

Engaging University Alumni Through Social Media: Strategies for Creating Community

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This study examines how colleges and universities use social media in order to inspire higher levels of identification with the institution and build a sense of community within their alumni networks. Qualitative analysis of interviews with university social media managers is coupled with systematic content analysis of 66 university Facebook pages to

propose a new model using four content themes to generate higher levels of engagement on social media: *pride points, relevance, unifying imagery* and *nostalgia*.

Keywords: social media, university, alumni, Facebook, social media, giving

As social media continue to dramatically change the way we communicate, higher education institutions are learning how to take advantage of the platforms to build their brands. It is impossible to place a numerical value on education. As Plato stated, “knowledge is the food of the soul.” Yet in today’s higher education environment, that knowledge comes with a hefty price tag. The cost of college increases yearly, reaching almost \$60,000 per year at many schools. In the past 35 years, the cost of attending college has risen more than four times faster than the rate of inflation (Campos, 2015). At least a portion of this exponential rise in costs can be attributed to projects such as state-of-the-art gymnasiums, plush dormitories, and immaculate grounds. Universities driven by the desire to rise higher in college rankings such as those provided by *US News and World Report* are forced to engage in an arms race of sorts to keep up with their competitor schools or risk falling in the rankings. Lower-ranked universities face the risk of a shortage of applicants, and, in turn, a lower number of enrolled students and their tuition dollars (Meredith, 2004). Sweet Briar College and Tennessee Temple University, for example, were forced to close their doors after long

histories of educating (Bidwell, 2015). Whether or not these luxury projects are necessary remains to be seen, but what is certain is that they are costly. In an economy that remains in recovery from the 2008 recession, public universities especially have been forced to endure large cuts in government funding. Both private and public universities have struggled as the tightening of institutional budgets has increasingly added pressure to find other sources of financial support.

Institutions are now more reliant than ever upon another source of funding: private donors. The U.S. Department of Education reports that private, nonprofit colleges comprised more than a quarter of their 2013 revenue and investment returns in the form of private gifts, grants, and contracts—up more than 4% from the previous year, and we can expect the trend to continue (U.S. Department of Education, 2015). These donations are often made by alumni with the desire to “give back” to their respective alma maters. In order to make up for lost funding, colleges and universities have thrown themselves into pursuing these alumni. The challenge these universities face is that alumni are no longer physically on campus. Time creates distance between graduates and their college experiences. How can these institutions reach out to alumni and make them interested in donating to their alma maters?

Studies demonstrate that *identification* with a university is an important factor in alumni donations in the sense that we know the closer an alumna perceives herself to her university, the more likely she is to donate (Levine 2008; Parsons & Wethington 1996). Universities use many strategies to increase identification in their alumni networks, including organizing and sponsoring alumni events in different cities, homecoming events, periodic reunions, etc. Marketing communication has traditionally come in the forms of *printed* materials such as alumni newsletters, direct mail and brochures; *verbally* in the form of telephone calls and face-to-face solicitation; and, more recently, via *online* services such as emails and e-newsletters. Universities have begun to direct their capitalization efforts via direct platforms to communicate and interact with those outside of the university: social media.

The purpose of this study is to understand what strategies social media managers within higher education use to communicate with their school’s alumni on Facebook and to examine what impact those strategies have on the engagement of Facebook posts.

LITERATURE REVIEW

Colleges and universities have recognized that social media platforms offer immense potential for public relations and communication with their alumni. Loyal alumni networks have always been an important source of funding for universities, so universities have an inherent interest in pursuing communications strategies that allow them to establish relationships with potential donors. Kelly (2012) argues that fundraising is a function of public relations and the prevailing view is that public relations is a necessity for fundraising yet this view is mostly ignored in the literature. As universities (and other non-profits) develop sophisticated campaigns for the four traditional programs of fundraising (annual giving, major gifts, planned giving, and capital campaigns), the value that relationships play in securing donor participation in giving programs must be recognized (Waters, 2009). O’Neil (2007) says that by dedicating more time to donor relations and stewardship, these principles can result in increased donor loyalty to the organization. Based on past studies and experiments, we know that three strategies can make a big difference in university alumni fundraising: communication, identification, and branding.

Communication

Of all strategies, more frequent *communication* with potential donors is positively associated with alumni donations. *The Chronicle of Philanthropy* (2005) reports that donors of all stripes quit giving because they feel as if their contributions don’t make a difference or because the organization has not kept them sufficiently informed (Levine, 2008). In general, the more communication pieces an alum receives, the more likely he is to give financially back to the school (Stephenson & Bell, 2014; Porter, Hartman, & Johnson, 2011). Alumni receiving communication pieces offering some kind of a personal touch—like a handwritten note from a current student or a brief note from a personal connection at the school—are more likely to become donors and are more likely to give *more* than those who don’t get the personal treatment.

Parsons and Wethington (1996) assert that regular communication between an organization and its potential donors can have a far greater impact than any current fundraising campaign, but also highlight another important factor—the *type* of

communication pieces being sent out. They conducted an experiment that demonstrates that when institutions embark upon mass fundraising appeals using brochures and cover letters, the response is more positive when there is a “personal touch.” The authors used a sample of 622 alumni with little or no history of giving that they split into two random groups. Half received a cover letter with a brochure only, and the other half received a brief personal note written by a student that touched upon an experience shared by the alumni recipient. Cash gifts were received from 47 recipients of the original 622 (7.5%), totaling \$5,600. Of the 311 alumni who received personal notes, 9.3% chose to give, compared to 5.8% who did not receive such a note. While this difference is not statistically significant, there is a marked difference in terms of monetary amounts, the former group donating a total of \$3,675 and the latter donating \$1,925, showing the effectiveness of adding a personal touch to these communications. These studies clearly demonstrate the importance that lies in both frequency and type of communications pieces with alumni by colleges and universities who seek to procure donations. What these studies fail to provide, though, is an explanation for this phenomenon.

