AC 2010-2034: BUILDING ENGINEERS ONE POSTING AT A TIME: SOCIAL NETWORKING FOR RECRUITING ENGINEERING MAJORS

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Building Engineers One Posting at a Time:
Social Networking for Recruiting Engineering Majors

Abstract

As social networking continues to gain in popularity, essential functions traditionally assigned to
electronic mail, instant messaging and conventional websites are slowly being subsumed by, and
coalesced within, social networking sites such as Facebook and MySpace. These sites offer what
are basically personalized and enhanced versions of both electronic mail and static content in a
user-created digest form and thus represent a significant departure from the most familiar
electronic information formats. During the recruiting season for a recent incoming class of civil
and mechanical engineers, the authors made a significant effort to reduce the distance between
information about our programs, the profession, members of the profession and students by
creating a significant presence for the department on a popular social networking site. This
paper presents the outreach goals of the initiative, the nuts-and-bolts of how it was executed, the
effect on recruiting and student excitement and, lastly, the author’s observations and
recommendations for similar efforts.

Introduction

In the summer and early fall of 2009, recognizing the growth of social networking within the
daily lives of our students, we initiated a project to improve the visibility and profile of the West
Point civil and mechanical engineering programs through the use of a Facebook fan site. This
project aligns with earlier efforts by the authors to reach students efficiently and effectively using
then-current social networks and popular internet communication modes (Klosky et al, 2008;
Klosky and Ressler 2007; Klosky and Klosky, 2006 and Klosky et al. 2006). Specifically, the
purpose of our Facebook site was to improve the recruiting of engineering majors into these
programs by creating excitement, presenting positive images of current students and interacting
with students interested in an engineering major but unsure of their decision. In recent years, it
had also become increasingly clear that our students were not visiting the department website on
a regular basis, but rather regarded it like a book to be read once, if at all. We therefore resolved,
based on observation and data, to meet the students on their own ground.

Targeting a Facebook site at current students may seem an odd approach given the timeline for
the selection of majors at most universities. At West Point, however, students select their major
field of study during the first four weeks of their sophomore year; thus, we had ample time to
actually reach these potential majors prior to their decision.
Background

As social networking continues to grow, essential functions traditionally assigned to electronic mail, instant messaging and conventional websites are slowly being subsumed by, and coalesced within, social networking sites such as Facebook and MySpace. These sites offer what are basically personalized and enhanced versions of electronic mail, instant text messaging and static content in a user-created digest form. This represents a significant departure from the most familiar electronic information formats. Most important, however, is the fact that student are ever-present within their chosen social networks, posting relentlessly and following closely the stream of updates and other content that comes into their electronic sphere, sometimes through multiple devices.

According to the Pew Internet and American Life Project (2010), use of the internet among persons 18 – 29 years of age has now reached 93% of all Americans, with the likelihood of use going up with both income and education and use being evenly distributed between men and women. Among the general population (all ages), the use of online social networking is highly prevalent, with the core age group of interest to most engineering programs, persons 18 to 29 years of age, showing particularly heavy usage (see Figure 1). It should be noted that the charts shown in Figure 1 represent the percentage of internet users reporting the use of social networking sites, rather than the percentage of total persons surveyed. It is thus clear that the use of social networking sites is very heavy among college students. (A casual survey of student computer screens, as seen from the back of many darkened lecture halls, would as easily identify this trend.)

A major advantage of social networking sites is the “pull” nature of information use. Because of the digest nature of the information presented, users see only a snippet of the total text posted or a thumbnail of the photo or video offered. Unlike the traditional classroom, where information is pushed to the student, social networking sites present a wide variety of opportunities to interact and learn, and the user chooses which avenue to pursue. This makes the use of social networking sites popular with students, who typically have a variable amount of time to spend on the site.

