table 19).

Table 19

*Crosstab Table Highlighting the Tweets that Featured the Two-Way Symmetrical Public Relations Model, by Comparing Private and Public Institutions*

<table>
<thead>
<tr>
<th>Two-Way Symmetrical</th>
<th>Institution Type</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public</td>
<td>Private</td>
</tr>
<tr>
<td>yes</td>
<td>Count</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>% within Two-way-symmetrical</td>
<td>51.4%</td>
</tr>
<tr>
<td></td>
<td>% within Institution Type</td>
<td>2.4%</td>
</tr>
<tr>
<td></td>
<td>% of Total Count</td>
<td>1.2%</td>
</tr>
<tr>
<td>no</td>
<td>Count</td>
<td>722</td>
</tr>
<tr>
<td></td>
<td>% within Two-way-symmetrical</td>
<td>47.7%</td>
</tr>
<tr>
<td></td>
<td>% within Institution Type</td>
<td>97.6%</td>
</tr>
<tr>
<td></td>
<td>% of Total Count</td>
<td>46.6%</td>
</tr>
<tr>
<td>Total</td>
<td>% within Two-way-symmetrical</td>
<td>47.7%</td>
</tr>
<tr>
<td></td>
<td>% within Institution Type</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>47.7%</td>
</tr>
</tbody>
</table>

The Two-Way Asymmetrical model of public relations was featured in tweets that asked for specific feedback, asked for participation in a survey or poll, or asked for targeted publics to become more involved with the institution by using Twitter. Of the 25 individual tweets that aligned with the Two-Way Asymmetrical, 15 or 60% were posted
by private colleges and universities, while 10 or 40% were posted by public colleges and universities (see Table 20).

Table 20

*Crosstab Table Highlighting the Tweets that Featured the Two-Way Asymmetrical Public Relations Model, by Comparing Private and Public Institutions*

<table>
<thead>
<tr>
<th>Two-way Asymmetrical</th>
<th>Institution Type</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public</td>
<td>Private</td>
</tr>
<tr>
<td>yes</td>
<td>Count</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>% within Two-way Asymmetrical</td>
<td>40.0%</td>
</tr>
<tr>
<td></td>
<td>% within Institution Type</td>
<td>1.4%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>0.6%</td>
</tr>
<tr>
<td></td>
<td>Count</td>
<td>730</td>
</tr>
<tr>
<td></td>
<td>% within Two-way Asymmetrical</td>
<td>47.9%</td>
</tr>
<tr>
<td></td>
<td>% within Institution Type</td>
<td>98.6%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>47.1%</td>
</tr>
<tr>
<td></td>
<td>Count</td>
<td>740</td>
</tr>
<tr>
<td>no</td>
<td>% within Two-way Asymmetrical</td>
<td>47.7%</td>
</tr>
<tr>
<td></td>
<td>% within Institution Type</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>47.7%</td>
</tr>
</tbody>
</table>

The variable of Questions to Followers was featured in tweets that were in the form of questions directed towards the institution’s followers. Of the 36 tweets that aligned with this message theme, 19 or 52.8% were posted by public colleges and universities, while 17 or 47.2% were posted by private colleges and universities (see Table 21).
Table 21

*Crosstab Table Highlighting the Tweets that Featured the Theme of Question to Followers, by Comparing Private and Public Institutions*

<table>
<thead>
<tr>
<th>Question to Followers</th>
<th>Institution Type</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public</td>
<td>Private</td>
</tr>
<tr>
<td>yes</td>
<td>Count</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>% within Question to Followers</td>
<td>52.8%</td>
</tr>
<tr>
<td></td>
<td>% within Institution Type</td>
<td>2.6%</td>
</tr>
<tr>
<td></td>
<td>% of Total Count</td>
<td>1.2%</td>
</tr>
<tr>
<td>no</td>
<td>Count</td>
<td>721</td>
</tr>
<tr>
<td></td>
<td>% within Question to Followers</td>
<td>47.6%</td>
</tr>
<tr>
<td></td>
<td>% within Institution Type</td>
<td>97.4%</td>
</tr>
<tr>
<td></td>
<td>% of Total Count</td>
<td>46.5%</td>
</tr>
<tr>
<td>Total</td>
<td>% within Question to Followers</td>
<td>47.7%</td>
</tr>
<tr>
<td></td>
<td>% within Institution Type</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>47.7%</td>
</tr>
</tbody>
</table>

The variable of Response to a Question was featured in tweets that were in the form of responses to questions posed by any of the institution’s followers. Of the 143 tweets that aligned with this message theme, 72 or 50.3% were posted by private colleges and universities while 71 or 49.7% were posted by public colleges and universities (see Table 22).
Table 22

_Crosstab Table Highlighting the Tweets that Featured the Theme of Response to a Question, by Comparing Private and Public Institutions_

<table>
<thead>
<tr>
<th></th>
<th>Institution Type</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public</td>
<td>Private</td>
</tr>
<tr>
<td>Count</td>
<td>71</td>
<td>72</td>
</tr>
<tr>
<td>% within Response to a Question</td>
<td>49.7%</td>
<td>50.3%</td>
</tr>
<tr>
<td>% within Institution Type</td>
<td>9.6%</td>
<td>8.9%</td>
</tr>
<tr>
<td>% of Total Count</td>
<td>4.6%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Count</td>
<td>669</td>
<td>738</td>
</tr>
<tr>
<td>% within Response to a Question</td>
<td>47.5%</td>
<td>52.5%</td>
</tr>
<tr>
<td>% within Institution Type</td>
<td>90.4%</td>
<td>91.1%</td>
</tr>
<tr>
<td>% of Total Count</td>
<td>43.2%</td>
<td>47.6%</td>
</tr>
<tr>
<td>Count</td>
<td>740</td>
<td>810</td>
</tr>
<tr>
<td>% within Response to a Question</td>
<td>47.7%</td>
<td>52.3%</td>
</tr>
<tr>
<td>% within Institution Type</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>47.7%</td>
<td>52.3%</td>
</tr>
</tbody>
</table>

_Top 100 Social Media Colleges versus U.S. News Best Colleges_

In regards to which population list the colleges and universities derived from, the data revealed that out of the 1,550 tweets that were analyzed, 980 or 63.2% were posted by colleges and universities that were featured on _U.S. News & World Report_ Best Colleges Rankings, while 970 or 62.6% of the tweets were posted by colleges and universities featured on the Top 100 Social Media Colleges list. It’s important to note that
some institutions did appear on both lists so some overlap did occur. This specific analysis wasn’t necessarily concerned with the overlap.

Out of all 1,550 tweets that were analyzed, 473 or 30.5% contained features that aligned with the Dialogic Feedback Loop principle. Of those 473 tweets that featured the Dialogic Feedback Loop principle, 286 or 60.5% were posted by colleges and universities that were featured on the Top 100 Social Media Colleges list, while 279 or 59% were posted by colleges and universities that were featured on the *U.S. News & World Report* Best Colleges Rankings. Based on the results of this study, it appears that colleges and universities featured on the Top 100 Social Media Colleges list incorporate features of the Dialogic Feedback principle within their tweets just as much as the colleges and universities that are featured on the *U.S. News & World Report* Best Colleges Rankings (see Tables 23 and 24).

Table 23

*Crosstab Table Highlighting the Tweets that Featured Dialogic Feedback Loop Principle, Posted by the Top 100 Social Media Colleges*

<table>
<thead>
<tr>
<th>Dialogic Feedback Loop</th>
<th>Count</th>
<th>% within Dialogic Feedback Loop</th>
<th>% within Top 100 Social Media Colleges</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>286</td>
<td>60.5%</td>
<td>29.5%</td>
<td>18.5%</td>
</tr>
<tr>
<td>no</td>
<td>684</td>
<td>39.5%</td>
<td>32.2%</td>
<td>12.1%</td>
</tr>
</tbody>
</table>

Total                                      473   100.0%                          30.5%                          30.5%
Table 23 (continued).

<table>
<thead>
<tr>
<th></th>
<th>Top 100 Social Media Colleges</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>100 Social Media Colleges</td>
<td>70.5%</td>
<td>67.8%</td>
<td>69.5%</td>
</tr>
<tr>
<td>% of Total</td>
<td>44.1%</td>
<td>25.4%</td>
<td>69.5%</td>
</tr>
<tr>
<td>Count</td>
<td>970</td>
<td>580</td>
<td>1550</td>
</tr>
<tr>
<td>% within Dialogic Feedback Loop</td>
<td>62.6%</td>
<td>37.4%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within Top 100 Social Media Colleges</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>62.6%</td>
<td>37.4%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 24

*Crosstab Table Highlighting the Tweets that Featured Dialogic Feedback Loop Principle, Posted by the U.S. News & World Report Best Colleges*

<table>
<thead>
<tr>
<th></th>
<th>U.S. News Best Colleges Rankings</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>279</td>
<td>194</td>
<td>473</td>
</tr>
<tr>
<td>% within Dialogic Feedback Loop</td>
<td>59.0%</td>
<td>41.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within U.S. News Best Colleges Rankings</td>
<td>28.5%</td>
<td>34.0%</td>
<td>30.5%</td>
</tr>
<tr>
<td>% of Total</td>
<td>18.0%</td>
<td>12.5%</td>
<td>30.5%</td>
</tr>
</tbody>
</table>
Table 24 (continued).

<table>
<thead>
<tr>
<th></th>
<th>U.S. News Best Colleges Rankings</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Dialogic Feedback Loop</td>
<td>65.1%</td>
<td>34.9%</td>
</tr>
<tr>
<td>% within U.S. News Best Colleges Rankings</td>
<td>71.5%</td>
<td>66.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>45.2%</td>
<td>24.3%</td>
</tr>
<tr>
<td>Count</td>
<td>980</td>
<td>570</td>
</tr>
<tr>
<td>% within Dialogic Feedback Loop</td>
<td>63.2%</td>
<td>36.8%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

In regards to this study, the Two-Way Symmetrical model of public relations was featured in tweets that attempted to resolve conflict or was in the form of a direct message featuring Twitter’s @-reply function for conversation, while the Two-Way Asymmetrical model of public relations was featured in tweets that asked for specific feedback, asked for participation in a survey or poll, or asked for targeted publics to become more involved with the institution by using Twitter. Of the 60 tweets that aligned with the Two-Way public relations models, colleges and universities that were featured on the Best Colleges Rankings accounted for 47 or 78.3% of the tweets, while colleges
and universities featured on the Top 100 Social Media Colleges list accounted for 28 or 46.7% of the tweets. Some institutions appeared on both lists.

Of the 143 tweets that aligned with the Response to a Question variable, colleges and universities that were featured on the *U.S. News & World Report* Best Colleges Rankings accounted for 100 or 69.9% of the tweets, while colleges and universities featured on the Top 100 Social Media Colleges list accounted for 66 or 42.6% of the tweets. Some institutions appeared on both lists (see Tables 25).

Table 25

*Crosstab Table Highlighting the Tweets that Featured the Theme of Response to a Question, Posted by the Top 100 Social Media Colleges*

<table>
<thead>
<tr>
<th>Response to a Question</th>
<th>Top 100 Social Media Colleges</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Count</td>
<td>66</td>
<td>77</td>
</tr>
<tr>
<td>% within</td>
<td>46.2%</td>
<td>53.8%</td>
</tr>
<tr>
<td>Response to a Question</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% within Top 100</td>
<td>6.8%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Social Media Colleges</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of Total</td>
<td>4.3%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Count</td>
<td>904</td>
<td>503</td>
</tr>
<tr>
<td>% within</td>
<td>64.3%</td>
<td>35.7%</td>
</tr>
<tr>
<td>Response to a Question</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% within Top 100</td>
<td>93.2%</td>
<td>86.7%</td>
</tr>
<tr>
<td>Social Media Colleges</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of Total</td>
<td>58.3%</td>
<td>32.5%</td>
</tr>
<tr>
<td>Count</td>
<td>970</td>
<td>580</td>
</tr>
</tbody>
</table>
Table 25 (continued).