Identification

Alumni who were actively involved with student organizations while on campus are more likely to identify with their alma mater, and strong alumni identification leads to donations (Porter, Hartman, & Johnson, 2011; Wastyn, 2009). *Branding*, meanwhile, can help to strengthen identification and schools use this knowledge to turn blanket alumni communication efforts into *directed* communication aimed at promoting a specific university brand. In short, the better the alumni brand identification with the school, the higher the number of alumni donors.

Porter et al. (2011) provide a model of identification for understanding why individuals choose to give to organizations, exploring both the factors in the external environment that increase the perceived status of the organization, and the individual experiences that might promote a positive response to the organization. The authors used an online questionnaire, sent to 110 participants from two groups: mid-career professionals and executives participating in a university advisory program. Responses represented 74 different undergraduate universities from 26 U.S. states. The authors

explored different factors that work to enhance college identification, including perceived academic prestige, perceived athletic prestige, attendance of university sponsored cultural events, attendance of academic events and student organization involvement.

Student organization involvement during their time at the university was most positively associated with alumni identification, but all of these factors contribute to the experience of alumni while attending a university, and to their memories of that experience as a whole. The authors conclude that increasing an alum's sense of oneness with the school has a direct impact on alumni donations and university promotions. While Parsons and Wethington (1996) do not address the aspect of identity, their study demonstrates that highlighting these past experiences—via the personal note, for example—serves to increase alumni identification, and therefore yield greater returns.

Branding

We know that university branding, paired with frequent communication of that brand to alumni, is positively associated with greater identification and higher levels of expected donations, yet we know little about how these strategies apply to social media use by universities. Social media platforms offer a different way for universities to communicate with their alumni network. Colleges and universities using Facebook pages, Twitter accounts and other social media outlets are now able to reach greater numbers of alumni more easily and with less cost. These social media are characterized by a different dynamic of communication—instead of the traditional forms of communication being directed at each particular alum, it allows for mass distribution, directed at all alumni that choose to follow university accounts. Social media offer the advantage of being both *mass/impersonal* communication (not unlike what we'd see in an alumni magazine, for example) and *interpersonal/direct*.

To increase identification further, colleges and universities have begun to employ complex branding and marketing tactics (Wæraas & Solbakk, 2009). These practices allow universities to turn blanket alumni communication into *directed* communication, communication all directed at promoting a specific university brand. Stephenson and Bell (2014) explain that university brand formation offers a number of benefits, including the establishment of prestige and legitimacy, the communication of organizational values,

differentiation from competitor institutions, and the creation of a sense of belonging through life-long membership. Judson, Aurand, Gorchels, and Gordon (2008) conducted a study seeking to investigate the effectiveness of internal branding within higher education. They used a quantitative survey-based method, sending online surveys to 2,619 university administrators at public and private universities. Of these surveys, 319 were returned, 66% from public institutions and 34% from private institutions. The authors use four items to determine brand strength among administrators: 1) the *distinctiveness* of their university brand, 2) the *clarity* of their university's branding message, 3) the degree of *university involvement* in the promotion of that brand, and 4) the university's *brand image* as compared to that of prospective students' perceptions relative to their own. The authors report that internal branding efforts are proving to be effective, especially in private institutions, and that universities are involved in the promotions of these brands.

While Judson et al. (2008) provide a useful analysis of branding efforts within the university, the analysis does not demonstrate whether or not these branding efforts are effective in influencing those outside of it, something which Stephenson and Bell (2014) set out to do. They asked three questions: 1) does university branding affect donations? 2) why do alumni choose to donate? and 3) why do alumni choose not to donate? To answer these questions, the authors use a quantitative survey approach conducted at a medium-sized, state-run institution, of about 15,000 students in the Mid-Atlantic region of the United States. Surveys were sent to 45,015 alumni and 2,763 usable surveys were returned. The authors define brand identification as "the propensity of an individual to define the self by association with an organization" (179). Their results suggest that as the level of alumni brand identification with the university increases, the expected number of donations increases.

Together these studies demonstrate that successful university branding, paired with frequent communication of that brand to alumni, is positively associated with greater identification and higher levels of expected donations, yet they fail to address how these issues apply to social media use by universities. Social media platforms offer a new and completely different way for universities to communicate with their alumni network, something that is largely understudied in the literature. Colleges and universities, using Facebook pages, Twitter accounts and other social media outlets, are now able to reach

greater numbers of alumni more easily and with less cost. These social media are characterized by a different dynamic of communication—instead of the traditional forms of communication being directed at each particular alumnus, it allows for mass communication, directed at all alumni who choose to follow university accounts. What follows is that this form of communication is inherently impersonal, and as demonstrated by Parsons and Wethington (1996) the less personal, the lower the response rate. Examined in that light, it might seem as if social media outlets are a useless development in the creation higher alumni identification levels and solidarity.

Yet there is another aspect of social media that works to remedy this shortcoming—Facebook pages and Twitter accounts *visually* create a sense of community. On Facebook, users can see exactly how many other people have liked, commented on, and shared (reposted) a specific post. Preece (2001) offers a way to measure the success of an online community, defining sociability as the number of participants in a community, the number of messages per unit of time, and members' satisfaction. On social media, this sociability is measured as engagement. According to Preece, the higher the number is, the greater the sense of value of the community. With this community being presented in such a visible way, people are motivated to participate, presumably wanting to be a part of something that is clearly successful. The level of engagement serves as both an indicator for universities that their communication is being received and allows for those associated with the university to communicate in return. Therefore, increasing engagement increases communication, which in turn increases identification with a university, something that has proved to be beneficial in regard to alumni giving levels.

To better understand how higher education social media messages are being constructed, this study employed both qualitative and quantitative methods to explore the following research questions:

RQ1: Are there any recurring content elements or themes being used in the posting strategies implemented by the higher education Facebook managers?

