

TEACHERS' TOPICS

Using Facebook Within a Geriatric Pharmacotherapy Course

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Objective. To evaluate using an Internet-based social networking site within an elective geriatric pharmacotherapy course.

Design. Thirty pharmacy students enrolled in a geriatric pharmacotherapy elective course were invited to join a closed Facebook (Facebook Inc, Palo Alto, CA) group to enhance communication among students and faculty members within the course. Creating a discussion board was the primary activity in the course. Each week, 3 students were assigned to post a healthy aging topic, and other students in the class were expected to post their comments and reactions. The healthy aging topics also were discussed during class.

Assessment. Students wrote reflections about their experiences using Facebook for the activities within this course. A survey instrument also measured students' opinions about using Facebook for educational purposes.

Conclusion. Using Facebook allowed students to discuss topics more openly and encouraged classroom discussions of healthy aging topics.

Keywords: online social networking, Facebook, geriatric pharmacotherapy

INTRODUCTION

Social networking sites such as Facebook are Web sites that provide a virtual community for people with similar interests. These sites have altered interpersonal communication dramatically on college campuses across the globe.¹ To "friend" someone on Facebook signifies the process of making a connection, transforming the noun "friend" into a verb for the estimated 350 million individuals who use the site worldwide.² Various methods of communication are available including chat, instant message, videos, and blogs, where members can interact and contact friends of other members.

In late 2009, the number of active Facebook users on a monthly basis reached 100 million within the United States. Although Facebook originated in 2004 as a site for students at Harvard and other Ivy League schools, an estimated 40% of users are under the age of 25 years, suggesting that although college students are among the largest group of users, other ages are represented.³ Twenty percent of all US Facebook users are over 45 years of age.^{3,4}

This article discusses using Facebook in an academic setting to create and evaluate an interactive forum about healthy aging topics. Thirty third-year (P3) students enrolled in a 3-credit-hour geriatric pharmacotherapy elec-

tive course that met only once each week used a Facebook discussion group to communicate between classes.

DESIGN

The design and learning objectives of this pharmacotherapy in geriatrics elective have been described previously.⁵ The course was an active-learning class that used diverse teaching techniques and strategies to engage students and encourage participation. Course objectives emphasized communication, learning about fundamental concepts in aging and geriatric syndromes, and developing optimal drug therapy regimens. Activities such as assessments of medically complex older adults, presentations about clinical geriatric controversies, book and film clubs, a semester-long "Adopt a Patient" project, and scientific and reflective writing exercises helped foster these learning objectives. This alternative use of Facebook was consistent with the active-learning goal of this course and was implemented easily because every student already had an active Facebook account and had used the site regularly, although never as part of an academic course. Other publications have described the use of social networking sites by pharmacy students and issues that educators must address concerning privacy and professionalism.^{6,7} The Facebook activity within this course, however, focused on using this social networking platform for an academic purpose within the pharmacy curriculum, and literature in this area has not been published.

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Prior to the beginning of the semester, the instructor created a closed Facebook group for this elective with membership restricted to students enrolled in the course. A closed group was chosen to ensure privacy and maintain the academic nature of the activity. Students were asked to join the group and were given instructions in the syllabus about the expectations of participating in the group. All posts within the Facebook group had to be appropriate, professional, and consistent with the purpose of the activity.

Each week for 10 weeks, 3 students were assigned the role of “blogger” and were asked to post a hot topic question or issue relating to healthy aging on the Facebook group discussion board. Students were expected to participate in the discussion activity even if it was not their week to identify a topic. Participation included posting comments and continuing discussion points on the board throughout the week. A wide variety of topics were posted throughout the semester pertaining to geriatrics and health care. Examples included pets and aging, super centenarians, nutrition, older workers thriving in the workforce, technology and aging, and seeing store shelves through seniors’ eyes. Each initial post provided an explanation by the student about the topic and a link to an Internet site or article displaying additional information. In some cases after reading the post, students who commented provided additional Web site links to view as a way to continue to develop the topic.

Posted topics often related to current trends in the news and created an opportunity for further discussion in class. One example included the attention from the media about the H1N1 vaccine, which led to further discussion about information that predated press releases about patient safety and use in older adults. The topic of health care reform and Medicare initiated another interesting class discussion that continued beyond the Facebook group and into class time. There were also times when the class ended before assigned readings were discussed. When this occurred, the instructor posted questions on the Facebook group board during the subsequent week and students commented and provided feedback that was viewable by all members of the group. In some instances, written comments were more structured and insightful than oral class discussions.

