# Use of Facebook as a Teaching Tool in a Veterinary Communications Course

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## ABSTRACT

First-year veterinary students enrolled in a Professional Development course were invited to join a Facebook group with the goal of having the instructor use that tool to promote student practice of client communication skills. All members of the class were surveyed to determine any difference in educational outcomes between those students who joined the Facebook group (FB) and those who did not (non-FB). Fifty-one students joined the Facebook group out of a class of 99, and 33 responded to the survey. Forty-four of the non-FB students completed the survey, for a total response of 77%. There was no difference between groups in their general use of Facebook. The only educational outcome that differed between the groups was increased practice of communication skills outside of school by the FB group. Students in the FB group cited interest and desire to access all course materials as the most common reason for joining. They were much more likely to read postings than to post anything themselves. Barriers to greater use of the tool by the FB group included lack of time and hesitance to post when others were not. Students were ambivalent about the use of Facebook as an educational tool. The instructor was unaware of the extent of use of the tool until survey results were gathered and felt that it would be most useful as a teaching tool for those instructors who already used Facebook as part of their personal routine.

**Key words:** communications, educational methods

## INTRODUCTION

Social media are forms of communication used by individuals for interpersonal interaction and by businesses or service providers for marketing or making resources available.[1] Facebook is a tool with which individuals create personal profiles on which they post announcements, including videos and images. Users can readily contact other individuals with profiles and stay in contact by "friending" them. Users also "like" postings or other components of Facebook pages to draw attention to them, comment on each other's profiles by writing on each other's "walls," and draw attention to specific images by "tagging" them. Sets of people can form their own Facebook page to promote interaction or provide information to the general public, or can create Facebook groups that are open only to those Facebook users specifically added to that group. Facebook has over 1 billion members across the world, with over half of those accessing the site daily.[2] Participation varies by age, with one study reporting 75% of those in the Millennial generation having a Facebook profile compared to 50% of Baby Boomers, and another study reporting that within a group of human health care professionals, those under 50 years of age were more likely to have a Facebook profile than were people aged 50 years or older.[3,4]

The constant presence of Facebook in the lives of young people has led many to promote its use in innovative ways. These include uses as a formal and informal educational tool,[5–12] a tool to promote personal adjustment as students enter college,[13] and a means to promote interactive learning or change personal behaviors, especially in regards to health concerns[14–18]; recruit human subjects for research or clinical trials[19,20]; and track human research subjects longitudinally.[21] Because college-aged students are likely to access Facebook regularly, one author contends that it could be used in education by creation of Facebook groups to facilitate discussions, post specific materials, connect students to video or images of current events as they happen in real time, hold virtual office hours, take polls of students to assess learning or generate discussion, and set up course-wide events.[22] Proponents of these uses of Facebook and other forms of social media note that a tool such as this, which promotes peer feedback, encourages students to think about what they need for their own learning, promotes learning within the student's social context, meets criteria for the highest goals of education, and is sound pedagogy.[23,24] Studies also have shown that students, especially those for whom English is not their primary language, may be more comfortable posting comments or contributing to discussion virtually rather than speaking up in class.[11,12] One could argue that college students already spend too much time on Facebook and that it would be a further distraction to direct them to Facebook as part of their school work.[25] However, one study demonstrated that college students who had more Facebook "friends" also had more close relationships, more acquaintances in college, and greater life satisfaction, which may well translate into a better attitude for learning.[26]