<table>
<thead>
<tr>
<th></th>
<th>Top 100 Social Media Colleges</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>% within Top 100 Social Media Colleges</td>
<td></td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>62.6%</td>
<td>37.4%</td>
</tr>
</tbody>
</table>

In regards to this study, the variable of Question to Followers was featured in tweets that were in the form of questions directed at the institution’s Twitter followers. Of the 36 tweets that aligned with this message theme, 24% were posted by colleges and universities that were featured on the *U.S. News & World Report* Best College Rankings, while another 24% were featured on the Top 100 Social Media Colleges list (see Tables 26 and 27).

Table 26
*Crosstab Highlighting the Tweets that Featured the Theme of Question to Followers, Posted by the U.S. News & World Report Best Colleges*

<table>
<thead>
<tr>
<th></th>
<th>U.S. News Best Colleges Rankings</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Question to Followers</td>
<td>yes</td>
<td>24</td>
</tr>
<tr>
<td>% within Question to Followers</td>
<td></td>
<td>66.7%</td>
</tr>
</tbody>
</table>
Table 26 (continued).

<table>
<thead>
<tr>
<th>Question to Followers</th>
<th>U.S. News Best Colleges Rankings</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>% within U.S. News Best Colleges Rankings</td>
<td>2.4%</td>
<td>2.1%</td>
</tr>
<tr>
<td>% of Total Count</td>
<td>1.5%</td>
<td>0.8%</td>
</tr>
<tr>
<td>% within Question to Followers no</td>
<td>956</td>
<td>558</td>
</tr>
<tr>
<td>% within U.S. News Best Colleges Rankings</td>
<td>97.6%</td>
<td>97.9%</td>
</tr>
<tr>
<td>% of Total Count</td>
<td>61.7%</td>
<td>36.0%</td>
</tr>
<tr>
<td>% within Question to Followers Total</td>
<td>980</td>
<td>570</td>
</tr>
<tr>
<td>% within U.S. News Best Colleges Rankings</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total Count</td>
<td>63.2%</td>
<td>36.8%</td>
</tr>
</tbody>
</table>
Table 27

*Crosstab Table Highlighting the Tweets that Featured the Theme of Question to Followers, Posted by the Top 100 Social Media Colleges*

<table>
<thead>
<tr>
<th></th>
<th>Top 100 Social Media Colleges</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Count</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>% within Question to Followers</td>
<td>66.7%</td>
<td>33.3%</td>
</tr>
<tr>
<td>% within Top 100 Social Media Colleges</td>
<td>2.5%</td>
<td>2.1%</td>
</tr>
<tr>
<td>% of Total Question to Followers</td>
<td>1.5%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Count</td>
<td>946</td>
<td>568</td>
</tr>
<tr>
<td>% within Question to Followers</td>
<td>62.5%</td>
<td>37.5%</td>
</tr>
<tr>
<td>% within Top 100 Social Media Colleges</td>
<td>97.5%</td>
<td>97.9%</td>
</tr>
<tr>
<td>% of Total Question to Followers</td>
<td>61.0%</td>
<td>36.6%</td>
</tr>
<tr>
<td>Count</td>
<td>970</td>
<td>580</td>
</tr>
<tr>
<td>% within Question to Followers</td>
<td>62.6%</td>
<td>37.4%</td>
</tr>
<tr>
<td>% within Top 100 Social Media Colleges</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total Question to Followers</td>
<td>62.6%</td>
<td>37.4%</td>
</tr>
</tbody>
</table>

*Retweets*

Another feature that makes Twitter unique is the fact that it allows those users to save, publish, and share those tweets at their convenience (Marshall & Shipman, 2011).
Twitter’s retweet capabilities are measures of just how popular tweets can be because this functionality allows users to spread the information as they choose to (Kwak et al., 2010).

A total of 318 tweets of 1,550 were in the form of retweets. Out of the 318 retweets, 81.8% or 260 tweets, were retweets of original messages posted by one of the institution’s internal departments or organizations, while 18.2% of those retweets were retweets of original messages posted by individuals (see Table 28).

Table 28

*Frequency Table Highlighting the Variable of Type of Tweet*

<table>
<thead>
<tr>
<th>Type of Tweet</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>original</td>
<td>1089</td>
<td>70.3</td>
<td>70.3</td>
<td>70.3</td>
</tr>
<tr>
<td>retweet</td>
<td>318</td>
<td>20.5</td>
<td>20.5</td>
<td>90.8</td>
</tr>
<tr>
<td>at-reply</td>
<td>143</td>
<td>9.2</td>
<td>9.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>1550</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
CHAPTER VI
DISCUSSION

Since making its debut in October 2006, Twitter has quickly grown to become one of the most popular brands of social media, gaining more than 17 million registered users in a short period. In fact, based on statistics alone, it’s one of the most successful social media tools. The Nielson Wire Website found that “Unique visitors to Twitter increased 1,382 percent year-over-year, from 475,000 unique visitors in February 2008 to 7 million in February 2009, making it the fastest growing site in the Member Communities category for the month” (Nielson, 2009).

Although Twitter began as a social networking tool for personal use (Priem & Costello, 2010), there is much evidence to suggest that many businesses and organizations use the microblogging tool for official business. Twitter is now one of only a few dominant social media tools that are used for a variety of communication purposes. For these reasons, it has made its way into the higher education landscape where it’s being used as a public relations and dialogic communication tool.

This research study proves that Twitter has become an important interactive resource for colleges and universities looking to engage and build relationships with their many technology-consumed publics. The results revealed that every variable was present at least once in some of the tweets, which confirms that colleges and universities are employing Twitter for different reasons and in different ways, which is not necessarily a bad thing. However, based on the belief that public relations has evolved into an industry that is focusing more and more on interactive two-way dialogic communication
practices, the results confirm that some institutions may be guilty of not strategically using Twitter in a manner as to take advantage of its many two-way dialogic capabilities.

Summary of Findings

One of the features that make Twitter unique is the fact that it allows a high degree of communication through a limited window. In fact, Twitter continues to gain praise for its many interactive capabilities. According to Twitter.com, it is the most interactive social media tools because individuals can access tweets and engage in conversation without even being an active member, and you can interact with people in nearly any other country in the world who are also using Twitter. Users can post tweets, follow other tweeters, retweet old tweets, and post links to other sites. All of this interaction occurs through tweets or messages that can be no longer than 140 characters (Greer & Ferguson, 2011).

Interactivity

Twitter’s interactivity is often broken down into three categories: Low, Medium, and High. Low Interactivity tweets have no links or @-replies, or any other extraordinary features. Medium Interactivity tweets include links to videos, pictures, and other websites. High interactivity tweets often consist of messages that are @replies to other users.

For the most part, the interactivity of the individual tweets will depend on the goals of the colleges and universities. Are they using Twitter to relay quick messages? Are they using it to supply their publics with an abundance of information? Are they using it to respond to the questions and concerns of their key publics?
Interestingly, the results from this study revealed that Medium Interactivity was
the most dominant level of interactivity featured within the individual tweets of colleges
and universities. In fact, 81.4% of the tweets contained a Medium Interactivity level. This
shows that colleges and universities are supplying their publics with an abundance of
information by taking advantage of Twitter’s technical capabilities to provide links to
videos, photos, and other websites. The University of Pittsburgh is a good example of a
university that utilizes medium interactivity within its tweets, which are posted below:

- “RT @UPittPress: Early Modern Medicine & Natural Philosophy conference

- “Do you have tickets to Pitt's 42nd Annual Jazz Seminar and Concert?
  Student tickets are only $8! http://bit.ly/ThXMXV” (PittTweet, 2012b).

- “The hard work of two classes of Pitt architectural students has paid off with a

- “To honor the troops, Pitt will host a Remembrance Day National Roll Call

- “Ever wonder why round fruits are stacked in pyramid formations at the
  (PittTweet, 2012e).

The results from the study also revealed that Low Interactivity was the second
most dominant level of interactivity featured in the individual tweets of colleges and
universities. Roughly 9.4% of the tweets met this level of interactivity. It was quite
surprising that this many tweets did not contain any type of links. Then again, if the
purpose of the tweet was to simply relay a quick message, then the college/university actually achieved its goal. Links have the potential to distract from the actual message posted in the tweet. California School of the Arts really seemed to utilize low interactivity in their tweets, which are posted below:

- “#CCArts Alum Catherine Sergurson launches new Santa Cruz-based magazine "Catamaran Literary Reader” (CACollegeofArts, 2012a).
- “Listen up, cyclists: Riding with headphones is incredibly dumb.” (CACollegeofArts, 2012b).
- “The November issue of #CCArts News and Events is out! Stay up to date with your favorite arts school” (CACollegeofArts, 2012c).
- “I don't want life to imitate art. I want life to be art.’ -Ernst Fischer” (CACollegeofArts, 2012d).
- “Tonight at @CACollegeofArts: Just Design Exhibition.” (CACollegeofArts, 2012e).

The results from the study also revealed that High Interactivity was the level of interactivity featured the least within the individual tweets of colleges and universities, accounting for only 9.2% of the individual tweets. Although the percentage of the High Interactivity tweets is not that high, it’s still a significant figure. It's important because it shows that some colleges and universities are monitoring twitter to respond to the questions and concerns of their key publics. This goes a long way in building mutually-beneficial relationships between these institutions and their publics. The University of Texas-Austin is a good example of a university that utilizes high interactivity within its tweets, which are posted below:
• “@brett_young7 nice work” (UTAustin, 2012a).

• “@blstice Aww. We miss you, too! How are things with you” (UTAustin, 2012b)?

• “@allie_wells @AmericanExpress Looking forward to the talk.#HookEm” (UTAustin, 2012c).

• “@koristrub22 @iLoNgHoRnS Awesome! Have a great day, y’all.#hookem” (UTAustin, 2012d).

• “@girlreadthis I've also contacted ITS Networking. They are aware of the issue & working to resolve. Hope to have a resolution soon” (UTAustin, 2012e).

Targeted Publics

Key publics are just as important for colleges and universities as they are for Fortune 500 companies. Understanding who colleges and universities are engaging through Twitter is just as important as how interactive that engagement is. An organization’s key publics are essential in determining the nature of the online relationship the organization is attempting to build. Grunig and Repper (1992) argued that public relations could be conducted more effectively if practitioners would aggressively identify the key publics. Nevertheless, the specific publics will oftentimes depend on the nature of the organization. Some colleges and universities already view social media as a tool that will become very beneficial to creating meaningful relationships with publics (Kelleher & Sweetser, 2012).

Colleges and universities are responsible for reaching a wide variety of different publics. These publics often consist of employees, students, parents, and the community.
Research has shown that regardless of demographics Twitter remains a popular social media tool among many different publics. Regardless, the key publics being targeted through Twitter will often depend on the goals of the college of university. Twitter can be a very powerful communications and public relations tool because it can be used for a variety of reasons, including expressing opinions about different topics and because it contains an array of audiences from all over (Pak & Paroubek, 2010). Many public relations practitioners perceive Twitter to be a valuable tool because it allows them to send specific information to their key publics in a quick and strategic manner (Evans et al., 2011). Although the Internet makes reaching these publics much easier, “communication professionals must produce creative, innovative and consistent digital messages that successfully represent the brand regardless of the intended audience” (Evans et al., 2011, p. 3). Public relations practitioners make a living off targeting messages to certain publics (Evans et al., 2011).

When one thinks of which population colleges and universities are targeting the most, they may automatically think it’s students. After all, colleges and universities are in the business of educating students. True as that may be, the results from this research study didn’t necessarily align with that assumption. In fact, the results revealed that the General Public was the most targeted public of the individual tweets posted by colleges and universities, accounting for 81.2% of the total tweets.

The majority of these tweets contained information regarding news, programs, and special events. This information could be useful for anyone. This shows that colleges and universities are directing their Twitter efforts to a more broad audience. Oftentimes, individuals must pay to attend these special events and programs. By using Twitter to
engage the general public, it shows the institution’s commitment to achieving the maximum return on its investment. In order to maximize the return of investments, organizations must remember to strategically develop long-term healthy relationships with their key publics (Ledingham & Bruning, 1998).