RQ2: How frequently are recurring content elements or themes being implemented into posting strategies?

RQ3: Does the presence of recurring content elements or themes have a positive impact on engagement?

RQ4: Which content elements or themes are most effective in having a positive impact on engagement?

METHODS

Study 1

In order to answer the first research question related to identifying the recurring content elements or themes the universities are using in their posting strategies, qualitative in-depth interviews were used to examine how colleges and universities use social media to construct their brand messaging online. A representative sample of nine administrators of Facebook pages from nine different universities was selected. This sample was selected from among the top 20 listed by *US News and World Report* in 2014; three schools from each of the categories of public universities, private universities and liberal arts colleges. The list of top 20 universities was used because these are often very involved with marketing and promotion, making it more likely for them to have social media pages. In addition, these universities often have loyal alumni networks, which are more active on social media pages such as Facebook (The Alumni Factor, 2013). We selected two schools from the East Coast (as the majority of the top 20 ranked higher education institutions are located here), and one school from the South, Midwest and West Coast. The remaining four were then chosen from these areas at random. This allowed for the opportunity to hear from a variety of university types located in geographically diverse areas. Interviews with the university administrators (N = 9) over the course of a month with the average interview lasting about an hour. This study was approved by our Institutional Review Board (IRB) and all participants provided written informed consents prior to commencement of the study.

The interview format was a set of 37 pre-written questions categorized into sections for personal information, goals, posting patterns and definitions of success. The iPhone recording app SuperNote was used to record in-person interviews, and QuickTime Player via laptop was used to record phone interviews. After recording, the interviews were transcribed and the recordings were deleted. During transcription, each respondent was given a pseudonym to preserve anonymity. After collecting and transcribing the interview data, the transcriptions were coded for recurring themes of goals, content categories and definitions of success.

Interviewers asked about the goals the universities aimed to accomplish with their marketing communication, specifically on their Facebook pages. We also wanted to know about the strategy used in crafting content (copy, visuals, video, etc.) for Facebook posts. We were able to learn the actual goals and strategies these administrators use on a day-to-day basis in an attempt to build an online community and, consequently, a stronger relationship with alumni. These interviews shed light on the process of how the goals and strategies of the administrators determine and influence social media content, and what content themes were used in the social media posts.

Assessments. Two broad dependent variables were examined. The first dependent variable is defined as the set of goals the university is aiming to accomplish with marketing communication on the Facebook pages. The second dependent variable is the strategy used in crafting content (copy, visuals, video, etc.) for the Facebook posts. These are measured through the interviews with the individuals, after which we break down the second dependent variable even further into content themes through transcription and coding. The independent variable is the type of university being examined: private university, public university, and liberal arts college.

RESULTS

RQ1: Are there any recurring content elements or themes being used in the posting strategies implemented by the higher education Facebook managers?

The most significant finding is that there are similar content themes used among higher education Facebook page community managers. In analyzing the interview transcripts, four content themes emerged. Discussed repeatedly by participants, these content themes were used to try to increase engagement on their Facebook posts. These four content themes are: 1) *pride points*, which give the university constituents something that they can be proud of and want to associate themselves with, causing them to engage with the post; 2) *relevance*, such as when a university is involved in a timely issue like financial aid or racial reform; 3) *unifying imagery*, demonstrated by a shared recognition by all interview participants of the fact that Facebook posts, which include an image have greater engagement than those that don't; 4) *nostalgia*, meaning that alumni sense of

identity is strengthened when they are able to reconnect with the memories associated with the time they spent at that university.

Pride Points. In our interviews, when asked why specific posts were successful, almost every participant mentioned something about the ability to inspire pride in those associated with the university. Interviewee Richard Nimmons (Public University) explains the first of these: “We look to share things that are going to make our community prideful and excited about the university and where we’re going.” Interviewee Linda Theresa (Liberal Arts) shares this view: “What I’m finding is focusing on the positive like I call it the rah-rah stuff like the cheerleader... Awesome stuff is what reaches across the audiences.” Things that achieve such effects and inspire pride in fans are things such as impressive research news, sports wins, and university achievements. When asked about a negative example—what posts tended to be most unsuccessful—participants almost always supplied an answer along the lines of “university news” because those posts are irrelevant to anyone outside of the university at the time of posting. Additionally, Interviewee Linda Theresa (Liberal Arts) explains that some posts are unsuccessful because: “This may come across kind of cheesy. I’m just going to say it. They don’t tug at the heartstrings. They don’t tie into that campus pride.”

Relevance. Mark Jamestein (Liberal Arts) touches on a similar, yet slightly different point: “Our alums are proud of things like when we’re relevant. “We were in Time Magazine. We were in Time Magazine.’ That’s what alumni said. They don’t say, ‘[The University] was in Time Magazine,’ they say ‘we.’” Relevance is something that generates a great sense of satisfaction and achievement within a university’s fan-base. Things such as school rankings and being featured in top tier news publications increase the importance of a university in the eyes of someone associated with it—it adds validity to it and users seek to associate that validity in order to make themselves feel good. Interviewees believe that when a school proves that it is relevant and involved in timely topics, then people feel the need to engage—they are more likely to engage with content that addresses an issue that actually matters and is not something that could be considered of relatively little importance.

Unifying Imagery. The unifying imagery theme is simply the shared recognition that a Facebook post including a visual element creates a mutual sense of focus, and also

requires less cognitive energy to process than a lengthy paragraph of text. This, and the fact that photos may take up more screen real estate, makes a Facebook user less likely to reject and gloss over. This imagery is useful for enhancing a sense of collective identity because followers are all viewing the same image. While it is easy for words to be misinterpreted and misconstrued, this is much more difficult to do with an image. With this in mind, it follows that a post that serves no other purpose than to present an image (as opposed to driving click-throughs to an article, etc.) would generate the highest levels of engagement, as they require the least cognitive energy and allow little opportunity for confrontational reception.