Members of the Facebook group did not have to be “friends” on Facebook to post on the group wall and participate within the discussion boards, which was important to respecting privacy among the students and course faculty members. Two faculty members were involved in the group so that active facilitation could occur within the discussion topics. This fostered a positive environment to guide the discussions, but did not compromise privacy in viewing each other’s Facebook wall because access was limited to the information shared within the course group. Weekly posts were not graded specifically, but consistent participation carried a point value that was allocated to the final grade at the end of the semester.

EVALUATION AND ASSESSMENT

Students evaluated the effectiveness of the Facebook course activities through written reflections describing the strengths and weaknesses of the various elements. Students also completed an exit evaluation of the entire course which was composed of Likert scale questions using a scale from 1 to 5 with 1 = strongly disagree and 5 = strongly agree. Several open-ended questions were included to provide an opportunity for students to expand on their responses and give constructive feedback for future course offerings. At the end of the semester, an additional anonymous 10-question survey instrument specifically relating to the Facebook activities within the elective was administered to the entire class with approval by the University of Rhode Island Institutional Review Board. The instrument was a mixture of Likert scale and open-ended questions for the students to evaluate the Facebook activities within this academic setting.

Twenty-eight out of 30 students completed the survey instrument, and results are provided in Tables 1 and 2. The majority of students valued the Facebook group activities. Consistent with national trends, most of the students enrolled within this course accessed Facebook daily to check their personal profiles. Ninety-six percent reported logging in to their personal accounts at least several times each week, with most (75%) checking daily. However, this was not the case with the academic Facebook site. Although 71% of the students reported checking the class group several times per month, and 25% reported checking

Table 1. Student Survey Results: Facebook Activity Within a Geriatric Elective Course (N = 28)

Facebook Use By Students	Daily, No. (%)	Several Times per Week, No. (%)	Several Times per Month, No. (%)	Only for Assignment, No. (%)
Frequency of checking own Facebook account	21 (75)	6 (21)	1 (4)	0
Frequency of checking course Facebook group	0	7 (25)	20 (71)	1 (4)

Table 2. Student Survey Results: Facebook Activity Within a Geriatric Elective Course (N = 28)

Survey Question	Strongly Agree, No. (%)	Agree, No. (%)	Neutral, No. (%)	Disagree, No. (%)	Strongly Disagree, No. (%)
Easier to discuss on Facebook board than class	8 (29)	11 (38)	7 (25)	2 (7)	0
Class activities supplemented Facebook board	8 (29)	18 (64)	2 (7)	0	0
Facebook board supplemented book club activity	16 (57)	8 (29)	4 (14)	0	0
Facebook board altered perception of older adults	7 (25)	14 (50)	3 (10.5)	3 (10.5)	1 (4)
Facebook activities were valuable	17 (60)	9 (33)	2 (7)	0	0

the group several times per week, no students checked daily. Students also identified that discussing topics on the group discussion board was easy, and over 90% agreed that class discussions and activities effectively supplemented the topics posted by their peers. Three-quarters of the students agreed that topics on the discussion board altered their own perceptions of older adults. Those who indicated no change in their perspective on aging generally had a high regard for older adults beforehand, which had influenced their enrollment in the course.

Facebook was used also to enhance other course requirements. One assignment was to read the book, *Living to 100: Lessons in Living to Your Maximum Potential at Any Age* by Thomas Perls and Margery Hutter Silver. This book focused on centenarians and discussed some of the science behind this quickly growing population.⁸ The book was selected by the instructors as a required course reading because it offered an opportunity to discuss some of the positive aging principles and possibly help the students on their own journey towards healthy aging. This theme was consistent with the purpose of the Facebook discussion board. Each student was asked to choose a topic covered in the book and write a short scientific paper. Using 1 of the ideas explored within the text, students were required to identify recent evidence in the literature to support or refute the discussion. Because the book was published in 1999, students investigated and evaluated newer evidence against information presented in the book. Based on the survey's results, nearly 90% of the students agreed that topics posted throughout the semester on the weekly discussion board effectively supplemented the concepts presented in the book. More expansive discussion also occurred during the class time dedicated as a "book club" activity.

In all cases, student's written reflections and open-ended responses on the end of semester evaluation supported the results of the survey instrument. Students felt that using the Facebook discussion board was a valuable

part of the course, and they supported its continued use, with additional capabilities and expansion in future course offerings. Because the students were so comfortable and experienced with Facebook, their comments provided valuable feedback on the strengths and limitations of using this platform for an academic purpose.

