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Title: *An Assessment of the Emerging Media Campaign Utilized to Engage the*
     UW-Stout Career and Technical Education Graduate Student

The accompanying research report is submitted to the **University of Wisconsin-Stout**, **Graduate School** in partial

completion of the requirements for the

Graduate Degree/ Major: MS Technical and Professional Communication

Research Advisor: Daisy Pignetti, Ph.D.

Submission Term/Year: Spring 2014

Number of Pages: 67

Style Manual Used: American Psychological Association, 6ᵗʰ edition

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This final research report has been approved by the Graduate School.

Director, Office of Graduate Studies: **DATE:**

Mittlestadt, JoDee V. *An Assessment of the Emerging Media Campaign Utilized to Engage the UW-Stout Career and Technical Education Graduate Student*

Abstract

Engaged communication is key to the success of online graduate students (Salter, 2012), and as such, fundamental to the success of the Career and Technical Education (CTE) hybrid (online and face-to-face coursework) graduate programs at University of Wisconsin-Stout. Further, research has shown engagement of the online student results in increased student retention (Salter, 2012; Junco & Timm, 2008; Tinto, 1993). To better engage the CTE graduate students, an emerging media campaign was developed, including an eNewsletter and LinkedIn Group. This study sought to determine if this campaign increased engagement for the current group of 59 CTE graduate students.

By using existing quantitative data from the eNewsletter and LinkedIn Group, and both quantitative and qualitative data from an online survey of the CTE graduate students, this mixed methods study revealed that the emerging media campaign was indeed successful in increasing student engagement. More specifically, this study and reviewed research shows that a well-selected emerging media platform paired with frequently posted, relevant content can indeed increase the engagement and community desired for the online graduate student.

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Chapter I: Introduction

Engaged communication is key to the success of graduate students (Salter, 2012), and as such, fundamental in the management and future success of the Master of Science (MS), Education Specialist (EdS) and Doctor of Education (EdD) Career and Technical Education (CTE) hybrid degree programs at University of Wisconsin-Stout (UW-Stout). With this importance in mind, significant effort has been put into the redesign of the CTE eNewsletter and the development of a social media presence for the CTE graduate student audience. In *Socialnomics* (2009), Qualman states that effective use of social media is not about simply building a database or online group, but rather about engaging individuals and "cultivating" long-term relationships (p. 50). Further, by engaging and creating relationships with graduate students, research has shown that online programs have significant potential in positively affecting student retention (Salter, 2012; Junco & Timm, 2008; Tinto, 1993). This research reviews literature regarding online student retention as affected by engagement and, using an 18-question survey, assesses the effectiveness of the CTE emerging media campaign's ability to engage the UW-Stout CTE graduate students.

Reviewed in this introductory chapter are the efforts implemented in attempting to increase the engagement of the CTE graduate students, namely the redesign of the CTE eNewsletter and the research and subsequent development of the CTE LinkedIn Group. Also discussed is the importance of communicating with graduate and online students, future potential, study shortcomings, and finally, utilized research methodology as it relates to the survey and collected data.

Background of the Problem

The CTE graduate student audience is comprised of 59 adult learners, with an average age of 39.5 years old (University of Wisconsin-Stout, 2014). These 59 students are enrolled in one of the CTE graduate programs, each of which offer a hybrid of online and face-to-face coursework suited specifically to the schedules of the working adult. Communicating with, and ultimately engaging this busy audience is both a necessity and a challenge. The challenge lies in engaging an already time-pressed working adult, while the necessity of engagement lies in its direct correlation to student retention (Salter, 2012; Junco & Timm, 2008; Tinto, 1993).

The CTE eNewsletter. Since May 3, 2010, an eNewsletter has been sent using Emma, an online email marketing service, to communicate with the CTE graduate student audience approximately four times per month (Emma.com, n.d.b). Originally, the eNewsletter was formatted as a factual list of events, with open rates hovering at 21 percent (Emma.com, n.d.a). During that time Dr. Carol Mooney, EdS and EdD CTE program director, felt the eNewsletter was an effective tool, but one that needed further refinement. In the five years that Dr. Mooney has worked with the CTE graduate programs, she has witnessed first-hand both the difficulties and importance of communicating with the mostly off-campus, adult learners.
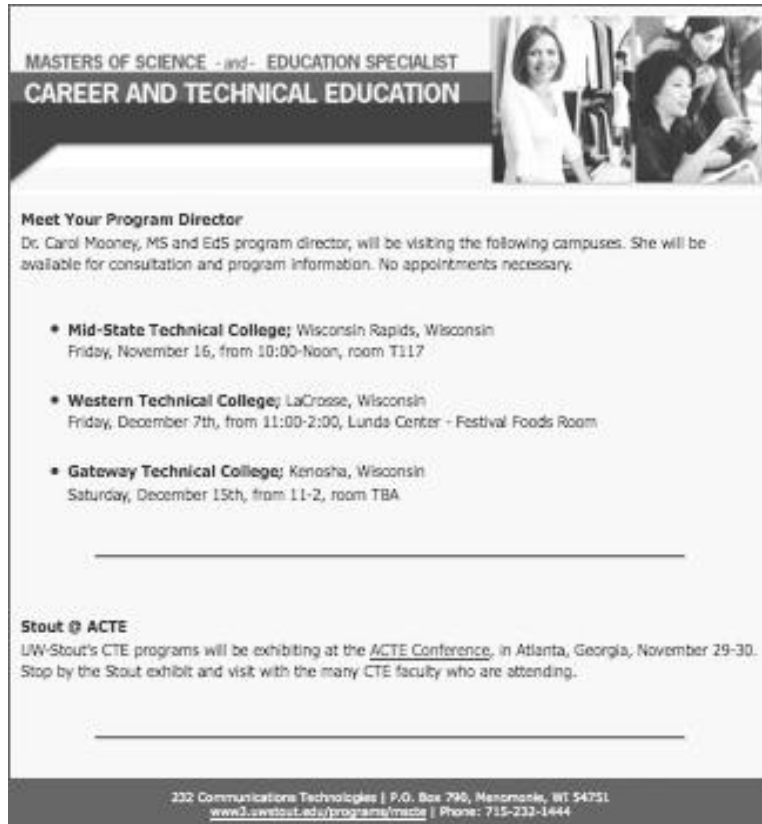
Figure 1. The CTE eNewsletter prior to the redesign (Source: MyEmma.com.)

When reviewing the original CTE eNewsletter, the readers' role was very passive. As described, the eNewsletter took the form of a factual list of events and offered little chance for the reader to interact with the text (Figure 1). At that time, it was decided to redesign the CTE eNewsletter to invite readers to better engage with the text in an effort to increase its usefulness and thus, open rates and click-through rates. After researching possible directions, the following improvements (Eridon, 2012) were made to the CTE eNewsletter:

- Email subject lines written to reveal subject matter and evoke interest

- Reader addressed in the first person

- Text includes links to timely, CTE related news

- Links utilized to keep text blocks brief and increase readability

- Reader feedback welcomed by inviting emailed responses

- Appearance redesigned to reflect the graphics of UW-Stout CTE marketing materials

After the eNewsletter redesign was completed (Figure 2), open rates and click-through rates began to increase. However, it was also fully realized at this point that the medium, by nature, is a unilateral mode of communication: Two-way or multiple-way communication was not likely to be achieved with the one-way push of an email. To better achieve a more active, engaged, multi-way communication the decision was made to form an online group, while also continuing to utilize the CTE eNewsletter.

Figure 2. The CTE eNewsetter post redesign (Source: MyEmma.com)

Exploring emerging media. Three different solutions were explored for an online community: Facebook, Twitter and LinkedIn. These mediums were each considered in relation to the audience and future content. As discussed, the CTE graduate student audience is

comprised of a group of 59 adult learners. Further, these students are working adults, ranging from 24-64 years of age, but with 63 percent focusing in the 30-49-year age range (University of Wisconsin-Stout, 2014). It was decided content to be shared on the emerging media group site would include program information, student and alumni updates, and industry information and articles. While at times this information can be shared in brief statements, there are also times that the information takes on a more lengthy form.

Of the social media formats reviewed, Twitter was first dismissed due to the 140-character limit of the online network's informational postings. Although in some scenarios this may be a benefit, for the CTE group the brevity of these "tweets" was overly limiting. Further, this medium did not well suit the CTE graduate student audience, as the most common Twitter-user demographic focuses on the 18-29 year old range (Duggan & Smith, 2014).

Facebook was considered because of its popularity, large audience (Machlis, 2011) and the probability that the CTE graduate student would likely already possess an account according to study demographics (Duggan & Smith, 2014). However, Facebook's most recognizable benefit of frequent, casual social interactions presented a significant weakness when considering the CTE group's need for a professional atmosphere. It was decided that the unprofessional nature of Facebook would be a significant detriment to the professional and academic communications desired for this online group.

In contrast, LinkedIn offered a more formal network setting for the professional CTE students. The LinkedIn website (LinkedIn.com, 2012) describes its service in the following manner: "LinkedIn operates the world's largest professional network on the Internet in over 200 countries and territories... [Our] mission is to connect the world's professionals to make them more productive and successful." In addition, the LinkedIn user demographic is weighted most

heavily in the 30-49 and 50-64 age ranges (Duggan & Smith, 2014). The sum of these benefits offered significant reason to choose LinkedIn as the CTE group's social media platform. It was also considered a significant benefit that at the time Dr. Mooney had a LinkedIn profile with 355 professional contacts, many of whom were CTE professionals, UW-Stout faculty, and CTE students and alumni (LinkedIn.com, 2012). Dr. Mooney and this author felt these 355 contacts effectively created a built-in audience for the initial CTE LinkedIn Group discussions. It was also considered that while networking is the focus of LinkedIn, the site is commonly used as a job search and recruitment tool; a potential benefit for the CTE graduate students.

After reviewing the three online options discussed, LinkedIn was ultimately selected. In addition to the two-way social connectivity each of the online social media platforms offered, LinkedIn possessed a format that best captured the professional nature of the UW-Stout CTE programs. In addition, being that the CTE graduate students are mostly working adults in the 30-49-age range (University of Wisconsin-Stout, 2014), it was calculated that they would be likely to be both familiar, and previously vested, with LinkedIn.

