

THE PENNSYLVANIA STATE UNIVERSITY  
SCHREYER HONORS COLLEGE

SAM AND IRENE BLACK SCHOOL OF BUSINESS

SOCIAL MEDIA AS A LEARNING TOOL IN HIGHER EDUCATION

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## Abstract

Social media has become part of many college students' everyday life. With Facebook as the leading social networking site among students and LinkedIn gaining popularity in the professional realm, students are submerged into this online networking world. Since students already spend so much time on social sites, it could be beneficial to include these sites into the curriculum and use them as tools among higher education. Students from Penn State Erie, the Behrend College were surveyed and their opinions were tested against this hypothesis. It was found the student do believe that social networks can be used as learning tools in higher education.

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## Introduction

Social networking has been increasing in popularity for a number of years now, with the introduction of Facebook bringing about large amounts of people wanting to try out this new form of communication. People of all ages have flocked to sites like Facebook, Twitter, LinkedIn, MySpace, and others, for many different reasons. Each of these social sites is a bit different, but they all boast an innovative version of communication.

Since these sites have provided such a wonderful venue for communication, people have started using the sites for things other than just keeping in touch with friends. They are used in the professional world, in education, and on a personal level. These different uses have made social networking very multifunctional.

Education is one realm that could really benefit from taking advantage of social networking by providing an enjoyable and well-liked way of learning. Students are some of the most dedicated and persistent social site users. These sites are part of their everyday lives and consume a large amount of their time.

## Literature Review

Social media encompasses a wide range of social websites. Generally, social media includes software applications that are used for communication. These can include, but are not limited to, blogging, discussion forums, wikis, social networking, social bookmarking, and sharing photographs, videos, and livecasting. Some of the most popular social media sites we may think of are Facebook, Twitter, MySpace, YouTube, LinkedIn, and more.

Since there is a vastly expanding interest in social media for not only strictly personal social reasons, but also advertising and educational reasons, there are many

resources I have chosen to examine in order to get a better understanding of social media and what it could lend to an educational environment. For instance, sites like Facebook and Twitter have become part of most people's daily lives. Statistics even show that more than half of teens use online social networking sites (Lenhart, 2010). Reasons for this use range from staying in touch with friends and family, making plans with friends, and advertising yourself among others.

Let's take a closer look at Facebook for a moment. Generally, Facebook is a site where you create a profile, share interests with friends, list work and education history, post photos, write notes, edit personal details, and post things on "the wall" (Cain, 2008). Facebook, more abstractly, is used to help students find their identity in a college environment. Many students use Facebook as a way to connect to other students on campus, and even meet new people that may end up being their classmates. This gives students a sense of belonging, which is shown to be important in student retention. Unfortunately, some colleges restrict the use of social networking among their students, claiming that it could be potentially harmful to the student. With colleges facing increased pressure in showing that they have done an adequate amount to protect their students, some seem to think that the easiest thing to do is ban sites like Facebook completely from the classrooms (Cain, 2008).

The fact that Facebook has been banned in some college classrooms is ironic. Facebook, contrary to MySpace, used to require that you be affiliated with an educational institution just to be able to be a member. Although this is no longer the case, it is still estimated that 80-90% of college students hold a Facebook account and sign in on average six times a day. With Facebook's close tie to college students, and its origination in higher

education, perhaps classrooms should embrace it as a learning tool instead of shunning this form of social media (Cain, 2008).

Students are one half of the education realm, but there are faculty to consider as well. Previous studies have shown that students have mixed feelings about faculty and professors being on Facebook. Cain's study showed that 33% felt that the student faculty relationships should remain purely professional and that Facebook should not be an appropriate means of communication between student and professor. Students gave many reasons for their opinions, including feeling like they didn't have privacy when writing comments and receiving an unfair perception of themselves from the faculty members in a social environment.

Another relationship among education and college students is that the majority of messages on Facebook are between friends that are at the same school. This showed researchers that Facebook usage is not necessarily directly related to a leisurely activity, but a part of the natural social interaction within other school-related activities during any given week. Also in this study, there was shown to be a relationship between Facebook usage and grade point average. It reported the heavier the usage, the lower the GPA. On the other hand, Facebook users reported feeling closer to their school than those who used Facebook less frequently (Cain, 2008). Clearly, this shows that there is already a strong relationship between college students and higher education.

