

Chapter 1

Revitalize Your Teaching: Creative Approaches to Applying Social Media in the Classroom

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Abstract Social media is a widespread phenomenon focused on connecting, sharing, and collaborating. The purpose of this chapter is to focus on the educational opportunities for applying social media in the classroom and this is achieved through an application of Bloom's Taxonomy. A brief description of Bloom's Taxonomy (Bloom, B.S. *Taxonomy of Educational Objectives: The Classification of Educational Goals*. Susan Fauer Company, Inc., 1956) and a description of its components: remembering, understanding, applying, analyzing, evaluating, and creating is given. It is argued that each of Bloom's components can be highlighted using different social media tools. Finally, a variety of case studies and further ideas demonstrate the effective deployment of social media in the classroom.

1.1 Introduction to Social Media for Education

Social media's capacity to enable people to connect, share, and collaborate has made its use increasingly common in the personal, business, and educational domains. Social media enables people to reconnect with former classmates and coworkers and rekindle past relationships. People share photos, videos, and provide others with frequent updates related to their lives. Further, social media facilitates collaboration for school projects, church gatherings, and community events. In business, social media is useful for virtual marketing, which makes word-of-mouth

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advertising that much easier. Social media provides new approaches for entrepreneurs who wish to reach niche markets, as well as customers who wish to share their evaluations of and recommendations for new products.

In education, social media provides new and exciting opportunities for teaching and learning. Traditionally, education has utilized lectures, written communication, and more recently computers for instruction. Now, the possibilities are endless. As Marc Levinson (Levinson 2010) wrote:

Our education system is in the midst of a paradigm shift, where new methods, environments, and assessment models need to be acquired if schools are to keep pace with our increasingly networked culture. As the conversation about the digital divide shifts from questions of technological access to ones concerning participation, educators must work to ensure that every young person has access to the tools, skills, and experiences needed to join in this new participatory culture. . . . Today's educators have a chance to be courageous and take the risk of jumping off the high dive. Those who do so will give students opportunities to bring their passions into the classroom and encourage them to gain the cultural competencies and social skills they will need in their future roles as 21st-century citizens and workers. Whereas the industrial age prepared many to be workers on assembly lines, today's information age challenges us to be critical thinkers and active citizens, to come together collectively and conceptualize solutions to new problems that didn't exist in the last decade (p. ix).

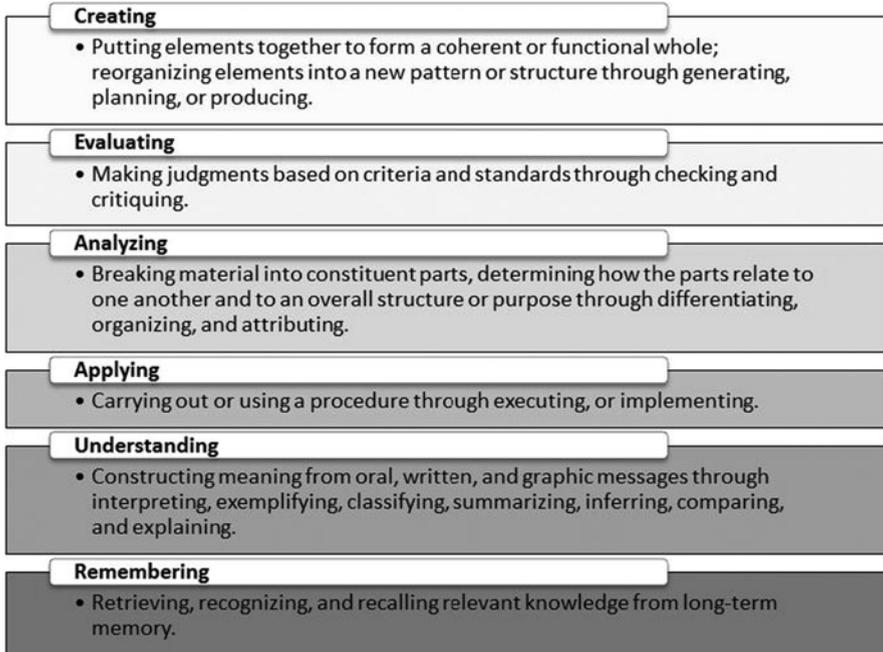
The purpose of this chapter is to analyze ways in which social media can be used in the classroom through the lens of Bloom's Revised Taxonomy. This is achieved via:

