© *Journal of Interdisciplinary Studies in Education*
ISSN: 2166-2681 Volume 3, Issue 1, 2014
ittc-web.astate.edu/ojs

Using Bloom's Taxonomy to Teach Course Content and Improve Social Media Literacy

Melissa Vosen Callens
North Dakota State University

Abstract

Social media can engage students in active learning opportunities and be used to teach almost any course concept. In addition to teaching course concepts, using social media in a classroom can help students critically think about a technology they use multiple times a day. While some instructors may shy away from using these tools, intimidated by the digital natives registered for their courses, they should not. Even though most students use social media regularly, many do not know how to use it professionally. This article will outline activities that incorporate social media and can be used in any classroom. The activities correspond with each level of Bloom's revised taxonomy of the cognitive domain; using this taxonomy allows instructors to introduce social media slowly and push students toward higher-level thinking.

Keywords: Bloom Taxonomy, Social Media Literacy

Social media can enhance student engagement and be used to teach almost any course concept. In addition to teaching course concepts, using social media in a classroom can help students critically think about technologies they already use multiple times a day. Marc Prensky (2001) reasoned that this current generation of students is full of what he calls digital natives—a generation that has spent their entire lives immersed in digital technologies. Prensky (2001) wrote, "Today's average college grads have spent less than 5,000 hours of their lives reading, but over 10,000 hours playing video games (not to mention 20,000 hours watching TV). Computer games, email, the Internet, cell phones and instant messaging are integral parts of their lives" (p. 1). For this generation, time spent with digital technologies and media is much higher than time spent by previous generations. In addition, their time spent with digital technologies is also *much* higher than their time spent with print and print media.

In regard to social media, according to a study sponsored by the Pew Research Center (2010), "73% of wired American teens now use social networking websites, a significant increase from previous surveys. Just over half of online teens (55%) used social networking sites in November 2006 and 65% did so in February 2008." The numbers continue to increase. This increase in usage, and the wide access to these technologies, can make students seem like experts in social media, but their amount in usage does not always translate to knowing how to use the platform well and for a variety of purposes.

Some instructors, intimidated by the large number of digital natives registered

for their courses, may shy away from using social media in the classroom. Even though most students use social media regularly, many students do not know how to use it responsibly and most effectively. Most students also do not know how to use social media to manage information and utilize it in an educational or professional setting despite the increasing presence of social media in higher education and business. As more and more employers use social media to screen job applicants as well as interact with their customers, two Northwestern University professors established a ten-week course designed to help students manage their reputations online. Not only did the course cover enhanced privacy settings for many social media sites, but it also aimed to "train students to build robust, productive online identities through which they can engage topics of interest, command audiences, and advanced their careers" (O'Neil, 2014).

Social Media and Professional Communication

The primary usage of social media, however, has always been to connect personally with friends and family. This is how many people still use these sites today and why courses like the one described above is needed. Most people use social media to connect and engage with others on a personal level—but not as often on an academic or professional level. According to Mao (2014), social media users in his study reported that:

> entertaining, getting connected with friends and family, and sharing pictures, interests, videos, experiences are the first three important reasons for using social media. Collaborating on projects, sharing or getting updated resources for school work, and learning about a new topic are the three least cited reasons for using social media. (p. 217).

Cain and Policastri (2011), however, asserted that applications like Facebook and Twitter can expand course content "to contemporary topics not included in class, and to include outside experts and thought leaders" (p. 8). It is possible, through social media, to bring in outside speakers and converse with experts all over the world—a potentially meaningful classroom experience.

In fact, some argue that shying away from utilizing social media in education, and in some K-12 cases even banning it, is both misinformed and dangerous. Palfrey and Gasser (2008) stated that a culture of fear has emerged surrounding digital natives in the form of cyber-bullying, identity theft, etc., when in fact, these digital natives have "tremendous opportunities in store for them, not in spite of the digital age, but because of it" (p.9). This is where instructors, instructors who have years of experience of communicating professionally in their respective fields, can be a great service to students. Instructors play a critical role in helping students understand and pursue the opportunities described by Palfrey and Gasser and to "manage a complex and exploding information environment" (Palfrey & Gasser, 2014, p. 14). They can help students create robust and professional online identities and engage with audiences around the world, much like the Northwestern professors who created the managing your online identity course.

