

TWITTER AS AN EDUCATIONAL ENVIRONMENT

Selami AYDIN
Balikesir University,
Necatibey Education Faculty,
Balikesir, TURKEY

ABSTRACT

The purpose of the study is to present a review of Twitter as an educational environment, as research is relatively new. The reviewed studies have been categorized into three sections:

- Reasons to use Twitter,
- Twitter as an educational environment, and
- some drawbacks.

Twitter and language teaching and learning and Twitter and libraries were subtitled under the section of Twitter as an educational environment. To conclude, current literature reflects that Twitter has a positive impact on education, while there has been a very serious lack of research on Twitter as an educational environment. Finally, the study ends with practical recommendations for researchers and educators.

Keywords: Twitter, education, educational environment.

INTRODUCTION

Twitter-a popular social networking and microblogging service – is rapidly emerging as a new educational tool within an educational context. However, whether and how it can be used as an efficient educational tool remains an unanswered question (Manzo, 2009a). This paper aims to review various educational studies of Twitter to recommend further research into its role within academia and education. The reviewed studies have been categorized into three sections:

- Reasons to use Twitter,
- Twitter as an educational environment, and
- Some drawbacks.

Twitter and language teaching and learning and Twitter and libraries are subtitled under the section Twitter as an educational environment.

Before presenting a review of these studies, the terms *social networking site* and *Twitter* need to be clarified. A social networking site is an online site that presents a platform used by individuals; it focuses on building and reflecting social relations in accordance with interests and/or activities. Popular examples of social networking sites include Twitter, Facebook, MySpace, Badoo and Google+ (Aydin, 2012). Twitter is a social networking and microblogging service that allows users to send and read posts of up to 140 characters. It has over 500 million active users as of 2012, generating over 340 million tweets daily (Dugan, 2012).

REASONS TO USE TWITTER

Communicative interactions among friends, colleagues, administrators, parents and other community members are the most important reasons for participation on Twitter as a communication platform and a personal and professional social outlet (Butler, 2010; Carscaddon & Harris, 2009; Rethlefsen, 2009). Twitter is also seen as an environment for sharing information and building and sustaining relationships (Trubitt & Overholtzer, 2009).

Turkle (2011) found that Twitter can change the way people view themselves and their relationships. Twitter also provides opportunities to increase connectedness and build relationships (Gonzales, Vodicka & White, 2011). Finally, Twitter helps preservice and new teachers connect with current teachers to learn about potential job openings and to engage in professional conversations (Greene, 2012).

Many institutions today have engaged more prospective students and alumni using platforms in which those constituents have already been integrated into their personal and professional lives to notify students and faculty of closings, emergencies, and public safety issues on campus (Fernandez, 2010; Taft, 2011). As Young (2008) notes, college officials use Twitter to keep in touch with colleagues at other universities. Because social networking services allow college presidents to connect, reach out, and build relationships, all of which are vitally important to recruiting and retaining students, the world of social media provides colleges with a means of finding out more about their students and communities (Neibling, 2010). Another reason to use Twitter is that it engages alumni and keeps them involved in the college community (Halligan, 2010). Thus, some colleges are exploring this new territory with specific strategies to recruit students or engage alumni via social networks (Lipka, 2009). Furthermore, as Fernandez (2009) states, increasingly more institutions are monitoring what is written about them online regarding managing and protecting the institution's online image.

TWITTER AS AN EDUCATIONAL ENVIRONMENT

The current literature shows that Twitter is an integral part of the lives of many teachers, especially the younger generation (Todoric, 2011). For instance, Twitter provides a better learning environment for students and helps them manage school more effectively, and it offers functionality that is helpful to faculty research and teaching in terms of behavioral and social sciences (Kennedy, 2011; Ovadia, 2009).

Twitter has the potential to be a powerful instructional tool, and it can add value to online and face-to-face university courses (Dunlap & Lowenthal, 2009a). In addition, as Ferguson (2010) has proposed, Twitter can help create a community built on communication and collaboration dedicated to making learning and education the best it can be.