The Outreach Effort – How We Used Social Networking

There are two fundamental aspects of how we chose to use social networking for outreach to potential students—the mechanics of setting up the content (how the content was presented) and what information we chose to propagate using the site. In general terms, the mechanism was an open Fan Site, and the content focused on people in our civil and mechanical engineering programs accomplishing appealing tasks.
Figure 1: Use of social networking sites by age (Pew Internet and American Life Project 2010, 2)
In terms of mechanics, the key differentiation of Facebook content collections is between content associated with individuals, as opposed to Groups or Fan Sites. This distinction, sometimes with different names, is common among the major social networking systems—and is quite important. We have observed organizations that have set up their Facebook presence as if they were individuals, rather than groups. This practice causes major difficulties. For instance, in the case of an individual, a user must typically be a Facebook “friend” of that individual in order to view his or her content. If a department or course sets up its Facebook presence as an individual rather than a Fan Site, users who became “friends” of the department will expose their personal profiles and content to the administrators of the site. Many potential users will feel uncomfortable with the prospect of opening their personal lives to site administrators, and membership will be discouraged as a result. With Fan Sites, on the other hand, users become “fans” rather than “friends.” This allows students or other interested individuals to simply sign up for access to the site. While they appear on the site’s fan list, which is public, they are not friends; thus their individual site cannot be accessed by administrators or other fans. While this may sound somewhat arcane to the uninitiated, it is an essential point. We are certain that, had we created an individual rather than a Fan Site, the effort would not have worked. Lastly, we chose to make the Fan Site open, meaning anyone could join without permission. We enabled all external posting capabilities, allowing any user to post on the Wall (text, video, links, and photos) without first receiving permission. This necessitated careful oversight, since the site is to some degree an unofficial West Point presence on the web, and persons could choose to post inappropriate material. But after over six months, no deleterious content has been posted by fans, and no external editing by administrators has been required.

Once we established the basic framework for the site, we had to make deliberate decisions about what type of content would be presented. In general, we found that very simple, punchy presentations of current events and information were most effective. These “official” postings—i.e., those made by site administrators—typically consisted of a single photo and less than a paragraph of text, as shown in Figure 2. This format ensured that most of each post was fully visible in the Feed (the summary page that provides each individual user with a digest of postings by friends and any groups to which the user subscribes). In terms of the photos used, where possible, we attempted to have them comply with Klosky’s Rules for Outreach Photos: Good pictures contain (1) people you want to be like, (2) doing something you want to be doing, (3) with the action enabled by the product—in our case, the pictured person’s professional education. Through these short, high-impact postings, we hoped to create buzz, as users would follow up the official posts with comments and discussion.
Throughout the Facebook initiative, we made a conscious decision to limit the official postings to no more than one per day, so that we would not wear out our welcome with our fans. From the time of creation through the beginning of the recruiting season (early September), the Wall, where posts made by an individual user or the group administrator are featured, was supplemented by about two posts per week, including student project photos, summer abroad opportunities, and other interest items. Once the fall semester opened, the posts became much more frequent, either every day or every other day, with a tight focus on both students in action and the features of our programs.

**Observations**

The costs of our Facebook initiative were modest and, like many social experiments, the benefits were both mixed and surprising. The equipment costs of establishing and maintaining the site were close to zero, while the personnel time involved could be characterized as significant.
during the start-up and learning phases, but relatively small (as compared with maintaining a regular website) during the maintenance phase. Adding new content and remaining engaged in the process was relatively easy, requiring about five to ten minutes per post.

With respect to our principal goal of recruiting additional students into our majors, we failed. Error! Reference source not found. Figure 3 clearly indicates that the enrollment numbers for the Class of 2012 did not see a significant increase over the running average of the last ten years (approximately 130 students per class). While this result does not, in and of itself, imply a failure (our intake of new students might plausibly have been much lower without the Facebook initiative), it is clear that our goal of increasing recruitment was not successful. That said, we believe that other benefits made the effort worthwhile.