Social Media and Managing Complex Information Systems

In addition to their years of professional communication experience, instructors also have experience managing complex information and complex information systems; they can help students learn how to find, analyze, manage, and save information. Teaching students to manage information is more and more critical because the amount of information students are exposed to on a regular basis is astronomical; the amount on social media alone can be overwhelming. According to Taylor (2014), in 2009, children "were exposed to 10 hours and 45 minutes of media of all kinds during a typical day and spent 29% of that time multitasking with several kinds of information in front of them at the same time" (p. 149). The constant barrage and exposure to information does not necessarily mean that students know how to process and interpret it. Digital natives must develop skepticism literacy—a way of weeding out the incorrect material and "outdated, incomplete and agenda-driven" information (Taylor, 2014, p. 152). Instructors can help hone this skill.

In addition to teaching students how to use social media conscientiously and how to manage the constant stream of information, using social media in the classroom can engage students, providing them with an active learning opportunity. Student engagement is an important component in education. Ralph and Ralph (2013) wrote, "The use of social media in the college and university classroom is an important and emerging trend that assists educators to continuously adopt interactive technology to facilitate greater student engagement with course content, while maintaining dynamic interaction with other learners" (p. 456). Social media allows students to not only interact and collaborate with other learners in their class, but also with learners around the globe—making for a very dynamic and diverse experience.

Social Media and Active Learning

Students who are disengaged in the classroom are likely not learning. Using social media is one of many ways to foster engagement in both face-to-face and online courses. Because of the prevalence of technology in the lives of students, to remain relevant in their eyes, Ralph and Ralph (2013) argued, "Existing and new instructors need to develop competencies in emerging technological teaching tools or risk losing the attention, interest, excitement and joy that the learning experience can become for university students" (p. 450). For some students, social media use in a course might help spark their interest in course material and connect the course content to their daily lives. Social media also encourages students to become creators and publishers—a very active way to learn.

As mentioned earlier, most people use social media for personal connections. Mao (2014) noted that most social media was intended for commercial and life use—not educational use. Because of this, it is important for instructors to choose the technology they use wisely after careful examination of the tools, the learning environment, and their students. He wrote, "Therefore, it is important for educators to critically evaluate the adoption of social media in education rather than being driven by the latest craze in the technology market" (Mao, 2014, p.222). While social media can entice and interest students, it is important social media technology is used in conjunction with other course material

and aligns with course objectives, assignments, and assessments.

It is critical that instructors do not haphazardly use social media in their classrooms. Haphazardly using any pedagogical tool—even a chalkboard— can do more harm than good. All classroom activities, including those using social media, should align with course objectives and assessments. In a study by Mao (2014), students indicated they appreciated the use of social media in the classroom, but they also indicated their displeasure with poor or inappropriate usage of social media by teachers— citing some teachers lack of familiarity with social media or when "teachers use social media (for example, YouTube videos) to replace teaching" (p. 219). Using social media without a clear connection to course objectives or without an understanding of the media can be counterproductive, and learners, like those in Mao's study, often take note.

Social Media and Bloom's Revised Taxonomy of the Cognitive Domain

Hearing students evaluate their instructors' usage of technology can be intimidating for instructors who are social media novices or for those who have never used social media in an educational setting. For some instructors, it may even seem overwhelming. Where does one start when incorporating social media in the classroom? For those who are only causal users of social media and have never used it in the classroom, one strategy I recommend is thinking about the technologies in a way that many instructors think about all of their lesson plans—creating lessons that build on one another by using Bloom's revised taxonomy of the cognitive domain.

When using social media in the classroom, I create different activities that introduce students slowly to the capabilities of the technology, and the capabilities of the technology in an educational and / or professional setting, much like I would any other course concept. I like to talk about the characteristics of each site, and I create activities using Bloom's revised taxonomy. By using Bloom's revised taxonomy, instructors can encourage higher-order thought in their students by building up from lower-level cognitive skills. The activities outlined in this article not only slowly introduce students to various technologies and the characteristics of each, but students can also engage in, and demonstrate their understanding of, course content.