**Table 1:** Postings made by the instructor to the Facebook group

| Date posted | Posting | Number of responses |
|---|---|---|
| April 1 | "I've been thinking about non-verbal communications … What are your favorite non-verbal communications in movies, and why?" | 2 |
| April 4 | Posting presenting a statement to which students could respond with a reflective or empathic statement: "I told you more than once it was arthritis but all you keep talking about is hip dysplasia." | 2 |
| April 6 | "I know she has lost a lot of weight but I really just want to talk about her itchy skin today." | 1 |
| April 7 (a.m.) | "I did sign the consent form but I was pressured into it. I didn't understand anything you told us." | 2 |
| April 7 (p.m.) | "The AI tech told me he felt something funny in my cow's rectum and that you'd be able to tell me what it is if I describe it over the phone." | 2 |
| April 8 (a.m.) | "It's just another ear infection. You just want me to bring him in so you can make money off an office call." | 2 |
| April 8 (p.m.) | "No one told me my horse could die from just eating too many apples too quickly. Are you sure that's what happened?" | 0 |
| April 9 | "My dog won't eat if I'm not here. You can't expect me to stick to the visiting hours." | 0 |
| April 10 | Posting asking if students had experiences to share from visits to local small-animal clinics (optional experience in another course) | 2 |
| April 11 | "So today my husband has to have a root canal. Here are the questions I was asked by the woman on the phone [at the endodontist's office]: his name, his date of birth, his insurance company, and how we intended to pay for what insurance would not cover. She then gave very detailed information about what insurance was likely to cover and ways that we could pay. She was polite and friendly throughout, but the conversation was very clearly about money. What do you think about that?" | 2 |
| April 14 | "Here's the URL for a very good and moving video to help us all think about the need for empathy in our communications: http://www.youtube.com/user/ClevelandClinic?v=cDDWvj_q-o8" | 0 |
| April 22 | Posting asking if students had experiences to share from visits to local small-animal clinics (optional experience in another course) | 0 |
| April 23 | "Here's the URL for a video regarding professional dress and making a good first impression: http://www.youtube.com/watch?v=3Ay6Z2mS45U" | 0 |
| April 26 | "Here's the URL for a video with hints for handling upset clients or clients that say unexpected things: http://www.youtube.com/watch?v=g5RknemM8Hw" | 0 |

The goals of this study were to create a Facebook group to promote student practice of communication skills in a Professional Development course in the veterinary curriculum, to assess student participation in the group, and to determine if students who participated in the Facebook group had different educational outcomes than those students who chose not to participate.

## MATERIALS AND METHODS

All students in the first year of the veterinary curriculum that were enrolled in a Professional Development course in which professional ethics and client communications were taught were offered an opportunity to participate in a Facebook group specific to the course.[27] The solicita-tion was made by the instructor, who told interested students that they could "friend" the instructor to be added to the group and that participation in the group would happen later in the semester. All students in the course were reminded of this opportunity by E-mail several weeks later, and the group was officially created in Facebook within one week of that E-mail. The stated goal of the Facebook group was to give students more opportunities to practice client communications and work through the material presented in the course. The study was approved by an Institutional Review Board.

Fourteen Facebook postings to the group were made by the instructor over one month (Table 1). Postings were sequenced in an attempt to minimize overlap with

**Table 2:** Survey responses of the FB and non-FB groups. Values are listed as mean +/−standard deviation.

| Question | FB | Non-FB |
|---|---|---|
| I found the large-group training sessions (in the course) helpful. | 4.2 +/−0.8 | 4.1 +/−0.6 |
| I found the small-group sessions (in the course) helpful. | 4.1 +/−0.7 | 4.0 +/−0.7 |
| I consciously practiced communication skills we had talked about in class in other venues (home, work, etc.).* | 4.0 +/−0.8 | 3.1 +/−1.0 |
| I feel well prepared for further communications training in 2nd year, including being videotaped during interactions with actors (OSCEs). | 3.6 +/−1.0 | 3.3 +/−1.0 |
| I feel well prepared for further communications training in 4th year, including being videotaped during interactions with clients while on the General Practice rotation. | 3.4 +/−1.1 | 3.2 +/−1.0 |

Scale: 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree.
FB = Facebook group; non-FB = non-Facebook group
* Significant at $p < .001$

**Table 3:** General use of Facebook by survey respondents

| | Number of respondents | |
|---|---|---|
| Description | FB ($n = 33$) | Non-FB ($n = 44$) |
| I interact with others via Facebook at least daily. | 7 | 12 |
| I read postings on Facebook at least daily but do not always respond. | 17 | 17 |
| I read or respond to postings on Facebook less frequently than daily. | 6 | 10 |
| I do not use Facebook at all. | 0 | 2 |

FB = Facebook group; non-FB = non-Facebook group

significant assignments or examinations in other courses and to synchronize with topics and activities in the Professional Development course. After the Professional Development course was completed, all students in the class were asked to complete an anonymous online survey with questions regarding their opinions and use of the class components, their use of and comfort with communications as introduced in the course, their regular use of Facebook and any previous educational use for college-level coursework, and, for those who participated in the Facebook group, frequency of and barriers to that use (Table 2). Questions were open-ended free response. Differences between the respondents that had participated on Facebook (FB) and those who had not (non-FB) were compared using the Student's t-test with significance set at $p < .05$.

