Social Media and Student Achievement, Adult Learning, and Professional Development

What does the research say about the impact of social media on student achievement, adult learning, and professional development?

Search Protocol: REL-NEI reference desk researchers follow an established protocol in conducting the search. The search reviews research reports as well as descriptive and policy-oriented briefs and articles on the topic. The sources include federally funded organizations, additional research institutions, several educational research databases, and a general Internet search using Google and other search engines. Researchers also search for appropriate organizations that might act as resources on this issue. Our researchers have not evaluated these organizations or the resources themselves but offer the list to readers for their information only.

Report:
Our researchers found limited research about the impact of social media on K-12 student achievement, adult learning, and professional development. Regarding student engagement and/or achievement, Junco’s study of college students and Twitter usage found that “the experimental group had a significantly greater increase in engagement than the control group, as well as higher semester grade point averages” (2011; see resource below). Regarding social media and adult learning, Pauschenwein’s study found that “informal exchange in twitter contributed to the motivation of learners during their participation in the online course” (2010, see resource below). Regarding social media and professional development, Greenhow found that “social bookmarking sites … can provide the resources to facilitate a scholarly approach to teaching where teachers concerned with developing research-based best practices can collectively assemble, annotate, recommend, and share scholarly resources” (2009; see resource below).

In addition to the resources provided, we have also included two related organizations with information on social media in the classroom.
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**Student Achievement**

1. **The Effect of Twitter on College Student Engagement and Grades.** 2011; Junco, R., Heiberger, G., Loken, E.; Journal of Computer Assisted Learning; Volume 27, Number 2; pp. 119-132; ERIC Document #EJ928384. (Experimental research report)  
Source: ERIC  
From the Abstract: “This paper describes our semester-long experimental study to determine if using Twitter—the microblogging and social networking platform most amenable to ongoing, public dialogue—for educationally relevant purposes can impact college student engagement and grades. A total of 125 students taking a first year seminar course for pre-health professional majors participated in this study (70 in the experimental group and 55 in the control group). With the experimental group, Twitter was used for various types of academic and co-curricular discussions. Engagement was quantified by using a 19-item scale based on the National Survey of Student Engagement. … The ANOVA results showed that the experimental group had a significantly greater increase in engagement than the control group, as well as higher semester grade point averages. Analyses of Twitter communications showed that students and faculty were both highly engaged in the learning process in ways that transcended traditional classroom activities.”

2. **YOUmedia Chicago: Reimagining Learning, Literacies, and Libraries. A Snapshot of Year 1.** May 2011; Austin, K., Ehrlich, S., Puckett, C., Singleton, J.; Consortium on Chicago School Research, University of Chicago, Urban Education Institute; 64 pages. (Descriptive research report)  
Source: The Center on Innovation and Improvement  
http://ccsr.uchicago.edu/publications/YOUmedia%20FINAL%202011.pdf  
From the Executive Summary: “[T]he John D. and Catherine T. MacArthur Foundation, the Chicago Public Library, and the Digital Youth Network joined forces to launch YOUmedia, a digital learning initiative for high school-aged teens. YOUmedia is a physical space at the Harold Washington Library Center in downtown Chicago, as well as a virtual place—a website—dedicated to YOUmedia users. Both are designed to draw teens into progressive levels of participation in digital and traditional media” (p. 1).

“Peer relationships and an emerging sense of community served as a potent force that drove teens to engage with digital technology in new ways. YOUmedia encouraged teens to socialize, exchange ideas, and collaborate and share with their peers. Teens have come to view YOUmedia as a unique learning environment—one that does away with the formalities of high school so that they feel free to explore their interests and express themselves” (p. 2).

**Adult Learning**
3. **Adult Education and the Social Media Revolution.** 2011; LeNoue, M., Hall, T., Eighmy, M.A.; Adult Learning; Volume 22, Issue 2; pp. 4-12; ERIC Document #EJ926216. *(Descriptive research report)*

   Source: ERIC, Abstract only.

   From the Abstract: “The article focuses on adult education and social media revolution in the U.S. It notes the emergence of digitally-mediated learning (DML) which offers accessibility and convenience to adults who prefer to enroll on online courses. It mentions the changes in the design of online education, with the application of wide arrays of technological media. It also outlines the compatibility between the principles of adult education and the capabilities of social software.”

   For a poster summary, see also:

4. **Adult Learner's Motivation for the Use of Micro-Blogging During Online Training Courses.** 2010; Pauschenwein, J., Sfiri, A.; International Journal of Emerging Technologies in Learning; Volume 5, Issue 1; pp. 22-25, 4 pages. *(Comparative research report)*

   Source: Internal Search Database
   Full text available with subscription:
   http://online-journals.org/i-jet/article/viewArticle/1041

   From the Abstract: “In this article we discuss our key idea that informal exchange in twitter contributes to the motivation of participants in online courses. Micro-blogging (via twitter) was introduced to groups of educators that participated in three online courses on the use of Web2.0 technologies and Online Didactics in educational settings. We used qualitative as well as quantitative methods to investigate their use of twitter and found out that informal exchange in twitter contributed to the motivation of learners during their participation in the online course. The participants extended their relatedness within the group, reflected their personal growth and supported others via acknowledging their inputs in a certain extent.”