Moreover, it can be used to deliver instructional content, demonstrate information literacy concepts, develop critical thinking about the social and political aspects of information production, and encourage students to view themselves as active agents in the creation of information and knowledge (Dunaway, 2011).

Students can also benefit from classroom experiences that raise their awareness of communication challenges associated with social networking, encouraging them to assess their own areas for improvement (Clipson, Wilson & DuFrene, 2012).

Although many opinions and evaluative papers on Twitter as an educational environment have been put forth, there are few studies on the issue. The research reviewed here focuses on the use of Twitter for scholarly purposes by higher-education institutes, Twitter aids in the learning of a particular subject matter, and the impact of Twitter on higher education and college students' engagement and grades. The research has also focused on Twitter as a learning space and its relationship to online courses, social learning and participation, collaboration, special education, reflective thinking, instructor credibility, history teaching, athletic training, and marketing teaching.

The relevant literature demonstrates that Twitter has positive effects on higher education, higher-education institutes, the learning of a particular subject matter, and college student engagement and grades. Forkosh-Baruch and Hershkovitz (2012) have empirically examined cases in which social networking sites were utilized for scholarly purposes by higher-education institutes in Israel.

In the study, all the tweets posted by participants were analyzed and classified into categories based on their content for better understanding of how they can facilitate informal learning. They found that Twitter promotes knowledge sharing, and facilitates informal learning within the community.

In another study, Kassens-Noor (2012) investigated whether the use of Twitter aids students in the learning of a particular subject in a comparative experiment in a small classroom setting. They found that Twitter brings potential opportunities and pitfalls to the e-learning community in higher education compared with traditional teaching methods. The study highlights that Twitter can be used to provide instant feedback in lectures in an out of class, although there are problems regarding privacy issues.

There is a lack of control and the blurring of boundaries between social and academic life. Reporting a survey study conducted by the Babson Survey Research Group, Blankenship (2011) discusses the expanding universe of social media in higher education and how social media could impact higher education regarding the five interconnected "literacies" of social media: attention, participation, collaboration, network awareness, and critical consumption. Finally, Junco, Heiberger, and Loken (2011) have carried out an experimental study to determine whether using Twitter for educationally relevant purposes can impact college student engagement and grades.

The results demonstrated that the experimental group had a significantly greater increase in engagement than the control group, as well as higher semester grade point averages. In addition, they concluded that the students and faculty were both highly engaged in the learning process in ways that transcended traditional classroom activities. To conclude, they indicate that Twitter can be used as an educational tool to help engage students and to mobilize faculty into a more active and participatory role.

The learning space is another area that has been examined and discussed. For Tyma (2011), Twitter provides students with an additional channel to communicate in the classroom using technology with which they are already familiar. The logic behind using Twitter in the classroom is that it is free to use, allows for a cataloging of conversations, and offers opportunities for students to bring appropriate technology into the classroom. Aspden and Thorpe (2009) have investigated how the university, home, and social lives of college students blend together when using Twitter as a learning space.

They concluded that Twitter is a nonthreatening and decidedly nontraditional activity that can be used to engage students in university-wide planning and development. In another study, Elavsky, Mislan, and Elavsky (2011) have reported the outcomes produced by using Twitter in a large lecture course as a means of assessing the pedagogical impact and potential of Twitter's contribution to large lecture course dynamics, noting that it impacted classroom dynamics.

To conclude, Twitter, as an example of the technology-mediated communication of "new media", can be an endless source of ideas for activities or inspiration for classroom discussion (Veltsos & Veltsos, 2010), as it combines aspects of social networking with an academic focus as the teacher guides students in a virtual constructive learning environment (Taranto & Abbondanza, 2009).