In this article, I will outline activities that correspond with each level of Bloom's revised taxonomy of the cognitive domain; these activities can be adapted to any classroom regardless of the subject matter. For example, business students could read about online marketing strategies and summarize, discuss, and apply those readings on a social media platform. They can learn how to bookmark and tag those and related resources for future reference. After, they could analyze and evaluate Twitter feeds of two competing companies. Finally, students could create a Twitter account or Facebook page for a campus club or organization. Other activities explored in this article include: bookmarking and tagging online information, evaluating a peer's digital identity, creating an online Facebook quiz to demonstrate knowledge and to engage with peers, and creating a personal LinkedIn profile, among others.

Remember

The base of Bloom's revised taxonomy is the simplest cognitive process category; in this category, "the student is given a recognition or recall task" (Anderson, et al., 2000, p. 66). Found in both formative and summative assessments, one common practice in education is to ask students to answer questions that require them to recall information found in course readings or from lectures. In addition, a variation of this exercise, many instructors ask students to write summaries of course readings or lectures in a journal or learning log.

Because this is the base of Bloom's triangle, it is the foundation for more complex, cognitive tasks. While it is a step that should not be overlooked, because it is the foundation, it is also a step that instructors should look beyond and build upon. Instead of asking students to memorize and recall in isolation, it is recommended that "remembering knowledge is integrated within the larger task of constructing new knowledge or solving new problems" (Anderson, et al., p. 69).

If an instructor wanted to introduce social media into their classroom, one variation of the above activity is to ask students to post their reading or lecture summaries to a social media site—like a personal blog or a class Facebook page. These types of activities also push students toward the next taxonomy level—understand— because students not only have to summarize the content, but they also have to understand the process of posting to a social media site and entering a larger, and often times public, conversation. In many cases, they are sharing their summaries with a much larger community. By posting to a blog or Facebook page, students are entering an existing community and must communicate in an appropriate and professional manner for that particular social media site.

Instructors can also have a conversation with students about the characteristics of communicating on, for example, Twitter and how that differs from more academic types of writing or even other social media sites. What are the conventions of a Tweet, for example? Asking students to critically examine what constitutes an "effective" post, Tweet, entry, etc. can help them be both effective users and critical consumers of the social media being examined.

One more variation of this assignment is to ask students to create a vine, summarizing the course information. Vine, a free application, allows students to create a short looping video summary—rather than just a text summary. Vine allows students to become instant directors and publishers, immediately propelling them to the highest stage in Bloom's revised taxonomy: create.

Finally, in the remember stage of Bloom's revised taxonomy, instructors can teach students how to bookmark and organize course information in programs like Evernote. For example, an instructor might ask students to practice bookmarking by bookmarking others students' summaries. This is great way to integrate these two different activities and help students gather a repository of information. Students could then use this repository to complete a final exam or final project for the course. In addition to having access to critical course information, students are learning how to use the bookmarking function on a program like Evernote. Class discussions could also focus on how

Evernote might be useful for other purposes—like creating a personalized online cookbook.

Learning to bookmark—to save information—is a skill that can help students throughout the course and is also a skill that can be used throughout their Lives to manage information. Whether they are creating that online cookbook or saving virtual news clippings from a family event, learning how to organize information is a life skill. In Evernote, students can also learn how to share this information with others.

Understand

The focus shifts to the remaining five categories of Bloom's revised taxonomy when instructors encourage knowledge transfer: understand, apply, analyze, evaluate, and create. It is here, beyond the remember tier, meaningful learning occurs. Meaningful learning, unlike rote learning, provides "students with the knowledge and cognitive processes they need for successful problem solving" (Anderson, et al., 2000, p. 65). After remember, the next level of Bloom's revised taxonomy is understand; in this level, "students understand when they build connections between the 'new' knowledge to be gained and their prior knowledge" (Anderson, et al., 2000, p 70).

In this stage, instructors can teach students how to use hashtags in Evernote to better organize their information and create connections between the information bookmarked. In addition, students can learn about hash tagging in programs like Twitter or even Facebook. Tagging allows for students to connect pieces of information together—pieces of information they saved and pieces of information that are being written and shared by others around the world. After students understand why one might hashtag as well as how to hashtag on various programs, instructors could ask students to live Tweet during a lecture using the same hashtag, for example. After the lecture, students can sort information by the hashtag and see what other students thought of the lecture and the concepts being discussed. It is also a great way to establish and organize a repository of course content for students.