Nostalgia. Interviewee Sarah Collarman (Private University) brings up another aspect she believes causes posts to be successful in terms of engagement: “Reminiscence is a big factor, that down the road gets them [alumni] to give.” Without touching on the memories that tie alumni to their institutions, they begin to feel disconnected, seeing the university as a different place than from when went there—a different place from another, distant time. By touching upon those nostalgic memories, universities provide a way for alumni to continue to feel connected, and to provide their own input. In doing so, these alumni are reminded of the reasons why they loved that university and are perhaps more motivated to give to their alma mater.

Based on the experiences of our subjects, many believed that having clear social media strategies to follow would increase engagement and in turn heighten the audience’s sense of identification to the institution. This is something that is desirable to all social media page administrators, as more engagement means that their content will reach a higher percentage of users’ newsfeeds. Yet the success of these content themes is something that has only been anecdotally reported by these social media managers.

Study 2

To test whether these four content themes were present in Facebook posts and if in fact they were effective in generating higher levels of engagement, we employed a systematic content analysis on a sample of Facebook posts. Publicly available Facebook posts and their attributes were collected from 66 different university Facebook pages. Each Facebook post in the sample was coded for the presence or absence of each content

theme discovered in the in-depth interviews. After determining the presence of these content themes, we then analyzed the level of engagement associated with each type of ingredient.

Sample. A total of 66 U.S. higher education institutions were selected from the *U.S. News and World Report* Best Colleges Rankings for 2014. The top 20 schools under the categories of liberal arts colleges, private universities, and public universities were selected (the 66 total schools in the sample accounts also take into account schools that were tied for positions).

This sample of universities and colleges was chosen because they are the top schools in the U.S., as identified by a national consumer publication. The *U.S. News and World Report* methodology first categorizes schools by their mission, which is derived from the breakdown of types of higher education institutions as refined by the Carnegie Foundation for the Advancement of Teaching in 2010. Second, it uses quantitative measures that education experts have proposed as reliable indicators of academic quality and is based on their researched view of what matters in education (16 weighted indicators of academic excellence including: reputation, retention and faculty resources). The ranking methodology goes beyond financial or geographic attributes and also focuses on what may not be noticeable to the public. As with the qualitative method, these highly ranked universities were chosen because they are often very involved with promotion, making it more likely for them to use Facebook for their marketing communications.

Data were collected from the universities' Facebook pages that had been posted during September 2013 and April 2014 (two separate 30-day spans). This total number of posts was 5,586. We believe that sampling two different points in the academic year will help to capture the variation in post types that occur throughout the year. The month of September is generally the first month of the academic year for these universities, resulting in many back-to-school posts and posts promoting homecoming and alumni weekends. The month of April is when most schools participate in commencement preparation as well as heavy recruiting efforts, such as open houses and events for prospective students and their parents.

All 66 university Facebook pages were located by doing a simple search through Facebook's internal search engine by typing in the name of the school (e.g. "Harvard

University”). If the page could not be located using this method, we visited the school’s website and looked for a Facebook icon or look for the official social media pages.

The data were collected using Facebook’s Graph application programming interface (API). Using the API allowed us to query specific data in Javascript Object Node (JSON) format from the school Facebook pages for the aforementioned date ranges. A custom PHP script was then used to parse the JSON data returned from the API and store it in a MySQL relational database. Page-level data collected included school name and number of page likes. Post-level data collected includes: created time, post text, description, media type, number of characters in post, number of likes, number of comments, number of shares, number of tags and number of hashtags.

In the content analysis, the dependent variable is broadly defined as level of engagement, which is a metric frequently used to measure the success of a social media initiative. Engagement is defined as a visitor taking some action beyond viewing or reading, for example, clicking, re-tweeting, liking, sharing, and so on (Paine, 2011). More specifically, through the Facebook API, there are attributes for each post that can be used to measure engagement: likes, comments and shares. A “like” is when Facebook users indicate their accordance with a post by clicking Facebook’s corresponding “like” button under the post. A “comment” is when users contribute a written response or makes a remark to a post. The comments appear in a chronological thread (newest at the top, oldest at the bottom) beneath the post. Lastly, a “share” is when users click the “share” button beneath the post to republish that post on their own timeline or in a group (Page Post Metrics, 2015). That shared post will then appear in the feeds of their friends.

For our analysis, these three measures of engagement were examined in two ways: absolute engagement and proportional engagement. Absolute engagement is the total number of likes, comments or shares. Proportional engagement is the absolute engagement of likes, comments or shares controlled by the number of page followers (Peruta & Shields, 2014):

$$\frac{\text{likes} + \text{comments} + \text{shares}}{\text{number of page likes at end of sample date}}$$

The average organic reach of a brand's Facebook post is only 1.5 percent (McDermott 2014), so Facebook posts will have a larger organic reach for the school pages that have more page likes. Due to the variance in number of page likes for our sample, it would be inaccurate to simply compare the raw data for engagement.

The independent variable is defined as the type of content theme: pride point, relevance, unifying imagery and nostalgia (these themes were discovered in the qualitative method). Posts having *pride points* are defined as posts with content boasting university-specific news. This content is new information and does not include the profiling of existing buildings/programs/agendas. In addition, this content largely affects the university itself, and does not focus on research/achievements of professors beyond the university. This type includes the broadest range of content, from university sports news to posts about the new incoming class to the announcement of an upcoming campus-wide celebration.



Figure 1. Posts showing pride points.

Relevance is defined as posts which include content that promotes that the university is involved beyond its own sphere, has impact in the community/world, or contains promotions that add to the school's profile. These types of posts contained content such as media mentions, the visit of a particularly well-known celebrity, university rankings, a detailing of the achievement of a well-known alumnus, and posts which situate the university within national and worldwide movements, holidays, or events.

