Finding the Wave Crest Using Twitter

Dr. Adrienne Peters, Department of Sociology
Dr. Jane Costello, Centre for Innovation in Teaching and Learning
Daph Crane, Centre for Innovation in Teaching and Learning

Canadian Network for Innovation in Education Conference, 2019, Vancouver, BC

MEMORIAL
UNIVERSITY

Twitter: An Introduction

- Launched in 2006

- Social networking platform for microblogging / microposts

- In 2016, 7.4 million active users

- Between 2010 and 2012, 64% Canadian Internet users used SN tools including Twitter

Literature Shows...

- Most common use in ed: Communication and assessment (Tang & Hew, 2017)

- Higher engagement scores (Junco et al., 2011)

- Encourages the challenge of assumptions (Rohr et al., 2015)

- Welch and Bonnan-White (2012) showed lower student-content engagement, but increased academic and peer engagement.

Literature Shows... continued

▶ Increased learner-centeredness (Chawingo, 2017)

▶ Promotes active e-learning (Hsu & Ching, 2012)

▶ Promotes informal learning

▶ Increased social presence

▶ Improved communication and writing skills (Dunlap & Lowenthal, 2009)

▶ Online students:

  ▶ are more independent (Diaz & Cartnal, 1999)

  ▶ have less direct interaction (Beard et al., 2004)

▶ Online interaction is less intimidating (Ni, 2013)

Present Study

- Two-fold study
  - A
  - B
- Two sections of sociology of deviance course:
  - same instructor and semester
  - identical content and materials
  - identical assessment
  - Difference: one section was online, one section was on-campus (f2f)

Research Questions

Study A:

▶ What kind of a Twitter presence do post-secondary students in a social science course have?

▶ Does students' required use of Twitter foster course and community connectedness based on students' perception of these concepts?

Research Questions continued

Study B:

- Examine students' use of social media platform in the social sciences

- Assess whether there were any differences in the experiences of Twitter by students completing the same course concurrently, one section being offered on campus and one section online

Methodology

- Course Assignment: 2 Twitter events
- Online questionnaire on experiences using Twitter
- 63.8% response rate

Results – General Twitter Use

Measure	On campus (n=24)	Online (n=13)
Twitter account prior (Yes)	75.0%	69.2%
Previous use		
Regularly, personal	26.1%	15.4%
Regularly, personal and other coursers	0.0%	30.8%
Infrequently	52.2%	23.1%
None/no account	20.8%	30.8%

Results – Frequency of Twitter Use

Frequency of use, generally	On campus	Online
Once	8.3%	0.0%
Twice	29.3%	8.3%
Monthly	33.3%	25.0%
Weekly	12.5%	33.3%
Daily	16.7%	33.3%

Results – Twitter Accounts

Separate university account	On Campus	Online
Yes	25.0%	23.1%
No	54.2%	46.1%
No account prior	20.8%	30.8%

Results – Course Twitter Use

Twitter use in other courses	On Campus	Online
0	79.2%	46.1%
1	8.3%	30.8%
2	12.5%	7.7%
3+	0.0%	15.4%

Results – Frequency of Course Twitter Use

Frequency of use for course	On Campus	Online
Once	0.0%	7.7%
Twice	70.8%	53.8%
Monthly	16.7%	7.7%
Weekly	12.5%	30.8%

Results – Twitter Activities

Students' Twitter use in SOCI 3290	On Campus	Online
Completed Twitter Events		
1	4.2%	7.7%
2 (all)	95.8%	92.3%
Retweeted classmates' posts (Yes)	0.0%	16.7%
Retweeted instructor's posts (Yes)	8.3%	7.7%
Tweeted using #SOCI3290F16 other than for the required course evaluations (Yes)	70.8%	69.2%

Results – Twitter Helpfulness

Students' perception of Twitter's helpfulness, generally	Yes
Engagement with material external to course	59.4%
Application of real-life events to course	59.4%
Alternative to traditional university setting, generally	59.4%
Alternative to lecture or reading course material	51.3%
Alternative to group activities	45.9%
Opportunity to see other students' interests	43.2%
Opportunity to participate outside of speaking in class	40.5%