Furthermore, this revelation regarding the general public also aligns with the idea about the significance of the community. Community support for an institution is often based on how that community perceives the institution. That is why higher education institutions must make aggressive efforts to build and maintain mutually-beneficial relationships with their host communities. The success of a college or university can depend on how well that institution builds and maintains effective relationships with its host community (Kim et al., 2006).

Considering how important students, employees, alumni, and parents are to colleges and universities, it was quite interesting to see how few of the tweets clearly targeted them. Only 17.7% of the tweets clearly targeted students, while .5% clearly targeted employees, follow by the .4% that targeted alumni and the .3% that clearly targeted parents. Once again, this trend goes back to the revelation regarding the significance of the general community that the general public gets the majority of the attention because the colleges and universities seem to be hoping to achieve maximum return on its investment in Twitter. Furthermore, the goal of social media, such as Twitter, in higher education should be to stimulate the behavior of its publics and serve as a forum in which all social messages can be communicated (Davis et al., 2012).
Message Themes

Twitter seems to be gaining popularity because it allows users to instantly send out engaging 140-character messages to thousands of people at one time (Janusz, 2009). When strategically created, the content or theme of these messages can be very powerful. The theme of these tweets can range from news, self-promotion and external promotion, to random statements or thoughts, opinions or complaints, questions to followers, and responses to questions posed by followers.

The results from this research study revealed that Self-Promotion was the most featured theme noticeable within the tweets. Self-Promotion was coded for if the tweet contained information regarding the self-promotion or advertisement of events, services, resources, or accomplishments of the institution. This theme was featured in 1,254 or 80.9% of the total tweets.

It was not surprising to see so many tweets that featured this theme. After all, many organizations primarily use Twitter to promote their products and services. Colleges and universities are embracing the power of social media, such as Twitter, and utilizing it in their marketing and communication efforts to better reach and target students (Reuben, 2008). Using Twitter, similar to how a billboard is used for marketing and advertising, institutions can engage their publics by offering access to new products and services, live customer service, and the opportunity for their key publics to provide feedback (Johnson, 2009). Boston University is a good example of an institution that likes to feature Self-Promotion within their tweets, which are listed below:

• “Meet the @BU_Cricket team, in their tenth year and growing strong: http://bit.ly/VGbsM9” (BU_Tweets, 2012b).

• “Tonight at @comugrad's 30th Great Debate: "Has @BarackObama earned a second term?" http://bit.ly/ToYYqf 6:30-8:30 pm in Tsai. #Election2012” (BU_Tweets, 2012c).

• “Boston University has joined the Association of American Universities (AAU), based on research and academic programs:


Unsurprisingly, External Promotion was one of the least featured themes in the tweets. External Promotion was coded for if the tweet contained information regarding the self-promotion or advertisement of events, services, resources, or accomplishments of outside organizations or individuals. This theme was featured in only 29, or 1.9%, of the total tweets. The numbers make sense because, from a public relations and communications standpoint, the use of Twitter in higher education should primarily focus on promoting the institution. Twitter allows colleges and universities to provide free, personal, direct, and fast information to their key publics (Grossman, 2009) about the institution. It’s simply a personal public relations tool for these institutions.

News was the second most featured theme in the tweets of colleges and universities, which was not a surprise at all. News was coded for if the tweet contained updates and announcements about news, breaking news, security alerts, or weather alerts.
News was featured in 509 or 32.8%, of the total tweets. This study revealed that many colleges and universities are primarily using Twitter as a news feed. John Hopkins University was one of the best institutions at using Twitter to disseminate news, as evident by the tweets below that were analyzed for this study:

- “Martha Hill, dean of Nursing (@JHUNursing), to step down in May” (JohnsHopkins, 2012a).
- “JHU provides 1,600 school uniforms for Baltimore students http://jhu.md/Syehke” (JohnsHopkins, 2012e).

If colleges and universities are strategically using Twitter as a newsfeed, the results from this study seem to indicate that they are achieving their goal. It’s been proven that Twitter is used for a number of reasons, including reporting news (Wigland, 2010). In fact, researchers recently conducted a content analysis and found that news was the most frequently occurring item on local television station Twitter sites (Greer & Ferguson, 2011), which is no different than how colleges and universities are utilizing it. One can assume that these institutions are attempting to build strong relationships with their key publics by offering unbiased information.
Response to a Question was the third most featured theme in the tweets of colleges and universities. These tweets were simply a response by the college or university to a question posed by one of its followers. Although this theme was featured in only 143 or 9.2% of the total tweets, this is still an interesting analysis, because it shows that colleges and universities are monitoring Twitter to see what their publics are saying about them. After all, the goal of social media, such as Twitter, in higher education should be to stimulate the behavior of its publics and serve as a forum in which all social messages can be communicated (Davis et al., 2012).

By responding to the questions posed by their followers, Twitter allows colleges and universities to form a deep connection with their publics (Collins, 2009). The University of Texas-Austin is an example of an institution that really responds to questions posed by their Twitter followers as evident by the following tweets:

- “@coney8 sorry to hear that. Please contact ITS in-person, through chat, on the phone or via email for help: http://ow.ly/eWVlq” (UTAustin, 2012g).
- “@blstice Aww. We miss you, too! How are things with you” (UTAustin, 2012b)?
- “@girlreadthis I've also contacted ITS Networking. They are aware of the issue & working to resolve. Hope to have a resolution soon” (UTAustin, 2012e).
- “@tylerg39 Hi, Tyler. I've contacted ITS Networking. They are aware of the issue & working to resolve. Hope to have a resolution soon” (UTAustin, 2012f).
When it comes to posing questions to their followers, colleges and universities are not effective. In fact, only 36 or 2.3% of the total tweets were in the form of a question to followers. Survey data reveals that Twitter is normally the site of choice for Internet users to socially interact online (Fox, Zickuhr, & Smith, 2009). For this reason, colleges and universities must make every effort to capitalize on Twitter’s popularity as a two-way communications tool. Arizona State University is a good example of one of the few institutions that actually used Twitter to pose questions to their followers, as evident by their following tweets:

- “Who will be watching the #ASU vs Oregon St game tomorrow at 7:30 pm on ESPN2” (ASU, 2012b)?

As mentioned earlier, tweeting and following other tweeters is a prime example of two-way communication which is what many argue is the key to successful public relations (Safko & Brake, 2009). If followers pose questions to colleges and universities, those same colleges and universities should pose questions to their followers. Because of its ability to allow institutions to send out information to large groups of people at any particular time, Twitter can be beneficial in spreading breaking news, organizational information (Mendoza, Poblete, & Castillo, 2010), and even posing questions, making it ideal for institutions such as colleges and universities to really engage their key publics.
Twitter is the social media tool of choice by many because of its unique features. It is different from other social media sites because of its openness and convenience because when users follow others it does not require any reciprocation (Kwak et al., 2010), meaning one user may follow another user, without the person following them. Twitter really seems to thrive off of this concept of openness.

Although it’s possible for Twitter to serve as a means for institutions to market their product and services, it is equally possible for it to serve as a medium for their followers to stay connected and freely express themselves (Heil & Piskorski, 2009). For the most part this freedom of expression is in the form of tweets that are opinions, complaints, or random statements or thoughts. The results of this study revealed that colleges and universities sometimes post opinions, complaints, or random statements or thoughts, and allow their followers to do the same. A total of 75 of the tweets were in the form of random statements or thoughts, while 5.6% of the total tweets were in the form of opinions or complaints. Smith College is an example of an institution that really likes to post random statements or thoughts, through Twitter’s retweet functionality, based on their following tweets:

- “RT @RainaeDayne: Writing a paper on feminism. Easiest paper ever.#Smithie” (Smithcollege, 2012a).
- “RT @runlolarun: So great having coffee with @thenorthernist! I really never do get tired of reminiscing about @smithcollege” (Smithcollege, 2012b).
- “RT @msAmandaKennedy: Heading to @smithcollege for Seven Sisters Leadership Conference with @bmcsga” (Smithcollege, 2012c)!
Dialogic Principles

Because of its dialogic capabilities, Twitter has proven to be a valuable resource for colleges and universities hoping to achieve maximum return on their investment. It is one of the most significant dialogical social media tools available. This is important because “dialogic public relations theory provides a foundation for public relation practitioners to successfully exchange and maintain conversations with their publics” (Linvill et al., 2012, p. 636), especially in an online environment, which is where the future of public relations is likely headed.

Nearly every college and university in this country has at least one primary Twitter profile, which can be used as a very powerful dialogical public relations tool to build mutually-beneficial relationships between an institution and its key publics. Although Kent and Taylor (1998) provided the blueprint for practitioners to incorporate dialogic features into their online public relation efforts, many colleges and universities are failing to take full advantage of this dialogic concept, which made it surprising to see that all dialogic principles were represented at least once within the individual tweets of colleges and universities that were analyzed in this study.

The results from this research study revealed that Conservation of Return Visitors was the most featured dialogic principle within individual tweets of colleges and universities, aligning with 38.5% of the tweets. Kent and Taylor (1998) describe the conservation of visitors an organization’s attempt to keep visitors on their site as long as possible. These tweets contained links that lead to any of the institution’s other social
media sites or departmental websites. This is important because it shows that colleges and universities are strategically using Twitter to keep its publics informed about and interested in everything the school has to offer.

Furthermore, it confirms that, for the most part, colleges and universities are strategically using Twitter in a manner so as not to make the mistake of providing several links that take the parties away from the organization’s page and to another site. At times, those visitors may not be able to return to the organization’s site, which doesn’t bode well in building relationships. Brown University is an example of an institution that uses features of Conservation of Return Visitors with their tweets because the links within those tweets always link to one of the university’s other departmental websites. Examples of their tweets are below:

- “A peek into the animal kingdom at the Bell Gallery
  http://news.brown.edu/pressreleases/2012/10/johan …
  pic.twitter.com/ipfODnvc” (BrownUniversity, 2012a).

- “Abraham Lincoln’s 1860 Campaign Biographies and the Lincoln Image
  http://blogs.brown.edu/libnews/abraham-lincolns-1860-campaign-
  biographies-and-the-lincoln-image/ … via @brownlibrary” (BrownUniversity, 2012b).

- “Brown ranks third for most Fulbright grants http://www.pbn.com/Brown-
  ranks-third-for-most-Fulbright-grants,83947 … via @ProvBusNews”
  (BrownUniversity, 2012c).
• “Wing to step down as dean of medicine and biological sciences

• “Brown Admission: SAT Test Center Closings
  http://www.brown.edu/admission/undergraduate/sat-test-center-closings …
  via @BrownUAdmission” (BrownUniversity, 2012e).

The second most featured dialogic principle within the individual tweets of colleges and universities was the principle of the Dialogic Feedback Loop. Kent and Taylor (1998) describe the dialogic feedback loop as the beginning point at which an organization can engage in dialogue with its publics on the web. A total of 29.7% of the tweets meet this principle. Although not used as much as Conservation of Return Visitors, this is still an important figure because it shows that colleges and universities are at least engaging in dialogue with their publics through Twitter by posing questions and responding to questions. Worcester Polytechnic Institute is an example of an institution that strives for the Dialogic Feedback Loop based on their following tweets:

• “@WPIProblems1 wait, learning how to take the casino’s money is a problem” (WPI, 2012a)?

• “@Lincoln1884 happy to be there” (WPI, 2012b)!

• “@TchedByAnAngell Sorry. We have lots more than engineering but if you don’t want any more, let us know at admissions@wpi.edu” (WPI, 2012c).

• “@WPI_CAC welcome back” (WPI, 2012d)!

• “@Gtsougranis22 have a fun day :)” (WPI, 2012e)!
Engaging in dialogue goes a long way toward building trust and stronger relationships. Furthermore, Kent and Taylor (1998) identified the two issues of dialogic feedback loop as incomplete dialogic loops and lack of training of those who respond to electronic communications. For this reason, the results of this study show that colleges and universities are at least investing in Twitter by dedicating trained individuals to respond to public concerns, questions, and requests made through Twitter. Once again, this can only strengthen the bond these colleges and universities have with their publics.