Social media sites specifically for education have been increasing in popularity. First, Edmodo was created in 2008 as a social learning network for teachers, students, schools, and districts. It is often referred to as the Facebook of education because it provides places for users to post classroom materials, share links and videos, and even

access homework, grades, and school notices. Users can also store and share their blogs, pictures, documents, and other presentations. Edmodo also boasts free special features for schools and districts. All of the users can access Edmodo and use all of its features using a mobile device or computer.

Another social site for schools is called SchoolTube, Inc. This is the nation's largest k-12 video sharing website. Similar to a YouTube for education, it is a safe, and free area that is approved by many different education associations. Students, teachers, and parents are able to share videos with each other through this site. SchoolTube uses a "chain of accountability" process where all the content is teacher-moderated, student appropriate, and academically useful.

There are many additional social sites that assist in the education process. Glogster EDU allows students to make attractive presentations using their online interactive technology. Collaborize Classroom enables teachers to extend their classroom discussions into a more structured and private online community. It is designed to accompany the classroom instruction by allowing the students to participate in their own time. The students can include Microsoft Office documents, videos, pictures, and PDFs. The site is supposed to save teachers 2 hours per week on grading. EDU 2.0 is a social site that is geared more for higher education. It includes advanced customization, analytics, certificates, and support. The learning management systems enables a social networking very similar to Facebook with newsfeeds, mobile access, and the ability to administer all schools and districts easily. Groups, wikis, blogs, forums, and chats are all included. These are just a few of the popular social media sites used in education today (Rivero, 2011).



Taking a different look at this topic in higher education, we can see a drastic increase in social media use after the recent recession. Because of this, educational institutions have started to look at outside providers for services like email. Google's Gmail and Microsoft's Live@edu have been popular choices for schools looking to trim their budget. It is even said that Microsoft and Gmail are actually more qualified to handle security around email than other email providers that universities may have used in the past. Some colleges don't even issue email addresses to new students anymore. Boston College, for example, has had a major shift to social media. People go to the Facebook fan page and the university just manages the posts and comments back to students and their questions (Beck, 2010).

Another way that universities are trying to improve their curriculum is by becoming more conscious of the entire student life cycle. This tracks the student from applicant to student and then to alumnus. The alumni are said to represent a university's main revenue. Social media helps universities stay in touch with these alumni as well as current and prospective students.

Using social networking as a tool in the workforce has even gained popularity. Large corporations have started using social media as a new method of communication between coworkers. This encourages personal as well as professional sharing inside the company intranet. It is also proven that professionals use this type of social networking to create stronger bonds with their weak ties and reach out to coworkers that they may not know as well (DiMicco, 2008).

Some divisions of education have already started using social media in their research and education. The science world, for example, uses social media as an integral

component when researching and then educating. It is even said that scientists must embrace the social applications to enhance their research and, in turn, better communicate with the public. (Racaniello, 2010). Vincent Racaniello wrote a book on virology and wanted to be able to teach to a broader range of students. To do this, he created a blog in 2004 explaining parts of what he explained in his book. A blog is actually a website that contains entries that are displayed in a reverse chronological order in a journal format. Blogs are easy to use for teaching purposes because they enable quick online publication while requiring only a minimal amount of technical expertise. Blogs can reach hundreds of thousands of potential students, which means that a professor could be teaching more students with a single blog post than they have in their entire teaching careers.

The other nice thing that Racaniello discovered while teaching using blogs is that blogs allow readers to be content creators. This means that not only can people read the blogs, but they also can write comments that ask questions or offer other insights directly on the blog. Racaniello noticed that this encouraged discussion among students and they were eventually able to answer each other's questions without input from Racaniello. If anyone is familiar with the Angel platform, this would be similar to discussion boards. This means that all the readers (or potential students) could have a conversation, learn, and interact with an expert, all at no financial cost to them. Professors still cannot count on everyone to contribute to something like a blog. Statistics show that 90% of a site's readers simply browse, 9% contribute very little to the blog, and then 1% contribute often. Racaniello tries to engage the other 90% of readers by posting things like a "pop quiz" or a poll. This ensures that people feel engaged in what they are reading and are willing to come back to seek more information in the future.

Blogs have worked so well for conversations and student engagement in science because conversation is an essential part of the scientific process. There are also other types of social media that can allow students to learn quickly and easily. One example would be podcasts. A podcast is just audio content that you can find on the Internet. Podcasts were first made popular by the Apple iPod. The iPod allowed you to purchase these podcasts and add them to your iPod, which enabled you to take them anywhere. Although the iPod made them popular, podcasts can be played online or with any other digital audio player. Ricaniello took this information and decided that he would record weekly conversations about viruses and put them in the podcast directory in iTunes so that hundreds of students and general listeners could have access to his knowledge.