Some papers have been published on online courses, social learning, and participation and special education. It has been stated that the use of Twitter encourages free-flowing just-in-time interactions and enhances social presence in online courses (Dunlap & Lowenthal, 2009b). It also functions as a social learning resource and as a space for new literacy practices among urban teenagers (Greenhow, 2009). The use of Twitter also fostered the collaboration of high school students in an English class (Koenig, 2011). Finally, Twitter can be used to improve recruitment and the retention of special education personnel, including related service providers and early intervention program personnel (Muller, 2011).

Studies have shown that Twitter furthers reflective thinking; instructor credibility; and history, athletics, and marketing training. Wright (2010) reported a case study with eight participants during a teaching practicum who posted to Twitter from their phones or computers to examine the question "Does microblogging help teacher education students develop self-reflective practices?" The tweet categories included pedagogy, complexity, emotions, curriculum/planning, and relationships.

It was concluded that the identified benefit was a sense of community, that participants appreciated reading tweets and receiving messages of support when they faced challenging situations, and that it improved the participants' reflective thinking. Johnson (2011) has examined whether posting social, scholarly, or a combination of social and scholarly information to "Twitter" has an impact on the perceived credibility of instructors.

The results showed that participants who viewed only the social tweets rated the instructor significantly higher in perceived credibility than did the group that viewed only the scholarly tweets and that there was an established link between perceived instructor credibility and positive learning outcomes. Reyerson, Mummey, and Higdon (2011) used a strategy to introduce technology into a history course, which included a traditional lecture without discussion sections or small group exercises, to allow students additional opportunities to engage with the material and obtain feedback.

They found that Twitter reflections on class films encouraged student questions and discussion. In an evaluative paper, Wagner (2011) presents five tips on using Twitter for teaching and learning regarding athletic training students, namely logging a teachable moment, quizzing, tracking a concept, tracking time, and keeping a learning diary. Lowe and Laffey (2011) evaluate students' experiences of using Twitter as a tool to facilitate learning in marketing courses and concluded that students' perceptions of using Twitter are largely positive.

Rinaldo, Tapp, and Laverie (2011) examine whether professors can use Twitter to engage students in conversation about a marketing course, as they believe Twitter has many benefits for marketing educators who are interested in engaging students in experiential learning. They conclude that Twitter facilitates the achievement of traditional educational goals.

Twitter and in Language Teaching and Learning Contexts

Few papers have appeared on language teaching and learning, although the relevant literature indicates that Twitter has positive effects on language teaching and learning. Lomicka and Lord (2012) have examined the role of Twitter in an intermediate French class in which students tweeted weekly with each other and with native French speakers.

Twitter was used to build community among learners in the United States and France and to provide opportunities for creative language practice outside of class time. It was found that learners quickly formed a collaborative community in which they were able to learn, share, and reflect. Similarly, the use of Twitter was found to foster collaboration among high school students in an English class (Koenig, 2011). Comer (2011) presents Twitter retelling as an alternative assessment measure in young adult literature in addition to exam results at the middle school, high school, and university/college levels. Mills and Chandra (2011) report that microblogging can positively influence reading and writing. Twitter also offers authors and publishers a powerful and positive medium for connecting with readers in a personal manner that is energizing and engaging for both authors and teens (Hamilton, 2009).

Moreover, as Kurtz (2009) states, writing has become an integral activity of elementary school students when they tweet throughout the day about their lives and activities (Kurtz, 2009). Teenagers have reported two types of writing: writing in school and outside of school via social networking sites such as Facebook, Twitter, and MySpace (Yancey, 2009).

Finally, Crews and Stitt-Gohdes (2012) developed a service-learning project in which writing for social networking sites was included. Students wrote tweets to encourage people to donate and to promote various activities. They concluded that the activity helped students write more concisely and to think critically about the key elements of writing.