The third most featured dialogic principle within the individual tweets of colleges and universities was the principle of Usefulness of Information, evident in 27.1% of the tweets. These tweets contained information such as security alerts, weather alerts, employment information, important dates and deadlines, and information regarding special events. The results indicate that colleges and universities are using Twitter to keep their publics informed about important information. Texas A & M is an example of a university that really features useful information within their tweets, some of which follows:

- “(retweet from TAMUCodeMaroon) Code Maroon Armed subject described as white male, late 40's, light hair, lime green short sleeve shirt, jeans, - see http://emergency.tamu.edu” (TAMUCodeMaroon, 2012b).
• “RT @tamucomedemaron: Officers still searching for suspect. Unable to locate. Remain in place until further notice. If seen call UPD. 5:12pm” (TAMUCodemaroon, 2012c).


Posting useful information goes a long way in building trust and mutually-beneficial relationships between an organization and its key publics. Furthermore, it indicates that some colleges and universities are using Twitter with the understanding that useful information is important because “relationships with publics must be cultivated not only to serve the public relations goals of an organization, but so that the interests, values, and concerns of publics are addressed” (Kent & Taylor, 1998, p. 328).

The least featured principle within the individual tweets of colleges and universities was the principle of Generation of Return Visitors, featured in 24.5% of the tweets. Kent and Taylor (1998) describe the generation of return visitors as an organization’s attempt to make strong efforts to ensure that visitors keep returning to the organization’s website. These tweets contained links that lead to discussion forums, FAQ pages on the college/university’s website, pages on the college/university’s website where visitors can request additional information, and internal and external pages highlighting newsworthy information about the college/university. Boston University is an example of an institution that posts tweets with links to internal and external websites that highlight newsworthy information about the university. Examples of their tweets include:

• “Meet the @BU_Cricket team, in their tenth year and growing strong: http://bit.ly/VGbsM9” (BU_Tweets, 2012b).

• “Jay Halfond, Dean of @METBU, will step down at the end of the fall semester: http://bit.ly/WffZeA” (BU_Tweets, 2012d).

• “Boston University has joined the Association of American Universities (AAU), based on research and academic programs: http://bit.ly/REa4tI” (BU_Tweets, 2012e).

Overall, it was disappointing to see such a low percentage of tweets that contained this dialogic principle, considering how important it is for colleges and universities to ensure that visitors keep returning to their Twitter page. This is an important principle because publics will often respond favorably to an organization if the organization can get their attention somehow. Many colleges and universities are simply not taking advantage of Twitter’s capabilities that can help generate return visits.

Public Relations Models

The original models of public relations were press agentry, public information, two-way asymmetrical, and two-way symmetrical (Grunig & Hunt, 1984). These models can be either symmetrical or asymmetrical in nature. Twitter is successful and effective because it simply offers an avenue for better two-way communication (Safko & Brake, 2009), which allows colleges and universities to build relationships and enhance their reputations with key publics. Public relations practitioners rely heavily on two-way
communications. When colleges and universities post tweets and follow other tweeters, they are unknowingly contributing to the success of two-way communication through the use of microblogging. Although there hasn’t been much research on how the four models of public relations can be incorporated into online public relations (Waters & Williams, 2011), the results of this research study seem to indicate that some colleges and universities are employing them through their Twitter activity.

The results of this research study revealed that Press Agentry/Publicity was the most featured model of public relations within individual tweets of colleges and universities, featured in 49.9% of the tweets. These tweets contained persuasive and biased language, emoticons that express emotions, and words that express emotions to describe the institution (or affiliates) or any of its accomplishments, events, or programming. This is nothing more than propaganda public relations. Brandeis University is an example of institution that posts messages containing features of the Press Agentry/Publicity model of public relations. Examples of their tweets include:

- “Go Judges! RT @brandeisjudges NCAA Bound! Men's soccer will host Baruch at 5 p.m. in first round on Sat., Nov. 10 http://bit.ly/TGJKkN” (BrandeisU, 2012d).
• “Sweet 16 bound! Women blank Lasell, 3-0, to advance to second weekend of NCAA play http://bit.ly/TAjww0 #RollDeis#d3soc” (BrandeisU, 2012e).

The above tweets are nothing more than “Propagandistic public relations that seeks publicity or media attention in almost any way possible” (Grunig, 1990, p. 21). If colleges and universities are strategically using Twitter as a propaganda tool to cast a favorable light on their accomplishments, the results from this study seem to indicate that they are achieving their goal. After all, Anderson (2011) argues that people use Twitter for a number of reasons including promoting their agendas in a biased manner.

The second most featured public relations model within the individual tweets of colleges and universities was the model of Public Information, which was featured in 42.8% of the tweets. These tweets contained updates and announcements about the institution or other organizations without the use of persuasive and biased language, emoticons that express emotions, and words that express emotions. The information contained within these tweets is for the public’s benefit. Fordham University is an example of an institution that posted tweets containing features of the Public Information model of public relations. Examples of their tweets include:

• “The Lombardi Center is open to all students, faculty, staff, and alumni who need a place to shower. the Center is... http://fb.me/J2NiGakx” (Fordhamnotes, 2012a).

• “Post Hurricane Sandy Update III | Friday, Nov. 2, 1 p.m. | All Classes Resume Monday Classes at all campuses and... http://fb.me/LrsiS41s” (Fordhamnotes, 2012b).
Both Press Agentry/Publicity and Public Information are considered one-way models of public relations, which some can argue goes against the best practices of utilizing the more appropriate two-way models. Public relations practitioners rely heavily on two-way communications. Scholars have praised Twitter because it offers an avenue for better two-way communication (Safko & Brake, 2009). For these reasons, it was disappointing to see that Two-Way Symmetrical and Two-Way Asymmetrical were the models featured the least within the individual tweets.

The Two-Way Symmetrical model of public relations was the third most featured model within the individual tweets, evident in 2.3% of them. These tweets attempted to resolve conflict or were in the form of a direct message featuring Twitter’s @-reply function for conversation. Although 2.3% is not a high percentage, it’s still a significant figure because it means that the Two-Way Symmetrical model of public relations actually aligned with 35 of the 1,550 tweets analyzed. The Stevens Institute of Technology is an example of an institution that posted tweets in an attempt to resolve conflict. Examples of their tweets include:

- “@cvharquail Works fine here. Try refreshing your page. Or share email address and we can forward you the whole letter” (FollowStevens, 2012a).
- “@cvharquail we just followed you so you can direct message your email. The web site is up and running” (FollowStevens, 2012b).
• “@Tsquaredt2 Only if you can get in safely given shut down roads and flooding! FYI, you may encounter a police check point” (FollowStevens, 2012c).

• “@Norah69928383 we will need a name and address for her and Student Life will look into it. Please direct message the information” (FollowStevens, 2012d).

Using Twitter to resolve conflict is important because it shows that some colleges and universities are actually monitoring Twitter to respond to what their publics are saying to them and about them. This philosophy seems to align with the current trend of Twitter-use by other organizations as well. Now, companies such as Kodak, Southwest Airlines, Comcast, and Dell are using Twitter to keep up with what customers are saying about their respective companies, in hopes of responding to those customers (Janusz, 2009). This goes a long way in relationship-building between an organization and its publics.

The least featured public relations model within the individual tweets of colleges and universities was the model of Two-Way Asymmetrical, which was featured in only 1.6% of the tweets. Grunig (2001) argued that two-way asymmetrical practitioners use scientific means to encourage their publics to act in a certain way. These tweets asked for specific feedback, asked for participation in a survey or poll, or asked for targeted publics to become more involved with the institution by using Twitter. The results from this study seem to indicate that colleges and universities are not as concerned about initiating dialogue with their key publics, which goes against the best practices of building relationships.
College and university communicators agree that two-way interactive dialogic communication is a significant advantage of using social media (Kelleher & Sweetser, 2012), such as Twitter. Tweeting and following other tweeters is a prime example of two-way communication, which is what many argue is the key to successful public relations (Safko & Brake, 2009). Some benefits of social media, such as Twitter, being two-way dialogue is that it allows people to come together to share information (Solis, 2008). The results of this study indicate that the higher education industry has room for improvement if colleges and universities are to take advantage of Twitter’s two-way dialogic capabilities.

This research study analyzed the individual tweets of public and private colleges and universities that were featured in the 2013 edition of the *U.S. News & World Report’s* Best Colleges Rankings, as well as the colleges and universities featured on the list of the Top 100 Social Media Colleges. Although both lists contain some tech-savvy institutions, one could easily assume that the Top 100 Social Media Colleges would be more strategic and creative at using Twitter to engage in dialogic and interactive two-way communication with their key publics. On the other hand, when comparing which institutions incorporated dialogic and two-way Twitter features, there really weren’t any significant differences between public and private colleges and universities, or between colleges and universities that were represented on the Best Colleges Rankings versus those that were represented on the Top 100 Social Media Colleges list.

Implications

Social media tools such as Twitter, have the potential to provide organizations with a creative means to engage their key publics in two-way dialogic communication
(Rybalko & Seltzer, 2010). Also, it has the potential to be a very valuable and beneficial public relations tool for colleges and universities that are looking for more creative ways to reach their digital and technologically-savvy publics. However, colleges and universities must effectively and strategically use Twitter in hopes of getting the maximum return on their investment in using the tool. Colleges and universities must embrace Twitter rather than fear it (Safko & Brake, 2009).

As this research has shown, many colleges and universities are using Twitter to connect and build relationships with their key audiences, but that engagement should be a bit more strategic and deliberate. They must take full advantage of its two-way dialogic and relationship-building capabilities by implementing its use within an actual public relations theoretical framework. Regardless of whether it’s Kent and Taylor’s (1998) dialogic principles or Grunig and Hunt’s (1984) four models of public relations, which is what this research study is based upon, the Twitter activity must be strategic and deliberate if these colleges and universities plan on achieving the maximum return on their investment in using the social media tool. This can be accomplished most effectively through use of the ROPE process, which is an acronym for Research Objectives, Programming, and Evaluation.

It’s obvious that colleges and universities can post more tweets that pose questions or respond directly to questions if they are more concerned about improving the dialogic feedback loop. Also obvious is the fact that these colleges and universities can post more tweets that ask for specific feedback or participation in surveys or polls if they want to improve their two-way asymmetrical communication efforts. However, by
implementing Twitter activity through the ROPE process, colleges and universities can practice more comprehensive public relations based on dialogic and two-way efforts.

The ROPE process is a four-step process initiated by Hendrix that can be used to conduct public relations (Worley & Little, 2002). The ROPE acronym stands for Research, Objectives, Planning, and Evaluation, and can be very beneficial in fostering successful relationships between an organization and its publics. Hendrix and Hayes (2010) describe the ROPE acronym in the following manner:

- **Research:** This is where the public relations practitioner conducts research on the client, identify the problem and the need for a public relations response, and identify the target audience.

- **Objectives:** The Objective phase is based on the public relations practitioner identifying the initiative behind the public relations campaign. Objectives can be output or impact (informational, attitudinal, or behavioral).

- **Planning:** In the Programming step, the public relations practitioner identifies how the message will be delivered (special events, press conferences, etc.).

- **Evaluation:** In regards to the evaluation step, the researcher tries to measure the success of the public relations campaign. This can be done in a number of different ways. (p. 371)

Edman (2010) suggests that institutions such as colleges and universities must utilize practices that allow their Twitter-use to coincide with the ROPE process. During the research phase, colleges and universities can monitor the Twitterverse to determine what is being said about them. This will allow these institutions to respond appropriately to their key publics. During the objective phase, institutions such as colleges and
universities should determine what they want to achieve and accomplish by using Twitter. During this step, colleges and universities will also determine how they will strategically use Twitter to reach their key publics. When colleges and universities post actual tweets, this constitutes the programming aspect or communication plan of the four-step ROPE process. Colleges and universities must remember to choose their words carefully since each tweet is limited to only 140 characters. During the evaluation phase, colleges and universities can measure the effectiveness of their Twitter-use by taking a closer look at changes in features such as lists, followers, and retweets.