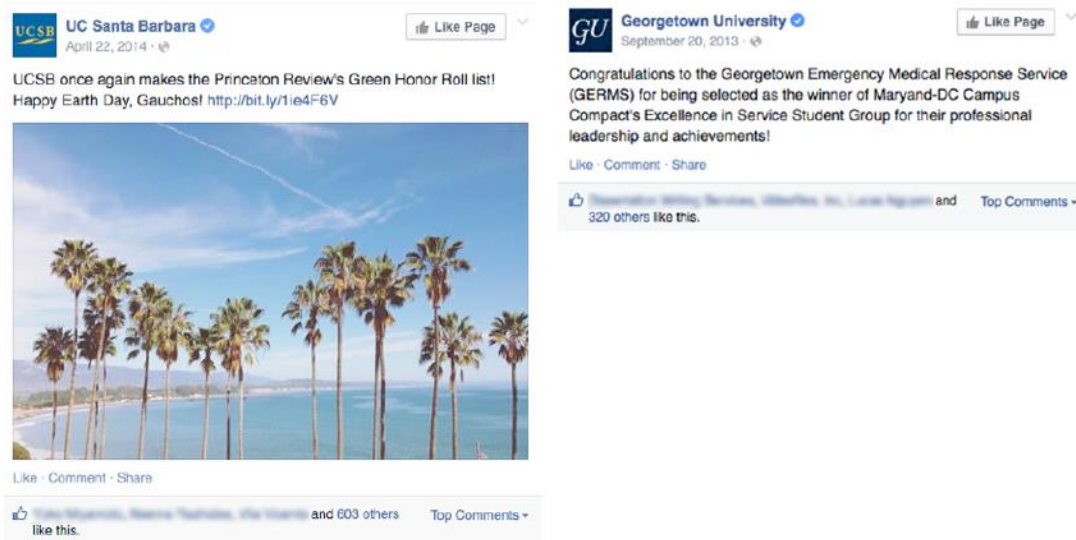


Figure 2. Posts showing examples of relevance.

Posts characterized by *unifying imagery* are posts that serve no other purpose than to present a photograph/visual image, perhaps with a short caption, and nothing more—no attempt to drive “click-throughs” or to present new information. Figure 3 shows examples of unifying imagery posts which include photographs of campus/buildings, cover photo or profile picture changes, or visuals of symbols associated with the university.

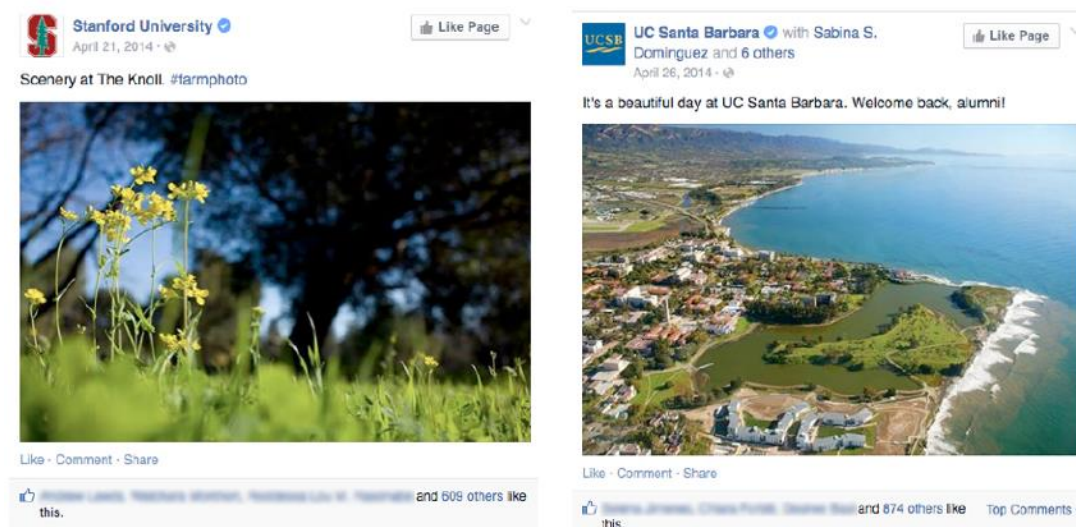


Figure 3. Posts showing unifying imagery.

Nostalgia was defined as posts which include content that somehow references the past, allowing alumni and current students to place themselves within the history of the

Engaging University Alumni Through Social Media: Strategies for Creating Community university. Examples include a “Throwback Thursday,” an old picture of campus, a story of an old campus tradition or event, anniversary posts or posts detailing historically significant alumni. An “on this day” post sharing university specific information of an occurrence on that particular day within the past is another example.



Figure 4. Posts showing nostalgia.

After defining these variables, every post was coded for each of these four content themes. A value of 1 was given if the post contained content for that theme, while a value of 0 was given if it did not. Posts that fulfilled more than one content theme were coded as such. The second author and a graduate student were trained and served as coders. To assess intercoder reliability, 100 Facebook posts not part of the sample were coded by the two coders as part of a pilot study to determine percentage agreement. For the main study, both coders independently coded 60 percent (n=3,352) of the posts in the sample, making sure to overlap a 10 percent subset (n=559) of the posts to ensure intercoder reliability. Recognizing that we should report a reliability index for content analysis that is more robust than percentage agreement, we calculated Scott's Pi and report the following values: unifying imagery (.95), pride point (.88), relevance (.83), and nostalgia (.85) (Lombard, Snyder-Dutch, & Bracken, 2002). After coding all posts from the sample, the data were imported into SPSS for analysis.

Outcome 2. To answer the second research question, the frequency of the four content themes of pride points, relevance, unifying imagery and nostalgia in the Facebook post sample (n=5,586) was measured. Table 1 shows the frequencies.

RQ2: How frequently are recurring content elements or themes being implemented into posting strategies?