Twitter and Libraries

Although many librarians wonder about the efficacy or potential futility of delivering their services via social networking, Twitter has provided a new platform and is a cultural trend that libraries can turn into an opportunity to reach patrons (Circle, 2009; Lindsay, 2009). Thus, librarians aim to activate and maintain accounts on social networking sites, including Twitter, in the "digital makeover" of libraries (Woodard, 2009; 2010). Moreover, as an integral part of their websites, Twitter appears to offer an opportunity to disseminate digital library news and ideas to a wider audience (Cahill, 2011; Starr, 2010).

Among the opinion and evaluative papers, Mathews (2008) mentions how Twitter can be used by librarians to interact with students and to monitor the actual use of library services, stating that it is a practical application for assessment, communication and collaboration among the community of users and a channel for librarians to interact with students directly. Similarly, as Kroski (2008) notes, Twitter presents online communication and new opportunities for users to foster community, test new ideas, share resources, stay updated, and socialize during interactions among librarians.

Moreover, academic librarians use Twitter primarily as a tool at library conferences and seminars to capture short speaker snippets to share with colleagues both in attendance and not in attendance at a meeting, whereas public and school librarians use it to drive people to their websites and provide current information regarding their programs and events at their locations (Emery, 2009). Twitter also offers libraries the chance to demonstrate to patrons how collections and services fit into their lives and provide important information about user needs (Hagman, 2012). Finally, Gamble (2011) notes that broadening paper and pencil lessons to include fundamental Web 2.0 skills expands the library walls to encompass the world of information and that this will increase the partnership of library teachers with the core classrooms' educational efforts, promoting student engagement and participation while developing multiple intelligences and increasing peer collaboration. In conclusion, As Purcell (2011) states, forward-looking librarians can incorporate information outlets such as Twitter into their libraries, making the school library an essential learning community in the school.

Although many opinions and evaluative papers have appeared, only two research papers are noted. First, Aharony (2010) has explored the use of Twitter in public and academic libraries to understand microblogging patterns and found there were some differences between public and academic libraries, including the number of tweets, linguistic differences, and content. Second, Sarrafzadeh, Hazeri, and Alavi (2011) have explored the knowledge and use of Web 2.0 technologies by library and information science academics in Iran and explored the challenges they face using these technologies.

They found that library and information science academics in Iran have a good level of familiarity with Web 2.0 tools such as blogs, wikis, YouTube, and Facebook, although their familiarity with Twitter was limited. They also identified Internet filtering, lack of access to high-speed Internet, and a lack of training as barriers.

Some Drawbacks

Studies show that Twitter also presents some potential drawbacks. The main problem is that there is a risk that people use social media to write inappropriate comments (Butler, 2010). Moreover, there are serious concerns about Internet predators, cyberbullying, the sharing of inappropriate content by students, and the abundance of sexually explicit and violent content (Manzo, 2009b). Other problems are publicity and that it consumes too much time (Dunlap & Lowenthal, 2009a; Kroski, 2009).

Finally, in terms of teacher and student interactions, Young (2010) emphasizes that college students are happy, as they have the chance to make their voices heard in class without having to actually speak. However, some instructors have complained that Twitter posts make them uncomfortable.

CONCLUSIONS AND RECOMMENDATIONS

Several conclusions can be drawn from this review of the limited studies on Twitter as an educational environment. First, people mainly use Twitter for specific purposes such as communicative interactions, sharing information, and building and sustaining relationships. Other reasons are the engagement of students and alumni, identifying potential job openings, and engagement in professional conversations. Second, Twitter participation may have harmful repercussions that include inappropriate comments, Internet predators, cyberbullying, inappropriate content, sexually explicit and violent content, time consumption, and issues related to publicity.

Third, Twitter can be used as an educational environment to improve collaboration, to develop reflective and critical thinking and to encourage learners in the creation of information and knowledge. Twitter also facilitates informal learning, and e-learning positively impacts attention and network awareness.

Third, Twitter can be used a valuable language learning tool, as it has positive effects on collaborative language learning, reading and writing skills. Fourth, Twitter plays an important role in the field of librarianship, as it provides an alternative and new platform for interaction and can serve as a communication and collaboration tool in addition to traditional tools.

