

The Relationship Between Twitter and Student Engagement and Exam Scores in An Advanced Nutrition Course

Abstract

Introduction: Web 2.0 technologies are being increasingly incorporated into the university classroom. Twitter, a social networking and micro-blogging site, has been relatively under-researched for its potential educational applications. The purpose of this study was to test the use of Twitter in an academic setting in evaluating the relationships between student Twitter use, student engagement and midterm exam grades in an advanced nutrition course.

Methods: The participants (n=76) of this study were the upperclassmen enrolled in the spring 2012 semester of a course titled, "Advanced Nutrition". Student engagement in this study was measured using a survey that was adapted from the National Survey for Student Engagement. Students took an initial pre- engagement survey before beginning course Twitter use to provide a baseline assessment of each individual's engagement. Students were required for the course to create a Twitter account and find and follow the course account @UVMAdvNutrition. Beyond this, regular Twitter use was not required for the course. The undergraduate teaching assistant for the course was responsible for facilitating most of the class Twitter use and tweeted on a regular basis. Following 1 month of Twitter supplemented class work, students took a second student engagement survey before sitting for their midterm exam.

Statistical Analysis and Results: A paired t-test showed no significant difference between student pre- and post- engagement surveys. A non-parametric Spearman correlation analysis showed no significant relationship between student Twitter use (measured in number of tweets) and engagement scores. There was also no relationship between Twitter use and the change in engagement scores. Student engagement scores were also not related to midterm exam grades but were, however, positively correlated to self-reported GPAs. Student Twitter use was negatively associated with student midterm exam grades.

Conclusions: In this study, Twitter use was not related to improved student engagement or exam scores. However student feedback comments suggest that students are receptive to the use of Twitter as part of the class, but with some changes in how it is used. Future changes to consider might include a course requirement for Twitter use and involvement, tweeting more often (more than once per day) and extending the duration of the study period.

Key Words: Twitter, education, student engagement.