Results – Twitter Helpfulness, External Content

Engagement with material external to course	On Campus	Online
Helpful (1-3)	58.3%	61.6%
Neutral (4)	0.0%	15.4%
Less helpful (5-7)	41.7%	23.1%

Results – Twitter Helpfulness, Real-life Events

Application of real-life events to course	On Campus	Online
Helpful (1-3)	62.5%	53.8%
Neutral (4)	12.5%	23.1%
Less helpful (5-7)	25.0%	23.1%

Results – Twitter Helpfulness, Students' Interests

Opportunity to see other students' interests	On Campus	Online
Helpful (1-3)	45.8%	38.5%
Neutral (4)	8.3%	15.4%
Less helpful (5-7)	45.9%	46.2%

Results – Twitter Helpfulness, Alternative to Lecture

Alternative to lecture or reading course material	On Campus	Online
Helpful (1-3)	45.8%	61.6%
Neutral (4)	8.3%	15.4%
Less helpful (5-7)	45.8%	23.1%

Results – Twitter Helpfulness, Alternative to Groups

Alternative to group activities	On Campus	Online
Helpful (1-3)	54.1%	30.8%
Neutral (4)	12.5%	15.4%
Less helpful (5-7)	33.3%	53.9%

Results – Twitter Helpfulness, Alternative to Lecture

Alternative to traditional university setting, generally	On Campus	Online
Helpful (1-3)	70.8%	38.5%
Neutral (4)	8.3%	15.4%
Less helpful (5-7)	20.9%	46.2%

Results – Twitter Helpfulness, Alternative to Speaking

Opportunity to participate outside of speaking in class	On Campus	Online
Helpful (1-3)	50.0%	25.0%
Neutral (4)	8.3%	0.0%
Less helpful (5-7)	41.7%	58.4%

Results – Twitter Helpfulness, Alternative to Lecture

Comparison to in-class assignments	On Campus	Online
More work	4.2%	0.0%
The same level of work	20.8%	46.1%
Less work	70.8%	46.1%
I do not know	4.2%	7.7%

Results – Forum Comparison

Comparison to other course discussion forums	On Campus	Online
Like them better	87.5%	53.9%
Like them about the same	8.3%	30.8%
Like them less	0.0%	15.4%
Never used other online forums	4.2%	0.0%

Results – Material Application

Straightforward application of course material	On Campus	Online
Strongly agree/Agree	91.3%	92.2%
Strongly disagree/Disagree	8.7%	7.7%

Results – Effort

Reasonable effort required	On Campus	Online
Strongly agree/Agree	79.2%	100.0%
Strongly disagree/Disagree	20.9%	0.0%

Results – Sense of Community, Course

Sense of community belonging in SOCI 3290	On Campus	Online
I felt really connected	8.3%	15.4%
I connected with a few individuals	37.5%	30.8%
I did not really connect with anyone	12.5%	46.1%
It was a means to an end	41.7%	7.7%

Results – Sense of Community, Other Courses

Sense of community belonging compared to other online courses	On Campus	Online
I felt more connected	34.8%	46.1%
I felt the same degree of connectedness	26.1%	46.1%
I felt less connected	4.4%	7.7%
Not applicable	34.8%	0.0%

Results – Twitter Interest, Future Courses

More integration of Twitter into course activities and evaluation (*Strongly agree/Agree*)	On Campus	Online
I wish more classes would integrate Twitter into course activities	70.8%	84.6%
I wish more classes would integrate Twitter into course evaluations	75.0%	84.6%

Results – Twitter Interest, Future Courses continued

Future Twitter use in another course (*Strongly agree/Agree*)	On Campus	Online
I hope I do not have to use Twitter in another course	29.2%	23.1%
I expect to use it more than before the course	25.0%	15.4%
I expect to use it about the same amount	45.8%	61.5%
I expect to use it only if required for another course, not for personal use	25.0%	23.1%

