Social Media and Equine Science: The Effect of LinkedIn on In-Class Engagement of Equine Higher Education Students[1]

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Abstract

Social media is a major method of communication in society today, allowing people worldwide to interact with just the click of a mouse. Social media has also become more frequently used in the equine industry. This study explored the benefit of using a social media site as a teaching tool in equine higher education curriculum. In particular, it involved the incorporation of LinkedIn as a required participation effort for equine science students. Four equine science classes were selected for participation in this study. All classes were taught by the same instructor and in a traditional lecture/discussion format; however, two courses had an additional social media component added. The treatment groups participated in assignments during the semester using LinkedIn. Pre-course, mid-course and post-course data collection were conducted in each class and grade data was collected at the end of the semester. Data were analyzed using descriptive statistics. Results revealed that the majority of students felt social media was an effective tool in the equine science classroom; however, it did not replace the traditional lecture format as the most effective method of teaching. Results also suggested that students felt the social media portion positively influenced the teacher-student relationship.

Introduction

Social media has changed the way people from all over the world communicate, the ease of use increasing the amount of online interaction on both computers and smart phones. Websites such as Facebook, Twitter and LinkedIn each provide a template for communication that spans across countries and cultures. Interactions on these sites can lead to various social situations, friendships and even possible employment opportunities. LinkedIn, for example, refers to itself as "the world's largest professional network" (LinkedIn.com, 2013). As of 2013, the site had 250 million users in 200 countries around the world and its popularity steadily increased since their launch in 2003. The website shares a similar layout with Facebook, but has a more professional, resume-like feel, with more detail given to past and present employment, current projects and other professional endeavors. What is unique to LinkedIn is that it allows users to give each other "endorsements" that vouch for another users proficiency in certain skills or areas. When used properly, a user can build up a sizable group of cyber references through "endorsements" that suggest them to possible employers for specific tasks. Another unique feature of LinkedIn is that their "groups" act more as intellectual forums, where people in a certain field can interact over current topics, look for employment and gain access to research materials or articles (LinkedIn.com, 2013).

An increasing amount of research has been conducted involving the incorporation of various social media sites into educational curriculum. Many faculty and staff in the academic community see social media in a pessimistic light as a "technological disruption to pedagogy", while others see endless possibilities in which this additional educational space of connectivity could provide for students and educators alike (Rambe, 2012, p. 1). A study conducted at the University of the Free State in South Africa, Facebook was incorporated into the course curriculum. Results suggested that by thinking outside the traditional pedagogical path and utilizing social media in classroom, students were able to have a "safe haven" for self-expression, access to a more advanced learning community and a greater opportunity for academic networking (Rambe, 2012). In another study conducted in 2011, a social media survey determined that almost two-thirds of instructors had used social media in their curriculum and 30% of those teachers used content that students could interact with outside of classroom time (Abe, 2013).

Facebook is not the only social media site used in the classroom. A study using Twitter examined the use of the site as a supplement to the curriculum in a college course and evaluated students' engagement and grades. Engagement was measured using a 19 item scale based on the National Survey of Student Engagement (Junco, 2011). Students who received the supplemental social media portion had both grades and classroom engagement that were statistically higher compared to the control group (Junco, 2011).

Research has also examined the effect of utilization of social media in education on the student –teacher relationship. Findings suggested that the use of social media sites in the classroom not only appeared to engage students in the material, but also created deeper and more collaborative relationships between instructors and students (Briones, 2013). However, there has been limited research on student user experiences or the experiences of the instructors who implement social media into their curriculum (Veletsianos et al., 2013). Whether or not traditionalists want to utilize it, social media and other forms of technological advancement are encroaching quickly on the pedagogical norms. While arguments over whether or not to use social media in the classroom generally stay the same, the real question now is: "How do we continue to capitalize on the advantages delivered by social media?" (Leece and Campbell, 2011).

The main goal of using social media in education is to discover and utilize alternative ways to provide an engaging experience in the classroom. 'Engagement' is a word commonly used by educators as the ultimate measure of their students' learning experience. Engagement can be defined as "a dynamic and constantly reconstructed relationship" (Leece and Campbell, 2011). Therefore, in order for students to be engaged in their educational experience, they must be committed to active participation and interaction with the material. Social media, by nature, promotes engagement purely by providing a space for dynamic interaction and idea-sharing (Leece and Campbell, 2011). This promotes the question of whether or not social media, with its innate engagement qualities, in combination with higher education can in fact facilitate a higher level of student engagement in the material.

In pursuit of student engagement, the use of online classes in the very hands-on field of equine science education has become more and more frequent. Michigan State University Extension has a highly successful online equine education website called My Horse University, which offers online courses relating to horse care and business management (myhorseuniversity. com). Pratt-Phillips (2011) examined the relationship between student participation in online-formatted class activities, grades and engagement in a distance equine science course and suggested that students who were more active online and interacted with other students in the online activities were significantly more engaged in

the material than those who did not participate (Pratt-Phillips, 2011).