This all eventually turned into something called TWiV, which is a podcast that includes a conversation among scientists. It is essentially a free science education. Ricaniello then accompanied each episode by a blog entry that included a title, brief description, and links to other helpful articles. The podcasts even answer listener questions weekly. This combination has proven to be very successful in educating the audience that Ricaniello originally wanted to educate.

Overall, this research leads me to believe that social networking has seen some success as a learning tool already. This means that it has great potential to be a learning tool in higher education.

## Statement of Hypothesis

Students believe that social media can be used as a learning in higher education within their classrooms.

## Methodology

In order to test the hypothesis, a survey was administered to students within a Management Information Systems classroom at Penn State Behrend. Their majors included Marketing, Accounting, Management Information Systems, Management and Finance. They were given a number of questions relating to social media in general and then social media specifically relating to using it as a learning tool in higher education. Every question was on a scale from one to seven, one being strongly disagree and seven being strongly agree with the rest of the numbers a variation between the extremes. Their results were averaged and then analyzed in order to determine their specific opinions on the issue.

The questions were chosen based on what was most relevant to the study. The study reflected a differently variety of questions that clearly allowed the students to show their true opinions on the subjects. The students were also not forced to take the survey, and they were not told the stance that this paper was taking. You can see a copy of the survey that was given in the appendix.

## Results

After surveying the Management Information Systems student's, I discovered numerous different things about the mindsets of students at Penn State Behrend on the issue of social media as a learning tool in the classroom.

First, just to prove what I have been saying this far about students using social media frequently, I asked the students to determine if they would agree with that statement. The result to this first question was a 6.3 out of 7. Also, over 50% of the students surveyed chose a result of 7, which means that they couldn't agree more with the statement

presented. Therefore, students definitely use social media frequently in their daily lives. This is the first step to proving the social media could in fact be a successful and valuable tool in higher education.

Out of those students, 80% strongly agreed that Facebook was the social media site that they used more often. Although Facebook may not be the easiest social site to use as a learning tool, it still offers great potential for professor to student interaction. Professors could build pages for their specific class, and message using the easy messaging system that Facebook offers. Since students already use Facebook so frequently, they would always have access to what's going on with the classroom and be constantly keeping up with anything that would be posted onto the class page. In fact over 90% of students said that they already use Facebook's messaging tools so it wouldn't be new to them. However, students gave an average rating of 2.9 to getting information from students about classes using these social sites. If professors used a social site as a tool in their classroom, I'm sure this number would increase greatly.

Facebook is not the only social network that college students are currently interested in. With an average score of about 4 out of 7, we can see that some students belong to a career or job network as well. This shows that students do want to use the sites beyond their purely social ability. Employers are starting to really look at these sites when they are hiring new employees, and the students understand this because at a score of 5.5, they agreed with this statement. Because of this, students really need to learn how to market themselves and communicate effectively over these types of mediums.

Moving from the workforce to the classroom, students were asked if they thought that they should be allowed to use social sites in the classroom. The results were on

average a 4.8, which means that most students thought that they should be permitted to be on these sites during class hours. The students have even gone as far as to say with a score of 5 that if the college tried to restrict their use of social sites, then it is a violation of their rights and free speech. Some colleges argue back that there are security issues and more time spent on social networks quite often reflects a lower GPA, however with a score of 2.7, but when asked if they thought more hours spent on social media normally reflected a lower GPA, students did not agree. The students were also asked if social media would be useful within a classroom environment. The students gave this statement a 5.6, which means that that they definitely agree. Even some students that said they never use social media still think that it would be useful in the classroom. This is a very important statistic because if the students are using a tool that they like in order to learn within the classroom, they are more likely to be more involved in the class and with the material. Therefore, they are more likely to retain the information.

After this, the students were asked to rate whether or not they thought the social media could be used specifically as a learning tool in higher education. They all agreed that it could be used for that purpose with a score of 5.6. Twenty percent of students even strongly agreed using social sites as a learning tool would be a viable option, and all students agreed that they had already used social networking in at least one of their classes. Not only did students think that it could be used as a learning tool in their classrooms, but they thought that it would actually benefit them to use it as a learning tool, shown by their score of 5.4. Lastly, with a score of 4.4, students believed that social media in the classroom would actually help them learn and improve their retention within the classroom.