**Professional Development**

5. **Tapping the Wealth of Social Networks for Professional Development.** 2009; Greenhow, C.; Learning & Leading with Technology; Volume 36, Number 8; pp. 10-11; ERIC Document #EJ842796. *(Descriptive research report)*

   Source: ERIC

   From the Abstract: “Today, information and communication technologies such as Facebook, MySpace, and Twitter are some of the most popular technologies available on the Internet…. In this article, the author describes two of the trends in using these tools that she and her colleagues see happening, based on their own research. First, social bookmarking sites, such as Delicious, Diigo, and CiteULike, can provide the resources to
facilitate a scholarly approach to teaching where teachers concerned with developing research-based best practices can collectively assemble, annotate, recommend, and share scholarly resources, such as books, journal articles, websites, and contacts. Second, social networking tools, such as Facebook, Classroom 2.0, Ning, and Twitter, can be used to garner collective emotional support and recognition for one's creative practices. In their work studying the potential educational benefits and challenges of social network site use among urban teenagers, the author and her colleagues found that such technologies could function as social learning resources and spaces for new literacy practices.”

Additional Organizations to Consult on Social Media in the Classroom

1. **Edudemic**  
   [http://edudemic.com](http://edudemic.com)  
   From the “About” section: “What is the best way to improve education using social media? That’s the big question that Edudemic hopes to answer. You’ll find regular doses of helpful ideas, infographics, news, videos, and more when you visit Edudemic.”


2. **The Center on Innovation and Improvement**  
   From the “About Us” section: “The Center on Innovation & Improvement supports regional centers in their work with states to provide districts, schools, and families with the opportunity, information, and skills to make wise decisions on behalf of students.”


Search Process:

**Key words and search strings used in the search:**
Social Media OR Social Networking OR Twitter AND Achievement OR Adult Education OR Adult Learning OR Professional Development

**Search databases and websites:**

Center for Education Evaluation and Regional Assistance (NCEE); National Center for Special Education (NCSER); National Center for Education Statistics (NCES)

**Other Federally Funded Resources:** The Assessment and Accountability Comprehensive Center; The Center on Innovation and Improvement; The Center on Instruction; The National Comprehensive Center for Teacher Quality; The National High School Center; Center for Comprehensive School Reform and Improvement; Center for Data-Driven Reform in Education; Education Commission of the States; National Center for Research on Early Childhood Education; Small Learning Communities Centers

**Search Engines and Databases:** EBSCO Databases; ERIC; Google, Google Scholar; General Internet Search

**Additional Resources:** WestEd

**Criteria for inclusion:**
When Reference Desk researchers review resources for inclusion in the report, they consider four main factors:

- **Date of the publication:** The most current information is included, except in the case of nationally known, seminal documents; less current information is also included when no recent resources have been found.

- **Source and funder of the report/study/brief/article:** Our established protocol is to search first for published, peer-reviewed literature from IES and other federally funded sources, such as the National R&D Centers or Content Centers, as well as from sources referred to by federally funded sites. If this provides sufficient information responding directly to the question, our researchers stop there. If not, they then search education and then general search databases such as EBSCO, ERIC, SAGE, Google Scholar, and Google to find journal articles, with priority given to materials from peer-reviewed publications. To back this up, or to obtain additional resources, researchers will visit organization sites respected in the education field for the quality of their research or their attention to target groups, again depending upon the question. Examples here include the Campbell Corporation and the National Conference of State Legislatures.

- **Methods:** Reference Desk researchers consider the type of methodology used in the research whenever possible and give priority to research reports that employ well described and appropriately rigorous methods. Methodologies can include randomized controlled trial or quasi-experimental designs; statistical analyses of assessment, survey, or other data; literature reviews; evaluations; case studies; and others. Reference desk researchers also take into account:
  a. **External validity:** To what degree can findings apply to other people, situations, measures, and times? How generalizable are the study findings?
b. **Sample selection**: What were the selection criteria? Did the participants volunteer for the study, or were they selected? Was the pool of participants homogeneous or diverse? Were they selected to be representative of a certain population? Overall, was the sample constructed in a manner that allows the research question to be answered appropriately?

c. **Sample size**: Were there just a few study participants? Thousands? Was the sample size appropriate to the needs of the study?

- **Existing knowledge base**: Although we strive to include peer-reviewed resources, there are times when the research base is minimal or non-existent. In these cases, we include the best resources we can find in the short turnaround time for the response; these resources may include policy or information briefs, newspaper articles, links to organization websites, or published interviews with content specialists.

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