In their use of Twitter, college and universities must also rely on the use of valuable tips from others who have examined the strategic use of this medium. Mansfield (2009) suggests that colleges and universities consider the following list of best practices when using Twitter in order to maximize its effectiveness:

- Build communities and promote authenticity when using Twitter.
- When using Twitter, don’t just use it as a news feed unless you call it profile news.
- In order to be successful using social media, institutions must create separate Twitter accounts for news, marketing, athletics, etc.
- Institutions must retweet and reply to everyone that communicates with them. This allows institutions to build relationships with key publics.
- Institutions must remember to follow those who follow them. This builds relationships and opens up the dialogue for communication.
• Institutions must post meaningful institutional messages to Twitter instead of insignificant chit chat.

• Institutions must remember to not over-use Twitter. They should make no more than five tweets per day.

Limitations

This study is likely the first of its kind, because it’s based on the analysis of individual tweets to determine if they feature Kent and Taylor’s (1998) dialogic principles and if they align with Grunig and Hunt’s (1984) four models of public relations. There is a major lack of published scholarly research on how Twitter is used in public relations. For these reasons, there really isn’t much scholarly research to which this study can be compared. This study provides theoretical insight into how Twitter and public relations can be combined as a tool for practitioners to build and maintain mutually-beneficial relationships with their key publics though the use of two-way dialogic capabilities, but as with most research, it’s not perfect.

This research is not without fault. It has its limitations just as any other type of research study. The most obvious limitation is the fact that the researchers did not analyze tweets posted by every college and university in this country with an active Twitter profile. The other most obvious limitation is that the researchers did not code every available tweet that was posted on the Twitter profiles.

Although a content analysis was used because of its ability to allow researchers to analyze media messages, the overall design still has potential limitations. Stemler (2001) argues that “two fatal flaws that destroy the utility of a content analysis are faulty definitions of categories and non-mutually exclusive and exhaustive categories” (para. 7).
However, the categories identified in this study seem appropriate enough to address the research questions. Furthermore, content analysis is a very appropriate research method for mass communication scholars who are studying the effects of messages (Lombard et al., 2002). This is important because a tweet is nothing more than a limited-message.

Another possible limitation of this study is the sampling technique. This study employed a combined total population sample of the top 100 colleges and universities identified in the 2013 edition of the U.S. News & World Report Best Colleges Rankings, as well as all of the colleges and universities on the list of the Top 100 Social Media Colleges as determined by Studentadvisor.com. A total population sample is a type of purposive sampling in which the researcher examines the entire population. Through this sampling technique, researchers are able to make analytical generalizations about the populations being studied. However, the researchers can’t make statistical generalizations about the populations being analyzed.

Finally, because of its use of a combined total population sample, it’s very difficult for this study to serve as a generalization of Twitter-use among all colleges and universities in the Twitterverse. Nevertheless, regardless of the possible limitations, this research design is appropriate to understanding how Twitter is being used as a public relations tool in higher education throughout the country. Furthermore, while there are some limitations to this research study, these limitations indicate there are opportunities for more research regarding Twitter’s use as a public relations tool.

Future Research

No one knows for sure if Twitter will be around forever. However, at the moment, it is trendy and popular, which means it’s likely to eventually leave its historical
fingerprint on mass communication and public relations research. Because it is such an understudied social media tool, there remain many opportunities for future research regarding Twitter. This is important because there are only a handful of scholarly research studies that focus on the use of Twitter as a dialogic communication and relationship-building tool, which can raise questions regarding its potential as an effective public relations resource.

This research study is based on a content analysis of actual tweets posted by colleges and universities and how those tweets align with Kent and Taylor’s (1998) dialogic principles and Grunig and Hunt’s (1984) four models of public relations. However, researchers must also closely examine the individuals and institutions responsible for posting the actual tweets. This can hopefully shed light on whether or not the use of Twitter among colleges and universities is an intentional public relations tactic in regards to Kent and Taylor’s (1998) dialogic principles and Grunig and Hunt’s (1984) four models of public relations.

Another opportunity for research would be to examine why colleges and universities adopt Twitter as a public relation tool. The Diffusion of Innovations theory can help researchers gain a better understanding of why colleges and universities are adopting Twitter as a public relations tool. There is not much published research that examines the factors that influence the adoption of social media tools such as Twitter. A diffusion of innovations research study can help researchers determine if colleges and universities are using Twitter because of its relationship-building capabilities or just because it’s the popular fad right now.
The best approach to examine this issue would be to do a survey or set of interviews of college and university communication officers to determine how and why they use Twitter. The main goal of survey research is to collect data that is representative of a specific population (Bartlett, Kotrlik, & Higgins, 2001). Surveying is used in a variety of research disciplines (Bartlett et al., 2001), including mass communication.

The practice of public relations within colleges and universities throughout this country will continue to evolve just as long as social media continue to be a dominant method of communication amongst their key publics. Rybalko and Seltzer (2010) argue that the future definition of public relations will be dependent upon scholars going beyond the traditional realm of public relations to accepting the use of popular and dominant social media tools such as Twitter. For these reasons, researchers must continue to monitor how Twitter is being utilized among public relations practitioners. Furthermore, Twitter’s growth in popularity and its adoption rate by institutions such as colleges and universities as a means of communicating with their key publics presents more opportunities for future investigation into how social media tools can be used to create dialogic and interactive two-way communication (Safko & Brake, 2009).

Conclusion

Twitter was the fastest growing social network in 2012, growing to 288 million active users, which reflects a growth rate in active users of 714% since 2009 (Bhushan, 2013), almost making it a requirement for scholars and researchers to examine this medium’s communication potential. The introduction of this microblogging tool has forever changed the practice of public relations, especially for organizations such as colleges and universities that are seeking creative ways to build relationships through
dialogue and interactive two-way communication, which are key aspects of dialogic public relations and the four models of public relations. Nearly every college and university in this country has at least one primary Twitter profile which can be used as a very powerful dialogical public relations tool to build mutually-beneficial relationships between an institution and its key publics.

Twitter can be used for professional and social networking because it allows engagement through immediate real-time means (Dunlap & Lowenthal, 2009). Twitter has proven to be useful in promoting blogs, politics, news dissemination, networking, and marketing and public relations (Grosseck & Holotescu, 2008). Many companies use Twitter to see what customers think of their products/services, to see how positive those customers feel towards them, and to see whether or not those customers would recommend their products/services to others (Pak & Paroubek, 2010). Many organizations are also using Twitter to relay important information to their stakeholders (Jansen, Zhang, Sobel, & Chowdury, 2009), which can be ideal for colleges and universities that are looking to better engage their technology-consumed publics.

Social media such as Twitter can allow institutions such as colleges and universities the potential to frame the issues, identify and build relationships with their key publics, and foster trust (Briones et al., 2011). Twitter can also serve as a public relations tool for institutions because it allows users to broadcast messages through a number of devices (Hughes & Palen, 2009), such as smart phones. This is especially important for institutions in the United States, which actually accounts for roughly 67% of the world’s total iPhone population (Cheng, Evans, & Singh, 2009). Twitter’s ability to generate real-time messages during an emergency or crisis can also be of great benefit
to organizations (Hughes & Palen, 2009). Research has shown that Twitter can be a very valuable information-sharing and communication tool during emergency and crisis situations (Lovejoy & Saxton, 2012), such as those similar to the Virginia Tech shootings.

As previous literature indicates, social media such as Twitter has the potential to open up new opportunities for how intuitions, such as colleges and universities, communicate and to whom they communicate. Twitter can serve as a platform for these institutions in their efforts to build and enhance relationships with their customers (Jansen et al., 2009). These institutions can also use Twitter to gain feedback from their publics regarding any issues or concerns (Go, Bhayani, & Huang, 2009). The findings from this study indicate that colleges and universities are not effectively using Twitter as an interactive dialogic and two-way communications public relations tool, in regards to Kent and Taylor’s (1998) dialogic principles and Grunig and Hunt’s (1984) four models of public relations.

This study extends upon the existing knowledge of how social media, such as Twitter, can be used in a dialogic public relations context. Furthermore, it offers insight into how Twitter can be used in collaboration with traditional public relations theories, such as the Four Model of Public Relations, because there hasn’t been much research conducted in this area. This research also extends the existing knowledge of the different uses of social media within higher education, which is significant because examining how colleges and universities use Twitter to build relationships with their publics can offer insight into the effectiveness of social media as a public relations tool.
This research study examined a total of 1,550 individual tweets that were posted by 155 colleges and universities that were represented in the top 100 colleges and universities identified in the 2013 edition of the *U.S. News & World Report* Best Colleges Rankings and the colleges and universities identified on the list of the Top 100 Social Media Colleges. Based on the notion that practitioners strive for dialogic and interactive two-way communication within their public relations efforts, the findings of this study indicate that colleges and universities are not following the blueprints laid by Kent and Taylor (1998) and Grunig and Hunt (1984) to incorporate dialogue and the two-way public relations models into their efforts. In fact, only 30.5% of the 1,550 individual tweets aligned with the Dialogic Feedback principle, while only 2.3% of the individual tweets aligned with the Two-Way Symmetrical public relations model and only 1.6% of the tweets aligned with the Two-Way Asymmetrical public relations model.

Overall, the findings from this study suggest that colleges and universities are not necessarily using Twitter in a dialogic and two-way dialogic communication context, which pretty much confirms the findings of previous studies that found institutions were not incorporating dialogic features within their online public relations efforts. This remains problematic because Twitter’s popularity thrives off the fact that it’s designed to initiate interactive dialogue between users. In fact, in Twitter’s own words, “Twitter connects businesses to customers in real time—and businesses use Twitter to quickly share information with people interested in their products and services, gather real-time market intelligence and feedback, and build relationships with customers, partners and influencers” (Twitter, 2012). Furthermore, if future research studies continue to produce similar findings, more questions will be raised regarding Twitter’s potential as an
interactive two-way communication and dialogic public relations tool, which can have negative implications for other social media as well.

The findings from this study present some very obvious theoretical implications for institutions, such as colleges and universities that are using Twitter as a public relations tool. Based on previous literature and research regarding Twitter’s potential as an interactive dialogic and two-way communication public relations tool, the findings from this study only reaffirm the belief that institutions must have the appropriate resources and quality personnel to effectively implement Twitter in a dialogic and two-way interactive public relations context, in a manner as to not completely resemble traditional forms of public relations. This goes a long way in building mutually beneficial relations with key publics and effectively engaging those key publics in online interactive dialogue.

Furthermore, before colleges and universities can dialogically and interactively engage their publics through Twitter, they must take the following concerns into consideration: Technology initiatives should be a central focus on the institution’s overall missions, colleges and universities must consider all of the potential benefits as well as the consequences that come along with adopting social media, colleges and universities must determine if the social media tool has any type of educational benefits, colleges and universities must communicate with students on how they use social media and on how they would like for the institution to use social media to reach students, colleges and universities must determine their staff’s knowledge of and attitude toward social media usage, and colleges and universities must monitor technology and social media to
determine if they are bringing value to the institution’s overall plan (Junco & Cole-Avent, 2008).

For institutions, such as colleges and universities, Twitter has the potential to create an environment of dialogic and civil engagement between those institutions and their key publics (Lovejoy & Saxton, 2012). The results of this study showed that only a handful of colleges and universities are using Twitter in a dialogic and two-way communication context. More institutions need to follow their lead because just being on Twitter is not enough, because reaping its benefits will be dependent upon how effectively and strategically it is used to engage publics (Lovejoy & Saxton, 2012). The decision to adopt social media like Twitter and to use it effectively is very important for institutions such as colleges and universities because it can have a major impact on their relationship-building capabilities (Briones et al., 2011). Furthermore, institutions such as colleges and universities should continue to look to social media, such as Twitter, as a means to viral marketing, propagating ideas, and understanding how social bonds are formed (Huberman, Romero, & Wu, 2008).