As a review of the studies, this paper offers several recommendations on using Twitter as an educational environment. First, educators should concentrate on current practices within educational contexts.

Moreover, educators should use Twitter as a teaching tool, as it presents many advantages regarding collaboration, critical thinking skills, reflective thinking, and information and knowledge creation. Second, educators should be highly sensitive to the negative effects of Twitter. In other words, they should be aware of the problems it can cause (Veltos & Veltos, 2010), protect their students, raise awareness of acceptable ways to use electronic communication tools when communicating with students, and be aware of the positive and negative outcomes that may result from using it with students (Todoric, 2011). Third, language educators should focus on using Twitter as a communication and interaction environment that has an important place in the nature of language.

More recommendations can be noted. First, much more research on Twitter as an educational environment is warranted, as it is clear that the current literature mostly consists of opinion and evaluative papers and that very little empirical evidence is available concerning the impact of Twitter on education.

Moreover, because of the widespread use of social media by students and its increased use by instructors and because Twitter is becoming increasingly popular in classrooms, many more studies should be conducted on a variety of topics related to Twitter as an educational environment (Junco, Heiberger & Loken, 2011; Lomicka & Lord, 2012). In other words, Twitter's potential as a venue for professional growth and development needs to be explored, discussed, and ultimately used to fill the gap in the current literature (Gerstein, 2011). Second, both educators and students should be supported and educated in developing appropriate communication skills through Twitter to understand what is happening both inside and outside the classroom and to create a professional boundary regarding communication between teachers and students, remembering that children today spend upwards of 40+ hours weekly interacting with social media (Bynum, 2011; Hunter, 2011; Kirkwood, Gutgold & Manley, 2011; Lay, 2010).

Moreover, learners should be allowed to interact with their peers and teachers in and outside schools instead of banning or blocking the use of social networking sites because of fears over inappropriate use, and they should be trained about the harmful effects of social network sites to develop strategies to help them stay safe on the Internet (Manzo, 2009a; Risinger, 2010; Schachter, 2011). In this way, students can graduate by acquiring basic skills for life such as innovation, imagination, communication, collaboration, teamwork, critical thinking skills, adaptability, agility, interactivity, information analysis, and initiative and self-direction (Davidson & Stone, 2009).

Third, educational institutions need to provide value in their Twitter feeds, to consider how Twitter will best benefit the institution, and to develop a concrete strategy (Fernandez, 2010; Ward, 2010). They should also provide opportunities for both teachers and students to use social networking in a responsible and structured manner to support academics (Taranto & Abbondanza, 2009). In brief, as Mayer (2009) highlights, an institution cannot live without social networks. Furthermore, building relationships through social media is a wise investment for institutions (Doak, 2011). Finally, it should be underlined that social interaction remains a powerful aspect of human nature and that a social learning platform requires collaborative effort among a group of technology experts, educators, social learning theorists, psychologists, sociologists and learners (Ganis, 2009; Trubitt & Overholtzer, 2009).

BIODATA and CONTACT ADDRESS of AUTHOR



Selami AYDIN (PhD) is an associate professor in the Department of English Language Teaching at Balikesir University. His research has mainly been in language testing, EFL writing, individual differences, and technology in EFL learning. His articles have appeared in some national and international journals. Aydin teaches ELT courses for pre-service English teachers.

Selami AYDIN
Balikesir University, Necatibey Education Faculty,
ELT Department, Balikesir, TURKEY.
Phone Number: 00 90 533 626 17 41
Email: saydin@balikesir.edu.tr

REFERENCES

Aharony, N. (2010). Twitter use in libraries: An exploratory analysis. *Journal of Web Librarianship*, 4(4), 333-350.

