Social Media Use for Learning and Development

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Poll 1: How many of you have posted to a social media account since you arrived in Amsterdam?
Poll #2: How many since this morning?
February 7, 2017
YouTube takes on Facebook with mobile live
Jefferson Graham, USA Today

Poll #3: Anyone have “phigital” children or students?
Going ‘phigital’? 4 things schools need to know about Generation Z,
Todd Kominiak, TrustEd
May 15, 2017
3 must know’s about the rising “phigital” student and why their impact is enormous,
Meris Stansbury, eCampus News
https://www.ecampusnews.com/campus-administration/education-gen-z-phigital-student/

Poll #4: How many of you have a blog?
The Changing Earth
http://thechangingearth.com/
Jan 17, May 14, and June 15, 2018

Poll #5: How many of you have a Twitter Account?
Aaron Doering, Chasing Seals, TEDx
http://chasingseals.com/
https://twitter.com/chasingseals

Poll #6: How many of you subscribe to a Twitter account?
Poll #7: How about this Twitter account?
June 15, 2018
https://twitter.com/realdonaldtrump

In addition to winning the Electoral College in a landslide, I won the popular vote if you deduct the millions of people who voted illegally.
May 30, 2018

Poll #8: Have you heard of Hoaxy?

https://hoaxy.iuni.iu.edu/
https://twitter.com/iubloomington/status/1001825139284172801?lang=en
https://twitter.com/iubloomington/status/9986514004628801?lang=en

What is Impact of Social Media?
Read Review Articles and Systematic Reviews

(e.g., blogs, Twitter, Facebook, LinkedIn, etc.)


Connection between PLE, social media, and self-regulated learning, and provide a framework for using social media to create PLEs that support student self-regulated learning.

• Level 1, instructors should encourage students to use social media such as blogs and wikis to create a PLE to engage in self-regulated learning processes (goal setting and planning).
• Level 2, instructors should encourage students to use social media to engage in basic sharing and collaboration activities.
• Level 3, information aggregation and management, instructors encourage students to use social media to synthesize and aggregate information from Level 1 and 2.


8. USA public admin instructors participated in telephone interviews about their experiences and perceptions of using social media for teaching and learning.

• Informal learning using social media could be facilitated by instructors into formal learning environments for enriched discussions, increased engagement, and broad connections.
Baiyun Chen and Thomas Bryer (2012). 
Investigating instructional strategies for using social media in formal and informal learning. 
IRRODL, 13(1), 87-104.

Conclusions and Advice:
1. Use social media as tools to facilitate informal discussions and collaborations with clear instructional goals.
2. Understand that the focus of social media activity for some faculty is learners’ personal interests and preferences, rather than institutional or instructors’ requirements.
3. Evaluate students’ reflections on their learning via social media in the form of formative assessment.
4. Use social media as an optional tool inside and outside classes. Provide students with alternative assignments if they choose not to participate.
5. Educate students about the security and privacy issues of posting personal information online.
6. Implement institutional policies on the use of social media in the educational environment in light of security/privacy issues, as well as faculty and student support.

Computers in Human Behavior, 33, 213-223.

Investigated high school students’ affordances for social media, their attitudes and beliefs about these new technologies, and related obstacles and issues.
- The affordance findings indicate that students depend on social media in their daily lives for leisure and social connections.
- Educational uses by teachers for teaching and learning are sporadic.
- Uses by students on their own for learning purposes seem to be abundant but also incidental and informal.
- Quantitative results suggest that in general, students show positive attitudes and beliefs about social media use in education.

Facebook Research

Facebook invites you to live in a bubble where you’re always right. 


Sample = 2,368 college students
Results indicate that Facebook use was significantly negatively predictive of engagement scale score and positively predictive of time spent in co-curricular activities.

Reynol Junco (2011), Too much face and not enough books: The relationship between multiple indices of Facebook use and academic performance. 
Computers in Human Behavior.