Everyone learns differently, and professors seem to be always trying to find new ways to help their students retain the information that is being taught. Only students know how they learn best, and if they believe that social media can help them to learn by turning it into a tool for the classroom, then perhaps this really is a viable option. All the results seem to reinforce the fact that students really would enjoy using social networks outside of their cliché purpose.

## Conclusion

In conclusion, I believe that it would be an intriguing and beneficial idea to include social media into the college curriculum. By using sites like Facebook and others, professors can communicate and educate their students. It was said earlier that students already spend a good amount of their time on the social network of their choice, so it would only make sense to include this into their studies. Professors would likely find it easier to stay in contact with their students and students would be better informed. Students can also use blogs for their assignments, which will alleviate the professors from having to collect and keep track of a number of papers. This will also allow students to comment and contribute to other student's work.

Books and other school supplies are already being found online. Since there is such an increase in the use of computers in college, professors should embrace social media instead of forcing it out. With students on board and technology quickly changing, social media should definitely be considered as a learning tool in higher education.

## Recommendations

Professors and students need to always keep up to date with new technology and ways of teaching. Since technology is constantly changing, if you don't keep up with it then you are already behind. There are so many different ways to learn and it is hard for professors to cater to every need of every student. Therefore, it can be beneficial to see how the majority of students would like to learn and then if the class can be taught in that way, then the professor can consider it.

Today the newest learning tool could be social media, but tomorrow it could be something completely different. However, this is what makes the learning process so exciting. It is always changing and transforming and there is always more to learn.

My final recommendation to my reader would not only be to consider social media as a learning tool in higher education, but to be aware and open to the changes taking place in education, and instead of trying to push them out, embrace them.



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## Appendix

Skills, Knowledge and Beliefs							
	<i>Strongly Disagree</i>			<i>Strongly Agree</i>			
1. I use Social Networking frequently.	1	2	3	4	5	6	7
2. Facebook is the Social Network that I use most often.	1	2	3	4	5	6	7
3. Twitter is the Social Network that I use most often	1	2	3	4	5	6	7
4. I don't use Social Networking.	1	2	3	4	5	6	7
5. I log on to Social Networking numerous times a day.	1	2	3	4	5	6	7
6. I have a Social Network site but I don't really use it.	1	2	3	4	5	6	7
7. I spend many hours on Social Networking sites per day.	1	2	3	4	5	6	7
8. I spend very little of my time on Social Networking sites.	1	2	3	4	5	6	7
9. I use Social Networking to market myself.	1	2	3	4	5	6	7
10. I use Social Networking to communicate with friends.	1	2	3	4	5	6	7
11. I use Social Networking to create events.	1	2	3	4	5	6	7
12. I use Social Networking to make new friends.	1	2	3	4	5	6	7
13. I use Facebook because it is a good way to keep me informed as far as who my friends are interacting and associating with as well as what they are up to.	1	2	3	4	5	6	7
14. Through Facebook, I can communicate through messages, wall posts, and events.	1	2	3	4	5	6	7
15. I have been able to sustain many friendships through Social Networking.	1	2	3	4	5	6	7
16. Signing a Facebook wall is a lot easier and less time consuming than picking up the phone to call a friend.	1	2	3	4	5	6	7
17. Expressing identity/opinions is my main reason for using Social Networking.	1	2	3	4	5	6	7
18. Finding love is my main reason for using Social Networking.	1	2	3	4	5	6	7
19. Friends are my "primary network".	1	2	3	4	5	6	7
20. Possible employers are my "primary network".	1	2	3	4	5	6	7
21. I belong to many different Social Networks.	1	2	3	4	5	6	7
22. I belong to a career or job network.	1	2	3	4	5	6	7
23. I tag 50-100 pictures per month.	1	2	3	4	5	6	7
24. I have over 200 pictures on my Facebook.	1	2	3	4	5	6	7
25. I look at someone else's profile at least once a day.	1	2	3	4	5	6	7
26. I rarely look at other people's profiles.	1	2	3	4	5	6	7
27. I rarely look at photos.	1	2	3	4	5	6	7
28. I spend a lot of time readings news feeds.	1	2	3	4	5	6	7
29. I send private messages often.	1	2	3	4	5	6	7
30. I create groups often.	1	2	3	4	5	6	7
31. I spend a lot of time adding/deleting friends.	1	2	3	4	5	6	7
32. I change my status often.	1	2	3	4	5	6	7
33. I tag people in photos.	1	2	3	4	5	6	7
34. I use Social Networking to get information from other students about courses.	1	2	3	4	5	6	7
35. I update my profiles often.	1	2	3	4	5	6	7
36. I mostly post on walls instead of sending private information.	1	2	3	4	5	6	7
37. I belong to more than one group.	1	2	3	4	5	6	7
38. I have changed my privacy settings.	1	2	3	4	5	6	7
39. I would consider my Social Networking site secure.	1	2	3	4	5	6	7
40. I think employers use social networking to connect with employees or to check up on them.	1	2	3	4	5	6	7
41. Employees should be allowed to use social networking sites at work.	1	2	3	4	5	6	7