- A brief description of the dimensions of Bloom's Revised Taxonomy, which includes: remember, understand, apply, analyze, evaluate, and create
- Connection of each aspect of Bloom's taxonomy with specific social media tools
- A discussion of strategic tools for obtaining support, for teachers who want to employ social media and, however, have limited resources.

1.2 Bloom's Revised Taxonomy

Bloom's Taxonomy (Bloom et al. 1956) provided a classification of measurable learning objectives for the education system. The taxonomy focused on three main domains, namely, the affective, psychomotor, and cognitive. Within the cognitive domain, the critical thinking objectives included knowledge, comprehension, application, analysis, synthesis, and evaluation.

In the 1990s, Lorin Anderson (Bloom's former student) set out to update the taxonomy for the twenty-first century student and teacher. Changes were made to the terminology and structure to account for the nontraditional knowledge capabilities presented by the Internet. The revised components include: remember, understand, apply, analyze, evaluate, and create, all of which are defined below (Anderson and Krathwohl 2001).



1.2.1 Remembering with Social Bookmarking

Remembering is defined as “retrieving, recognizing, and recalling relevant knowledge from long-term memory” (Anderson and Krathwohl 2001). Social bookmarking is a magnificent tool used to *remember* and organize online resources. They provide students and teachers with the ability to save website links to one location, accessible through the Internet. These links allow the students and teachers to easily find the site in the future. Examples of social bookmarking sites include: EdTags, Delicious, Google Reader, and Diigo. As Churches, Crockett and Jukes (Churches et al. 2010) note:

Using social bookmarking tools, students and teachers are able to harness the huge potential of the Internet’s resources by collaborating and sharing sites they have found and validated. The easy accessibility of social bookmarking tools means you can access and search your bookmarks from any computer connected to the Internet. Students are easily able to collaborate with their peers and teachers, which contributes to the learning process and validates their research process (p. 33).

1.2.1.1 Ideas for Social Bookmarking in the Classroom

- Depending on the class topic (science, math, literature. . .), the student should research the internet and bookmark related links.

- Play Jeopardy using social bookmarks. Give the students a topic and have them work alone to bookmark related links. Next, commence playing, using general statements that should be found on a website. For example, the topic can be the United States and a potential Jeopardy answer could be “This state has the largest population.”
- For a student government class, the students use social bookmarks to identify links to debatable topics (websites for gun control and websites against gun control).
- For each new topic, teachers share a new collection of online resources.
- Teachers use social bookmarking to subscribe to RSS feeds to bring the news to one designated location. At the beginning of each class, the teacher can scroll through the new headlines and work with the students to tie a link between the news and the class topic.

1.2.2 Understanding with Social Blogging

Understanding includes “constructing meaning from oral, written, and graphic messages through interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining” (Anderson and Krathwohl 2001). Blogs are an efficient method to learn what is known about a specific topic and bring forward new ideas. Typically, blogs are updated and maintained by an individual, rather than a company. Blogs can provide information through writing, pictures, videos, music, and/or audio. Examples of blog publishing tools include EduBlogs, Learner-BlogWordpress, Google Blogger, Tumblr, and PhotoBlog. Specific to education, Richardson (Richardson 2010) suggests:

Adopters of Weblogs in the classroom have already created a wide variety of ways to use them, and they have shown that blogs can enhance and deepen learning. Even at this still fairly early stage of development, blogs are being used as class portals, online filing cabinets for student work, e-portfolios, collaborative space, knowledge management, and even school Web sites. Through the unique process of blogging, students are learning to read more critically, think about the reading more analytically, and write more clearly. Further, they are building relationships with peers, mentors, and professionals within the Weblog environment (p. 20).