Aspden, E. J., & Thorpe, L. P. (2009). "Where do you learn?" Tweeting to inform learning space development. *EDUCAUSE Quarterly*, 32(1). Retrieved on June 1, 2012 from <http://www.educause.edu/ero/article/where-do-you-learn-tweeting-inform-learning-space-development>

Aydin, S. (2012). A review of research on Facebook as an educational environment. *Educational Technology Research & Development*, 60(6), 1093-1106.

Blankenship, M. (2011). How social media can and should impact higher education. *Education Digest: Essential Readings Condensed for Quick Review*, 76(7), 39-42.

Butler, K. (2010). Tweeting your own horn. *District Administration*, 46(2), 41-44.

Bynum, S. L. (2011). *Utilizing social media to increase student engagement: A study of Kern county public schools*. M.P.A. Thesis, California State University, Bakersfield.

Cahill, K. (2011). Going social at Vancouver Public Library: What the virtual branch did next. *Program: Electronic Library and Information Systems*, 45(3), 259-278.

- Carscaddon, L., & Harris, C. S. (2009). Working the social Twitter and FriendFeed. *Library Journal*, 134(11), 24-26.
- Circle, A. (2009). Marketing trends to watch. *Library Journal*, 134(16), 26-29.
- Clipson, T. M., Wilson, S. A., & DuFrene, D. D. (2012). The social networking arena: Battle of the sexes. *Business Communication Quarterly*, 75(1), 64-67.
- Comer, M. (2011). Young adult literature and alternative assessment measures. *Theory into Practice*, 50(3), 239-246.
- Crews, T. B., & Stitt-Gohdes, W. L. (2012). Incorporating Facebook and Twitter in a service-learning project in a business communication course. *Business Communication Quarterly*, 75(1), 76-79.
- Davidson, N., & Stone, J. (2009). 21st century transformation. *Principal Leadership*, 10(1), 52-55.
- Doak, J. (2011). Prepare to engage: Building relationships through social media is a smart investment for institutions. *CURRENTS*, 37(8), 46-51.
- Dugan, L. (2012). Twitter to surpass 500 million registered users on Wednesday. *All Twitter, The Unofficial Twitter Recourse*. Retrieved on June 1, 2012 from http://www.mediabistro.com/alltwitter/500-million-registered-users_b18842
- Dunaway, M. (2011). Web 2.0 and critical information literacy. *Public Services Quarterly*, 7(3-4), 149-157.
- Dunlap, J. C., & Lowenthal, P. R. (2009a). Horton hears a tweet. *EDUCAUSE Quarterly*, 32(4). Retrieved June 1, 2012 from <http://www.educause.edu/ero/article/horton-hears-tweet>.
- Dunlap, J. C., & Lowenthal, P. R. (2009b). Tweeting the night away using Twitter to enhance social presence. *Journal of Information Systems Education*, 20(2), 129-135.
- Elavsky, C. M., Mislán, C., & Elavsky, S. (2011). When talking less is more: Exploring outcomes of "Twitter" usage in the large-lecture hall. *Learning, Media and Technology*, 36(3), 215-233.
- Emery, J. (2009). Rocking in the tree tops. *Journal of Electronic Resources Librarianship*, 21(2), 110-113.
- Ferguson, H. (2010). Join the flock. *Learning and Leading with Technology*, 37(8), 12-15.
- Fernandez, K. (2009). Operation reputation how to manage and protect your institution's online image. *CURRENTS*, 35(8), 30-35.
- Fernandez, K. (2010). Following the threads. *CURRENTS*, 36(7), 16-18.
- Forkosh-Baruch, A., & Hershkovitz, A. (2012). A case study of Israeli higher-education institutes sharing scholarly information with the community via social networks. *Internet and Higher Education*, 15(1), 58-68.

