

Letter to the Editor in response to:

[Junco, R., Heilberger, G., & Loken, E. \(2010\) The effect of Twitter on college student engagement and grades, *Journal of Computer Assisted Learning*](#)

Dear Dr. Crook,

I am writing regarding the recent publication entitled “*The effect of Twitter on college student engagement and grades*”. While I have concerns regarding statements in the review of literature, and the supporting references, the focus of this letter is the study itself.

The authors state that the purpose of the study was to answer the questions: “What effect does *encouraging* the use of Twitter for educationally relevant purposes have on grades” and likewise “engagement”, yet the title of this article refers to the “effect of *Twitter*.” Was this a study on the effect of “encouraging” or the effect of “Twitter”? They are not the same thing.

The “Results” section of this study reflects this same confusion beginning with a restatement of the questions “what effect does encouraging...” followed by answers that begin with “To examine the effect of Twitter...” Again, these are two completely different things. Even if one were to modify “the effect of Twitter” to say “the effect of the use of Twitter”, they are still not the same thing. Even so, one could question whether researchers should even discuss an educational study like this one in terms of a particular tool, or whether this research should be concerned with the *type* of tool: the effect of microblogging, for example. These, however, are relatively minor points when one considers the methodology and analysis of this particular study.

There is an extensive description in the “Methods” section on “The Twitter Procedure”. In contrast, there is almost no information regarding what is termed “the control-group”, which is comprised of students using another social networking application called Ning. We are told the Twitter students were given an hour-long training session two weeks into the semester, and that this was “supplemented by question-and-answer periods over the next few class meetings.” It appears these sessions were given during the study. We are not told who gave these trainings nor who was involved in supplemental sessions. One assumes the Twitter students were, even at this point, more actively engaged with the instructors of this experiment than the “control group”, as they were being given extra attention. There is no mention of what the Ning students (control group) were doing. Did the researchers influence the outcome of this study by their actions, or were these actions part of the treatment? It is not clear.

The authors go on to say that the Twitter activities were specifically created “based on previous research on engagement”; were the Ning activities also built on this research? Was there an equal level of engagement built into the control group? The study doesn’t say. If this research is studying the effect of Twitter, then those activities needed to also be part of the instructional design for the activities of the students in the control group,

otherwise we have another variable to consider. We are not given any description regarding how the activities, nor *what* activities, were built into Ning. One questions: what is the study comparing? Good design vs bad design?

We are told: “Students from experimental group sections were asked to follow a single Twitter account created for this study as well as follow each other so that they could interact across sections”; were the Ning students assigned a partner? If not, was the assigning of a partner another variable to consider? We are told that “activities that help students connect with each other and with faculty” were built into the activities on Twitter, and that “student/faculty interaction is an NSSE factor shown to be related to student success”. We know nothing about whether this was also done for the control group. If not, would this not be a seriously biased research study? We are told about the required Twitter assignments; we are told absolutely nothing about the Ning assignments. Was all attention was focused on the Twitter students? Was this part of the treatment? There is no way to tell. Regardless of whether the study was conducted in a biased manner, the report was certainly written from a biased perspective.

We are told the control group was provided the same “information” as the Twitter group. Information is not attention, it is not instruction, and says nothing of pedagogy. Information relies on delivery. True, they were not “encouraged” to use Twitter, so is this what was studied after all? The authors admit that the instructors were more engaged with the Twitter students. One wonders: did the students in the control-group feel ignored? Were the students in the control group aware of the activities of the treatment group, and if so what sort of effect did that have on their perception regarding the course and their own sense of value in the course? Is it possible these significantly affected the outcome? These are important factors that would certainly affect grades and engagement, and yet they are not even mentioned in this study.

One assumes that a good portion of instruction took part in an actual classroom. The instruction in the classroom does not appear to be part of the study, as it is never discussed. However, the authors analysis of the Twitter activities state: “Using Twitter produced a more rich discussion of student’s relationship to themes covered in the book than would have been possible *during the limited class time*. Twitter allowed us to extend conversations in ways *that would not have been practical during the hour-long class sessions*.” It is unclear how this is relevant. What does this have to do with the control group? And why is this important, since Ning and other applications would also do this? There are other similar statements throughout the analysis section in which the authors compare the use of Twitter with *in-class activities*. The “control group” was not “in-class activities”, and it is unclear why these statements are relevant to this study.

The sections of analysis include samples of dialogue between faculty and students; no dialogue from Ning is presented. The authors state: “Students in the Twitter group had the benefit of almost always on support for academic, co-curricular, and personal issues.” And “The use of Twitter also demanded that two of the faculty members involved in this study regularly monitor and participate in the Twitter feed. This helped increase students’ sense of connection with faculty and the institution, one facet of

engagement.” Twitter does not *require* this any more than any other social networking application unless this study required it in some unique way. One cannot help but ask: what was this study really comparing? What was it really measuring?

Faculty engagement and presence appear to be important factors in this study, yet we are not given any specific information regarding the faculty, their attitudes towards Twitter and Ning, nor their skill with Twitter. In fact, the only thing clear in this study is that faculty were much more present in the Twitter group, and more engaged with those students as well. Is this, in fact, what was actually measured: the effect of teacher presence and engagement?

It does not appear that the study was designed to validly test the effects of Twitter on student grades and engagement, nor even the effect of *encouraging* the use of Twitter.

I look forward to reading any responses to the questions posed in this letter.

Sincerely,

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