To tweet or not to tweet? Students' perceptions of twitter use in a D1 course

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This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi: 10.1002/jdd.12447.

PROBLEM

Given that student retention is lowest (5%) for lectures, there is a need to engage students in real time.[1] Due to class sizes and efficiency, lecturing is still a common teaching method within the U.S. dental school curriculum (https://www.educationcorner.com/the-learning-pyramid.html). Anecdotal observations suggested that only approximately 10% of students in this course where we implemented Twitter were truly engaged.

SOLUTION

Short posts (called Tweets) enable members to make comments or statements. Twitter provides an opportunity to promote student engagement, an opportunity for "anywhere anytime" learning[2] and real time feedback[3] as well as increases accessibility to the instructor.[4]

A total of 109 DDS students enrolled in a D1 Treatment Planning course (Class of 2022) at the University of Michigan School of Dentistry were informed before the three-lecture series to be prepared with a Twitter account (anonymous if preferred). Students were encouraged to Tweet questions during class. At the conclusion of each lecture, students were presented with a de-identified clinical case and asked to respond to questions posed by the instructor. At the start of the subsequent lecture, the instructor used important/incorrect/interesting Tweets, considered the relevant evidence, and facilitated a customized discussion for the class. This project was deemed "not regulated" by our Institutional Review Board (HUM00166289).

RESULTS

Twitter data

Forty percent of our students did not have a Twitter account before this class. There were 117 unique Tweets by students (n=109). Six of the 117 Tweets attracted replies and there were 151 "likes." Additionally, there were 45 re-Tweets of the original 117 Tweets. Only 65 of the 109 students participated by Tweeting, "liking" or engaging in some other way. The Tweet conversation was seen by a total of 4,798 other Twitter members.

Post-experiment survey feedback data

Forty-seven students (43%, 55 males and 54 females) participated in the survey. Thirty two percent reported they felt moderately or extremely comfortable posting their responses on Twitter. However, 23% said they felt moderately or extremely uncomfortable. A total of 28% said that Twitter enhanced the learning in the lecture (definitely yes/probably yes), and 45% reported that it did not (definitely not/probably not).

Similarly, 28% said they preferred interacting on Twitter (definitely yes/probably yes) and 49% (definitely not/probably not) said they preferred interactions in a traditional lecture. In response to the question "did class discussion that came from Twitter posts result in additional learning," 36% agreed (definitely yes/probably yes) while 28% disagreed (definitely not/probably not). In response to the question "Would you want the instructor to use Twitter for the remaining lectures in this series," 26% agreed (definitely yes/probably yes), while 57% disagreed (definitely not/probably not).

Anonymous Overall Course feedback

The Twitter lectures represented three of the 12 lectures for the entire course, however, they generated 40% of the open-ended comment that were mostly negative (Table 1). Interestingly, the feedback for the entire course (14 weeks) was very focused on these three sessions with Twitter. The class opinion was split, with 50% strongly disliking the experiment and 50% stating they enjoyed it and hoped we would persevere with this type of engagement.

Lessons learned

One lesson learned was that monitoring and displaying Twitter in a synchronous class session was difficult to manage.

A second lesson learned was that using Twitter data during class and in non-class time to respond and make clarifications required additional effort by the instructor. However, the use of Twitter presents an interesting opportunity to engage students even outside of classroom hours.

A third lesson learned was that students may be hesitant about using Twitter. [5] We are exploring the use of Canvas to create a similar interactive experience to Twitter as it may be a more acceptable platform for students.

References

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Table 1. Students Comments about Twitter use
The lecturer kept the class engaged with different case studies through questions and Twitter application.
While the Twitter experiment did not work out this semester, I think it it necessary to implement some type of student engagement system, be it a modified Twitter setup or iClickers. Otherwise, most of the class sat in silence when the instructor posed a question, which slowed down the class.
Didn't love the twitter idea. I think a way to get people more engaged in class could be using the iclickers.
The whole twitter thing was a dud. Would not recommend.
Don't use twitter discussions. Additionally, less of the class sessions should be discussion based.
The Twitter experiment really does not work. I felt like a lot of the class meetings were not very useful.
Stop using Twitter in classroom