- Gamble, J. (2011). New essential for the library as learning commons. *Library Media Connection, 30*(2), 54-55.
- Ganis, F. (2009). "Social learning" buzz masks deeper dimensions mitigating the confusion surrounding "social learning. Gilfus Education Group, Washington, DC.
- Gerstein, J. (2011). The use of Twitter for professional growth and development. *International Journal of E-learning, 10*(3), 273-276.
- Gonzales, L., Vodicka, D., & White, J. (2011). Leadership 2.0: Social media in advocacy. *Leadership, 41*(1), 18-20.
- Greene, K. (2012). Social media and the job hunt. *Educational Horizons, 90*(2), 26-27.
- Greenhow, C. (2009). Tapping the wealth of social networks for professional development. *Learning & Leading with Technology, 36*(8), 10-11.
- Hagman, J. (2012). Joining the Twitter conversation. *Public Service Quarterly, 8*(1), 78-85.
- Halligan, T. (2010). The social media evaluation: Online tools drive opportunities for alumni outreach, fundraising. *Community College Journal, 80*(4), 30-33.
- Hamilton, B. (2009). Young adult literature, 2.0. *Library Media Connection, 28*(3), 14-15.
- Hunter, E. (2012). Class list [not equal to] friend list. *Educational Horizons, 90*(2), 21-22.
- Johnson, K. A. (2011). The effect of "Twitter" posts on students' perceptions of instructor credibility. *Learning, Media and Technology, 36*(1), 21-38.
- 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.
- Kassens-Noor, E. (2012). Twitter as a teaching practice to enhance active and informal learning in higher education: The case of sustainable tweets. *Active Learning in Higher Education, 13*(1), 9-21.
- Kennedy, M. (2011). Facing the future with education technology. *American School and University, 84*(2), 10-17.
- Kirkwood, J., Gutgold, N. D., & Manley, D. (2011). Hello world, it's me: Bringing the basic speech communication course into the digital age. *Communication Teacher, 25*(3), 150-153.
- Koenig, D. (2011). Social media in the schoolhouse. *Teaching Tolerance, 39*, 42-45.
- Kroski, E. (2008). All a Twitter: Want to try microblogging? *School Library Journal, 54*(7), 31-35.
- Kroski, E. (2009). Should your library have a social media policy? *School Library Journal, 55*(10), 44-46.

- Kurtz, J. (2009). Twittering about learning using Twitter in an elementary school classroom. *Horace*, 25(1). Retrieved on June 1, 2012 from <http://www.essentialschools.org/resources/451>
- Lay, M. M. (2010). Securing a place at the table: School psychologists as educational leaders. *Cummunique*, 39(3), 12.
- Lindsay, E. B. (2009). Using social networking in the library. *Public Services Quarterly*, 5(3), 208-211.
- Lipka, S. (2009). Colleges "don't own the conversation anymore". *Chronicle of Higher Education*, 55(35). Retrieved on June 1, 2012 from <http://chronicle.com/article/Admissions-Offices-Struggle/47230/>
- Lomicka, L., & Lord, G. (2012). A tale of tweets: Analyzing microblogging among language learners. *System: An International Journal of Educational Technology and Applied Language*, 40(1), 48-63.
- Lowe, B., & Laffey, D. (2011). Is Twitter for the birds? Using Twitter to enhance in a marketing course. *Journal of Marketing Education*, 33(2), 183-192.
- Manzo, K. K. (2009a). Twitter lessons in 140 characters or less. *Education Week*, 28(1). Retrieved June 1, 2012 from http://www.edweek.org/ew/articles/2009/10/21/08twitter_ep.h29.html
- Manzo, K. K. (2009b). Filtering fixes. *Education Week*, 29(2). Retrieved June 1, 2012 from http://www.edweek.org/ew/articles/2009/09/02/02filter_ep.h29.html
- Mathews, B. S. (2008). Twitter and the library: Thoughts on the syndicated lifestyle. *Journal of Web Librarianship*, 2(4), 589-593.
- Mayer, C. E. (2009). The inner circle while some institutions have dropped their private networks, others have seen them thrive. *CURRENTS*, 35(8), 40-45.
- Muller, E. (2011). *Using new social media to recruit and retain qualified special education personnel: Practice Brief*. National Center to Improve Recruitment and Retention of Qualified Personnel for Children with Disabilities, National Association of State Director of Special Education. Retrieved from on June 1, 2012 <http://eric.ed.gov/> (ED527024).
- Neibling, J. (2010). Speaking the language of today's digital natives. *Community College Journal*, 81(1), 14-15.
- Ovadia, S. (2009). Exploring the potential of Twitter as a research tool. *Behavioral & Social Sciences Librarian*, 28(4), 202-205.
- Purcell, M. (2011). The vision: Libraries in the future. *Library Media Connection*, 29(4), 38-39.
- Rethlefsen, M. L. (2009). Power tweeting next steps. *Library Journal*, 134(17), 18-20.
- Reyerson, K., Mummey, K., & Higdon, J. (2011). Medieval cities of Europe: Click, Tweet, map, and present. *History Teacher*, 44(3), 353-367.