1.2.2.1 Ideas for Social Blogging in the Classroom

- Students use blogs to summarize concepts, articles, and notable resources used within the classroom.
- Teachers use blogs for class management. They help their students understand class requirements better, through posting class assignments, handouts, and by providing a forum for answering questions.
- E-portfolios, summarizing the breadth of a student’s work, are created using blogs.

- Blogs are a wonderful tool for students to debate a current topic of interest.
- Teachers use blogs as a way to communicate with parents about computer-use policy, external resources, lesson plans, and class events.
- Teachers have students create a bucket list for the semester – 10 things to accomplish by the end of the semester. Students follow up and summarize the accomplishment with pictures, videos, or writing.
- Teachers challenge students to a food diary, taking a picture of every meal eaten.
- Students create a photoblog – one picture a day for the entire semester.
- Students use blogs as a means of creating a daily response and reflection for a book the class is reading. The students read and respond to each other's blogs.

1.2.3 Applying with Social File Sharing

Applying includes “carrying out or using a procedure through executing, or implementing” (Anderson and Krathwohl 2001). Social file sharing tools are a new way to share information about a specific topic. Examples of social file sharing tools include: Moodle, Google Documents, Wikis, and Keep and Share. Specific to the classroom, Solomon and Schrum (Solomon and Schrum 2010) suggest:

Imagine this situation: You and your colleagues create a paper, presentation, or report. You pass the file around, each adding the date or your initials, or both. After several iterations, you are not really sure which is the latest version, whose tracking or changes have been accepted and incorporated, or who has made the final decisions on the document. But assuming you end with the correct version, you show up with your thumb drive only to discover that the best version is not the one you have with you! The correct one is really on your home computer or on the thumb drive in your other coat pocket! If this has happened to you, or you know someone for whom this occurred, you might begin to understand the lure of Google Docs (p. 68).

1.2.3.1 Ideas for Social File Sharing in the Classroom

- Google Documents, through spreadsheets, are used as a way to teach probability and statistics. Up to 50 users work on one spreadsheet at a time. In class, users can simultaneously enter data, and the class can then perform statistical analysis.
- Wikis are used to brainstorm new ideas about class projects or debate a hot topic.
- Students work on collaborative projects through file sharing programs.
- Through file sharing programs, the teacher sees exactly who wrote what, to determine project contribution.
- Teachers use file sharing programs to easily share document templates with students.

- File sharing programs create a forum for parents to view and check up on student's work.
- Teachers assign students to edit/comment on each other's documents through the file sharing programs.
- Students use file sharing to fill out a document asking questions about a book review or other topics of interest.
- File sharing programs allow teachers to easily keep track of grades, attendance, and other data for students to review.

1.2.4 Analyzing with Social Collaboration

Analyzing includes “breaking material into constituent parts, determining how the parts relate to one another and to an overall structure or purpose through differentiating, organizing, and attributing” (Anderson and Krathwohl 2001). Social collaboration tools allow groups to meet, discuss, mark-up, and analyze information in one specific playground or workplace. Examples of social collaboration include ePals, Dim Dim, Oovoo, Skype, and Twiddla. Solomon and Schrum (Solomon and Schrum 2010) argue:

Teachers and other educators have begun using these tools for a variety of activities, and as they become more familiar, they see other ways for students to benefit from them. In general, the goal and purpose has been to make public the types of development, creativity, and other activities that their students typically do individually. These tools have also afforded educators a way in which to promote and encourage collaboration authentically in the development of projects and papers (p. 69).