Implementing the CTE LinkedIn Group. The CTE LinkedIn Group was established on October 29, 2012. The group was set-up using LinkedIn's 'members-only' feature, which allows group administrators to review and approve each member. Such member screening ensures against unwanted commercialization of the group (Fouts, 2012). In November 2012, the CTE graduate students were invited to join this newly formed group through the LinkedIn invite feature and the CTE eNewsletter. The LinkedIn invites had quite poor results in comparison to invitations sent out via the CTE eNewsletter. Despite this inconsistency, the LinkedIn Group grew to 28 members within the first month (LinkedIn.com, 2012). This initial membership

included a mix of graduate students, alumni, CTE faculty, and industry professionals

(LinkedIn.com, 2012).

For branding and recognition purposes the same colors and graphics from the eNewsletter

and CTE marketing materials were utilized for the LinkedIn Group's website page (Figure 3).

The page was branded with the UW-Stout logo shield and wordmark, in an effort to reassure

students that they had indeed arrived at the official UW-Stout CTE page. These recognizable

marks serve the group well with their collective ethos; as Lundsford, Ruszkiewicz, and Walter

(2004) state, shields and logos display "credibility and authority" (p. 425). The LinkedIn

Group's visuals provide visitors with an immediate sense of the professionalism and

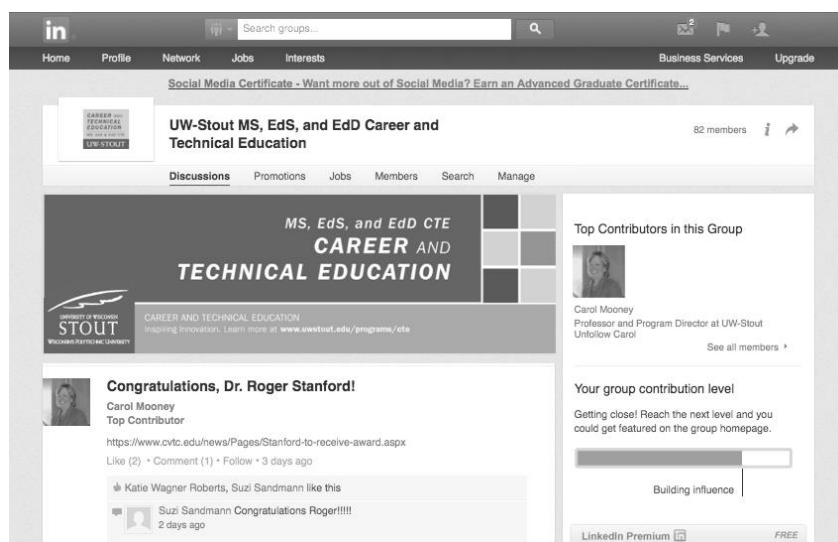respectability garnered from the good standing of the UW-Stout CTE programs.

Figure 3. The CTE LinkedIn Group (Source: LinkedIn.com)

CTE LinkedIn Group administrators. Two administrators operate the CTE LinkedIn

Group, Dr. Mooney and this author. Dr. Mooney has served in her role as program director for

five years. This author's experience as a graduate assistant to the MS, EdS, and EdD CTE

programs, has included work as a graphic designer, marketer, and communicator over the past

four years. This team effort has lent itself well to the promotion of the CTE programs via the

LinkedIn Group. Dr. Mooney's experience with CTE, marketing, and LinkedIn is crucial and shown frequently in the relevant industry posts she provides, some examples of which include: Timely CTE related articles; industry updates; upcoming CTE conferences; recognition of faculty, students, and alumni; and providing information on the new EdD CTE program (Figure 4). This author's posts focus on sharing recent program happenings, as well as faculty and student updates (Figure 4).

These complimentary administrative roles also offer sharing of the group's management needs; thus aiding in providing timely responses to membership requests and posts. Further, the UW-Stout CTE Ambassadors have also been alerted to the LinkedIn Group. The CTE Ambassadors work in area technical colleges and serve as on-campus UW-Stout CTE resources for other faculty and students from their home. Thus far, only one ambassador has contributed to posting to the LinkedIn Group. However, a great deal of depth has been added from this relevant technical college perspective (Figure 4).

Figure 4. An excerpt from the CTE LinkedIn Group showing typical discussion post topics (Source: LinkedIn.com)

Managing the CTE LinkedIn Group. On average, new discussions have been posted to the CTE LinkedIn Group 2.5 times each month (LinkedIn.com, 2012). As discussed, topics vary from happenings in career and technical education, related conferences, program updates, faculty news, and news or awards related to current students or graduates. A concentrated effort

has been made that each post be accompanied by a website link, and thus, the main image that is on that webpage is also visible within the discussion post (Figure 4). Many of the discussions are linked to other UW-Stout social media or website presences, thus aiding in directing web traffic to those pages.

The CTE graduate students are formally invited to join to the LinkedIn Group each semester via the eNewsletter. In addition, each eNewsletter that is distributed does include a sidebar inviting students to join (Figure 2). The most effective invite tool has clearly proven to be an eNewsletter dedicated solely to the description of the group and the value it creates for the students. The least effective method, even potentially destructive, was utilizing the LinkedIn invite feature. When receiving these emails students assumed they were junk email automatically generated by LinkedIn (various graduate students, personal communications, November –December 2012). Further, once LinkedIn has received an email address, the site continues to send correspondence until that individual takes action to deactivate the notices. In these ways the LinkedIn invite feature has proven to be an undesirable communication method.

According to Fouts (2012) the keys to a successful LinkedIn group reside in the following areas: management, engagement, sharing, and promotion. Fouts' states (2012), "The most important thing is to be an active manager." This has proven to be true to date, as each membership must be manually activated and, surprisingly, there are no obvious visual cues to alert administrators that there are pending membership requests. Another management challenge in the LinkedIn group has been pulling the members into discussions: Fouts' (2012) mentions that engaging the group is best achieved by posting industry-relevant questions as inquires for the group; a question-and-answer approach yet to be explored.

Supporting technology for the CTE LinkedIn Group. A few challenges have arisen with the LinkedIn Group posts: One being there is no functionality to post pictures natively within the discussion posts. To feature an image, each discussion must be linked to a website with an accompanying a photo. A second challenge has been the post formatting limitations. Although it is possible to post up to 4,200 characters (LinkedIn.com, March 8, 2014), one must link to an external website to provide content which is formatted and, as such, more inviting to read. In order to compensate for the lack of formatting and inability to natively post pictures within discussions, on November 21, 2012 the CTE Blog was created (Figure 5). WordPress, a popular blogging interface with many feeless options, was used to create the blog. The CTE Blog allows for full articles, formatted content, photography, and also provides the added benefit of tagged indexing and a search feature. Thus far the CTE Blog has served an important supporting role to the CTE LinkedIn Group.

Figure 5. The CTE Blog, which is used as a supporting technology to the CTE LinkedIn Group (Source: uwstoutcte.wordpress.com)

Statement of the Problem

As previously discussed, engaged communication is key to the success of graduate students (Salter, 2012), and as such fundamental in the management and future success of the MS, EdS, and EdD CTE programs. Further, by using the CTE eNewsletter and LinkedIn Group to engage the CTE graduate students, the CTE programs have significant potential to positively affect student retention. By identifying the student engagement resulting from the CTE emerging media campaign, future communication efforts can be refined and better developed to suit student preferences. Thus resulting in an emerging media campaign that better serves students and, in turn, will likely further increase engagement.

Purpose of the Study

Given society's booming expectation for real-time, multi-way engagement and the prominence of technology in the lives of graduate students, emerging media serves as a potentially effective vehicle for effective and engaging communication. This research project is designed to determine if the CTE LinkedIn Group and the CTE eNewsletter have increased engagement for the current group of 59 CTE graduate students. Student engagement is being reviewed due its importance for graduate student program success, as well as its potential positive affect on retention (Salter, 2012; Junco & Timm, 2008; Tinto, 1993). As such, this study will answer the following research questions:

1. What are the strengths and weaknesses of the implemented Career and Technical Education graduate students emerging media campaign?

2. Has the emerging media campaign effected the engagement of the Career and Technical Education graduate student? In what ways?

If the CTE eNewsletter and/or the CTE LinkedIn Group prove to be successful in developing an increased level of engagement, there is a significant possibility for this success to be duplicated by other UW-Stout online graduate programs, as well as by similar programs at other universities.

Assumptions of the Study

Research shows that student engagement increases retention (Salter, 2012; Junco & Timm, 2008; Tinto, 1993) and this study assumes this to be accurate. While student engagement is an elusive idea, it is possible to determine if student engagement has been effected by the CTE emerging media campaign by reviewing existing metrics that will reflect changes in student activity over time. Engagement will also be determined by obtaining the CTE graduate students' opinions in response to the emerging media campaign.

Definition of Terms

Blog. A blog is an online interface that allows individuals to create and post entries to a website. A blog is a popular way to disseminate and view information online. Many online services allow for the free creation and maintenance of a blog, with more customized and powerful tools available with payment.

Click-through rates. Click-through rates describe the number of individuals whom visit a website using a link provided within the email. For the CTE eNewsletter, this data is available via Emma (MyEmma.com).

Emerging media/social media. These terms are used interchangeably in industry and within this paper to describe the online websites available for gathering individuals in various groups or communities for the exchange of information and social interaction. For this research,

the CTE eNewsletter is also included under this broad umbrella of emerging media and social media.

Emma. Emma (MyEmma.com) is the email-marketing provider for the MS, EdS, and EdD CTE degree programs, as well as for many of the other programs at UW-Stout. This paid service allows for the maintenance of email address databases, custom eNewsletter design and creation, and also offers metrics data that provides detailed views of open and click-through rates.

ENewsletter. An eNewsletter is an electronic newsletter that is distributed to a collection or database of email addresses.

