Student Reflection of Blogging in a Turfgrass Weed Management Course[1]

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Abstract

A blog, which contains periodic, reverse chronologically ordered posts on a common webpage, is a tool that is popular among all ages and for many different uses. Blogging in the turfgrass industry is prevalent, regardless of the industry sector. It is vital that students in the Golf and Sports Turf Management (GSTM) program at Mississippi State University (MSU) are well versed in using blogging technology in a professional environment upon graduation. Therefore, the objective of this research was to determine if blogging was an effective educational delivery method for GSTM students enrolled in a Turfgrass Weed Management course at MSU. Students were randomly assigned into groups of three to research, write and publish a blog post on an assigned weed species. Students were given three instruments at the beginning (PRE), middle (MID) and end (POST) of the semester to determine the impact of incorporating the blog into this course. Of the 14 students in the course, 12 had never followed or contributed to a blog. Of the students who completed the MID instrument (n = 12), 11 students indicated their ability to find and understand new information was improved through participating in this blog. Overall, the blogging component of this course significantly improved student connection with the turfgrass industry and students indicated a blogging assignment should be included into future turfgrass weed management courses. Also, the majority of students indicated they would be willing to contribute or start a blog upon entering the workplace after graduation.

Introduction

Social media is a powerful tool widely used throughout many parts of the world. This technology is unique because it provides an alternative from the traditional one-way message by enabling communication between individuals or groups who are located a great distance apart. Social media's ease of use has allowed widespread adoption in personal, business and educational settings (Bosman and Zagenczyk, 2011). The rapid rise in popularity of social media has challenged educators in many ways; in particular, how to incorporate social media technology into the classroom to enhance the learning environment.

Several recent studies have examined the role of various social media outlets in a classroom environment. Regarding Twitter, et al., (2010) reported students were familiar with this technology, but were hesitant to use Twitter in a classroom environment. In a more recent report, Ingwers et al. (2014) noted similar dissatisfaction and lack of student enthusiasm when Twitter was incorporated into classroom assignments. However, Henry and Hock (2014) reported positive student reaction when summarizing industry related articles into tweets in an Agricultural course, but students in their study did not actually use Twitter to write the tweet. In a recent study examining the use of Facebook, McCole et al. (2014) noted incorporating Facebook into an Introduction to Travel and Tourism course increased student engagement with the course material and enhanced interaction with the instructor and other students.

While Facebook and Twitter are currently very popular social media outlets, blogging is a tool that is popular among all ages and for many different uses. In a survey of nearly 37,000 students in Canada and the United States, 37% of students agreed contributing content to blogs was an effective tool for learning (Smith and Caruso, 2010). A web-log, commonly referred to as a blog, was introduced in 1997 and is a web application which contains periodic, reverse chronologically ordered posts on a common webpage (Blood, 2000). Although blogging is one of the oldest forms of social media, its use is prevalent in all sectors of the turfgrass industry, including golf courses management, lawn care services,

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university extension agents, athletic field managers and turfgrass print publication magazines. Jones et al. (2011) examined two blogs in the turfgrass industry to determine the effectiveness of reaching a broad audience. The authors concluded both blogs reached an average of 34.9 to 148.4 people per day at the time of their publication.

Williams and Jacobs (2004) published one of the earliest reports determining student response to incorporating blogs into a classroom environment. The authors noted that students were in favor of blogs as an effective aid in teaching and learning. The authors also stated the blogging technology enabled greater student interaction with peers. Platt (2011) noted improved student writing, increased student engagement inside and outside the classroom and improved ability in producing appropriate material in blogs. Avci and Askar (2012) also noted blogs increased student performance and productivity.

Although several studies have examined the use of various technologies in the classroom to enhance student learning and engagement (Platt, 2011; Shultz and Doerfert, 2010), continued examination is required in order to assess the effectiveness of technology across multiple disciplines. Information about the impact of blogging on enhancing the classroom learning environment is limited in plant science related courses, in particular, turfgrass specific courses. Therefore, the objective of this study was to determine if blogging is an effective educational delivery method by accessing student writing skills, improving technology literacy in a professional environment and developing a positive connection with turfgrass industry professionals.