Table 1

Frequencies of Content Themes in All Posts (n=5,586)

Content Theme	# of Posts	Percent
Unifying Imagery		
0	4,895	82.5
1	1,038	17.5
Total	5,586	100
Pride Point		
0	5,036	84.9
1	897	15.1
Total	5,586	100
Relevance		
0	5,541	93.4
1	392	6.6
Total	5,586	100
Nostalgia		
0	5,688	95.9
1	245	4.1
Total	5,586	100

Unifying imagery was the most common type of ingredient, appearing in 17.5% (n=1,038) of total posts. This is most likely because each and every social media administrator interviewed was aware of the industry research that shows that visuals and aesthetically pleasing images are immensely powerful in generating engagement from their users.

University pride point posts were also very present, characterizing 15.1% (n=897) of posts. This is probably due to the fact that a common strategy with many higher education Facebook pages, as explained by the interviewees, is to foster the school's reputation by sharing the positive news of the university in an attempt to inspire pride in followers.

Posts characterized by relevance were much less common, appearing in only 6.6% (n=392) of all posts. This is easily explained: the opportunity for these types of posts is inherently less frequent as they require the participation of the outside world. Media coverage for university participation in current events is dictated by the media outlets, rankings are only posted ever so often and special events and holidays occur only a few select days every year.

Lastly, nostalgic posts were the least common content theme of the four, emerging in only 4.1% posts (n=245) in total. This is perhaps due to the fact that it is less recognized as an engagement generator by social media managers—only three interviewees mentioned it as such, in contrast to the unanimous recognition of unifying imagery's success in generating high levels of engagement.

Engagement Scores. To answer research questions three and four, we analyzed our data by examining level of engagement by content theme.

RQ3: *Does the presence of recurring content elements or themes have a positive impact on engagement?*

RQ4: *Which content elements or themes are most effective in having a positive impact on engagement?*

The analysis indicates that the differences in positive engagement generated by pride points, relevance and unifying imagery were statistically significant ($p < 0.001$), while nostalgia was not. To answer RQ3 and RQ4, a t-test for each content theme was run using the absolute and proportional engagement measures. Table 3 shows the level of engagement by content theme.

Table 3

Content Themes by Types of Engagement (n=5,586)

Content Theme	Likes		Comments		Shares		Proportional Likes		Proportional Comments		Proportional Shares		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Unifying Imagery	0	215.69	552.73	5.98	15.98	23.75	85.56	0.22	0.44	0.01	0.03	0.02	0.08
	1	475.49	790.52*	10.68	24.29*	42.09	122.20*	0.43	0.60*	0.01	0.03*	0.03	0.09*
University Pride Point	0	206.24	506.04	5.24	14.56	22.10	84.37	0.21	0.42	0.01	0.02	0.02	0.07
	1	569.41	951.51*	15.60	28.56*	54.25	129.26*	0.48	0.69*	0.02	0.04*	0.05	0.13*
Relevance	0	238.06	564.57	6.36	17.15	21.71	73.80	0.23	0.43	0.01	0.03	0.02	0.07
	1	587.42	780.70*	13.08	24.51*	101.17	221.11*	0.64	0.83*	0.02	0.05*	0.10	0.20*
Nostalgia	0	260.46	613.31	6.70	17.89	26.80	93.86	0.25	0.48	0.01	0.03	0.02	0.08
	1	276.97	503.18	9.12	15.56	30.50	78.32	0.26	0.38	0.02	0.05*	0.02	0.06

Note: * = (p<0.001)

The presence of unifying imagery, the most common ingredient, increased each type of engagement by almost twice as much—posts featuring this content received 475 likes, on average, compared to 215 likes on posts which did not. Again, interview participants repeatedly described how successful these types of posts were in their experiences. These posts are particularly strong in terms of presenting a mutual focus of attention and fostering a shared mood, as their purpose is very simple and therefore not easily misinterpreted, making them the least confrontational content theme. Some schools used this theme for weekly content fixtures. For example, an image campaign called “Where are we Wednesday” would depict a picture focused on a very small, obscure piece of a building and ask that people guess where on campus the image was taken. However, interviewees noted that anecdotally this was something that was largely unsuccessful in terms of generating engagement.

University pride points, representing 15.1% of the sample, produced the largest effects in terms of increasing engagement levels. The engagement was strongest in terms of comments, almost tripling engagement from an average of five comments per post which did not feature this content theme, to 15 on posts which did. This indicates that these posts were most likely to not only elicit accord (a like) but also responses and comments from those connected to the university. Posts fulfilling the purpose of disseminating university news that is of an almost exclusively positive, prideful nature

are cognitively consistent with users' expectations, causing them to engage. Anecdotally, interviewees said that their audiences simply like to hear positive things about the institution they dedicated four years of their lives to. University pride points are effective in enforcing group members' sense of barriers to outsiders, as this news matters only to them. Things like the announcement of a new building to support the university's growth in a certain field, the news of the future incoming class receiving their acceptances, the expression of excitement for the new students coming to campus for the first time in September, or the sad goodbyes to seniors in preparation for commencement in April are all things that are incredibly specific to that university. Additionally, many universities within the sample had large athletics programs, especially in the public school category, so sports-related news such as big wins or congratulatory end of season posts were hugely present.