Apply and Analyze

The next category in Bloom's revised taxonomy is apply; Anderson, et al. writes, "The *Apply* category consists of two cognitive processes: *executing*—when the task is an exercise (familiar)—and implementing—when the task is a problem (unfamiliar)" (p. 77).

Andrew Churches maintains a wiki page called Educational Origami, a site devoted to teaching and technology. On one of his subpages, Churches outlines what he calls Bloom's Digital Taxonomy—documenting different types of technology and technology use and how each corresponds when the different levels of Bloom's taxonomy. Churches (2014a) argued that gameficiation is part of the apply category, that "students who successfully play or operate a game/s are showing understanding of process and task and application of skills." Instructors can research and find games within sites like Facebook that might be relevant to their classrooms. An ambitious instructor can even create their own games using a host of different websites such as superteachertools.net. In addition to gaming, he believes that uploading and sharing is also part of the apply category; while a simpler form of collaboration, uploading and sharing is still part of this category because students are applying

knowledge on how to facilitate the transmission and sharing of materials.

The next level after apply of Bloom's revised taxonomy is analyze. According to Anderson, et al., "Analyze involves breaking material into its constituent parts and determining how the parts are related to one another and to the overall structure" (Anderson, et al., 2000, p. 79).

In this particular category, instructors can ask students to mash some of their themed data they have collected. This could come in the form of creating a wall on Padlet, a glog on Glogster, or a page on Pinterest. In my first-year experience course, for example, students create glogs to represent their first semester at North Dakota State University. A glog is an interactive poster that can be loaded with text, graphics, music, and videos. Based on my own experiences, I can say my students seem to enjoy sharing their glogs with one another. The glogs allow students to express themselves and demonstrate their understanding in a visual manner.

One additional suggestion, offered by Churches (2014b), is to ask students to create Google form related to course content, collect data, and analyze it. The Google form could be based on course content. For example, if students are enrolled in an introductory political science course, the students could create a form which polls the student body and their perceptions during school election time.

Evaluate

Evaluate is the next level on Bloom's revised taxonomy. According to Anderson et al., "Evaluate is defined as making judgments based on criteria and standards. The criteria most often used are quality, effectiveness, efficiency, and consistency" (p. 83). Research shows that students already evaluate a variety of products and events on a regular basis on social media sites. Taylor (2014) wrote, "Millenials over-perform when it comes to creating an reading user reviews and comments online as they make up their minds about where to eat and drink, what movies and musical acts to see, and what Web content to access" (p. 151). Instructors can incorporate some of this into their classrooms and engage students in their desire to crowdsource. When I taught first-year composition, many instructors, including myself, asked students to write reviews on a television show, movie, or album, drawing on this skillset.

One assignment that I find particularly useful is asking students to evaluate different social media pages after they learn the characteristics of that particular media as well as the conventions of the topic the page is addressing. This can come in a variety of different forms—depending on your course content and course objectives. In my Writing in the Health Professions course, students are asked to examine Facebook pages of local clinics, dentist offices, fitness centers, etc. When students do share the assessment of these materials, they must consider the reliability of the media site, the authenticity of the materials posted, and the relevance of the user-centered tags and comments.

In addition, first-year students and graduating seniors can benefit from analyzing and evaluating their own or a peer's digital identity. In this assignment, students are responsible for reviewing the digital identity of their partners. Students are required to review all profiles posted on social media sites, and in addition to social media sites, they do a Google search of their

partners' name. After the evaluation process, students meet with their partners to discuss their findings. Depending on their peer's findings, students may or may not decide to revise their profiles—or perhaps create an additional one. After this assignment, for example, many seniors decide to create a more professional social media profile on LinkedIn—or a similar social media site because they plan to enter the job market upon graduating.

With all of these assignments, I create rubrics for students to follow to guide their evaluation.

Create

The highest category of Bloom's revised taxonomy is create. According to Anderson, et al., "Create involves putting elements together to form a coherent or functional whole" (p. 84). In this category, students create new products related to prior learning experiences in the course. Social media provides ample opportunities for users to be producers; in fact, if students are already social media users, they are already creating a variety of content. According to Taylor (2014), "More than two-thirds of American adults and more than 80% of Millennials create content through social networking sites, other social media, and their various rankings, ratings, commenting, and remixing applications" (p.148). In addition to all that is listed, some Millennials are behind many of the popular applications embedded within social media sites themselves.