Engagement. For the purpose of this paper, student engagement refers to the times in which the CTE graduate students are pulled into reading, visiting a link, sharing, commenting, or 'liking' communications provided via the CTE eNewsletter and CTE LinkedIn Group. It should be considered that engagement also has different levels. In order to best review the engagement, it has been broken into the following levels: From the passive or low-level engagement read of the CTE eNewsletter; to an active, mid-level engagement of a 'like' on a discussion post in the CTE LinkedIn Group; to an active, high-level engagement click-through from a link in the eNewsletter, or 'comment' on the CTE LinkedIn Group. On the passive to active response spectrum, engagement is increased on the active end due to the effort required in the high-engagement activities (i.e., commenting on a discussion post).

Hybrid. Hybrid refers to educational programming that combines both online and face-to-face coursework. The UW-Stout MS, EdS, and EdD programs are hybrid, however the MS and EdS contain coursework that allows students to select options allowing for mostly online completion.

LinkedIn. LinkedIn (LinkedIn.com) is a social networking site for professionals. Members of the site maintain personal online profiles (similar to a resume) and network with other industry professionals in effort to expand their network and, increasingly, search for new positions.

LinkedIn group. A LinkedIn group can be a private, open, or membership-based group. Groups are created and maintained without fee, and can be operated by one or more administrators with the ability to manage the group's settings for privacy, discussion post approval, and membership request approval.

LinkedIn newsfeed. The LinkedIn newsfeed is personalized to each member's selected industry and, as such, provides articles, information, and job postings relevant to their industry. If the individual is a member to any LinkedIn groups, their newsfeed is also updated with new discussions or comments happening within those groups.

Open rates. Open rates describe the number of individuals whom open an email or eNewsletter. For the CTE eNewsletter, this data is available via Emma (MyEmma.com).

Qualtrics. Qualtrics is an online tool that allows for intuitive survey building and distribution. The site also provides automatically calculated data results and summaries from implemented surveys.

Reach. Reach, also known as network reach, is calculated by tallying the networks of each member within an online community or group (Nolfi, 2013).

Retention. Retention refers to student persistence through the completion of their degree program. Retention has become an increasing concern with online graduate programs, as community is important yet difficult to achieve in this format (Salter, 2012). In addition, online

students have an increased opportunity to change program selection due to the inherent mobility of their online coursework (Salter, 2012).

       UW-Stout CTE Ambassador. The CTE Ambassadors are a select group of accomplished UW-Stout CTE students and alumni, who serve as points-of-contact and UW-Stout CTE program support on their respective technical college campuses.

       WordPress. WordPress (WordPress.com) is a popular and comprehensive provider for blog and website creation and maintenance. Both paid and unpaid options are available with the service.

Methodology

       Mixed methods, a method using a combination of qualitative and quantitative data, has been utilized for this study (Creswell, 2009; Hughes & Hayhoe, 2008). To accomplish this, a survey was utilized to collect qualitative and quantitative data form the CTE graduate students, while existing quantitative and qualitative data was pulled from the eNewsletter and the CTE LinkedIn Group.

       The CTE graduate student survey. The survey was sent to the 59 CTE graduate students (see Appendix A). Due to their varying geographic locations and full schedules, the survey was conducted online for convenience. Qualtrics, a web-based survey building software, was used to design and deliver the study questionnaire, with the invite to the graduate students sent via email. Students who wished to participate were able to click on the provided link to access the study itself. The complete survey consisted of 18 questions, focused on gaining information related to graduate student opinion of the CTE eNewsletter and LinkedIn Group. To summarize, survey questions queried if students were aware of these communication efforts, whether they found them useful, their usage frequency, and also their preferences and

suggestions. The questions were formatted as 'yes'/'no', multiple-choice, Likert-scale, frequency scale ratings, as well as short answer. These varied response types were designed to derive both quantitative and qualitative data from study participants, as well as increase study validity: According to Hughes and Hayhoe (2008), short answer questions increase the validity of a study due to their open-ended nature removing any restrictions due to the researcher's framing of potential responses.

Existing data from the eNewsletter and LinkedIn group. Existing data has been pulled from the eNewsletter and LinkedIn Group. For the eNewsletter, open rates and click-through rates have been reviewed and compared over an 18-month period; this information will show engagement changes during this time frame. Regarding the LinkedIn Group the following items will be reviewed: membership growth since launch; membership network reach; discussion post quantity; and reader responses, including discussion posts, comments, and 'likes'. After all survey and existing data has been compiled and reviewed, connections will be sought. As stated by Creswell (2009), in a concurrent study qualitative and quantitative data are combined for analysis to "seek convergence or similarities among the results" (p. 220).

To answer research question one, "Has the emerging media campaign effected engagement of the Career and Technical Education graduate student? In what ways?" existing data will primarily be used, with correlations sought when overlaying the survey response data. By reviewing the existing CTE eNewsletter and LinkedIn Group metrics data overtime, it can be shown if the engagement of graduate students has been effected. Further, the following types of engagement will be reviewed:

- A passive, low-level engagement, such as a read of the CTE eNewsletter.

- An active, but mid-level engagement, such as a 'like' on a LinkedIn Group discussion post.

- An active, high-level engagement, such as an eNewsletter click-through or a LinkedIn Group discussion comment or original post.

To answer research question two: "What are the strengths and weaknesses of the implemented Career and Technical Education graduate student emerging media campaign?" survey data will primarily be used, with focus given to how it overlays with existing data pulled from the CTE eNewsletter and LinkedIn Group. The survey questionnaire was specifically crafted to pull responses that will not only answer this question, but also provide a broader understanding of what is behind the resulting strengths and weaknesses.

Limitations of the Study

As the developer of the CTE LinkedIn Group and CTE eNewsletter redesign, this author is uniquely positioned to review the trajectory of these communication attempts. However, despite significant effort to avoid bias, there may be instances where this familiarity has influenced the research due to the long-term, ongoing role this author has played with the studied modes of communication.

As part of this study, the engagement created via the CTE LinkedIn Group will be reviewed. CTE LinkedIn Group members include the CTE graduate student audience, UW-Stout CTE faculty, and many CTE professionals. While this varied membership is crucial for the group's function, this variation is also shown in the discussion posts themselves, as well as the comments and 'likes.' As such, it is not suitable to measure only the engagement of the CTE graduate student population within the group due to the layered, interwoven communications.

For this reason, the engagement data pulled from the LinkedIn Group is admittedly skewed, as it includes the involvement of the entire group and not the CTE graduate student audience alone.

Chapter II: Literature Review

Current Use of Social Media in Academia

"Social Media in Higher Education: A Literature Review and Research Directions (Moran, Seaman, & Tinti-Kane, 2012) covers the range of social media uses by four-year college institutions, the great majority of which shows its use as a tool to create community among students and augment teaching. This review describes that although universities are utilizing the usual suspects (e.g., Facebook, Twitter, LinkedIn, YouTube and blogs), the content continues to be presented in a one-way push. For instance, it is common within university blogs to not allow reader comments for fear of inappropriate content, thus resulting in engagement limitations. Moran, Seaman and Tinti-Kane (2012) also note that, "The use of social media among faculty is fluid and evolving. The mix of sites being used is changing over time—in 2011 Facebook was the most visited site for faculty professional purposes; by 2012 this has been replaced by LinkedIn" (p. 3). This is certainly a noteworthy development when considering the importance of faculty contribution to an online student group.

In the infographic *The Social Media Missing Link in MBA Programs* (The Best Colleges, 2012), it is revealed that while 87 percent of the graduate schools polled said they utilized LinkedIn, virtually all of them used it solely for alumni connections. Also shown is that 46 percent of schools polled reported they planned on using LinkedIn more in the future. LinkedIn falls third in this area of planned future use, only mere percentage points behind Twitter and blogs. This infographic also states that 100 percent of the polled graduate schools utilize social media in some fashion, with 94 percent focusing on student recruitment. A considerable number, 84 percent, of these universities cited a focus on student communication in their social media use (The Best Colleges, 2012). While this is indeed a significant number, it should be

considered that "student communication" is a broad term and the number of schools utilizing social media to interact with a small, subject-focused group (such as the CTE LinkedIn Group) may actually be a much smaller percentage.

Importance of Graduate Student Communications

In *Improving Your Communication with Graduate Students* (n.d.), author Michael Loui covers points specific to communicating with graduate students as well as the resulting benefits. For example, students who understand the formal and informal requirements of the school and degree are more likely to succeed in their completion of the program. This success is key for both the student and the future growth of the program itself. Although Loui (n.d.) does not mention social media sites directly, the type of two-way or multi-way communication that he states is key to student engagement is certainly available with the medium. This type of unique, multidimensional connection is actually the primary benefit of an online social group, according to Erik Qualman in *Socialnomics* (2009).

Salter (2012) shares that there are many attributes, which together affect the retention, or attrition, of the online student:

- Experimentation with online higher education

- Social engagement

- Relationship to the institution

- Attitudes and personality attributes

- Coursework and faculty experiences

- Experiences with institution's administration

- External environment

- Background

- Financial situation

While social engagement is but one of these points, Salter (2012) states it is certainly one which can be positively affected by social media, "Early indications are positive and supportive of the view that [emerging media] can be employed to support the social experience of online students and potentially influence their retention" (p. 219). Further, when coupling the social experience with positive mentorship from faculty (another key noted within Salter's student retention list), one would see where this communication method could indeed create an engaged community, which, in turn, may positively affect retention.

Tinto (1993) also reflects these remarks in *Leaving College*, but simplified further that the successful retention of a nonresidential student (versus the traditional residential student or online-only student) is related to just four key areas:

- Constructing classroom communities

- Strengthening the student to faculty connections

- Bridging between a students' college and external environment

- Timely student services

Of Tinto's areas of consideration, emerging media could potentially affect at least two of them; with promise to both strengthen student-student interaction and student-faculty connections. Further, social media could quite potentially aid in the bridging to students' external environment. It is notable that this review is of the text's second edition, leaving one to safely assume social media was far from Tinto's consideration during his original writing of this text in 1987. Regardless, social media certainly provides the types of community Tinto describes as necessary for the retention of the nonresidential student.