Recommendations

- Keep Hashtags simple
- Require ongoing participation
- Require responses to tweets
- Small group Twitter activities
- Use early in semester
- Base use in a framework
  - (Example: Chickering & Gamsom, 1987)

Recommendations continued

- ▶ Be aware of the variety of experiences & backgrounds students have with the tool

- ▶ Implement Twitter or other microblogging platform

- ▶ Ask students what social networking tools they use early in the course

Published Papers

- Peters, A., Costello, J., & Crane, D., (2018). Deviating from the Traditional Instructional Tools: Integrating Twitter is a Sociology of Deviance Course. *Canadian Journal of Learning and Technology, 44*(3). DOI: 10.21432/cjlt27792

- Peters, A., Crane, D., & Costello, J., (2019). A Comparison of Students' Twitter use in a Postsecondary Course Delivered on campus and online. *Education and Information Technologies*. DOI: 10.1007/s10639-019-09888-1

References

▶ Beard, L. A., Harper, C., & Riley, G. (2004). Online versus on-campus instruction: Student attitudes & perceptions. *Tech Trends, 48*(6), 29-31.

▶ Chawinga, W. D. (2017). Taking social media to a university classroom: Teaching and learning using Twitter and blogs. *International Journal of Educational Technology in Higher Education, 14*(3), 3-22.

▶ Chen, L., & Chen, T. L. (2012). Use of Twitter for formative evaluation: Reflections on trainer and trainees' experiences. *British Journal of Educational Technology, 43*(2), E49–E52. doi:10.1111/j.1467-8535.2011.01251.x

▶ Diaz, D. P., & Cartnal, R. B. (1999). Students' learning styles in two classes: Online distance learning and equivalent on-campus. *College Teaching, 47*, 130-135. doi:10.1080/87567559909595802

▶ Dunlap, J. C. & Lowenthal, P. R. (2009). Tweeting the night away: Using Twitter to enhance social presence. *Journal of Information Systems Education, 20*(2), 129-136.

References continued

▶ Harrison, R., & Thomas, M. (2009). Identity in online communities: Social networking sites and language learning. *International Journal of Emerging Technologies and Society, 7*(2), 109-124.

▶ Hsu, Y., & Ching, Y. (2012). Mobile microblogging: Using twitter and mobile devices in an online course to promote learning in authentic contexts. *The International Review of Research in Open and Distance Learning, 13*(4), 211-227.

▶ Junco, R., Heiberger, G., & Loken, E. (2011). The effect of Twitter on college student engagement and grades. *Journal of Computer Assisted Learning, 27*(2), 119-132. doi:10.1111/j.1365-2729.2010.00387.x

▶ Menkhoff, T., Chay, Y. W., Bengtsson, M. L., Woodard, C. J., & Gan, B. (2015). Incorporating microblogging ("tweeting") in higher education: Lessons learnt in a knowledge management course. *Computers in Human Behavior, 51*(B), 1295-1302.

▶ Ni, A. Y. (2013). Comparing the effectiveness of classroom and online learning: Teaching research methods. *Journal of Public Affairs Education, 19*(2), 199-215.

References continued

- Rohr, L. E. & Costello, J. (2015). The use of Twitter as an assessment tool in a large enrollment online course. *Online Learning: Official Journal of the Online Learning Consortium: Invited Papers / OLC 20th Anniversary Conference Special Issue, 19*(4), 25-36.

- Rohr, L. E., Costello, J., & Hawkins, T. (2015). Design considerations for integrating Twitter into an online course. *International Review of Research in Open and Distributed Learning, 16*(4), 241-249.

- Tang, Y., & Hew, K. F. (2017). Using Twitter for education: Beneficial or simply a waste of time? *Computers & Education, 106*(2017), 97-118 .

- Voorn, R. J. J., & Kommers, P. A. M. (2013). Social media and higher education: Introversion and collaborative learning from the student's perspective. *International Journal of Social Media and Interactive Learning Environments, 1*(1), 59-73.