Who knows if Twitter will be here tomorrow or if it’s just a trend for today? Regardless, colleges and universities must continue to function and maintain a presence in the Twitterverse just as long as their technology-consumed publics keep demanding so. Social media such as Twitter has the opportunity to revolutionize public relations if practitioners and scholars utilize it appropriately (Grunig, 2009). Most university departments initiate communications from a traditional standpoint even though the majority of their publics now rely on social media. It’s important that colleges and universities continue to find creative ways to use dialogic and two-way social media such
as Twitter because the majority of their key publics are already using it and they can, 
thus, build effective relationships and enhance their reputation with these key publics 
(Kelleher & Sweetser, 2012).

The majority of scholarly public relations research has already shown that when 
organizations and institutions understand the key aspects of sites like Twitter, they will 
more than likely use it strategically and effectively to engage their publics and build 
healthy relationships with them (Briones et al., 2011). This is important because Twitter 
seems destined to continue to be one of the most utilized social media tools in public 
relations, marketing, and advertising (Lovejoy, Waters, & Saxton, 2012).
APPENDIX A

CODEBOOK: INDIVIDUAL COLLEGE/UNIVERSITY TWEETS

Unit of Analysis: Every fifth tweet (up to a maximum of ten tweets for each institution) of each college/university that were posted between November 1, 2012 and November 15, 2012.

The coding scheme for this study was developed in conjunction with Kent and Taylor’s (1998) dialogic principles that were also utilized in studies conducted by Rybalko and Seltzer (2010) and Linvill, McGee, and Hicks (2012). Each feature will be investigated within the individual tweets. Circle, type or write in the appropriate information when applicable.

Name of College/University:

1. Interactivity of the Tweet: Each individual tweet will be examined to determine if it demonstrates low, medium, or high interactivity. The researcher will circle the most dominant level of interactivity for each individual tweet.
   - Low: Low interactivity tweets have no links or @replies, or any other extraordinary features.
   - Medium: Medium interactivity tweets include links to videos, pictures, and other websites.
   - High: High interactivity tweets consist of messages that were @replies to other users.

2. Targeted Public: In an effort to determine the target publics of community college websites and the dialogic features of those websites, McAllister and Taylor (2007) conducted a content analysis of all 19 institutions with the New Jersey Community College System. The study revealed that the target publics were students/prospective students, employees/prospective employees, external stakeholders such as political leaders, and the media. For the sake of this study, each individual tweet will be coded to determine if its primarily targeting Students, Employees, Alumni, or Parents. If the targeted public is not clearly identified, it will be coded as General Public. The coders will circle the most dominant public in which the tweet is clearly targeting.
   - Students (current and prospective)
   - Employees (faculty/staff)
   - Alumni
Parents (of prospective and current students)

General Public

**Theme of the Tweet:** Each individual tweet will be examined to determine if it demonstrates news, self-promotion, external promotion, question to followers, response to a question, opinions/complaints, or random statements or thoughts. The researcher will circle the most dominant theme in which the tweet aligns with. Each tweet could contain multiple themes.

3. **News:** Circle Yes or No
   - The tweet contains updates and announcements about news, breaking news, security alerts, or weather alerts.

4. **Self-Promotion:** Circle Yes or No
   - The tweet contains information regarding the self-promotion or advertisement of events, services, resources, or accomplishments of the institution.

5. **External promotion:** Circle Yes or No
   - The tweet contains information regarding the self-promotion or advertisement of events, services, resources, or accomplishments of outside organizations or individuals.

6. **Question to Followers:** Circle Yes or No
   - The tweet is in the form of a question that is directed towards the institution’s publics

7. **Response to a Question:** Circle Yes or No
   - The tweet is in the form of a response to a question asked by one of the institution’s followers.

8. **Opinions/Complaints:** Circle Yes or No
   - The tweet is in the form of an opinion or complaint posted by the institution or any of its followers, such as, “State is the best.”

9. **Random Statements of Thoughts:** Circle Yes or No
   - The tweet is in the form of a random statement or thought posted by the institutions or one of its followers such as “The sky is blue here in New York” or “I miss my university.”
Kent and Taylor’s Dialogic Principles: Each individual tweet will be examined to determine if it contains the following dialogic features: usefulness of information, conservation of return visitors, and dialogic feedback loop. It’s perfectly fine if the Twitter profile contains more than one of the dialogic features. The researcher will circle ‘Yes’ if the individual tweet contains the dialogic principle and circle ‘No’ if the individual tweet does not contain the dialogic principle.

10. Usefulness of Information: Circle: Yes or No

- Kent and Taylor (1998) describe useful information as being contact information such as deadlines, emergency alerts, historical information, background information, and contact information such as telephone numbers, email addresses, web addresses, fax numbers, and mailing addresses. They argue that useful information is important because “relationships with publics must be cultivated not only to serve the public relations goals of an organization, but so that the interests, values, and concerns of publics are addressed” (Kent & Taylor, 1998, p. 328). This study considers useful information within the individual tweets (and its links) to be security alerts, weather alerts, employment information, important dates and deadlines, and information regarding special events.

11. Conservation of Return Visitors: Circle: Yes or No

- Kent and Taylor (1998) describe the conservation of visitors an organization’s attempt to keep visitors on their site as long as possible. Kent and Taylor argue that “if the goal of public relations in webbed environments is to create and foster relationships with publics, and not to entertain them, websites should only include essential links with clearly marked paths for visitors to return to your site” (Kent & Taylor, 1998, p. 330). This study considers conservation of visitors as links within the individual tweets that lead to any of the institution’s other social media sites and/or websites.

12. Generation of Return Visitors: Circle: Yes or No

- Kent and Taylor (1998) describe the generation of return visitors as an organization’s attempt to make strong efforts to ensure that visitors keep returning to the organization’s web site. This study considers generation of return visits as links within the actual tweets that lead to discussion forums, FAQ pages on the college/university’s web site, pages on the college/university’s web site where visitors can request additional information, and internal and external pages highlighting newsworthy information about the college/university.
13. Dialogic Feedback Loop: Circle: Yes or No

- Kent and Taylor (1998) describe the dialogic feedback loop as the beginning point for which an organization can engage in dialogue with its publics on the web. This study considers the dialogic feedback loop of the individual tweets as when the college/university attempt to engage with their publics in communication by posing a question, responding directly or indirectly to a question, or retweeting an original tweet posted by another individual/organization.

Public Relations Models: Each individual tweet will be examined to determine if it closely aligns with press agentry/publicity, public information, two-way asymmetrical, or the two-way symmetrical model of public relations. Although some tweets may be classified under multiple models, the coders will choose the model in which the tweets represent the most. Still, it’s perfectly fine if the tweet fits more than one of the public relations models. The researcher will circle ‘Yes’ if the tweet aligns with the public relations model and ‘No’ if the tweet does not align with the public relations model.

14. Press Agentry/Publicity: Circle: Yes or No

- Grunig (1990) describes the press agentry/publicity model of public relations as “Propagandistic public relations that seeks publicity or media attention in almost any way possible” (p. 21). Researchers will code for Press Agentry/Publicity if the tweet is in the form of a one-way communication that contains persuasive and biased language, emoticons that expressed emotions and words that expressed emotions, to describe the institution (or affiliates) or any of its accomplishments, events, or programming. These tweets demonstrate propaganda for the institution and attempts to persuade followers to act in a manner that would benefit the institution, such as attending any of the institution’s events or programming or supporting any of its causes. These tweets do not contain at-replies because at-replies are a form of two-way communications.

15. Public Information: Circle: Yes or No

- Grunig (1990) describes the public information model of public relations as “Public relations practiced by ‘journalists in residence’ who disseminate what generally is accurate information about the organization but do not volunteer negative information” (p. 21). Researchers will code for this public relation model if the tweet is in the form of a one-way communication that contains updates and announcements about the institution (and its affiliated organizations) without the use of persuasive and biased language, emoticons that express emotions and words that express emotions. These tweets contain only facts, through direct and objective language that focuses on information that would benefit the public, such as scores to game, current events, directions to specific locations, special updates and announcements, etc. These tweets do not contain at-replies.
16. Two-Way Asymmetrical: Circle: Yes or No

- Grunig (1990) describes the two-way asymmetrical model of public relations as “Public relations that uses research to identify the messages most likely to produce the support of publics without having to change the behavior of the organization” (p. 21). Researchers will code for this public relation model when the tweet demonstrates the institution’s efforts to advocate for feedback from its publics. The Two-way Asymmetrical model of public relations will be confirmed if the individual tweet asks for specific feedback, participation in a survey or poll, and for targeted publics to become more involved with the college/university by using Twitter.

17. Two-way Symmetrical: Circle: Yes or No

- Grunig (1990) describes the two-way symmetrical model of public relations as “Public relations that uses dialogue, bargaining, negotiation, and strategies of conflict management to adjust the relationship between an organization and its publics” (p. 21). These posts typically include @replies. Researchers will code for this public relation model when the tweet demonstrate the institution’s efforts to solve problems and build long-term relationships with its key publics. The Two-way Symmetrical model of public relations will be confirmed if the individual tweet attempts to resolve conflict or is in the form of a direct message featuring Twitter’s @-reply function for conversation.
APPENDIX B

CODESHEET: INDIVIDUAL COLLEGE/UNIVERSITY TWEETS

Unit of Analysis: Every fifth tweet (up to a maximum of ten tweets for each institution) of each college/university that were posted between November 1, 2012 and November 15, 2012.

The coding scheme for this study was developed in conjunction with Kent and Taylor’s (1998) dialogic principles that were also utilized in studies conducted by Rybalko and Seltzer (2010) and Linvill, McGee, and Hicks (2012). Each feature will be investigated within the individual tweets.

Name of College/University: Write in school name:

1. Interactivity of the Tweet: Circle one
   - Low
   - Medium
   - High

2. Targeted Public: Circle one
   - Students (current and prospective)
   - Employees (faculty/staff)
   - Alumni
   - Parents (of prospective and current students)
   - General Public

Theme of the Tweet: Each individual tweet will be examined to determine if it demonstrates news, self-promotion, external promotion, question to followers, response to a question, opinions/complaints, or random statements or thoughts. The researcher will circle the most dominant theme in which the tweet aligns with. Each tweet could contain multiple themes.

3. News: Circle: Circle Yes or No

   The tweet meets this theme if any of the following features are present, and does not meet this theme if all of these features are absent:
• Security Alerts
• Weather Alerts
• Important Updates
• News stories

4. Self-Promotion: Circle Yes or No

The tweet meets this theme if any of the following features are present, and does not meet this theme if all of these features are absent:
• Contained information regarding the self-promotion or advertisement of events, services, resources, or accomplishments of the institution.

5. External Promotion: Circle Yes or No

The tweet meets this theme if any of the following features are present, and does not meet this theme if all of these features are absent:
• Contained information regarding the self-promotion or advertisement of events, services, resources, or accomplishments of outside organizations or individuals.

6. Question to Followers: Circle Yes or No

The tweet meets this theme if any of the following features are present, and does not meet this theme if all of these features are absent:
• Tweet was in the form of a question that was directed towards the institution’s followers.

7. Response to a Question: Circle Yes or No

The tweet meets this theme if any of the following features are present, and does not meet this theme if all of these features are absent:
• Tweet was in the form of a response to a question asked by one of the institution’s followers.

8. Opinions/Complaints: Circle Yes or No

The tweet meets this theme if any of the following features are present, and does not meet this theme if all of these features are absent:
• Tweet is in the form of an opinion or complaint posted by the institution or any of its followers.
9. Random Statements or Thoughts: Circle Yes or No

The tweet meets this theme if any of the following features are present, and does not meet this theme if all of these features are absent:
- Tweet was in the form of a random statement or thought posted by the institutions or one of its followers.