An excellent resource was located in *Social Media in Higher Education: A literature review and research directions* (Davis, Deil-Amen, Rios-Aguilar, & Gonzalez Canche, 2012). Although this review covers multiple associations between emerging media and higher education, Davis et al. (2012) speak eloquently on the existing theories, as well as the need for further research in the area of student engagement via social media:

Despite the current dearth of an extensive research base on the effects of [social media] on the academic and social outcomes of college students, long-standing theories in the field of higher education provide a foundation for viewing [social media] as having potential to enhance student success. Specifically related to students, many theoretical frameworks explain student persistence (Astin, 1984; Tinto, 1975, 1987, 1993; Pascarella, 1986; Pascarella & Terenzini, 1991, 2005), engagement and involvement (Astin, 1984; Kuh, 2001, 2003; Kuh et al., 2008), and social and academic integration (Tinto, 1975, 1987, 1993) were developed on the premise that increased engagement, involvement, and connection and belonging (read integration) with the academic and social realms of the campus community will lead to higher achievement, retention, and eventual degree attainment. (p. 19-20)

Ultimately, Davis et al. (2012) ask "Can [social media] offer what lies at the core of such theoretical frameworks, which is the linking of individuals with common interests in a community shared experience to achieve desired student academic and career outcomes" (p. 20). Clearly, these authors place a great deal of potential in engaging students via social media, but also note that further assessment in needed.

Engaging an Audience with Emerging Media

Qualman (2009) discusses social media marketing and its indispensable value to engaging an audience. He also discusses the utilization of email marketing and its helpful, but limited, service when in comparison to more collaborative types of communications, such as social media. ENewsletters are noted by Dixon (2012) to excel at sharing knowledge with a targeted group of individuals. It is also noted that collaboration can be derived from the tool (Dixon, 2012); however, to date this has not been the typical experience linked to the CTE eNewsletter. It is certain that further improvements are possible with the CTE eNewsletter, and the medium could prove to offer more two-way engagement with additional refinements as suggested by Dixon (2012). He specifically mentions that polling via an eNewsletter can be highly successful. However, Qualman (2009) counters by stating, "Having 12 million email addresses in your database doesn't mean much if only 1,000 open and click on your emails" (p. 109). Clearly opinions vary on the ability of an eNewsletter to engage a reader.

Online social groups abound which allow both the group moderator and members to communicate in a two-way fashion, as opposed to the disputed one-way push of an eNewsletter. Qualman (2009) goes further to describe how social media is enabling consumers to drive the growth of brands and services that they favor. By consumers choosing to align themselves with a certain brand or group, they then show this allegiance to their personal social network via newsfeeds and their profile page. According to Qualman (2009), these endorsements can quickly multiply as other members repeat the practice with the same brand or service. One can easily recognize that sharing valuable information among social networks can result in organic and exponential growth. This use of sharing and expansion within social networks is referred to as "leveraging the social graph", and is noted to be key to the success of any social media

endeavor (Qualman, 2009). Organic sharing and growth is what is desired for the information posted to the CTE LinkedIn Group, as such it is important to note that Qualman (2009) makes clear that such success is highly dependent on frequently-posted, relevant content and continual attention to group maintenance.

The CTE Graduate Student Audience

The MS, EdS, and EdD CTE graduate student body is largely comprised of working adults, many of whom are currently employed at the sixteen technical colleges in the state of Wisconsin or other post-secondary institutions, such as private technical colleges and universities (Dr. C. Mooney, personal communication, September 13, 2012). As such, these individuals are enrolled in continuing education in an effort to advance their skills and professional opportunities as post-secondary educators and secondary and post-secondary administrators. The CTE graduate students' range in age from 24-64 years, however, 63 percent are 30-49 years of age with the average age at 39.5 years (University of Wisconsin-Stout, 2014). Other notable points are the student audience is well balanced in regards to gender with 49 percent male and 51 percent female, with the vast majority of the group (78 percent) residing in Wisconsin (University of Wisconsin-Stout, 2014).

According to Dr. Mooney, the MS, EdS, and EdD CTE programs have been an important part of the CTE landscape in western Wisconsin for many years (Dr. C. Mooney, personal communication, September 13, 2012). UW-Stout offers four CTE degrees: A Bachelor of Science, Master of Science, Educational Specialist, and beginning in Fall 2013, a Doctor of Education degree. UW-Stout also offers various CTE certifications, which allow instructors to earn their state-required professional development credits. As noted earlier, each of these programs offer a combination of online and face-to-face coursework, suited specifically to the

busy schedules of the working adult. Indeed, the MS and EdS offer many online options, allowing students to complete coursework near fully online if they prefer.

LinkedIn User Demographics

According to a Pew Research Report (Duggan & Smith, 2014) only 22 percent of online adults utilize LinkedIn. While this could prove to be a significant barrier to the CTE LinkedIn Group's success, further investigation sheds light that may counteract this figure: Only 15 percent of 18-29 year olds use LinkedIn, while 27 percent of 30-49 year olds and 24 percent of 50-64 year olds use the medium. In fact, LinkedIn is the only social media interface with higher usage in the above 30 age groups (Duggan & Smith, 2014). The percentage of online users who utilize LinkedIn jumps again to 38 percent, if you look at those who possess at least one college degree (Duggan & Smith, 2014). It seems of any demographic the CTE graduate student is a well-suited match for the educated, working adult LinkedIn demographic. In relation to how LinkedIn members are using the medium, a Lab42 report (April 24, 2013) states "81 percent of LinkedIn users belong to at least one group, 52 percent of whom participate in group discussions." These statistics reassure that if the CTE graduate students are introduced to the CTE LinkedIn Group, there is significant potential that they will indeed engage with the discussions.

Summary

Research has shown that engagement and community can positively affect retention of the online student (Salter, 2012; Junco & Timm, 2008; Tinto, 1993). This literature review has also clearly indicated that social media possess the potential for multiple-way communication and networked sharing that can be used to effectively engage online students (Qualman, 2009; Dixon, 2005). Yet, this same research has also warned that the challenge to this solution is in

providing appropriate content and continual persistence in building and maintaining the online

community (Qualman, 2009; Salter, 2012).

Chapter III: Methodology

Research shows that engaging the online graduate student can have a positive effect on student success and retention (Salter, 2012; Junco & Timm, 2008; Tinto, 1993). The CTE eNewsletter and LinkedIn Group were developed as tools to aid in communication and engagement of the CTE graduate student. This research project seeks to determine if these communication tools have indeed affected the engagement of the current group of 59 CTE graduate students. As such, this study is designed to answer the following research questions:

1. What are the strengths and weaknesses of the implemented Career and Technical Education graduate students emerging media campaign?

2. Has the emerging media campaign effected engagement of the Career and Technical Education graduate student? In what ways?

To best answer these evaluative questions, both quantitative and qualitative data was required. After looking to suit this need and provide reliable results, a mixed methods approach was chosen (Hughes & Hayhoe, 2008). Results were pulled from existing quantitative data available regarding the CTE eNewsletter and LinkedIn Group, and both quantitative and qualitative data was reviewed from an online survey of the CTE graduate students. As such, this research utilized a concurrent embedded strategy, with an emphasis on qualitative data (Creswell, 2009). Also according to Creswell (2009), this data collection model is helpful in gaining a broader understanding of the research topic, as it is derived from the use of different methods.

Subject Selection and Description

Due to the reasonable nature of the population size, each of the 59 CTE graduate students was invited to participate in the online survey. Because there was not a derived sample and the entire CTE graduate student population was contacted, the resulting data is more reliable

(Hughes & Hayhoe, 2008). As previously noted, these students are working adults, ranging in age from 24-64 years, but with 63 percent focusing in the 30-49 year age range (University of Wisconsin-Stout, 2014).

Instrumentation

The survey (see Appendix A) was developed specifically to suit the purpose of this study. To affirm survey validity, the questionnaire was reviewed and refined per the recommendations of research advisor, Dr. Daisy Pignetti. In addition, student peers were used to sample the survey. After reviewing these peer survey responses, edits were made to ensure the clarity and necessity of each question. Also prior to research, UW-Stout's Institutional Review Board reviewed the research methodology and instrumentation, with approval to proceed granted on February 19, 2014.

The complete survey consisted of 18 questions, each focused on gaining information related to graduate student opinion of the CTE eNewsletter and LinkedIn Group. To summarize, survey questions queried if students were aware of these communication efforts, whether they found them useful, their usage frequency, and also solicits their opinions and suggestions. The questions were formatted as 'yes'/'no', multiple-choice, Likert-scale, frequency scale ratings, and also short answer. These varied response types are designed to derive both quantitative and qualitative data from study participants (Hughes & Hayhoe, 2008). In addition, according to Hughes and Hayhoe (2008) short answer questions increase study validity due to their open-ended nature removing interference from the researcher's creation of potential responses.

To answer research question one: "Has the emerging media campaign effected engagement of the Career and Technical Education graduate student? In what ways?" existing data was primarily used, with correlations sought when overlaying the survey response data. By

reviewing the existing CTE eNewsletter and LinkedIn Group metrics data over a period of time, it is shown if the engagement of graduate students was effected. Further, it was also reviewed what types of engagement are present:

- A passive, low-level engagement, such as a read of the CTE eNewsletter.

- An active, mid-level engagement, such as a 'like' on a LinkedIn Group discussion post.

- An active, high-level engagement, such as an eNewsletter click-through or a LinkedIn Group discussion comment or original post.

To answer research question two: "What are the strengths and weaknesses of the implemented Career and Technical Education graduate students emerging media campaign?" survey data was primarily used, with focus given to how it overlays with existing data pulled from the CTE eNewsletter and LinkedIn Group. The survey questionnaire was specifically crafted to pull responses that will not only answer this question, but also provide a broader understanding of each medium's strengths and weaknesses.