Methods

This research was conducted at MSU in the Plant and Soil Science Department for students in the GSTM program. A total of 14 students were enrolled in a Turfgrass Weed Management course (PSS 4823) in the spring, 2014 semester. For this semester-long project, students who were enrolled in PSS 4823 created content for the blog page (http://blogs.msucares.com/turfgrass/) utilized by the GSTM professors to disseminate information to clientele. At the beginning of the semester, the first class period was spent reviewing general information regarding blogs, importance of blogs in the turfgrass industry and professionalism in blogging. The second class period was spent reviewing the goals of the project, student expectations and fielding any questions from students regarding the blogging project.

The blogging assignment consisted of students compiling information about a specific problematic weed in turfgrass management (i.e., “weed of the week”). In general, students had a lot of freedom regarding content of information presented in the blog. However, items such as key identification traits, germination characteristics and control measures were required to be part of each blog post. Each week, a group of three students were randomly assigned into groups to research, write and publish a blog post on an assigned weed species. These groups of students changed to ensure all students were able to work together over the course of the semester. The students had one week to complete the writing assignment. Once they completed the assignment, each group met with the professor to review editorial and content quality of the writing assignment. Following revisions, the professor and students would publish the blog post together. A total of eight blog posts were generated over the course of the spring semester.

For data collection, students completed three instruments over the course of the semester. The first (PRE) was given at the start of the semester. A second (MID) was given at the halfway point of the semester. A final (POST) instrument was administered at the end of the semester. Due to student absences, not all 14 students completed each instrument. Aside from yes/no, open-ended and demographic type questions, all other questions had a scale of 1 to 5, with 1 = poor, 2 = fair, 3 = good, 4 = very good and 5 = excellent. Paired Samples t-tests were conducted to determine if there was a significant difference ($p \leq 0.10$) in mean scores comparing PRE to POST and MID to POST.

Results

A total of 13 students completed the PRE survey instrument. Students in this course were between the ages of 20 and 24 (M = 22.3) and all with prior experience working in the turfgrass industry. In relation to their previous experience working with blogs, the majority of students (n = 12) had never followed a turfgrass industry-related blog or contributed to any blog (turfgrass-related or not). Three students reported they had followed a blog not related to turfgrass. A total of 12 students completed the MID survey questions. When asked if their ability to find and understand new information was improved through participation in this blog, 11 students indicated an improvement. A total of 12 students completed the POST survey questions. Of the 12 questions asked, two related to potential blog participation post-graduation. Students were asked if they would feel comfortable contributing to an employer-established blog and would they consider creating a blog if an employer did not have an existing blog. Regarding willingness to contribute to an established blog, 11 students indicated yes, while one student indicated maybe. Regarding starting a new blog, seven students indicated yes, one student indicated no and four students indicated maybe. Therefore, the majority of students would feel comfortable contributing and/or starting a blog once they find employment.

Students were asked to describe their writing skills PRE and POST completion of the blogging assignment (Table 1). There was slight improvement from PRE (M = 3.64, SD = 0.81) to POST (M = 3.91, SD = 0.83), but the improvement was not statistically significant ($p = 0.43$). Students were asked to rate their level of comfort with the use of the blogging technology. Again, there was a

slight increase from PRE (M = 3.55, SD = 1.13) to POST (M = 4.09, SD = 0.70); however, this change was not statistically significant (p = 0.24).

A paired samples t-test was also conducted to determine if there was a significant difference in mean scores from the MID to POST on four questions (Table 1). Students were asked to rate the writing assignment (the weed species description blog post). There was a numerical improvement from MID (M = 3.50, SD = 1.68) to POST (M = 4.33, SD = 0.78), but significance was not noted (p = 0.20). Regarding students sense of connection with the turfgrass industry through the blogging assignment, there was a significant (p = 0.07) 1.08 unit increase from MID (M = 3.00, SD = 1.60) to POST (M = 4.08, SD = 0.79). Students were also asked to rate their satisfaction with the blogging assignment. There was a significant (p = 0.10) improvement from MID (M = 3.17, SD = 1.53) to POST (M = 4.17, SD = 0.58), which indicates students would recommend this assignment for future classes. Finally, students rated their experience working in groups to complete the blog assignment. While there was a 0.66 unit increase from MID (M = 3.67, SD = 1.92) to POST (M = 4.33, SD = 0.78), this increase was not significant (p = 0.33).