1.2.4.1 Ideas for Social Collaboration in the Classroom

- Teachers use social collaboration tools to establish virtual classrooms.
- Parent–teacher conferences are achieved using social collaboration tools.
- Social collaboration tools provide a permanent location for distance learning groups to meet about class projects.
- Twiddla is used to increase the functionality associated with collaboration, including screen mark-ups, chat, and a real-time whiteboard.
- Skype allows distance learning student groups the ability to analyze projects and suggest alternatives.
- If students are unable to participate in a fieldtrip, Skype is used to bring the fieldtrip to the students.
- Social collaboration tools are used to virtually bring guest speakers to the classroom.
- Social collaboration tools are used to bring special needs kids into the classroom.
- ePals provide students the ability to create pen pals across the globe and learn about other cultures.

1.2.5 Evaluating with Social Decision Making

Evaluating is defined as “making judgments based on criteria and standards through checking and critiquing” (Anderson and Krathwohl 2001). Social decision-making tools are used to evaluate new ideas, consider multiple options, and gain general consensus through crowd sourcing. Examples of social decision-making tools include: Kluster, Doodle, and User Voice. The Kluster website states the benefit of this tool:

Kluster is a collaborative decision making platform — a turbo-charged collective wisdom machine that turns questions into answers, ideas into opportunities, and analysis into action. Unlike conventional “crowdsourcing” that pits people and ideas against each other, Kluster brings them together. Our approach is based on real-world group decision-making models, taking into account individual influence and participation. Not only does Kluster identify the best ideas, it actually improves them in the process (Kluster.com).

1.2.5.1 Ideas for Social Decision Making in the Classroom

- Teachers use social decision-making tools to poll the class on upcoming book options.
- Student groups use social decision-making tools to aid in project selection.
- Social decision-making tools are used to brainstorm and select a best idea.
- Students use decision-making tools to judge each other’s science projects.
- For a management class, students use Kluster to gain feedback on new product development or business ideas.
- Social decision-making tools can aid in the class project evaluation process through prioritizing objectives and project components.

1.2.6 Creating with Social Creativity Sharing

Creating is described as “putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing” (Anderson and Krathwohl 2001). Social creativity sharing sites are an exciting venue through which users can share videos, pictures, and personal publications. Examples of social sharing sites include: video sharing (YouTube, Metacafe, and uvouch), picture sharing (Flickr, Photobucket, Snapfish), and publishing (Scribd, Writeboard, Pixton). Relative to the classroom, a workshop attendee described:

I recently had the privilege of conducting a workshop for about 50 students who were attending a conference with their teachers (something I often advocate, and highly recommend). The setting was a technologically favorable one, in that the kids all had access to a well-stocked computer lab, but the students were an ordinary high school mix, representing high, low, and medium GPAs. We began by working as partners to come up with this guiding question: “What could we make to show our teachers what we are capable

of creating?” Next we spent some time listing all the things that at least some of the students knew how to create – videos, podcasts, games, computer programs, Facebook pages, competitions, and more. Each student then chose his or her preference, and the group divided up into teams. There were, in the end, 10 different tools used, some by more than one team. Even though the students had a total of only three hours to complete the projects (as a model of a weekend homework assignment), the results were extraordinary. One team of a girl and a boy made a podcast in which they did radio interviews with each other, using audio speed-up and slow-down software to reverse their genders! Two teams wrote and shot YouTube-style videos, complete with titles. . . . The point worth taking away is not just the fact that the projects were all great, but also the variety of the projects and the tools the students were able, and preferred, to use (Prensky 2010).