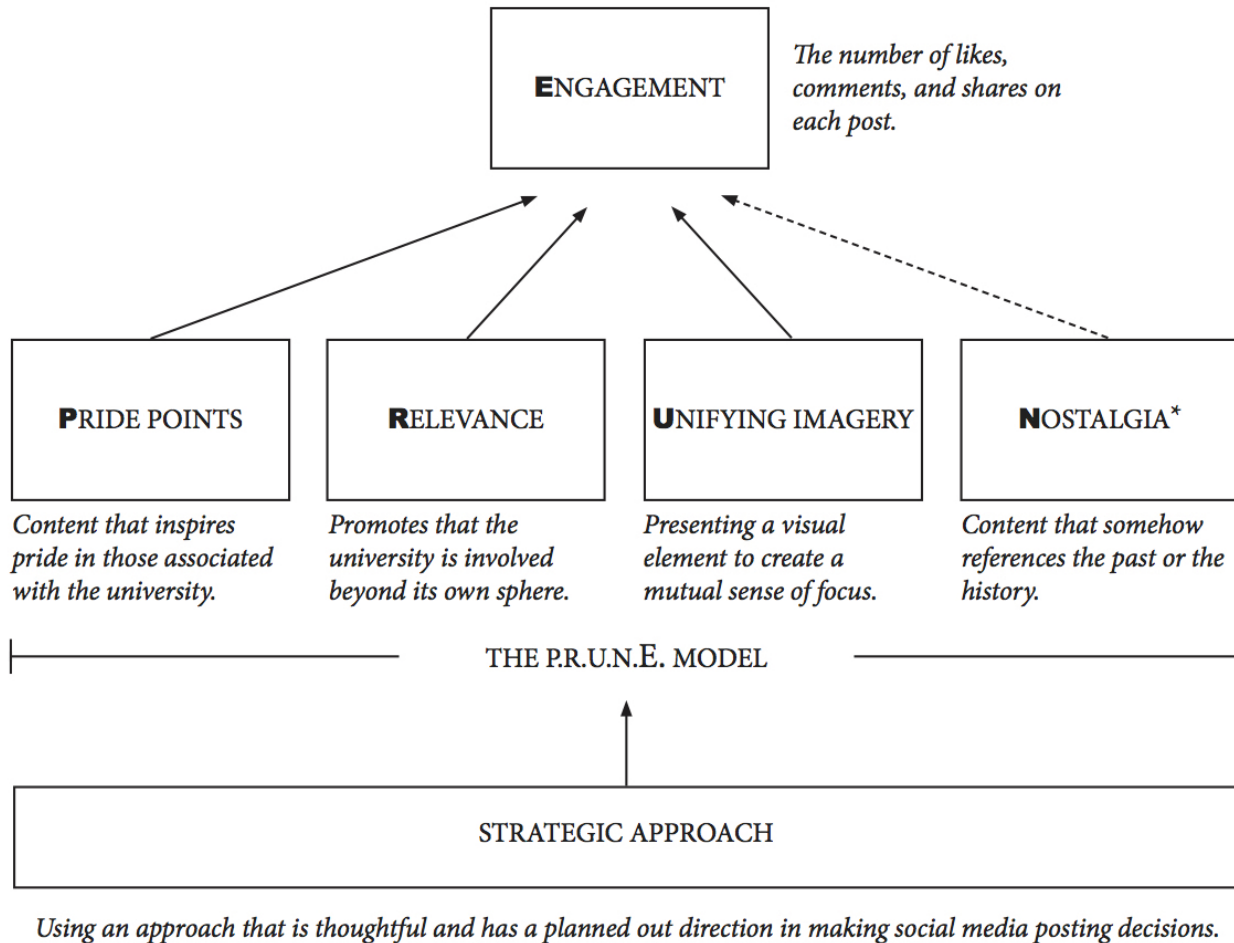
Posts indicating relevance were less frequent, were slightly more effective than unifying imagery in generating engagement, but slightly less so than university pride points. In terms of comments, it was the least effective engagement-generating type of content theme, only increasing the average number of comments from six to thirteen comments when present. When analyzing shares, though, it becomes clear that this ingredient is by far the most effective—receiving 101 shares on average when present in comparison to only 22 when not. We can assert that when schools post about having a relationship to the outside world, alumni of that school feel compelled to share it with their networks as if to say “look, [the school] cares about this, so should you.” Additionally, this type of post is especially effective in terms of barrier enforcement. These users are sharing that they associate themselves with the university (that many of their friends do not have an association with) and the post clearly presents itself as important enough to be shared on the user's timeline. University rankings are the most obvious example of this type of post. Interviewees stated that each time these posts appeared, the number of likes and shares were incredibly high. This finding was weakened by one specific habit of administrators—often when a high-profile celebrity (Hillary Clinton, Barack Obama) visited campus, schools published this news more frequently, diluting the engagement that could have been concentrated in one place.

Not only was nostalgia both the least common content theme as well as the least effective (only barely increasing each type of engagement), but it was also the only content theme which was not statistically significant. We anticipated that nostalgic posts would be effective due to Facebook users being appreciative of their institution's history. One interviewee described that one of their Facebook page's most successful posts of all time featured an image of the school's entrance exam from the 1800's. These types of posts, when used correctly, indicate the enduring legacy of the institution, lending a sense of safety and success to group members. The misuse of this content theme carried much higher consequences in terms of altering the findings because it was used infrequently. The most common misuse of this theme occurred in the form of overused, weekly social media campaigns, especially those including hashtags. In particular, some schools frequently posted "Throwback Thursdays." The low engagement suggests that alumni and current students are not able to place themselves within all parts of the history of the university.

DISCUSSION

This study seeks to examine the current landscape and issues at play in the use of social media by colleges and universities, apply this knowledge to how identification is created in a digital setting, and to test the validity of a new model. Facebook was selected as the focus of research because of its representative qualities as a social medium. All universities, forced by the Facebook algorithm, must now work to increase engagement on posts in order to generate a larger reach to their fan base. The emphasis these universities place on this desire to communicate with their followers demonstrates the fact that they understand, though perhaps not necessarily on a conscious level, that communication is what increases identification amongst users and builds a sense community. The descriptions they provided as to how they construct their Facebook posts points to this understanding.

Based on the overall findings of this study, we posit that using a strategic approach to social media in higher education can lead to higher engagement on social media posts. We present the following P.R.U.N.E. model:



** In this study, no statistical significance was found between nostalgia and engagement.*

Figure 5. The proposed P.R.U.N.E. model illustrates that using a strategic approach to social media can lead to higher engagement on social media posts.