For example, after critically examining the conventions of different social media platforms, students could be asked to create a social media page for a campus club or organization. It requires them to apply all the knowledge they have learned about the platform, and if the club or organization relates to your course content, about that too. If you have local non-profits in your area, this is also a possibility. A social media page, whether it is on Facebook, Twitter, Instagram, etc., must be constantly updated in order for it to be effective. Because of this, it is important that students approach this assignment from a partnership perspective as they are unlikely to continue maintenance on the page unless they are a member of the organization.

In addition, students can create applications or create within existing applications depending on their skill set. For example, in the past, I have asked students to create a quiz anyone could take on Facebook, a quiz that asked them to use the knowledge obtained through course readings. In Todd Gitlin's book, *Media Unlimited*, he discusses seven ways in which people respond to the media. In my visual communication course, students are asked to create quiz questions that test how people respond to the media, drawing on Gitlin's work. Students then put the quiz on Facebook—and invite their friends to take the quiz. Not only do students have to write the quiz, they have to write up summaries for each of the possible quiz results. While this activity is challenging, it definitely requires students to use higher-level cognitive processes and demonstrate their understanding in a creative way. Students are publishers; they are filmmakers. They are creators!

Conclusion

Using social media in the classroom can help students understand how to utilize these applications in both a professional and educational setting. After taking a course on online identity management, a student said he is now more thoughtful about what he

posts online and how his posts will be received (O'Neil, 2014). In addition to reevaluating how they manage their online reputation, students can begin to learn how to manage the constant stream of information available at their fingertips. Finally, the use of social media in the classroom can actively engage students in and with course content.

By using Bloom's revised taxonomy as a guide for activity and assignment development, students complete increasingly complex tasks throughout the semester. Structuring activities in such a manner places the focus on transferable knowledge and allows the instructor to learn more about the social media site as the semester progresses—just as the students do. The tasks are not only complex in how students engage with course concepts, but also how they engage with and use the social media platform. By asking students to create content on social media—rather than simply passively consume—instructors are able to help students see the potential value of social media and the opportunities that exist within for lifelong learning and professional and personal correspondence.

References

Anderson, L.W., Krathwohl, D.R., Airasian, P.W., Cruikshank, K.A., Mayer, R.E., Pintrich, P.R., Wittrock, Merlin. (2000). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's Taxonomy of Educational Objectives*. New York: Longman.

Cain, J., & Policastri, A. (2011). Using Facebook as an informal learning environment. *American Journal of Pharmaceutical Education*, 75(10), 1-8.

Churches, A. (2014a) "Bloom's applying." Retrieved April 23, 2014, from https://edorigami.wikispaces.com/

Churches, A. (2014b). "Bloom's analyzing." Retrieved April 23, 2014, from ttps://edorigami.wikispaces.com/

Mao, J. (2014). Social media for learning: A mixed methods study on high school students' technology affordances and perspectives. *Computers in Human Behavior*, 33, 213-223.

O' Neil, M. (2014). Confronting the myth of the digital native. *The Chronicle of Higher Education.* Retrieved from http://chronicle.com/

Palfrey, J., & Gasser, U. (2008). *Born digital: Understanding the first generation of digital natives*. New York, New York: Basic Books.

Pew Internet and American Life Project (2010). Social media and Mobile Internet use among teens and young adults. Retrieved from http://www.pewinternet.org/Reports/2010/Social-Media-and-Young-Adults.aspx

Prenksy, M. (2001). Digital Natives, Digital Immigrants. *On the Horizon*, 9 (5), 1-6.

Ralph, M., & Ralph, L. (2013) Weapons of mass instruction: The creative use of social media in improving pedagogy. *Issues in Informing Science and Information Technology*, 10, 449-460.

Taylor, P. (2014). *The next America: Boomers, millennials, and the looming generational showdown.* New York: Public Affairs.

About the Author

Melissa Vosen Callens, Ph.D.
Assistant Professor of Practice /
Instructional Design College of Arts, Humanities and Social SciencesNorth Dakota State University