Skills, Knowledge and Beliefs							
	<i>Strongly Disagree</i>			<i>Strongly Agree</i>			
	1	2	3	4	5	6	7
42. Students should be allowed to use social networking sites in the classroom.	1	2	3	4	5	6	7
43. I allow users who are not my friend to see my information.	1	2	3	4	5	6	7
44. Social networking can be useful in the workforce.	1	2	3	4	5	6	7
45. Social networking can be useful in the classroom.	1	2	3	4	5	6	7
46. Boys use social networking more than girls.	1	2	3	4	5	6	7
47. Girls use social networking more than boys.	1	2	3	4	5	6	7
48. I am risking my safety by participating in social networking sites.	1	2	3	4	5	6	7
49. Facebook is the most preferred social networking for colleges.	1	2	3	4	5	6	7
50. Pictures are never visible to anyone again once they are deleted.	1	2	3	4	5	6	7
51. It is important to be educated about the risks associated with social networking.	1	2	3	4	5	6	7
52. It is fair for a school to tell you that you cannot use social networking sites for safety reasons.	1	2	3	4	5	6	7
53. Restricting students' ability to use social networking sites is a violation of free speech and privacy.	1	2	3	4	5	6	7
54. Colleges should be able to monitor social networking sites.	1	2	3	4	5	6	7
55. Age is a significant predictor of Facebook membership.	1	2	3	4	5	6	7
56. It is fair when social networking is used to hiring decisions.	1	2	3	4	5	6	7
57. It is fair when social networking is used for acceptance into college decisions.	1	2	3	4	5	6	7
58. Faculty and people out of college should be allowed on Facebook.	1	2	3	4	5	6	7
59. The more time you spend on social networking sites, the lower your GPA.	1	2	3	4	5	6	7
60. It is the responsibility of the college to educate students about social networking sites.	1	2	3	4	5	6	7
61. I used social networking before I got to college.	1	2	3	4	5	6	7
62. I have over 500 friends on Facebook.	1	2	3	4	5	6	7
63. I do not participate in social networking.	1	2	3	4	5	6	7
64. Social networking could be used as a learning tool.	1	2	3	4	5	6	7
65. I have used social networking in at least one of my classes.	1	2	3	4	5	6	7
66. I think it could be beneficial to use social networking in my classes.	1	2	3	4	5	6	7
67. Using social networking in my classes would help me learn.	1	2	3	4	5	6	7
68. I have used social networking to complete an assignment.	1	2	3	4	5	6	7
69. I would enjoy using social networking as a learning tool.	1	2	3	4	5	6	7
70. Facebook would be a good social network for a learning tool.	1	2	3	4	5	6	7
71. Blogging would be a good social network for a learning tool.	1	2	3	4	5	6	7
72. I think it's possible to teach a class through social networking.	1	2	3	4	5	6	7
73. I think social networking is important when it comes to getting hired/into college.	1	2	3	4	5	6	7

# VITA

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- EDUCATION:** Penn State Erie, The Behrend College May 2012  
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- Focus of project is on social networking and its influence and integration over employment and the job market
  - Planning the overall paper and conducting research both online and using polls inside the classroom of MIS classes
  - Analyzing research to obtain relevant information for inclusion in the final thesis
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- |  |                              |
|--|------------------------------|
| Systems Analysis                             | VB Programming               |
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| Electronic Business Management               | Database Management Systems  |
- Analyzed case studies in order to fully understand the implementation difficulties and procedures of information systems
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  - Created an advertising website for a fictitious company that was selling a brand of energy drink
    - Developed a research report on supply chain managements and the advantages and importance that it maintains for companies
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- LEADERSHIP EXPERIENCE:** **Lambda Sigma Honor Society Treasurer**
- Served on E-board where decisions on how to run the club were made
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  - Wrote proposals as well as maintaining the budget and expenses
- Alpha Sigma Alpha Philanthropic Chair and Scholarship Chair**
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