## RESULTS

Of the 99 students enrolled in the course, 88 were women and 11 were men. Of the 51 students who "friended" the instructor and were added to the Facebook group, 48 were women and 3 were men. There were 77 students who completed the anonymous survey. Of these respondents, 33 were from the FB group and 44 were from the non-FB group.

Course study materials were offered as hard copies, digital copies, or podcasts. Thirty percent of the FB group and 34% of the non-FB group used hard copies, 76% of

the FB group and 68% of the non-FB group used digital copies, and 18% of the FB group and 20% of the non-FB group used podcasts to support learning. There was no significant difference between the FB and non-FB groups in use of course study materials.

All respondents were asked to rate how they use Facebook (Table 3). There was no significant difference between the FB and non-FB groups in general use of this type of social media.

All respondents were also asked if they had used Facebook in any other college-level course. One student had used it as a discussion tool in a science course and one had been assigned the creation of a Facebook page as a biography assignment in a humanities course. Forty-one students reported never having used Facebook for academic purposes in a course, but 14 participants reported using some aspect of Facebook for small-group scheduling or work and sharing of resources. Two students expressed interest in using Facebook as an academic tool in the future. Two students felt that Facebook should not be used as an academic tool, with one student expressing concern that use of Facebook for personal matters was in conflict with its use for schooling, and the other student expressing discomfort with its use in a professional or school setting because it is primarily viewed as a social communications tool.

Responses to questions regarding students' opinions on the value of large- and small-group discussions and their effect on attitudes regarding the practicing of client communications and the ability to succeed in future

training are shown in Table 2. The only significant difference between groups was regarding whether or not students had consciously practiced communication skills in non-academic venues. That was significantly more common in the FB group than in the non-FB group.

Students in the FB group were asked how many of the postings they had read. Seventeen of the 33 participants read all of the postings and 24 of the 33 read at least half of the postings. Students were asked how many of the postings they responded to. Of the 33 respondents, 21 responded to none of the postings, and no respondent replied to more than three postings. Three of the students commented that although they did not post responses on the site, they did think about the content posted and watch the suggested videos, with one student even sharing those videos with others for their learning.

Students in the FB group were asked their primary reason for joining the FB group. Ten participants thought it would be interesting or were curious. Six wanted to make sure they had access to all course materials and ensure they were learning all they could. Five wanted to rehearse conversations they knew they would have in practice someday. Three were interested in interacting with their classmates and the instructor.

Students were asked what barriers prevented them from participating in the FB group to a greater extent. Eight participants were unwilling to post comments either because they did not want to appear to be the only ones posting on the site (few of their colleagues were posting anything) or because they wished for anonymity and were too shy to post comments to a large group without more training. Seven described time and obligations in other courses as the limiting factor. Seven participants read the posts at times that were not conducive to immediate response and either did not remember to respond later, forgot what they had wanted to say, or saw a response from a classmate that was similar to what they would have said. Ideas for changes to the use of the Facebook group that might enhance participation included giving points for responding and encouraging students to respond so that others would not feel like they were sticking out.

## DISCUSSION

Of the enrolled students, 77% participated in the anonymous survey. Gender of the participants responding to the survey was not determined and could be a cause of bias in the study, although the lack of gender balance in the class precluded likelihood of an even gender distribution in survey participants and may mean that the survey participants well reflected the population surveyed.

The members of the FB and non-FB groups did not differ in their use of course materials or general use of Facebook. Students in the FB group were much more likely to read than to post; this is well described in the literature.[28,29] In one survey of 123 pharmacy students, 82% viewed materials on a course Facebook page, but only 26% posted to that page.[7] These findings suggest that Facebook should not be used by instructors hoping to enhance interaction between students; it instead is best

used as a means of providing more resources or encouraging more critical reflection within students.