The first finding of this study is that there are similarities in content themes for the posting strategies that higher education Facebook managers are using. Each of these themes revealed a different aspect of building a brand’s message online, uncovering the different attitudes these universities hold in their approach to posting on social media, and the factors which work to influence those attitudes. These content themes indicate that this space is characterized by change—there is no single, correct way that can be agreed on as to how someone should populate a university Facebook page in order to achieve the best results. There is not even an agreement as what the best results *are*, whether it be high numerical levels of engagement, lots of “click throughs” to the university’s Website, or simply representing the university in a genuine way and striking

a balance. There is still a significant amount of disagreement in this field; no one has yet written a book titled “University Facebook Page Strategies for Dummies.”

Quantitative results indicate that for the most part, these content themes do in fact heighten engagement levels. Three out of the four increased engagement measures by twice as much, or more, while nostalgic posts did so only minimally. What these findings suggest is that group solidarity can in fact be achieved in a social media setting, something which has previously been debated. Any social media manager reading these results might say: “But I already know all of this!” Which, of course, would be accurate—we constructed four new content themes directly from their own words. Yet it is important not only to first definitively prove what these administrators have only passively been observing, but also to consider the importance of the way these content themes are presented. In other words, though a post may be nostalgic, or a university pride point, the way in which this content is utilized and framed is incredibly important. For instance, a post reporting the death of a beloved campus community member reading “[name of person] Dies” (this is a real example) may generate significantly less engagement than a post which reads “Today, all members of the community celebrate the life of [name of person].” It would be very difficult to measure the difference between effective and ineffective framing, as the decision to categorize a post as one or the other would be an entirely subjective one, but anyone conducting an analysis of these Facebook pages could confirm that these differences do in fact exist. By framing these content themes in the context of higher education, we are one step closer to understanding how alumni identity and community is created and fostered in these online settings. This research serves as a jumping off point for future research in regard to connecting online social media interactions in higher education with real-life monetary donations.

A number of limitations exist for this study that must be kept in mind. First, for the Facebook postings, some schools more frequently changed their profile and cover photos in promoting campus events or funding campaigns—things which followers who are no longer physically within the sphere of the university may identify very little with (and thus may not engage with). Additionally, some pages would consecutively publish a number of photos picturing the same event separately, as opposed to adding them as a singular album, spreading the potential engagement over a wider range of posts as

opposed to condensing them in one. These posting strategies especially diluted the findings for the unifying imagery theme—we expected the difference for this content theme to be more pronounced.

A limitation of the data collection for engagement measures is that click data on posts cannot be collected and measured. The action of clicking on a post is defined as engagement by Facebook, but click data are not available through the public API. However, while clicking means that content is being seen and interacted with, the actions of liking, commenting and sharing further amplify the posted content on the Facebook platform. A second limitation of the data collection method is that we don't know which posts, if any, were promoted posts (e.g. posts for which the institution may have paid to increase the overall reach). Promoted, or boosted, posts reach a larger audience, thus leaving more opportunity for engagement. Again, this post attribute is not available through the public API.

Our selection of the sample is also limiting. First, though three types of schools (liberal arts colleges, public universities and private universities) were selected, analyses were not run to determine whether there are differences between the school types or other attributes. Other institution attributes including enrollment, number of alumni or athletics division may influence posting strategies and audience engagement. In addition, the sample is restricted to top tier universities, so future research in this area might want to explore other types of institutions (lower-ranked schools, up-and-coming schools, or technical colleges). Understanding the effects that these content themes have on engagement levels at these other types of universities would help determine whether or not content themes can be universally applied to any type of higher education Facebook page. In addition, applying this new model to other social media types (e.g. Twitter and Instagram) would be an important step to understanding how engagement is impacted across all social media platforms. Applying this model to other types of social media pages, beyond solely university Facebook pages, to see how these content themes might map out when the characteristics of both the industry and audience are different would also be interesting. Finally, the most important opportunity for future research would be to survey university alumni to understand if there is a correlation between the social media content themes discovered here and donor tendencies.

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Appendix 1

Interview Questions

General

1. What is your name?
2. Would you like to pick a pseudonym for yourself? If not, I will choose one for you.
3. What is your job title/description?
4. How did you get this job?

Vision/Goals

5. Do you have a vision for the University Facebook page (and other university social media)?
6. What are your goals?
7. Do you have any short-term goals?
8. Do you have any long-term goals?
9. What is your overall strategy?
10. Do you think the university is trying to achieve or already possesses a brand or identity? Why or why not?

Posting

11. What does a typical Facebook post look like?
12. Are you aware of Facebook Analytics?
13. Does this play a role in how you post?
14. Who is your Facebook audience?
15. Do you target your posts to any particular audience, or do you try to include all three?
16. Do you prioritize any specific audience?
17. Does this influence how you post?
18. How do you decide what to post?
19. Are things sent to you? Do you seek them out?
20. How often do you post?
21. How do you decide when to post?
22. Does time play a factor in your posting patterns?
23. What do you think about when you are posting?
24. Do you have any strategies that you use when posting? If so, what are they?
25. Do you try to frame your posts?
26. Do you ever use questions when you post?
27. Does the idea of a university brand play a role in how you decide what to post?
28. What is your policy in responding to posts?
29. What advice would you give to someone who is starting out in a similar position to you?

Definition of Success

30. How would you define/measure success in your job?
31. What is an example of a successful post?
32. Why do you think that post was successful?
33. What is an example of an unsuccessful post?
34. Why do you think that post was unsuccessful?

35. Do you face any pressure to be successful? What does that look like?
36. Do you believe that you have been able to achieve success in your vision/goals for the University Facebook page?
37. How would you compare the Facebook page to other modes of communication with alumni/parents/prospective students?