This study involved the implementation of LinkedIn into the required course participation of equine science students as an outside of class interaction with their material. The purpose of the study was to examine the benefits of using a social media site as a supplemental portion in an equine higher education curriculum.

Methods

Students (n = 26) enrolled in advanced-level equine science classes were selected for participation in this study during the fall 2013 (n = 9) and spring 2014 (n = 17) semesters. All classes were taught by the same instructor and in a traditional lecture/discussion format; however, one course each semester had an additional social media component. Each semester, both courses met with the instructor for the same number of face-to-face class sessions each week and both the traditional group (TRAD) students and treatment students (LINK) completed standard assignments. LINK students were also required to participate in several assignments during the semester using the LinkedIn site. Assignments included having students create their own profile, join a group set up specifically for the class and interact with their classmates by reviewing and discussing peer-reviewed research complete with references that was posted periodically to the group within the LinkedIn site (Figure 1). Their interactions were in the form of "comments" on discussion threads and they were also able to "like" posts made by other students (Figure 2). The professor also interacted with the students through "comments" on the page by answering questions and contributing to discussions. To improve the validity of the discussion posts, the professor did not allow incorrect

Figure 1: Home page for the LinkedIn group specifically developed for the course and used by the LINK group to complete several assignments during the Fall 2013 and Spring 2014 semesters.
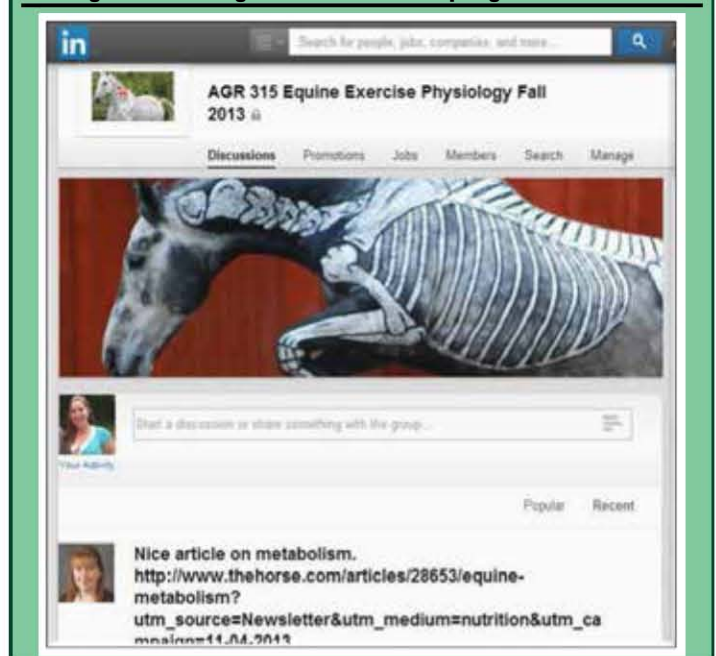
Figure 2: Example assignment posted to the LinkedIn group for the LINK group.

information to exist on the page. LINK students were also required to interact on other equine science related groups on LinkedIn and to submit periodic summaries of the question and discussion activity occurring within those groups. Completion of the assignments was graded.

Pre-course, mid-course (only for the LINK group) and post-course surveys were conducted in each class. Questions included 4-point Likert-type scales and open-ended responses and all surveys were presented to the students in person during a class period. The pre-course survey was comprised of questions regarding the use of social media in classes previously attended, the effectiveness of social media in the classroom and the impact of social media on career opportunities. The mid-course survey was only distributed to LINK students and was composed of questions regarding the students' experience with the LinkedIn component of the class to that point, their perceived impact of the LinkedIn component on their grades and their thoughts on how the social media portion could be better used to benefit the students. The post-course survey was comprised of the same questions as the pre-course survey, with additional questions for the LINK group regarding the effect of LinkedIn on their learning experience and the communication/relationship with their professor and their classmates during the course.

Due to low student numbers, data from both semesters was combined and analyzed using descriptive statistics.

Results and Discussion

In both the TRAD and LINK groups, the majority of students thought that social media would be effective as a tool in higher education equine science classes and finding/securing career opportunities. According to the pre-course survey, 77% of the students in both classes

had used a social media site previously in a college course. Of the TRAD students, 78% had previously experienced social media in the classroom, while 83% of LINK students reported the same. This means that 17% of the students in the LINK group were experiencing social media used in the classroom for the first time. Students who were experienced with social media in the classroom had used sites such as Pinterest, Facebook and YouTube, but never LinkedIn as an educational supplement.

At midterm, the mid-course survey was administered to the LINK group to evaluation their feelings about how LinkedIn was being used in the class and to inquire about any thoughts or suggestions that they might have regarding the use of LinkedIn thus far. When asked how the social media portion could be better utilized and helpful to the students, one LINK student's response was *"Involve more of the class work with LinkedIn, discuss what was said in class on the forum and relate it back to everyday use to better increase everyone's understanding."* Responses such as this one suggested that the students wanted more cohesion between lecture and the social media supplement.