Data Collection Procedures

As previously stated, the survey invite was sent to the entire MS, EdS, and EdD CTE graduate student group of 59 adults. The emailed invitation was sent on February 27, 2014, with a reminder email distributed on March 4, 2014. The invitation included an explanation of the study, a link to the survey, and also described the risks, benefits, and confidentiality of the research. Students were invited to participate by 'clicking' the link to complete the study itself. The survey was developed in Qualtrics and remained active for eight days. Initially the survey was to close on March 5, 2014, but at day seven with a 24 percent response rate Dr. Mooney recommended an additional reminder invite be sent to the CTE graduate student noting the

survey would remain open for an additional 24 hours. Ultimately, the survey was closed on

March 6, 2014, with a final response rate of 63 percent, which according to the University of

Texas is 'very good' (as cited by Hughes & Hayhoe, 2008, p. 103).

Existing metrics data was collected regarding the CTE eNewsletter and LinkedIn Group

from their respective websites. For the eNewsletter both open rates and click-through rates over

the span of 18 months (both pre- and post-redesign) was collected from Emma (MyEmma.com).

For the LinkedIn Group the following items have been reviewed: membership growth since

launch; membership network reach; discussion post quantity; and reader responses, including

discussion posts, comments, and 'likes'. According to Nolfi (2013), it is important to review

each of these areas when measuring impact of a social media initiative.

Data Analysis

Both the survey data and existing emerging media data has been compiled and reviewed

for connections, as is part of the strategy in the concurrent embedded method (Creswell, 2009).

As such, the following data has been collected and reviewed:

- CTE Graduate Student Survey: Qualitative and quantitative data available in survey
  responses.

- MS, EdS, and EdD CTE eNewsletter: Open rates and click-through rates over
  18-month time frame.

- MS, EdS, and EdD CTE LinkedIn Group: membership growth; membership network
  reach; discussion post quantity; and reader responses, including discussion posts,
  comments and 'likes'.

With data compiled and reviewed, connections were sought. As stated by Creswell (2009), in a

concurrent study qualitative and quantitative data are combined for analysis to "seek

convergence or similarities among the results" (p. 220). Attempts were made to answer the research questions with direct responses from the CTE graduate student group, with attention paid to pair the information with qualitative data in an effort to ensure reliable research results.

Limitations

Although the materials and procedure were chosen in part for the convenience of the CTE graduate students, they have also been constructed to provide the quantitative and qualitative information needed to discern the preferences of the study participants. Further, although surveys are typically classified as a quantitative research method, the type of information polled from these questions bridges well into the qualitative. This mix of quantitative and qualitative information is essential for reliable study results according to Hughes and Hayhoe (2008).

As previously noted, during this study the engagement created via the CTE LinkedIn Group will be reviewed. CTE LinkedIn Group members include the CTE graduate student audience, UW-Stout CTE faculty, and many CTE professionals. While this varied membership is crucial for the group's function, this variation is also shown in the discussion posts themselves, as well as the comments and 'likes.' As such, it is not suitable to measure only the engagement of the CTE graduate student population within the group due to the layered, interwoven communications. For this reason, the engagement data pulled from the LinkedIn Group is admittedly skewed, as it includes the involvement of the entire group and not the CTE graduate student audience alone.

To aid in producing valid study results the entire CTE graduate student population was polled, with a resulting response rate of 63 percent. As such, according to a formula provided by Hughes and Hayhoe (2008) the margin of error for this study is plus or minus 13.

Chapter IV: Results

Given the expectation for real-time, multi-way engagement and the prominence of technology in the lives of graduate students, emerging media can serve as a potentially effective vehicle for communication (Qualman, 2009; Dixon, 2005). This research project was designed to determine if the CTE LinkedIn Group and the CTE eNewsletter have increased engagement for the CTE graduate students. Student engagement is being reviewed, as it is both important for graduate student success and its potential positive affect on retention (Salter, 2012; Junco & Timm, 2008; Tinto, 1993). As such, this study will answer the following research questions:

1. What are the strengths and weaknesses of the implemented Career and Technical Education graduate students emerging media campaign?

2. Has the emerging media campaign effected the engagement of the Career and Technical Education graduate student? In what ways?

Summary of Data

To best address these evaluative questions, a mixed-methods study has been performed; including both existing data from the CTE emerging media campaign and an online survey sent to each of the 59 CTE graduate students. In this chapter we will review the resulting data, which includes:

- CTE Graduate Student Survey: Qualitative and quantitative data.

- MS, EdS, and EdD CTE eNewsletter: Open rates and click-through rates over 18-month time frame.

- MS, EdS, and EdD CTE LinkedIn Group: membership growth; membership network reach; discussion post quantity; and reader responses, including discussion posts, comments and 'likes'.

This qualitative and quantitative data has been reviewed in whole as well as inter-connected, to best answer this study's research questions. In addition, the data has been pulled from current perspectives (CTE graduate student survey) as well as data comparisons completed over an 18-month time line (existing data from the CTE eNewsletter and LinkedIn Group) in an effort to show the trajectory of student engagement as effected by the CTE emerging media campaign.

CTE Graduate Student Survey Data Analysis

As previously stated, the survey invite was sent to the entire MS, EdS, and EdD CTE graduate student group of 59 adults. The emailed invitation was sent on February 27, 2014, and included an explanation of the study and a link to the online survey. The survey was closed on March 6, 2014, with a final response rate of 63 percent and resulting margin of error of plus or minus 13 Hughes and Hayhoe (2008).

Question 1. Do you receive the Career and Technical Education (CTE) eNewsletter? Survey respondents noted that 83 percent received the eNewsletter, while 17 percent did not. It should be noted here that in the past multiple conversations have occurred with students noting they did not receive an eNewsletter. Some instances resulted in the eNewsletter landing within their junk folder, a topic that is discussed in-depth in the next chapter. Also, in the past some students have noted they did not receive the eNewsletter, when they in fact did receive it. This type of oversight can be confirmed using eNewsletter data, and has occurred multiple times with different students.

Question 2. In the past, have you ever read or interacted with the CTE eNewsletter? Survey responses indicated 83 percent read the eNewsletter and 38 percent visited a linked provided in the eNewsletter, while none of the respondents forwarded the eNewsletter or

replied to the eNewsletter. Ten percent of respondents had not interacted with the eNewsletter in any fashion.

Question 3. Is the CTE eNewsletter helpful for you? Survey respondents indicated that 14 percent strongly agree, 55 percent agree, 28 percent neither agree nor disagree, 0 percent disagree, and 3 percent strongly disagree. It is notable, that the 3 percent 'strongly disagree' group is formed of a single user; this user also indicates that although they do receive the eNewsletter, they have never read it. It is also notable that 69 percent of respondents feel the eNewsletter is helpful, yet 28 percent remain undecided.

Question 4. What would make the CTE eNewsletter more helpful for you? Qualitative responses included:

- "Include some new statistics for the state"

- "Embedded links where more information may be warranted"

- "Maybe there could be links based on the program you are a part of?"

Question 5. Are you a member of LinkedIn, the professional networking website? Responses indicated that 74 percent are members, 23 percent are not members, and 3 percent are unsure if they are members.

Question 6. Why have you chosen not to join LinkedIn? Qualitative responses included:

- "It is like Facebook, and I do not want my information that accessible. Plus I do not like the junk mail they send."

- "I am not interested in having a big presence online, so I am not on LinkedIn, Facebook or Twitter."

- "Privacy reasons - I do not like putting information on the web that is readily available to anyone."

- "Simply have not had the time to spend on it."

- "I haven't taken the time to investigate it."

- "I already have a job."

- "I do have an account but rarely use it... too busy, but hope to become more involved in the future."

Of these seven respondents, three (43 percent) refer to privacy concerns with social media; three (43 percent) refer to time constraints; and one (14 percent) notes indifference due to being employed. Of the students not using LinkedIn, clearly their main concerns are privacy and lack of time. To provide background for the "I already have a job" response, it is important to note again that LinkedIn is commonly used for both job searching and recruiting purposes. It is clear that this individual has not seen potential benefits to LinkedIn, outside of being a job search aid.

Question 7. How many times each week do you visit/use LinkedIn? Of the respondents, 77 percent indicate 0-2 times, 12 percent indicate 3-5 times, 4 percent indicate 6-8 times, 0 percent indicate 9-11 times, and 8 percent indicate 12+ times each week. Most respondents indicate they do not frequent the site often, yet those that do frequent LinkedIn it use it rather extensively (12+ times each week).

Question 8: What event/s prompt you to visit LinkedIn? After being prompted to 'select all that apply' the respondents indicated 65 percent receive an email notification from LinkedIn, 42 percent noted it is simply part of their routine, 15 percent indicate a desire to increase their network. Twelve percent selected 'other' and entered the following responses:

- "I rarely use the site as time does not allow"

- "Connection request"

- "Saw link on CTE newsletter and wanted to join CTE group"

Despite students sharing they do not like being invited to the LinkedIn Group via a LinkedIn invite (various graduate students, personal communications, November –December 2012), many are triggered by LinkedIn messaging to visit the site each week.

Question 9. In what ways do you use LinkedIn? With a prompt to 'select all that apply', responses indicated 88 percent connect with other professionals, 62 percent keep up-to-date on industry trends and news, and 12 percent job search. Four percent selected 'other' and entered the following response:

- "Updating my career experience"

It is important to note that of respondents, 88 percent note that they are already using LinkedIn to connect with other professionals, a natural outcome of the CTE LinkedIn Group.

Question 10. Are you a member of the MS, EdS, and EdD CTE LinkedIn Group?
Of the respondents, 67 percent indicated 'yes,' 26 percent indicated 'no,' and seven percent indicated 'unsure.'

Question 11. Why have you chosen not to join the MS, EdS, and EdD CTE LinkedIn Group? Responses included:

- "I did not know it was available."

- "Did not know it existed."

- "I was not aware of its existence."

- "Was not aware."

- "Did not know about it."

Of the five respondents that had not joined the CTE LinkedIn Group, 100 percent noted that they were not aware of the group yet each of them is already a member of LinkedIn. It is important to note that the CTE LinkedIn Group was largely communicated with students via the eNewsletter. Two of these respondents noted earlier in the survey that they did not receive the eNewsletter, while three indicated they did; other than oversight of emailed LinkedIn Group invitations, an assumption cannot be made as to why they were not informed.