Sample = 1,839 college students...
Participation in Facebook activities, and time spent preparing for class and actual overall GPA...time spent on Facebook was strongly and significantly negatively related to overall GPA, while only weakly related to time spent preparing for class. Furthermore, using Facebook for collecting and sharing information was positively predictive of the outcome variables while using Facebook for socializing was negatively predictive.

Sample = 1,649 college students...

The results showed that seniors spent significantly less time on Facebook and spent significantly less time multitasking with Facebook than students at other class ranks. Time spent on Facebook was significantly negatively predictive of GPA for freshmen but not for other students. Multitasking with Facebook was significantly negatively predictive of GPA for freshmen, sophomores, and juniors but not for seniors.

Twitter Research

Reynol Junco, Greg Heiberger, E. Loken (2011)

Explored 125 students taking a first year seminar course for pre-health professional majors.

- Twitter was used for various types of academic and co-curricular discussions.
- Engagement Measured by NSSE.
- The experimental group had a significantly greater increase in engagement than the control group, as well as higher semester grade point averages.
- This study provides experimental evidence that Twitter can be used as an educational tool to help engage students and to mobilize faculty into a more active and participatory role.

Reynol Junco, Greg Heiberger, E. Loken (2011)

Study #1 = 125 students (Twitter required half)
Study #2 = 135 students (Twitter voluntary)

Qualitative analyses of tweets and quantitative outcomes show that faculty participation on the platform, integration of Twitter into the course based on a theoretically driven pedagogical model and requiring students to use Twitter are essential components of improved outcomes.
Evans, Chris (2014). Twitter for teaching: Can social media be used to enhance the process of learning? BJET, 45(5)
Undergraduate students in Business and Management (n = 252) were encouraged to use Twitter for communicating with their tutor and each other during a 12-week course.
- Survey amount of Twitter usage and students’ attitudes and experiences.
- Positive correlation between amount of Twitter usage and student engagement in university-associated activities including organizing their social lives and sharing information.
- Course-related tweeting was not related to interpersonal relationships between students and their tutor.
- Twitter usage did not impact class attendance.

How best to promote learning in authentic contexts in an online graduate course in instructional message design. The 16 students used Twitter apps on their mobile devices to collect, share, and comment on authentic design examples found in their daily lives.
- Positive perceptions toward mobile microblogging.
- Students were mainly engaged in assignment-relevant activities.
- Appropriately applied design principles and terms.
- Spontaneously generated social tweets as related to their own life experiences.
- Peer design examples through mobile microblogging were inspiring.

Twitter has many benefits for marketing educators who are interested in engaging students in experiential learning.
- In a real-time environment for student learning, professors may use Twitter for direct communication with students to generate discussion and interest in the course topics and examples.
- Educators can use Twitter to generate interest in a course through social media.
- Twitter is a fast, easy method for making announcements, solving student issues, and performing course-related administrative duties.
- In three studies, both quantitative and qualitative data suggest that when students engage in Twitter use with the professor, students feel better prepared for future careers. Students indicate that Twitter facilitates achieving traditional educational goals.

This study critically analyzed the current body of published research on microblogging in education (MIE) to build a deep and comprehensive understanding of this increasingly popular phenomenon. Twenty-one studies on MIE in 2008–2011 were selected based on the selection criteria.
- The analysis suggests that microblogging has a potential to encourage participation, engagement, reflective thinking as well as collaborative learning under different learning settings. The quality of research, however, varies greatly, suggesting a need for rigorous research on MIE.