Kent and Taylor’s (1998) Dialogic Principles: Each individual tweet will be examined to determine if it contains the following dialogic features: usefulness of information, conservation of return visitors, and dialogic feedback loop. It’s perfectly fine if the Twitter profile contains more than one of the dialogic features. The researcher will circle ‘Yes’ if the individual tweet contains the dialogic principle and circle ‘No’ if the individual tweet does not contain the dialogic principle.

10. Usefulness of Information: Circle: Yes or No

The tweet meets this dialogic principle if any of the following features are present, and does not meet this principle if all of these features are absent:
- Security Alerts
- Weather Alerts
- Important Updates
- Employment Information
- Important Dates and Deadlines
- Special Events

11. Conservation of Return Visitors: Circle: Yes or No

The tweet meets this dialogic principle if any of the following features are present, and does not meet this principle if all of these features are absent:
- Links to any of the institution’s other social media sites
- Links to any of the institution’s other departmental websites

12. Generation of Return Visitors: Circle: Yes or No

The tweet meets this dialogic principle if any of the following features are present, and does not meet this principle if all of these features are absent:
- Links to the institution’s discussion forums
• Links to the institution’s FAQ pages

• Links to pages where visitors can request more information about the institution

• Links to internal pages highlighting newsworthy occasions about the institution

• Links to external pages highlighting newsworthy occasions about the institution

13. Dialogic Feedback Loop: Circle: Yes or No

The tweet meets this dialogic principle if any of the following features are present, and does not meet this principle if all of these features are absent:
• Poses a question

• Responds directly to a question

• Responds indirectly to a question

• A Retweet of an original tweet that was posted by another individual/organization

Public Relations Models: Each individual tweet will be examined to determine if it closely aligns with press agentry/publicity, public information, two-way asymmetrical, or the two-way symmetrical model of public relations. Although some tweets may be classified under multiple models, the coders will choose the model in which the tweets represent the most. Still, it’s perfectly fine if the tweet fits more than one of the public relations models. The researcher will circle ‘Yes’ if the tweet aligns with the public relations model and ‘No’ if the tweet does not align with the public relations model.

14. Press Agentry/Publicity: Circle: Yes or No

The tweet meets this model of public relations if any of the following features are present, and does not meet this model of public relations if all of these features are absent:
• Uses persuasive and biased language, as well as words that express emotions, to describe or promote an event/program, or accomplishment
- Demonstrates propaganda for the institution and attempted to persuade followers to act in a manner that would benefit the institution, such as attending any of the institution’s events or programming or supporting any of its causes
- Uses emoticons that express emotions

15. Public Information: Circle: Yes or No

The tweet meets this model of public relations if any of the following features are present, and does not meet this model of public relations if all of these features are absent:
- Contains updates and announcements about the institution without the use of persuasive and biased language, emoticons that express emotions, and words that express emotions
- Contained only facts, through direct and objective language that focused on information that would benefit the public, such as scores to game, current events, directions to specific locations, special updates and announcements, etc.

16. Two-Way Asymmetrical: Circle: Yes or No

The tweet meets this model of public relations if any of the following features are present, and does not meet this model of public relations if all of these features are absent:
- Asks for specific feedback,
- Asks for participation in a survey or poll
- Asks for targeted publics to become more involved with the institution by using Twitter

17. Two-Way Symmetrical: Circle: Yes or No
The tweet meets this model of public relations if any of the following features are present, and does not meet this model of public relations if all of these features are absent:

- Attempts to resolve conflict
- Is in the form of a direct message featuring Twitter’s @-reply function for conversation.
## APPENDIX C

### LIST OF COLLEGES AND UNIVERSITIES FROM SAMPLE

List: Contains colleges and universities that were featured on the *U.S. News & World Report* 2012 Best College Rankings and the Top 100 Social Media Colleges list.

<table>
<thead>
<tr>
<th>College/University</th>
<th>Institution Type</th>
<th>U.S. News Best Colleges Rankings</th>
<th>Top 100 Social Media Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. American University</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2. Arizona State University</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>3. Art Center College of Design</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>4. Auburn University</td>
<td>Public</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>5. Babson College</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>6. Bates College</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>7. Baylor University</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>8. Berklee College of Music</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>9. Binghamton University-SUNY</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>10. Biola University</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>11. Boston College</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>12. Boston University</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>13. Brandeis University</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>14. Brigham Young University</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>15. Brown University</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>16. Butler University</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>17. California College of the Arts</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>18. California Institute of Technology</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>College/University</td>
<td>Institution Type</td>
<td>U.S. News Best Colleges Rankings</td>
<td>Top 100 Social Media Colleges</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>------------------</td>
<td>----------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>19. Carnegie Mellon University</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>20. Case Western Reserve University</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>21. Clark University</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>22. Clemson University</td>
<td>Public</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>23. Colgate University</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>24. College of Charleston</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>25. College of William and Mary</td>
<td>Public</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>26. Colorado School of Mines</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>27. Columbia University</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>28. Connecticut College</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>29. Cornell University</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>30. Dartmouth College</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>31. Drake University</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>32. Drexel University</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>33. Duke University</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>34. Emerson College</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>35. Emory University</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>36. Florida International University</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>37. Florida State University</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>38. Fordham University</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>39. Full Sail University</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>40. George Washington University</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>41. Georgetown University</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>42. Georgia Institute of Technology</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>College/University</td>
<td>Institution Type</td>
<td>U.S. News Best Colleges Rankings</td>
<td>Top 100 Social Media Colleges</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>------------------</td>
<td>---------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>43. Harvard University</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>44. Howard University</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>45. Indiana University--Bloomington</td>
<td>Public</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>46. Iowa State University</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>47. John Hopkins University</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>48. Kansas State University</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>49. Lehigh University</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>50. Louisiana State University and Agricultural &amp; Mechanical</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>51. Lynn University</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>52. Macalester College</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>53. Marquette University</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>54. Massachusetts Institute of Technology</td>
<td>Public</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>55. Miami University</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>56. Michigan State University</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>57. Mississippi State University</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>58. Morehouse College</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>59. Mount Holyoke College</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>60. Northeastern University</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>61. Northwestern University</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>62. Ohio State University – Main Campus</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>63. Ohio State University-Columbus</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>64. Ohio University-Main Campus</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>65. Oklahoma Christian University</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>College/University</td>
<td>Institution Type</td>
<td>U.S. News Best Colleges Rankings</td>
<td>Top 100 Social Media Colleges</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>------------------</td>
<td>---------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>66. Oklahoma City University</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>67. Oral Roberts University</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>68. Oregon State University</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>69. Pennsylvania State University</td>
<td>Public</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>70. Pepperdine University</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>71. Pratt Institute-Main</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>72. Princeton University</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>73. Purdue University-Top</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>74. Quinnipiac University</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>75. Rensselaer Polytechnic Institute</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>76. Rhode Island School of Design</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>77. Rhodes College</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>78. Rice University-Top</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>79. Roanoke College</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>80. Rollins College</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>81. Rush University</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>82. Rutgers University</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>83. Saint Norbert College</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>84. Seattle University</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>85. Smith College</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>86. Southern Methodist University</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>87. Spelman College</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>88. St. Johns University-New York</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>89. St. Louis University</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>College/University</td>
<td>Institution Type</td>
<td>U.S. News Best Colleges Rankings</td>
<td>Top 100 Social Media Colleges</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>------------------</td>
<td>----------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>Stanford University</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Stevens Institute of Technology</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Stony Brook University-SUNY</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>SUNY College of Environmental Science and Forestry</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Syracuse University</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Texas A &amp; M University</td>
<td>Public</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Texas Christian University</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Texas Tech University</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>The University of Alabama</td>
<td>Public</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Thunderbird School of Global Management</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Tufts University</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Tulane University</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Tuskegee University</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>United States Air Force Academy</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>United States Military Academy</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>University of Arizona</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>University of California-Berkeley</td>
<td>Public</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>University of California-Davis</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>University of California-Irvine</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>University of California-Los Angeles</td>
<td>Public</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>University of California-San Diego</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>University of California--Santa Barbara</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>College/University</td>
<td>Institution Type</td>
<td>U.S. News Best Colleges Rankings</td>
<td>Top 100 Social Media Colleges</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>------------------</td>
<td>---------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>112. University of California-Santa Cruz</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>113. University of Chicago</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>114. University of Colorado-Boulder</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>115. University of Connecticut</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>116. University of Delaware</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>117. University of Denver</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>118. University of Florida</td>
<td>Public</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>119. University of Georgia</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>120. University of Hawaii-West Oahu</td>
<td>Public</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>121. University of Illinois-Urbana</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>122. University of Iowa</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>123. University of Kansas</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>124. University of Kentucky</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>125. University of Maryland-College Park</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>126. University of Massachusetts-Amherst</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>127. University of Miami</td>
<td>Public</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>128. University of Michigan-Ann Arbor</td>
<td>Public</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>129. University of Minnesota</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>130. University of Missouri</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>131. University of North Carolina at Chapel Hill</td>
<td>Public</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>132. University of Notre Dame</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>133. University of Oklahoma-Norman</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>College/University</td>
<td>Institution Type</td>
<td>U.S. News Best Colleges Rankings</td>
<td>Top 100 Social Media Colleges</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>------------------</td>
<td>---------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>134. University of Oregon</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>135. University of Pennsylvania</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>136. University of Pittsburgh</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>137. University of Rochester</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>138. University of San Diego</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>139. University of Southern California</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>140. University of Texas-Austin</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>141. University of Tulsa</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>142. University of Vermont</td>
<td>Public</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>143. University of Virginia-Main Campus</td>
<td>Public</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>144. University of Washington</td>
<td>Public</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>145. University of Wisconsin-Madison</td>
<td>Public</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>146. Vanderbilt University</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>147. Virginia Polytechnic Institute and State University</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>148. Wake Forest University</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>149. Washington and Lee University</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>150. Washington University in St. Louis</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>151. West Virginia University</td>
<td>Public</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>152. Williams College</td>
<td>Private</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>153. Worcester Polytechnic Institute</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>154. Yale University</td>
<td>Private</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>155. Yeshiva University</td>
<td>Private</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
REFERENCES


Art_center. (2012, November 2). @vatman_Freedom Hi, our servers went down last night but we’re back up now. You can also email admissions@artcenter.edu

[Twitter post]. Retrieved
https://twitter.com/art_center/status/264454993787092992

ASU. (2012a, November 1). Can you guess this building on the Tempe campus?
http://instagr.am/p/Rfgd5gydV/ [Twitter post]. Retrieved from
https://twitter.com/ASU/status/264029337613893632

ASU. (2012b, November 2). Who will be watching the #ASU vs Oregon St game tomorrow at 7:30 pm on ESPN2 [Twitter post]? Retrieved from
https://twitter.com/ASU/status/264442139533008897


http://www.umassd.edu/cmr/socialmedia/socialmediagamechanger/


BrandeisU. (2012a, November 4). I LOVE my deisians! @BrandeisU #TYP [Twitter post]. Retrieved from https://twitter.com/BrandeisU/status/265460542880219136


BrandeisU. (2012d, November 6). Go Judges! RT @brandeisjudges NCAA Bound!
Men's soccer will host Baruch at 5 p.m. in first round on Sat., Nov. 10
https://twitter.com/BrandeisU/status/26582789019548416

BrandeisU. (2012e, November 11). Sweet 16 bound! Women blank Lasell, 3-0, to
advance to second weekend of NCAA play http://bit.ly/TAjww0 #RollDeis#d3soc
[Twitter post]. Retrieved from
https://twitter.com/BrandeisU/status/267783686357938176

BRASS Program Planning Committee (2011). The business of social media. Reference &
User Services Quarterly, 51(2), 127-132. Retrieved from
http://rusa.metapress.com/content/u6038756x5586117/

How the American Red Cross uses social media to build relationships. Public
Relations Review, 37(1), 37-43.