Question 12. How many times each week do you visit/use the MS, EdS, and EdD CTE LinkedIn Group? Of the CTE LinkedIn Group member respondents, 90 percent indicated 0-2 times and 10 percent indicated 3-5 times. Zero respondents indicated visiting 6 or more times each week.

Question 13. What typically prompts you to visit the MS, EdS, and EdD CTE LinkedIn Group? Of the respondents, 57 percent indicated 'receiving email notifications from LinkedIn,' 19 percent indicated that it is 'simply part of their daily or weekly routine,' and 19 percent indicated they did so while 'searching to expand their professional network.' Five percent (one respondent) selected 'other' and entered, "Notices sent to me."

Question 14. In the past, in what ways have you read or interacted with the MS, EdS, and EdD CTE LinkedIn Group? After being prompted to 'select all that apply,' 95 percent of responses indicated 'read a post or update,' 42 percent indicated having 'liked a post or update,' 21 percent noted having 'shared a post or update,' 16 percent had 'commented on a post or update,' and 5 percent had 'written a post or update.'

Question 15. Is the MS, EdS, and EdD CTE LinkedIn Group beneficial to you as a student and/or professional? Of the respondents, 64 percent said 'yes', and 36 percent indicated 'undecided.' Zero respondents selected 'no.'

Question 16. Please describe in what way/s the MS, EdS, and EdD CTE LinkedIn Group has been beneficial to you as a student and/or professional. Ten respondents entered the following comments:

- "Allows me to see other students or professionals with the same interests and major."

- "Keeps me informed of events and what is happening with my colleagues."

- "Industry Trends, Current Issues, Celebrate Peer Successes"

- "It keeps me aware of what is going on in the programs. As a distance-learning student this is really nice to feel more connected. It is also a great resource to have for connecting with other students and CTE professionals- even though I have not yet taken advantage of it. Good to know it's there."

- "I am able to keep up on current news within the group."

- "Reading about opportunities in the field."

- "Ideas considering research topics and professional development."

- "Keeping up with current information about my cohorts."

- "Keeping me informed as to what is happening within the program and my cohorts."

- "By connecting with others in a similar position."

The following trends regarding the benefits of the CTE LinkedIn Group emerged from the data through coding and categorizing these responses (Hughes & Hayhoe, 2008): Eighty percent found community and/or connectivity, 40 percent found CTE program updates, 30 percent found networking, 20 percent noted industry trends, and 20 percent noted opportunities in the CTE field.

Question 17. What would make the MS, EdS, and EdD CTE LinkedIn Group beneficial/more beneficial to you as a student and/or professional? Ten respondents entered the following comments:

- "Have a larger network outside of Wisconsin. Not all students or members are from Wisconsin or will they stay here to work."

- "Resources for research."

- "Job Openings, Leadership Trends, CTE Legislative Updates"

- "I would like to see more involvement from other students and faculty."

- "Linking to some of the latest happenings around the nation in CTE, maybe have some of the state initiatives or opportunities for collaboration."

- "Perhaps an occasional discussion on the topics of CTE or from other contributors of the group."

- "Use this as a method of communication in a coursework."

- "Being able to connect with others in the group."

- "The Group could be much more beneficial if it were being more strongly utilized by the Group's creators/facilitators. Often, when I check the site, nothing new is offered so I lose interest--or, don't find it valuable."

- "By using it as more of a learning tool for current students."

The following trends regarding the benefits of the CTE LinkedIn Group emerged from the data through coding and categorizing these responses (Hughes & Hayhoe, 2008): Fifty percent of respondents indicated a desire to see more involvement in the group, with 80 percent of these responses noting that the involvement is desired from contributors other than the group's facilitators; namely other faculty, students, and industry professionals. In addition, 50 percent of

the respondents specifically requested more valuable content be added, with 60 percent of these responses specifically desiring more information on industry trends and happenings in CTE. Further, it is notable that 20 percent of respondents specifically commented that they felt it would be beneficial to tie the CTE LinkedIn Group to classroom learning and discussion.

Question 18. Please select your age range. Of the LinkedIn Group users, the age ranges break down as 14 percent aged 20-27 years, 29 percent aged 28-34 years, 14 percent aged 35-41 years, 14 percent aged 42-48 years, 29 percent aged 49-56 years, and zero percent aged 57-65 years.

CTE eNewsletter Data Analysis

Existing metrics data has been collected for the CTE eNewsletter including both open rates and click-through rates over the span of 18 months, from August 2012 to January 2014. This time range includes data both pre- and post-redesign, as the redesign took place in November 2012. This data has been collected from Emma (MyEmma.com), the online email-marketing provider for the CTE graduate programs. As described earlier, this service allows for the maintenance of email address databases, custom eNewsletter design, and analytics information that offers detailed views at open and click-through rates.

In the three months prior to the redesign in November 2012, the average open rate was at 21 percent and the average click-through rate was at one percent. By the end of November 2012, the open rate quickly increased to 35 percent, with the click-through rate moving up to 3 percent. The increased open rates show that the implemented changes were indeed successful in inviting the reader to open the email, yet consistently low click-through rates show that active engagement remained relatively low. However, over time both the open rates and click-through

rates have steadily increased; in the past three months of the eNewsletter open rates have averaged at 51 percent, with click-through rates averaging at 9 percent.

CTE LinkedIn Group Data Analysis

For the LinkedIn Group the following data has been reviewed: membership growth since launch; membership network reach; discussion post quantity; and reader responses, including discussion posts, comments, and 'likes.' According to Nolfi (2013), it is important to review reach, quantity, and reader response when measuring impact of a social media initiative. As part of both the reach and reader response review, the engagement created by the CTE group members has been studied. Membership of this group includes CTE graduate students and alumni, faculty, and also industry professionals. While this varied membership is crucial for the group's function, it is also shown in the discussion posts themselves, as well as the comments and 'likes.' As such, it is not suitable to measure only the engagement of the CTE graduate student population due to the layered, interwoven-communications. For this reason, the engagement data pulled from the LinkedIn Group is admittedly skewed, as it includes the involvement of the entire group and CTE graduate student audience alone.

Since the LinkedIn Group's creation in October 2012, it has grown currently to 82 members including students, alumni, faculty and industry professionals. By totaling the individual networks of each member, it is calculated that the group has a network reach of 9,772 LinkedIn members. It is important to consider that reach is crucial to group growth because when a member posts, comments, or 'likes' within the group, their respective network can then see the CTE LinkedIn Group activity appear in their newsfeed. However, it is also important to note that it is improbable that the 9,772 members in the network reach total are all unique individuals.

From October 2012 to February 2014 there have been 43 discussion posts, averaging 2.5 discussion posts each month. The site's administrators, Dr. Mooney and this author created thirty-six of these discussion posts. Another frequent discussion poster is Nancy Chapko, an EdD CTE student and UW-Stout CTE Ambassador, who works at Madison Area Technical College. The CTE Ambassadors are a select group of accomplished UW-Stout CTE students and alumni, who serve as points-of-contact and UW-Stout CTE program support on their respective technical college campuses.

As the LinkedIn data is reviewed, it is important to note the difference between engagement types. While any type of engagement is desirable, it should be considered that more active engagement is the most valuable:

- A passive, low-level engagement, such as a read of the CTE eNewsletter.

- An active, mid-level engagement, such as a 'like' on a LinkedIn Group discussion post.

- An active, high-level engagement, such as an eNewsletter click-through or a LinkedIn Group discussion comment or original post.

The 43 discussion posts have been 'liked' a total of 53 times, and commented on a total of 36 times. Engagement per post ranges from 0 to 5 'likes', and 0 to 8 comments, with each post averaging 1.3 'likes' and 0.9 comments. A total of nine received zero 'likes' and comments. However of these nine instances of zero engagement, all but one of them occurred in the six months between October 2012 and March 2013, during the group's launch. During the nine month period from April 2013 to February 2014, there was only one discussion post (a job posting) with zero 'likes' or comments. During the six-month launch period, each post averaged 0.7 'likes' and 0.6 comments. In comparison, during the latter 9-month period each post

averaged 1.8 'likes' and 1.1 comments. This data clearly shows that engagement per discussion post is increasing over time.

The LinkedIn posts which invite the most engagement, both comments and 'likes', consistently contrast those with the least interaction in a few main areas: They are neutral in content, new information for the group, and relevant to CTE. Posts that received little engagement were often repetitive information that had appeared in previous discussions. In addition, posts that included content that could be professionally taboo received little interaction. For example, a discussion post about an available CTE position received no engagement. It should certainly be considered that clicking 'like' on a job posting in a public forum shared with your peers could lead to negative outcomes in the workplace of employed individuals.

Regarding discussion post engagement correlations, it was surprising that no significant correlation was found between posts that included photos and/or links to those posts that did not. It did not seem that the CTE LinkedIn members were effected in a significant way by the presence of a photo or link, or the lack there of. According to Lunsford, Ruszkiewicz, and Walters (2004) the presence of imagery is desirable for effective and engaging communications, so the lack of correlation here is quite surprising.

One post in particular created by far the most engagement with eight comments and five 'likes.' The post specifically shared a photo of Dr. Mooney and a title that noted: "An award was presented to Dr. Carol Mooney for her work in launching the Doctor of Education in Career and Technical Education." It is noteworthy that this post included photo, link to additional information, was new information for the group, and was also neutral in content. This post's success further confirms that in the professional context of LinkedIn, the subject of the post greatly affects the amount of feedback that will be received.

Chapter V: Discussion

Given society's expectation for real-time, multi-way engagement (Qualman, 2009; Dixon, 2005) and the prominence of technology in the lives of online graduate students, social media serves as a potentially effective vehicle for communicating with this audience. Student engagement is of special interest because research shows that the online graduate student's success stands to be positively affected by engagement, the results of which are seen through increased student retention and an improved learner experience through an engaged community of peers and mentors (Salter, 2012; Junco & Timm, 2008; Tinto, 1993). This research project was designed to determine if the CTE LinkedIn Group and the CTE eNewsletter have increased engagement for the CTE graduate students. As such, this study provided answers to the following research questions:

1. What are the strengths and weaknesses of the implemented Career and Technical Education graduate students emerging media campaign?