Table 2: Learning topics in the studies of microblogging in higher education (n = 21)

<table>
<thead>
<tr>
<th>Learning topic</th>
<th>n</th>
<th>Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>4</td>
<td>Antoniou-Conforti (2009); Bonas et al (2009); Pontelescu (2009); Agbodokon (2013)</td>
</tr>
<tr>
<td>Instructional tech/design</td>
<td>6</td>
<td>Elmer and Schleifer (2008); Dunlap and Lownothal (2009); Costa et al (2008); de Weerd et al (2011); Kör (2011); Kop et al (2011)</td>
</tr>
<tr>
<td>New media</td>
<td>3</td>
<td>Holowitz and Gromacki (2009); Elmer et al (2010); Bartsy et al (2011)</td>
</tr>
<tr>
<td>Business</td>
<td>2</td>
<td>Lowe and Laffey (2011); Rinaldi et al (2011)</td>
</tr>
<tr>
<td>Others</td>
<td>3</td>
<td>Elmer (2009b); Wright (2010); James et al (2011)</td>
</tr>
<tr>
<td>Not available</td>
<td>3</td>
<td>Elmer (2009a); Ross et al (2011); Walker (2010)</td>
</tr>
</tbody>
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The purpose of the study is to understand how people interacted in a popular microblogging-based learning community by examining a one-hour synchronous chat event and exploring its network structure, levels of participation, major topics generated, and types of interaction.

- The study found that the online synchronous chat that occurred among the members of the #edchat Twitter community for educators was dominated by a group of active members.
- These active members not only generated a large volume of tweets but also interacted actively with other participants.
- However, about half of all members tweeted only once, and the majority of the members had limited connections with others.

Figure 1: Overall networking structure with degree mapped to size

Figure 3: Percentages of tweets by types of interaction
GS: General Statement; NT: New Topic; BLD: Building; SP: Supporting; PE: Personal Experience Sharing; SCL: Socializing; FCL: Facilitating; RS: Sharing Resources; RT: Retweeting

Figure 4: Number of content-focused tweets generated in every five minutes
Xin, W. & Gao, F. (submitted) Exploring the relationship between online discourse and commitment in Twitter professional learning communities.

Investigated how some key features of online discourse influenced the continued participation of the members of a Twitter-based professional development community.

- More than 600,000 tweets generated over six years under the hashtag #edchat were gathered.
- Online discourse were deconstructed to the cognitive dimension, the interactive dimension, and the social dimension. Text-mining methods and survival analysis...
- The results revealed that the more tweets in the interactive and productive dimensions that the members were exposed to, the lower was their risk of dropping out.
- Tweets in the interactive dimension had slightly stronger influences than did tweets in the cognitive dimension.


The study was to understand 45 scholars' naturalistic practices on Twitter in particular... scholars participating on Twitter:
1. Shared information, resources, and media relating to their professional practice.
2. Shared information about their classroom and their students.
3. Requested assistance from and offered suggestions to others.
4. Sought to network and make connections with others.


This study examined education scholars' (professors' and doctoral students') social media participation by using data mining methods to capture a large data set of scholars' participation on Twitter (232 students, 237 professors, 74,814 unique hashtags, and 645,579 tweets).

1. Significant variation in how ed scholars participate on Twitter.
2. Question purported egalitarian structures of social media use for scholarship.
3. Suggest that by focusing on the use of social media for scholarship researchers have only examined a fragment of scholars' online activities, possibly ignoring other areas of online presence.

Implications: Must consider the meaningfulness of alternative metrics for determining scholarly impact.

Future Directions

• This study provides little evidence to support the claim that social media can increase participation in the context of Twitter as an adjunct to MOOCs.
• Results show that learners make up only about 45% of users and contribute only about 35% of tweets. The majority of users contribute minimally, and an active minority of users contributes the preponderance of messages.
• Suggests that learners did not find Twitter to be a useful space that provided added value or responded to their needs.
• Results demonstrate the need for greater intentionality in integrating social media into MOOCs.

Future Directions (Fei Gao, June 15, 2018)

• How to provide guidance or structures in social media-based learning environments to support community building and knowledge co-construction.
• How to encourage participants use social media for sustained engagement.
• How to effectively combine informal learning with social media with other forms of formal learning.
• How to develop automatic grouping mechanism to form groups/communities.
• Automate analysis of online discourse to understand the individual or group processes of meaning-making or knowledge building.
• Need for social media and AI for just-in-time training/learning.

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Slides and Proceedings Paper at TrainingShare.com:
http://www.trainingshare.com (go to “Archived Talks”)