During the last week of the semester, a post-course survey was administered (Table 1), student grades were collected and survey data was analyzed. There was noticeable positive feedback from LINK students regarding their interactions with the LinkedIn portion of the class. Of particular interest was that, while 55% felt a better connection with their professor, 44% of LINK students did not feel a better connection with their classmates. Students wrote comments on the surveys such as "It is a great way to get involved in the outside world other than the classroom setting and get an outside point-of-view on topics" and "It gives students a chance to actually visualize what they are learning and see other opinions from individuals all over the world." These answers suggest that students felt the involvement with the LinkedIn portion of the class provided them with a different interaction with their material which in turn improved their understanding.

The primary challenge of this study was the small number of participants in both the fall and spring semesters which made statistically meaningful data analysis impractical. A secondary issue was keeping and maintaining student participatory interest and creating a dynamic discussion space. While LINK students were required to participate in the LinkedIn assignments as part of their course grade, some did not participate despite the potential grade penalty. Those who did participate sometimes did not actively engage in the discussions and instead simply wrote the answer to a question but did not explore the content further. While critical thinking and problem-solving skills were reflected by some, they were not reflected by the majority. It was interesting to note that even though they were not participating as much as expected, students still vocalized their affinity toward participating through the LinkedIn site. Similar issues were experienced at

Table 1: Likert Responses for LINK Students (n=26) on a Sub-set of the Post-Course Survey Questions.				
	Not Effective			Very Effective
	1	2	3	4
Questions	*f*(%)	*f*(%)	*f*(%)	*f*(%)
1. How effective do you think social media can be when used as a teaching tool in higher education?	1 (3.85)	6 (23.08)	14 (53.84)	5 (19.23)
2. How effective do you think social media can be when used as a teaching tool in equine science classes?	0 (0.00)	7 (26.92)	12 (46.16)	7 (26.92)
3. How effective do you think utilizing social media sites, such as LinkedIn, can be in identifying possible career opportunities?	1 (3.85)	8 (30.77)	5 (19.23)	12 (46.16)
4. How effective do you think utilizing social media sites, such as LinkedIn, can be in attaining a career/job?	0 (0.00)	8 (30.77)	7 (26.92)	11 (42.91)
5. How effective do you feel using LinkedIn as a teaching tool was in this class?	4 (15.38)	10 (38.46)	10 (38.46)	2 (7.69)

the University of the Free State in South Africa, where Facebook was used as a portion of an Information Systems course (Rambe, 2012). They also faced challenges identified as the development of quality educational discussions, fostering student engagement and levels of deep learning (Rambe, 2012).

There is still skepticism around the use of social media in the classroom by agricultural educators (Settle et al, 2011). Even while the majority of agriculture teachers are using some form of social media in the classroom, these educators are the most opposed to non-Facebook networking sites (such as LinkedIn) because of the questionable educational value (Settle et al, 2011). Further research is necessary to gain a better understanding of the use of these types of networking sites to create a more solid knowledge base for educators.

Also, the way stakeholders (in our case, students) use the internet for educational purposes can range widely (Porr et al, 2014). Stakeholders with questions sometimes find the internet unreliable and are unable to sift through the incredible volume of information available to find valuable and valid sources (Porr et al, 2014). To address this issue, the instructor did not allow incorrect information to exist on the LinkedIn discussion posts and required cited references for information provided by students in the discussion posts. There is also a perceived risk for educators, some of whom believe that these new forms of educational transference could end up replacing them in the long run (Porr et al, 2014).

Summary

This study examined the effect of incorporating a social media site as a teaching tool in equine science classes taught at the college-level. The social media site LinkedIn was chosen because of its professionalism and career opportunities. While social media used in educational settings has been researched frequently, its use as a technologically-advanced supplement within equine science classes has not been documented. The equine industry requires access to current knowledge and management techniques as well as ready access to information from all over the world, making social media an ideal choice for use in the industry as a whole. Using social media in equine science education allows students

interested in employment in the field to experience ideas and discussions about topics in various locations both inside and outside the classroom. While this study did not provide statistically significant data about the effect of social media use in the equine science classroom, it did provide encouraging suggestions that it very well could have an impact on student engagement and a deeper learning experience.

There is very limited research on the effect of social media implementation into animal/equine science college curriculum and this study functions as a preliminary look into future possibilities. Implementing a social media site into classes with larger student numbers is crucial to attaining a better understanding of the effects of social media as a learning tool within the animal/equine science context. Also, the utilization of a flipped classroom format in addition to the social media tool could affect the outcome of student satisfaction and engagement. The flipped classroom facilitates student interaction with classroom material (lectures, readings, PowerPoint presentations) outside of class time at their individual speed, which allows in-class time to be utilized for more discussion, interaction and synthesis (Baker, 2013). By using the social media portion in a flipped classroom, social media could become a more effective tool by allowing students and instructors to better utilize class time to create the fluid connection between the course material and in-class experience. With more research, alteration and repetition of this study, further information could be gathered about social media and its impact on the equine science classroom in places of higher education.

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