- Rinaldo, S. B., Tapp, S., & Laverie, D. A. (2011). Learning by tweeting: Using Twitter as a pedagogical tool. *Journal of Marketing Education, 33*(2), 193-203.
- Risinger, C. F. (2010). What I learned (and didn't) at NCSS 2009. *Social Education, 74*(4), 189-190.
- Sarrafzadeh, M., Hazeri, A., & Alavi, S. (2011). The status of Web 2.0 in Iran's LIS education. Web 2.0 in Iran's LIS education. *Education for Information, 28*(2), 233-245.
- Schachter, R. (2011). The social media dilemma. *District Administration, 47*(7), 27-28.
- Starr, J. (2010). California Digital Library in Twitter-land. *Computers in Libraries, 30*(7), 23-27.
- Taft, D. (2011). Safety first. *Community College Journal, 82*(2), 44-46.
- Taranto, G., & Abbondanza, M. (2009). Powering students up. *Principal Leadership, 10*(4), 38-42.
- Todoric, M. E. (2011). Guidelines for acceptable electronic communication with students. *Education Digest: Essential Readings Condensed for Quick Review, 77*(3), 47-49.
- Trubitt, L., & Overholtzer, J. (2009). Good communication: The other social network for successful IT organizations. *EDUCAUSE Review, 44*(6), 90-98.
- Turkle, S. (2011). The Tethered self: Technology reinvents intimacy and solitude. *Continuing Higher Education Review, 75*, 28-31. Retrieved on June 1, 2012 from <http://web.mit.edu/sturkle/www/presentations.html>
- Tyma, A. (2011). Connecting with what is out there!: Using Twitter in the large lecture. *Communication Teacher, 25*(3), 175-181.
- Veltsos, J. R., & Veltsos, D. (2010). Teaching responsibility with technology-mediated communication. *Business Communication Quarterly, 73*(4), 463-467.
- Wagner, R. (2011). Social media tools for teaching and learning. *Athletic Training Education Journal, 6*(1), 51-52.
- Ward, B. J. (2010). Bird on a wire. *CURRENTS, 36*(5), 32-36.
- Woodard, A. (2009). From zero to Web 2.0: Part 2. *Computers in Libraries, 29*(9), 41-43.
- Woodard, A. (2010). From zero to Web2.0: Part 3. *Computers in Libraries, 30*(1), 27-28.
- Wright, N. (2010). Twittering in teacher education: Reflecting on practicum experiences. *Open Learning, 25*(3), 259-265.
- Yancey, K. B. (2009). Writing by any other name. *Principal Leadership, 10*(1), 26-29.
- Young, J. R. (2008). Forget e-mail: New messaging service has students and professors atwitter. *Chronicle of Higher Education, 54*(25). Retrieved June 1, 2012 from <http://chronicle.com/article/Forget-E-Mail-New-Messaging/17813/>
- Young, J. R. (2010). Teaching with Twitter: Not for the faint of heart. *Education Digest: Essential Readings Condensed for Quick Review, 75*(7), 9-12.