2. Has the emerging media campaign effected the engagement of the Career and Technical Education graduate student? In what ways?

If the CTE eNewsletter and/or the CTE LinkedIn Group prove to be successful in developing an increased level of engagement, there is a significant possibility for this success to be duplicated by other UW-Stout online graduate programs, as well as by similar programs at other universities.

As previously described, both quantitative and qualitative data has been reviewed to suit the needs of this study and provide reliable results (Hughes & Hayhoe, 2008). To best answer the research questions present in this study this method was focused further on a concurrent embedded strategy, specifically emphasizing qualitative data (Creswell, 2009). While the

existing metrics data of the eNewsletter and LinkedIn Group was essential in reviewing the trajectory of increased engagement created by the CTE emerging media campaign, more detailed information and insightful opinions were gleaned from the CTE graduate student audience via an online survey. To aid in producing valid study results the entire 59 CTE graduate student population was invited to partake in the survey. The response rate was 63 percent, resulting in margin of error of plus or minus 13.

Summary of Problem History

The CTE graduate student audience is comprised of a group of 59 adult learners ranging from 24-64 years of age, but with 63 percent focusing in the 30-49 year age range (University of Wisconsin-Stout, January 21, 2014). These graduate students are enrolled in the MS, EdS, and EdD CTE programs; each of which offer a combination of online and face-to-face coursework, suited specifically to the busy schedules of the working adult. Further, many of these working adults are employed by one of Wisconsin's sixteen public technical colleges (Dr. C. Mooney, personal communication, September 13, 2012).

Since May 3, 2010, an eNewsletter has been sent to the CTE graduate students using Emma, an online email marketing service, to communicate CTE program information and CTE news four times per month on average (Emma.com, n.d.b). This eNewsletter underwent a redesign in November 2012 to improve its readability, appearance, and functionality in an effort to better inform and engage the CTE graduate students. This redesign was ultimately successful, seeing increased open rates grow from 21 to 51 percent, and click-through rates also increased, moving from one to nine percent. However, after the redesign it was realized that by nature the eNewsletter is a unilateral mode of communication, which struggles to actively engage the reader. This is demonstrated by the improved, but still disappointing nine percent click-through

rate. To better achieve multi-way communication a LinkedIn Group was developed, while also continuing to utilize the CTE eNewsletter. Although other mediums were reviewed, LinkedIn was ultimately chosen for its professional nature, popular platform, networking, and demographics that closely matched that of our working adult, graduate student audience. The CTE LinkedIn Group was established on October 29, 2012, and has been a place to share CTE program information. Discussions topics have included recognizing students, alumni, and faculty achievements; sharing CTE industry news and conference information; and CTE-related position openings. In the 18 months since launch, the group has grown to 82 members including students and alumni, UW-Stout CTE faculty, and also industry professionals.

Discussions are posted to the group an average of 2.5 each month, with 43 total discussion posts thus far. These 43 discussion posts have been 'liked' a total of 53 times, and commented on a total of 36 times, with per post engagement ranging from 0 to 5 'likes', and 0 to 8 comments and a per post average of 1.3 'likes' and 0.9 comment. During the six-month post-launch period, each post averaged 0.7 'likes' and 0.6 comments. In comparison, during the latter nine-month period each post averaged 1.8 'likes' and 1.1 comments. This data clearly shows that engagement per discussion post is gradually increasing over time.

Limitations

As the developer of the CTE LinkedIn Group and CTE eNewsletter redesign, this author is uniquely positioned to review the trajectory of the social media campaigns ability to engage the CTE graduate student. However, despite significant effort to avoid bias, there may be instances where it has played into the research due to the long term, ongoing role this author has played with the studied modes of communication.

The researched engagement created via the CTE LinkedIn Group is produced from the entire group membership; individuals who include the CTE graduate student audience, UW-Stout CTE faculty, and many CTE professionals. Because this varied membership is crucial for the group's function, it was not suitable to measure the engagement of the student population only due to the layered, interwoven-communications. As such, the engagement data that is pulled from the LinkedIn Group is admittedly skewed as it includes the entire membership, and not the CTE graduate student audience alone.

Conclusions

Research question 1: Has the social media campaign effected engagement of the Career and Technical Education graduate student? In what ways? The research data clearly shows that student engagement has indeed been effected in a positive way by the CTE emerging media campaign. The eNewsletter open rates have increased by 30 percent and click-through rates have increased by 8 percent. As stated however, the active engagement and community that is desired, is better suited to interaction available with the CTE LinkedIn Group.

Since its creation in October 2012, the LinkedIn Group has quickly increased to 82 members, and also boasts a gradually increasing comment and 'like' rate per discussion post. During the six-month period from October 2012 to March 2013, each post averaged 0.7 'likes' and 0.6 comments. In comparison, during the following 9-month period, April 2013 to February 2014, each post averaged 1.8 'likes' and 1.1 comments; showing that 'likes' have doubled and comments have nearly doubled. Further, survey results indicated that of the LinkedIn members, an overwhelming 95 percent had read a discussion post, while 42 percent had indicated having 'liked' a discussion post. In addition, 21 percent noted having shared a post, 16 percent had commented on a post, and 5 percent had written a discussion post. The combination of this data

clearly shows that not only has engagement been created by the LinkedIn Group, but also engagement per discussion post is increasing over time.

In possibly the most telling results regarding the LinkedIn Group, the CTE graduate students indicated their overwhelming support of the group in response to the following survey question: "Please describe in what way/s the MS, EdS, and EdD CTE LinkedIn Group has been beneficial to you as a student and/or professional." In short answer form, 80 percent of students wrote they found community and/or connectivity; of the respondents 40 percent noted the CTE program updates; and of the respondents 30 percent of respondents commented on networking. Clearly the students have indicated they do, indeed, find connections and community within the CTE LinkedIn Group.

Research has shown that engagement and community are needed by the online student and, further, providing this opportunity to graduate students has been shown to positively affect student success and retention (Salter, 2012; Junco & Timm, 2008; Tinto, 1993). This is an exciting potential outcome, which should be researched further to determine the specific retention results of the successful engagement of the current group of 59 CTE graduate students.

Research question 2: What are the strengths and weaknesses of the implemented Career and Technical Education graduate students emerging media campaign?

Strengths of the CTE eNewsletter. Survey responses indicated that of those that received the eNewsletter, 83 percent of students read the eNewsletter. In addition, of those that received the eNewsletter, 38 percent had visited a provided link. In the survey the majority of the graduate student audience indicated that they found the eNewsletter helpful: Fourteen percent strongly agreed, 55 percent agreed, 28 percent neither agreed nor disagreed, 0 percent disagreed, and 3 percent strongly disagreed. (It should be noted that the 3 percent 'strongly disagreed'

group is formed of a single user, who also indicated that although they receive the eNewsletter, they have never read it.) Stated concisely, the data clearly shows that 69 percent of students found the CTE eNewsletter helpful. This is certainly a positive response, showing student information needs are being met with this media. As such, the eNewsletter should remain part of the CTE emerging media campaign.

Weaknesses of the CTE eNewsletter. In the survey, 17 percent of respondents indicated that they did not receive the eNewsletter. It is a significant concern that the CTE eNewsletter at times does not appear in a student's inbox, but rather is funneled to their junk mail folder. While this is a known issue with email marketing service providers, including Emma and others, previously conducted research did not locate an immediate solution to the problem.

While students seem to receive email sent directly from UW-Stout email accounts, it is not reasonable to expect program directors or administrators to attempt to maintain ever-changing student databases within their personal UW-Stout email accounts as they are ill equipped for this functionality. A potential solution may be that as students are enrolled, they be instructed to add 'uwstout.edu' to their email safe list, which in theory should avoid emails being caught in junk filters. However, in the past, it has been shown that this practice does not always produce the expected result. As such, this is certainly an unacceptable problem that needs to be further addressed.

As noted previously, the eNewsletter alone does not create the active engagement or community beneficial to the online student. Despite attempts to invite feedback and encourage engagement, 10 percent of the survey respondents indicated that they had not even read the eNewsletter. It should be considered that Dixon (2012) states that collaboration can indeed be fostered via an eNewsletter and specifically describes enlisting the use of questions in the form

of poll. Going forward this is a possibility that could entice additional eNewsletter engagement, while also coupled with useful response from the audience.

Strengths of the CTE LinkedIn Group. In the survey, respondents indicated that 74 percent are members of LinkedIn, 23 percent are not members, and 3 percent are unsure if they are members. Further, survey results indicated that of the LinkedIn members an overwhelming 95 percent had read a CTE LinkedIn Group discussion post, while 42 percent had indicated having 'liked' a discussion post, 21 percent noted having shared a post, 16 percent had commented on a post, and 5 percent had written a discussion post. These figures are certainly reassuring that LinkedIn was indeed a good choice for the online community for the CTE adult learner audience.

A major strength of the LinkedIn Group is its ability to generate engagement and community online, as discussed in the previous research question. To be specific, 80 percent of LinkedIn Group members indicated that they found community and/or connectivity within the group. It is also important to note that questions related to community and connectivity were not present in the survey–these results organically occurred in the short answer areas of the survey.

Also discussed in research question one, was the ability for this engagement and community to positively affect student retention and success (Salter, 2012; Junco & Timm, 2008; Tinto, 1993). Salter (2012) states this clearly: One of the greatest challenges of the online student is to "establish a social presence and to cope with the isolation that is often attributed to distance education: their "e-solation," as it were" (p. 219). This study has shown that the LinkedIn Group is well poised to serve this very need for the CTE graduate students.

Another strength of the LinkedIn Group is its reach. By totaling the networks of each of the 82 members, the group's reach is 9,772 LinkedIn members. It is important to consider that

when a member posts, comments, or 'likes' within the group, their respective network can then see the CTE LinkedIn Group, as well as the member's recent activity. However, it is important to note that it is improbable that the 9,772 members in the network reach total are all unique individuals. Regardless, if the level of engagement continues to increase as it has thus far, the 9,772 LinkedIn members will continue to see posts from the CTE LinkedIn Group and the membership and reach will, in turn, grow exponentially.