Concerns were expressed by some students about the use of social media for education and the blurring of their personal and academic lives. Insertion of an authority figure, such as an instructor, into student social space has been described as something as innocuous as uncomfortable to something as extreme as unprofessional or "creepy."[30,31] Students worry about disclosure to instructors of personal information that may change the instructor's image of them as developing professionals.[7] This concern is not unfounded; in one review of Facebook profiles of 352 veterinary graduates, 21% had posted content that could have risked the reputation of the individual, the practice, or the profession.[32]

The only educational outcome that differed between the FB and non-FB groups was increased practice of communication skills outside of the academic setting by members of the FB group. Even if this only consisted of reading the posting on Facebook, it demonstrated that students will access these course materials and think about the content when it is presented in this venue. Comments from the students about the time they spent thinking about postings and sharing of content with classmates suggest that Facebook is a good tool to keep students thinking about the course content, which was a primary goal of the instructor in using this tool. The instructor originally was discouraged by lack of posts and apparent lack of use of the tool. Without having administered the survey, the educational outcome would not have been obvious to the instructor. While it is not automatic that thinking and talking about course content with others will lead to enhanced competence, it is clear that communication is not something that can be learned by reading about it. Communication is a skill that must be practiced.[33,34] The instructor had hoped that student comments on the Facebook group would create interactions that gave overt opportunities for practice; this did not occur.

The majority of students who participated in the FB group did so out of interest and to ensure exposure to all course materials. This agrees with findings in other studies of health science students. While 84% of students in one cohort participated to earn extra credit points, 10% did so out of interest alone.[5] It may be that students chose to participate not because this was a Facebook group but simply to ensure that there were no course materials to which they did not have access. This particular motivation may have skewed the population that chose to participate but did not likely skew results regarding the use of those materials. The author did not ask in the survey why students may have chosen not to participate in the Facebook group. This omission is a possible limitation of this study as it might have revealed student concerns or made clear how students saw social media used for teaching and learning.

Barriers described by veterinary students included lack of time and lack of participation by classmates. In a cohort of pharmacy students, time also was cited as a primary limiting factor, especially around the time of examinations.[5] Despite efforts by the instructor to minimize

posts during periods of heavy coursework, the consistent dense course load in the veterinary curriculum was a barrier for participation, especially since this was an elective activity.

Students had not had much exposure to the use of Facebook as a formal educational tool. There are several reports of students using Facebook informally as was reported here, including for forming study groups, clarifying logistics of assignments and content of examinations, and seeking moral support.[9,10,35] These groups were considered to be most beneficial when there was no blurring of educational and social communications on the site.[9,36]

Teachers may be hesitant to use social media as a teaching tool. This hesitance may be due to lack of familiarity with the tool or its use in teaching and learning or to concerns about students posting inappropriate or copyrighted materials on the site.[37,38] Faculty members who choose to use Facebook should consider whether or not they will give students any access to the instructor's personal information. Instructors who personalize their teaching by self-disclosure, enthusiasm, and use of stories and humor may be seen as more effective at explaining course content.[39–43] However, students in one survey suggested that instructors should use caution by not posting excessive personal or political information and that instructors should ensure the same level of formality online that they express in the classroom.[39]

Future iterations of this study could include some required component in the use of the Facebook group to ensure that activity is discernible to the instructor and to encourage more students to post. Use of this specific tool would require students to join Facebook and could compromise the social and academic divide described previously. Similar tools are available through most learning management systems and are perhaps better for required activities. A follow-up to this study would be tracking the students in communications training later in the curriculum to see if increased exposure to course materials as promoted by Facebook use translates into demonstrable competence in authentic situations.

The author of this study joined Facebook solely to familiarize herself with this form of social media for teaching and never became a devoted user. This very much meets the profile of other faculty members of her age and amount of education, who generally do not use Facebook regularly and prefer E-mail to Facebook for communications.[3,31,38] Use of Facebook for teaching would perhaps be easier for those who regularly access the site as part of their daily routine.

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