Broom, G., Casey, S., & Ritchey, J. (1997). Toward a concept and theory of

BrownUniversity. (2012a, November 1). A peek into the animal kingdom at the Bell
Gallery http://news.brown.edu/pressreleases/2012/10/johan …
pic.twitter.com/ipfODnvc [Twitter post]. Retrieved from
https://twitter.com/BrownUniversity/status/264020353846759425

BrownUniversity. (2012b, November 1). Abraham Lincoln’s 1860 Campaign
Biographies and the Lincoln Image http://blogs.brown.edu/libnews/abraham-
lincolns-1860-campaign-biographies-and-the-lincoln-image/ … via @brownlibrary
BrownUniversity. (2012c, November 2). Brown ranks third for most Fulbright grants
http://www.pbn.com/Brown-ranks-third-for-most-Fulbright-grants,83947 … via
@ProvBusNews [Twitter post]. Retrieved from
https://twitter.com/BrownUniversity/status/264379084841316354

BrownUniversity. (2012d, November 5). Wing to step down as dean of medicine and
biological sciences http://news.brown.edu/pressreleases/2012/11/wing [Twitter
post]. Retrieved from
https://twitter.com/BrownUniversity/status/265520070355210240

BrownUniversity. (2012e, November 5). Brown Admission: SAT Test Center Closings
http://www.brown.edu/admission/undergraduate/sat-test-center-closings … via
@BrownUAdmission [Twitter post]. Retrieved from
https://twitter.com/BrownUniversity/status/265538572164161536

McGraw-Hill.

4-8.


Bruning, S. D., & Ledingham, J. A. (1999). Relationships between organizations and
publics: Development of a multi-dimensional organization-public relationship


BU_Tweets. (2012e, November 5). Boston University has joined the Association of American Universities (AAU), based on research and academic programs:
https://twitter.com/BU_Tweets/status/265491223731658752

BYU. (2012, November 12). The winners were impressive! Have a read MT @byucet: If
You Missed our Student Innovator of the Year Competition: http://bit.ly/Xy34nt
[Twitter post]. Retrieved from
https://twitter.com/BYU/status/268060190472015872

CACollegeofArts. (2012a, November 1). CCArts Alum Catherine Sergurson launches
new Santa Cruz-based magazine "Catamaran Literary Reader" [Twitter post].
Retrieved from https://twitter.com/CACollegeofArts/status/264080616029564928

CACollegeofArts. (2012b, November 1). Listen up, cyclists: Riding with headphones is
incredibly dumb [Twitter post]. Retrieved from
https://twitter.com/CACollegeofArts/status/264083337562427393

CACollegeofArts. (2012c, November 1). The November issue of #CCArts News and
Events is out! Stay up to date with your favorite arts school [Twitter post].
Retrieved from https://twitter.com/CACollegeofArts/status/264096217045274624

CACollegeofArts. (2012d, November 1). ‘I don't want life to imitate art. I want life to be
art.’ -Ernst Fischer [Twitter post]. Retrieved from
https://twitter.com/CACollegeofArts/status/264121131554488832

CACollegeofArts. (2012e, November 1). Tonight at @CACollegeofArts: Just Design
Exhibition [Twitter post]. Retrieved from
https://twitter.com/CACollegeofArts/status/264439537919471617


CarnegieMellon. (2012a, November 5). @alcouponcommuni Sorry to hear about the problem with the shuttle on Friday. You can try contacting the Shuttle Service at @AndysBuses [Twitter post]. Retrieved from https://twitter.com/CarnegieMellon/status/265469248414040064

CarnegieMellon. (2012b, November 7). @butta1995 Yes, double majors are an option at CMU. For more information, contact @CM_Admission [Twitter post]. Retrieved from https://twitter.com/CarnegieMellon/status/266209340522897409


ConnCollege. (2012, November 1). I love working in the@cc_lgbtqcenter. They have tea! I've had some of my best conversations on campus in there [Twitter post]. Retrieved from https://twitter.com/ConnCollege/status/263402034848716030


Dartmouth. (2012, November 1). Dartmouth student-athletes lead all NCAA Division I institutions with a 99.7% Graduation Success Rate. Go Big Green [Twitter post]. Retrieved from https://twitter.com/dartmouth/status/264097581083279360


Floridastate. (2012, November 1). 11/1/12 9:55AM - CORRECTION. An electrical fire has occurred at the Mag Lab, with one medical injury. TFD is ventilating the building [Twitter post]. Retrieved from https://twitter.com/floridastate/status/26540034648726040

FollowStevens. (2012a, November 1). @cvharquail Works fine here. Try refreshing your page. Or share email address and we can forward you the whole letter [Twitter post]. Retrieved from https://twitter.com/FollowStevens/status/263993754552238080

FollowStevens. (2012b, November 1). @cvharquail we just followed you so you can direct message your email. The web site is up and running [Twitter post]. Retrieved from https://twitter.com/FollowStevens/status/264039510369787905

FollowStevens. (2012c, November 1). @Tsquaredt2 Only if you can get in safely given shut down roads and flooding! FYI, you may encounter a police check point
FollowStevens. (2012d, November 1). @Norah69928383 we will need a name and address for her and Student Life will look into it. Please direct message the information.

FollowStevens. (2012d, November 1). @Norah69928383 we will need a name and address for her and Student Life will look into it. Please direct message the information.

Fordhamnotes. (2012a, November 1). The Lombardi Center is open to all students, faculty, staff, and alumni who need a place to shower. the Center is... http://fb.me/J2NiGakx [Twitter post]. Retrieved from https://twitter.com/fordhamnotes/status/264109108972646401

Fordhamnotes. (2012b, November 2). Post Hurricane Sandy Update III | Friday, Nov. 2, 1 p.m. | All Classes Resume Monday Classes at all campuses and... http://fb.me/LrsiS41s [Twitter post]. Retrieved from https://twitter.com/fordhamnotes/status/264442610163281992

Fordhamnotes. (2012c, November 3). Post Hurricane Sandy Update IV | Saturday, November 3, 3 p.m. Off-Campus Facilities: Fordham offices at 1790... http://fb.me/2mifMI14h [Twitter post]. Retrieved from https://twitter.com/fordhamnotes/status/264801667499835392


Joosten, T. (2009, November). Harnessing social networking tools to build connectivity and learning community in online courses. Retrieved from EDUCAUSE:


DOI=10.1145/1772690.1772751 http://doi.acm.org/10.1145/1772690.1772751


Proceedings of the ACM 2012 conference on Computer Supported Cooperative Work, (pp. 441-450). ACM.


Perez, S. (2009, Judy 9). *Who uses social networks and what are they like? (Part 1).* Retrieved from ReadWriteWeb:


PittTweet. (2012b, November 2). Do you have tickets to Pitt’s 42nd Annual Jazz Seminar and Concert? Student tickets are only $8! http://bit.ly/ThXMXV [Twitter post]. Retrieved from https://twitter.com/PittTweet/status/264366539304734721


RhodesCollege. (2012, November 2). Early Decision Applications will be accepted until November 9 for students in areas affected by Hurricane Sandy....


http://doi.acm.org/10.1145/2145204.2145274


RutgersU. (2012, November 1). Registration for Rutgers Newark, New Brunswick students delayed until Nov. 11. Camden registration will proceed as scheduled on Nov. 4 [Twitter post]. Retrieved from https://twitter.com/RutgersU/status/264088975713648640


Smithcollege. (2012b, November 1). RT @runlolarun: So great having coffee with @thenorthernist! I really never do get tired of reminiscing
about @smithcollege [Twitter post]. Retrieved from
https://twitter.com/smithcollege/status/264050883690655744

Smithcollege. (2012c, November 2). RT @msAmandaKennedy: Heading
to @smithcollege for Seven Sisters Leadership Conference with @bmcsga [Twitter post]. Retrieved from
https://twitter.com/smithcollege/status/2644390000884989952

Smithcollege. (2012d, November 4). Helen Hills Chapel on a crisp fall day
at #smithcollegehttp://instagr.am/p/RnwpJMvIYd/ [Twitter post]. Retrieved from
https://twitter.com/smithcollege/status/265191076074229760


type, gender and relational characteristics. *Journal of Social and Personal

mass media and “social media”: Reality television as a model for social network


Studentadvisor.com (2012). Top 100 social media colleges. Retrieved from
http://www.studentadvisor.com/top-100-social-media-colleges

communities. *iDMAa Journal, 3*(1).


TAMUCodeMaroon. (2012b, November 1). (Retweet from TAMUCodeMaroon) Code Maroon Armed subject described as white male, late 40's, light hair, lime green short sleeve shirt, jeans, -see http://emergency.tamu.edu [Twitter post]. Retrieved from https://twitter.com/TAMUCodeMaroon/status/264120859311091713


remain cautious. If seen -see http://emergency.tamu.edu [Twitter post. Retrieved from https://twitter.com/TAMUCodeMaroon/status/264132641014571008


Ucdavis. (2012, November 1). Join UC President Mark G. Yudof Friday for a Web chat. Everyone in the UC community and surrounding community is invited to


UCSD. (2012, November 1). You tell us, which is more important: what you say or how you say it [Twitter post]. Retrieved from https://twitter.com/UCSD/status/264077965722656610

UofR. (2012, November 2). @jasminee_ross Please visit anytime, and let me know if you have any questions I can help with [Twitter post]. Retrieved from https://twitter.com/UofR/status/264343794663710720

UTAustin. (2012a, November 1). @brett_young7 nice work! [Twitter post]. Retrieved from https://twitter.com/UTAustin/status/263984972069744640

UTAustin. (2012b, November 1). @blstice Aww. We miss you, too! How are things with you [Twitter post]. Retrieved from https://twitter.com/UTAustin/status/264032553722314752

UTAustin. (2012c, November 1). @allie_wells @AmericanExpress Looking forward to the talk.#HookEm [Twitter post]. Retrieved from https://twitter.com/UTAustin/status/264034392366792704

UTAustin. (2012d, November 1). @koristrub22 @iLoNgHoRnS Awesome! Have a great day, y’all.#hookem [Twitter post]. Retrieved from https://twitter.com/UTAustin/status/264034492581298176
UTAustin. (2012e, November 1). @girlreadthis I've also contacted ITS Networking. They are aware of the issue & working to resolve. Hope to have a resolution soon [Twitter post]. Retrieved from https://twitter.com/UTAustin/status/264070955901542400

UTAustin. (2012f, November 1). @tylerg39 Hi, Tyler. I've contacted ITS Networking. They are aware of the issue & working to resolve. Hope to have a resolution soon [Twitter post]. Retrieved from https://twitter.com/UTAustin/status/264071047593213953

UTAustin. (2012g, November 1). @coney8 sorry to hear that. Please contact ITS in-person, through chat, on the phone or via email for help: http://ow.ly/eWVlq [Twitter post]. Retrieved from https://twitter.com/UTAustin/status/2640709655901542401


Uvmvermont. (2012b, November 2). A woman with a toy gun entered Angell hall around 8:30 am. She has been apprehended by UVM Police. There is no threat to the
community [Twitter post]. Retrieved from https://twitter.com/uvmvermont/status/264363896624795648


UWMadison. (2012b, November 1). #Badgers: Text REDCROSS to 90999 to give $10 to American@RedCross Disaster Relief, support #Sandy victims. Please RT [Twitter post]. Retrieved https://twitter.com/UWMadison/status/264078965732657630


WPI. (2012a, November 1). @WPIProblems1 wait, learning how to take the casino’s money is a problem [Twitter post]? Retrieved from https://twitter.com/WPI/status/264040841646055424

WPI. (2012b, November 1). @Lincoln1884 happy to be there [Twitter post]. Retrieved from https://twitter.com/WPI/status/264046973492031448

WPI. (2012c, November 1). @TchedByAnAngell Sorry. We have lots more than engineering but if you don’t want any more, let us know at admissions@wpi.edu [Twitter post]. Retrieved from https://twitter.com/WPI/status/264170580574629888

WPI. (2012d, November 3). @WPI_CAC welcome back [Twitter post]! Retrieved from https://twitter.com/WPI/status/264763770734264320
WPI. (2012e, November 3). @Gtsougranis22 have a fun day [Twitter post]. Retrieved from https://twitter.com/WPI/status/264745415788867584