![Figure 3: Enrollment in Civil and Mechanical Engineering](image)

A surprising aspect of our Facebook site was the development of our department fan base. Given the purpose of the site, we fully expected that the growth of the fan base would be relatively linear through the period of recruiting majors and then would flatten out upon completion of the selection process. As Figure 4 shows, this was not the case. Growth in the fan base was sporadic, depending on our outreach efforts (mass mailings to the sophomore class, announcements in active classes, etc.), and it continued to grow steadily after the major selection process ended—even though we have posted new material on the site only approximately once per week since then. Our current fan total is over 400 persons.
More surprisingly, however, is the composition of the fan base. We had expected that it would consist mainly of students, with sophomores seeking information about our programs dominating the total. This was not the case. As can be seen in Figure 5, the fan base is dominated by the family and friends (labeled “Relatives”) of faculty, staff and students. It is apparent from this data that the parents of students are particularly interested in the people and organizations with which their children associate. In retrospect, this outcome is perhaps not as surprising as it seems. The fan base also includes grandparents, siblings and significant others of students and faculty.

Most importantly, however, was the presence of alumni in large numbers. Universities are forever trying to “tune up” their outreach to this critical demographic; at this point in time, Facebook appears to be an excellent tool for doing just that, provided the content is perceived as relevant. Our mode of Facebook use enhances the perception of relevance, because our postings are much more focused and current than material that would be found on a typical university or department website. Thus, our alumni’s desire to engage with the department via Facebook is much higher; and with social networks, the barriers to engagement are known to be low. (Indeed, these barriers are often regarded as being too low, as can be seen in many Facebook users’ tendency toward compulsive self-revelation.) Our alumni’s willingness to sign up as fans clearly demonstrates their desire to be part of the ongoing academic life of the department. Indeed, on our Fan Site, alumni have been the most active participants, in terms of commenting on postings. Many of these alumni had not been heard from since graduation.
Another important demographic that we did not expect was high school students interested in West Point and the Army. At 10% of the fan base, their presence, though silent, was significant. Few could argue against the value of engaging high school students and alumni, and so this unexpected benefit was indeed welcome.

Some other key observations and recommendations are as follows:

- Though the details are simple to master, the site administrator must know what he or she is doing. In the world of social networking, there is big difference between a person, a group and an organization—usually distinguished as individuals, groups and Fan Sites. A Fan Site is the right format for an academic department, prominent public figure or novelty music act.

- Social networking and what constitutes good manners continue to evolve. For instance, some students want to be “friends” with professors, while others regard that as either “weird” or “creepy” (actual quotes from our students). Being flexible and reading student cues carefully is thus very important. In no case did either of the authors ask a student to become a friend, but neither did we turn down requests that came directly from students.

- No one has abused the site. Initially we were concerned about the posting of inappropriate text or videos, or the possibility of persons outside the department’s ordinary sphere of influence posting unwelcome content. This simply did not occur. We recommend disabling user addition of content only if abuse becomes a problem.
• We got better at it as we went along. Social networking sites are meant to be simple, and they are. Having had a few months to practice, we now regard the process of posting content as quick and straightforward.

• Predicting the exact audiences and outcomes of social networks is difficult.

• The Facebook Wall resulting from both official postings and follow-up comments serves as an excellent historical record of department activities.

• Content and the resulting interactions are highly personal and much easier to maintain in Facebook than in an active department website. In our view, the Facebook presence makes conventional academic websites look static and worthy of the same sort of interactions one might have with a library book.

• We strongly recommend informal content over formal content. This recommendation is consistent with the YouTube phenomenon and the findings of Klosky et al. 2008.

Conclusions

Our initial purpose in creating and maintaining a departmental presence on Facebook was primarily to assist with recruiting of new majors, with outreach beyond potential new students being strictly secondary. The result of the initiative was exactly the opposite, and strongly so. In terms of students recruited in our civil and mechanical engineering majors, there was no perceptible effect, positive or negative. In the absence of a control group, of course, the meaning of this outcome is uncertain. Some positive effect might have been masked by a drop in baseline demand. Nonetheless, we must acknowledge that here was no observable gain in enrollments. However, in terms of outreach, the department’s social networking site can be classified as a significant success that was worth the effort. We effectively engaged with alumni, students, relatives of students and high school students—a bumper crop of constituents who would otherwise have little or no direct connection to the department. We intend to sustain this effort as long as Facebook remains a relevant presence in the internet life of our department community.

REFERENCES