DISCUSSION

Educators in all settings strive to identify methods to engage and motivate students to learn. This is true especially within the current generation of students who embrace trends in technology because this always has been a part of their lives.⁹ Using Facebook is so widespread that its language is spoken by most college students; thus, incorporating this platform into the academic arena intrigued many of the students. Student survey results demonstrated a positive impact in using Facebook within the course, and their comments described many of the unexpected benefits that occurred as a result of the activity. Students appreciated the instructors' contributions in facilitating discussion threads, the ability to use Facebook for an alternate purpose, and the opportunity to discuss topics in depth that were not covered adequately during class time. Students valued the continued discussion topics surrounding the book club activity. Several students commented that formulating their thoughts through online posts was easier than offering those same comments in class. Some students are not comfortable speaking in front of a group, and even though this was a small class, 30 students may be an intimidating number for effective group discussions. An improved relationship among the students also was evident as the course progressed. Contributing to discussions and sharing additional ideas, both orally and through Facebook, became a natural process rather than an assigned course activity.

Probably the most unexpected benefit was the interest in Facebook exhibited by many of the older adults involved with the course. This geriatric pharmacotherapy

elective course regularly uses older adult patient volunteers, and the students and patients have the opportunity to get to know one another through various projects and activities scheduled throughout the semester. Hearing the students talk about Facebook, and also having grandchildren and family members who use Facebook, created interest among these individuals. Many of the older adults were still in the early learning phase, but 1 in particular embraced the concept and was guided through the process by a group of pharmacy students. She is now active and thriving on Facebook due in large part to the students who assisted her. This became an opportunity to present this older adult's "Facebook journey" as part of a student group's final course project. Ultimately her positive experience reconnected her with friends, family members, and places of interest after becoming a Facebook "fan." An interesting dynamic was created allowing generations to communicate through this social networking site.

The Facebook course activity also provided students the opportunity to discuss issues relating to appropriateness of the content posted on their own Facebook profile. Based on previous articles within this journal, emphasizing professionalism with the students was important.^{6,7} Once an individual was "friended," their profile information had to be appropriate because it was viewable by others. The "friends" may or may not have been within their immediate peer group because Facebook "friends" can encompass coworkers, family members, neighbors, or any other acquaintance. The controversy surrounding boundaries in accepting friend requests is apparent now more than ever.

There were several limitations to using Facebook for academic purposes. Most notably was that based on student survey results, students were regularly on Facebook, but not on the academic group site. Activity that occurred on the group discussion board was not immediately evident unless the student actually clicked on the group link and then viewed the board, often a multistep process. There were no reminders that new activity occurred, and the group activity was not viewable from an individual's home Facebook page. The group postings were always available, however, enabling 24-hour access 7 days a week. Students appreciated checking and commenting at their convenience, often adding posts to several topics each visit, as a way to catch up with discussions that may have been missed between logins.

Another limitation of using Facebook within the academic setting was its inability to serve as a single comprehensive tool when running a course. Although it was beneficial to use the messaging features and create a "virtual course community" by posting photos and events relevant to course activities, the current Web-based plat-

form used by this university was still required to upload readings and e-mail assignments with attachments, among other functions. This created 2 places for students to check for course updates, which was time consuming.

One article discussed potential perceptions of using social networking systems within university courses based on a project that used Facebook as a study aid for elementary education majors enrolled in a biology course at a midwestern university. Many issues were raised including the students' ability to navigate among the social and academic uses of Facebook while retaining individual privacy and maintaining professionalism.¹⁰ In some cases, separating social and academic settings may be intentional. Also considering whether pharmacy students have an additional expectation to abide by a higher code of conduct and professional standards than other groups of students may be necessary.⁷

Another factor to consider relates to academic performance. Preliminary research has indicated a negative correlation among users and non-users of Facebook with respect to grade point average and average hours spent studying.¹¹ The increased time spent on Facebook may be a distraction from time intentionally allocated to schoolwork. Alternatively, Facebook may be considered a learning tool reaching out to students in a familiar way and encouraging them to be more involved in a particular course if this technology were used. Further research must be conducted to evaluate the personal, academic, and professional implications of merging Facebook into an academic setting before consensus can be reached.

SUMMARY

Using a social networking Web site within the pharmacy curriculum has not been explored previously. Within this university, the academic Facebook activity was valuable in connecting students through a common platform, allowing them to benefit from the various capabilities to engage in discussion, both in the Facebook group and in class. Although concerns and limitations exist, this generation of students clearly relates to social networking sites, but the exact role of Facebook within the academic setting is yet to be determined.

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