Discussion

Students have become active participants in gaining knowledge through various social media outlets and online sites. This is also changing the role of the professor since he/she is no longer the sole creator and distributor of educational content. Therefore, incorporating various forms of technology in the classroom environment is important to ensure students can obtain and process quality information through various online sources. While numerous technology mediums exist for students to use, this project focused on blogging, perhaps one of the oldest forms of social media dating back to the mid 1990's. Blogging was chosen for this project since its use is prevalent in the turfgrass industry, regardless of which sector of the industry a student enters upon graduation. Also, only three students had previously contributed content to a blog, which indicates a lack of previous experience with this teaching methodology and lack of experience generating content for a blog in a professional setting. In a recent study about blogging use in turfgrass extension, Jones et al. (2011) indicated that two blogs targeting the turfgrass industry reached an average of 34.9 to 148.4 people per day. During the spring, 2014, the turf team's blog at MSU received 2,414 visitors during the study period. While not every visitor views each individual weed post, many are able to see a link to weed posts and therefore are aware of student activities. One of the objectives of initiating this assignment was to provide an avenue for students to connect with turfgrass industry professionals. Networking via attending conferences, participating in field day events and building an online presence are vital when it comes time for job placement. Results from this study indicate students felt a stronger connection with the turfgrass industry in association with this assignment. This stems from students who interview for internships and receive positive comments about the blog and from general positive feedback sent to students regarding their weed species posts. Students were also satisfied with the blog being incorporated into the course. A similar response was noted in a communication technologies course (Platt, 2011) and an MBA course (Williams and Jacobs, 2004) regarding positive student feedback with a blogging assignment. This supports the addition of a blogging assignment into other turfgrass weed management courses.

Summary

Overall, students responded favorably to the blogging assignment. This type of project gave the students a purpose for writing that goes beyond simply receiving a grade. Students indicated favorite aspects of the blog were "collaborating with other turf managers", "learning how to form a blog and being able to apply that skill to future jobs" and "it was a good learning tool in addition to lecture." While our students leave MSU with a solid scientific foundation regarding turfgrass management, building and maintaining an online presence is also equally important. Of the six questions answered, two significant increases were noted from the MID to POST instrument. There was a significant improvement in student connection to the turfgrass industry and their level of satisfaction with the blogging assignment. Although research incorporating technology in the classroom is still relatively new, future research should focus on incorporating multiple social media platforms, such as Twitter and Facebook, in addition to blogging. The majority of the literature focuses on one platform, when in reality; a single user typically utilizes multiple social media outlets.

Table 1. Paired samples t-test for students' PRE-, MID-, and POST- completion of the blogging assignment for Golf and Sports Turf Management majors at Mississippi State University in Spring, 2014 (n = 12).

Question	Instrument	Mean	Standard deviation	t	df	P-value[z]
Writing skills[y]	PRE	3.64	1.10	-0.82	10	0.43
	POST	3.91				
Comfort level[x]	PRE	3.55	1.44	-1.26	10	0.24
	POST	4.09				
Writing assignment[w]	MID	3.55	2.12	-1.36	11	0.20
	POST	4.33				
Industry connection[v]	MID	3.00	1.88	-2.00	11	0.07
	POST	4.08				
Satisfaction[u]	MID	3.17	1.91	-1.82	11	0.10
	POST	4.17				
Group work[t]	MID	3.67	2.27	-1.02	11	0.33
	POST	4.33				

[z] Mean separation within each question, P ≤ 0.10.

[y] How would you describe your writing skills after completing the blog assignments?

[x] How would you describe your comfort level with blogging after completing the blog assignments this semester?

[w] How would you rate the writing assignments for the blog?

[v] How much has your level of connection to the turf industry increased due to your participation in this blog?

[u] What is your level of satisfaction with the blogging component of this course?

[t] How was your experience in groups researching and summarizing information for the blog?

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