Weaknesses of the CTE LinkedIn Group. When the CTE graduate students were asked if they are members of LinkedIn, 23 percent indicated they are not. Of this 23 percent, they overwhelmingly cited lack of time and privacy concerns with online profiles as their reason for not joining. It is beneficial to note the concerns of the non-LinkedIn members, as this raises the need for some students to be educated about the benefits of LinkedIn and the desirability of having a profile, in an effort to sway these stances. Of course addressing time constraints presents a difficulty, however it has been discussed to tie the CTE LinkedIn Group into the discussions of CTE coursework (Dr. C. Mooney, personal communication, September 13, 2012). Of course, it is not likely that 100 percent of the CTE graduate student audience will be convinced that they need to create a LinkedIn profile, join the group, and remain active in discussions. As such, the CTE LinkedIn Group will not aid the entire CTE graduate student audience, yet with the positive responses it is certainly an effective tool to engage the majority.

According to survey results, the major weakness of the CTE LinkedIn Group is the fairly infrequent content posts. From October 2012 to February 2014, there have been 43 discussion posts, averaging 2.5 discussion posts each month. In the survey, 50 percent of LinkedIn Group member respondents requested more content be added, with 60 percent of these respondents specifically desiring more information on industry trends and happenings in CTE. One student

expressed their desire in the following manner: "The Group could be much more beneficial if it were being more strongly utilized by the Group's creators/facilitators. Often, when I check the site, nothing new is offered so I lose interest – or, don't find it valuable." Further, in the survey students specifically requested content regarding: CTE industry news, legislative updates, leadership trends, job openings, research resources and collaboration opportunities. While content of this very nature currently exists within the LinkedIn Group, it seems clear that the students want to see more content in general. Further, this content frequency improvement likely explains the high number (90 percent) of LinkedIn Group members who indicated in the survey that they frequent the Group's site only 0-2 times each week.

Although further research would be needed to prove the reliability of this statement, it seems that the students are looking to the CTE LinkedIn Group to be a resource for funneling them CTE-related information with which they should be familiar. If this assumption is accurate, a significant opportunity is available in that the CTE LinkedIn Group could potentially become a time-saver for the students. By addressing the student's need to stay relevant in the CTE industry, the LinkedIn Group can directly resolve the earlier described concerns related to time constraints limiting students' LinkedIn Group participation.

Another trend that surfaced within the survey results was the desire to see discussion posts authored by new contributors. Of the 50 percent of respondents who indicated a desire to see more involvement in the group, 80 percent of those noted that the involvement is desired from contributors other than the group's facilitators; namely other faculty, students, and industry professionals. Of the group's 43 discussion posts, the site's administrators, Dr. Mooney and this author, created 36 of them. Another frequent discussion poster is Nancy Chapko, an EdD CTE student and UW-Stout CTE Ambassador, who works at Madison Area Technical College. An

immediate potential solution would be to request the current thirteen CTE Ambassadors to frequently post to group. This would likely also add valuable perspective from various technical colleges and also from the different focus areas within CTE.

In regards to content, it should also be noted that within the survey multiple students suggested that tying the group to communications already required within their coursework could expand LinkedIn Group discussions. This solution could both expand student experiences with social media, and further educate students about the CTE LinkedIn Group itself, a potential improvement certainly worth exploring.

Additional Findings and Recommendations

The desire to engage an online community is a common theme currently in emerging media. Richmond (2014) states,

> There is a lot of discussion about [engagement]… in the technology sphere
>
> overall. It is not about how many times you post, or how many people are
>
> following you, but it is about what happens to the [information] you put out there.
>
> Are people interacting with it? Because a lot of studies have shown if people
>
> interact with your content [and] share it with their friends, it has this multiplier
>
> effect and gets your word out to a much broader [network]… (00:12:50).

This perspective further highlights this study's findings that a well-selected social media platform paired with frequently posted, relevant content can indeed aid the engagement and community desired for the online student. Yet, as discussed earlier, it is worth highlighting that the challenge to social media is in providing appropriate content and continual persistence in building and maintaining the online community.

Qualman (2009) states, "Good businesses realize that it's not all about the instant win of getting someone into an [email] database. Rather it is cultivating that relationship via social media. If [it is] done correctly, you will have a relationship that lasts a lifetime" (p. 50). Many of the CTE graduate alumni continue to guide acquaintances to enroll in UW-Stout's CTE programs, according to Dr. Mooney (personal communication, September 13, 2012). This reciprocating relationship will likely be enhanced by the CTE LinkedIn Group; if alumni continue to be aided in their professional lives by the networks they developed while at UW-Stout one can reason that they may also seek to return to the university if in the future they desire advanced education. Further, while considering this potential it is important to again note that the current 82-member LinkedIn Group has a total network reach of 9,772 individuals; while it is likely that these are not all unique individuals it is still a respectable total. It should also be considered that the majority of those individuals are likely CTE professionals at various stages of their careers and educational goals. As such, the activities of the CTE LinkedIn Group are appearing before a very defined, targeted audience of individuals whom may be interested in one of the UW-Stout CTE graduate programs.

In correlation to this benefit, it is fitting that an equal, but student-focused, secondary benefit be uncovered. For the students utilizing the CTE LinkedIn Group, this benefit is the built-in professional network that may aid them well into their future. The very nature of the CTE LinkedIn Group allows students and alumni to quickly and effectively increase key contacts within their field. This active, functioning, professionally relevant network may very likely assist students in their search for employment, not only post-graduation, but for the remainder of their careers. This beneficial relationship fits the enduring type referred to by Qualman (2008)

and, as such, the potential for group growth is quite exciting for the students, alumni, and CTE graduate programs themselves.

Salter (2012) states, "Although social media may appear to be an easy solution to the challenge of e-solation and retention of online students, it's quite possible that higher education may not have a complete answer to that question before the variables shift again" (p. 219). It seems that the opportunity to develop social media communities for graduate students is now. As graduate students enroll in online programing, research shows their need for engagement and community is very real. By answering these needs, the CTE graduate programs can define themselves yet further as the education provider that strives to support its online students and alumni. Of course, as Wisconsin universities struggle to survive with decreased state funding, the very real challenge to this prime opportunity is the ability to align the necessary hours and wages required to successfully develop and manage online communities in the ever-evolving world of emerging media.

Further research opportunities. A recent development for LinkedIn is LinkedIn Higher Education: According to their website this service supports higher education professionals in educating students, contacting alumni, marketing, and admissions outreach (University.LinkedIn.com, March 23, 2014). This new service should certainly be explored, as it may offer additional benefits and fill unique needs to the development of a university-based LinkedIn group.

Further research is appropriate for the CTE LinkedIn Group and eNewsletter, as well as for social media's ability as a whole to engage and create community for the online student. It will be crucial to test CTE emerging media campaign's effectiveness over time, and essential to

have figures directly revealing any correlation between the resulting engagement and related changes in retention.

Given the ever-evolving nature of emerging media, it is likely that the methods of online student engagement will likely change in the future (Salter, 2012), and this will certainly require additional research. However, currently the opportunity exists within emerging media to effectively engage students in an online community, provided the medium is well selected and content is both relevant and frequently posted. With this knowledge, there is significant possibility for other UW-Stout online graduate programs, as well as similar programs at other universities to utilize emerging media to engage students and increase retention.

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Appendix: CTE Graduate Student Survey

Section One:

1. Do you receive the CTE eNewsletter? (Yes; No)

2. In the past, have you ever read or interacted with the CTE eNewsletter? (Click all that apply: Read the eNewsletter; Visited a link provided in the eNewsletter; Forwarded the eNewsletter to another person; Responded to the sender of the eNewsletter to comment or inquire on information within the eNewsletter; None of the above.)

3. Is the CTE eNewsletter helpful for you? (Answer options: Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree.)

4. What would make the CTE eNewsletter more helpful for you? (Short answer.)

Section Two

1. Are you a member of LinkedIn, the professional networking website? (Yes; No; Unsure)

2. How many times each week do you visit/use LinkedIn? (0-2, 3-5, 6-8, 9-11, 12+)

3. What events prompt you to visit LinkedIn? (Select all that apply: Simply part of my daily/weekly routine; Desire to search and add new professional contacts; Receiving email notifications from LinkedIn; Other)

4. In what ways do you use LinkedIn? (Select all that apply: Connecting with other professionals; Keeping up-to-date on industry trends and news; Job searching; Other)

Section Three

1. Are you a member of the MS, EdS and EdD Career and Technical Education (CTE) LinkedIn group? (Yes; No; Unsure)

2. How many times each week do you visit/use the MS, EdS, and EdD CTE LinkedIn Group? (0-2, 3-5, 6-8, 9-11, 12+)

3. What typically prompts you to visit the MS, EdS, and EdD CTE LinkedIn Group? (Select all that apply: Simply part of my daily/weekly routine; Desire to search and add new professional contacts; Receiving email notifications from LinkedIn; Other

4. In the past, in what ways have you read or interacted with the MS, EdS, and EdD CTE LinkedIn Group? (Select all that apply: Read a posts/update; 'Liked' a post/update; Shared a post/update; Commented on a post/update; Written a post/update)

Section Four

1. Is the CTE LinkedIn group beneficial for you as a student and/or professional? (Answer options: Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree.)

2. Is the MS, EdS, and EdD CTE LinkedIn Group beneficial to you as a student and/or professional?

3. Please describe in what way/s the MS, EdS, and EdD CTE LinkedIn Group has been beneficial to you as a student and/or professional.

4. What would make the CTE LinkedIn group more beneficial to you as a student and professional?

Section Five

1. Please select your age range: 20-27, 28-34, 35-41, 42-48, 49-56, 57-65

2. Thank you for your time in participating in this research. If you have any additional comments related to the topic of the MS, EdS, and EdD CTE emerging media campaign please feel welcome to share them here. (Short Answer.)