1.2.6.1 Ideas for Social Creativity Sharing in the Classroom

- For a show and tell, using a video camera, the students create a demonstration (science experiment, cooking video, dance lesson) and post to a video sharing site.
- If students go on vacation, ask them to create a video and post to a video sharing site.
- The teacher creates a video demonstration of a science experiment and posts to a video sharing site. Thus, if students have questions, they can just refer to the video.
- If several students are absent from class, the teacher can videotape and post the lectures.
- Students join forces with a local nonprofit and post a photo album of events to a picture sharing site.
- Students use Pixton to create a cartoon depiction of their feelings toward something they like or dislike, relative to the class topic.
- Students use Scribed to collaborate on a writing project, where participants take turns writing without editing. Thus, each person needs to keep the story flowing based on the writings of the previous person.
- Have students research colleges or potential employers through the use of video sharing and picture sharing sites. Then have the students create a video to promote the specific class.
- For a class topic on recycling, have students create a photo album with pictures of common household products that are recyclable.
- Students can use Scribed as a source for brainstorming class project ideas in one central location.

1.2.7 Communicating and Relationship Building with Social Networks

Revisiting Bloom’s Taxonomy, the previous six thinking objectives focused almost exclusively on the cognitive domain. However, another important domain for students is the affective – or emotional – domain, which includes communication and relationship building. The ability to effectively network and build relationships is critical to both personal and professional success. An individual’s social network includes the individuals with whom that individual maintains relationships, including

colleagues, friends, family, and other social contacts. Online social networks, however, can transcend traditional geographic and time-zone limitations. For example, Facebook, Second Life, LinkedIn, Edmodo, and Ning allow individuals to access the network regardless of location and time. Specific to education, Bunzel (Bunzel 2010) writes:

At the time this is being written, Twitter is extremely hot and is the most significant real-time social media communications tool. “Real time” refers to the immediacy of Twitter’s status updates and the responses of followers; because of the brevity of posts, there is almost no lag time between a post and a slew of responses, a viral dissemination of information and opinion. . . . But at the moment, Twitter is an important tool for seeing how quickly social media can effect of the outcome of communications strategy, how it comprises a key component of your online identity, and how you interact and are perceived by others (p. 110–111).

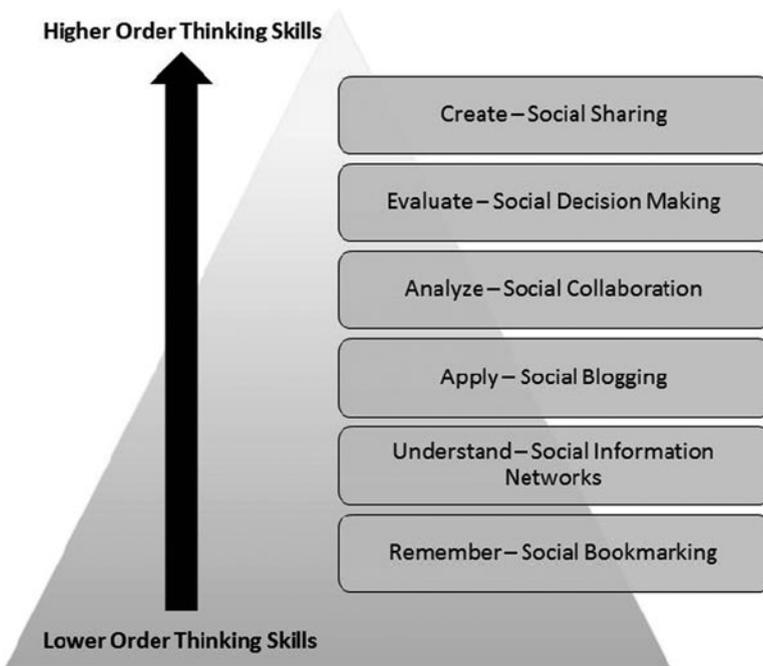
1.2.7.1 Ideas for Social Networks in the Classroom

- Through SecondLife, institutions purchase “land” to build and develop structures, and the environment, to create a meeting place for students.
- Students join forces with a local nonprofit and create a fan page in Facebook to promote a cause. Pick teams and make it a competition to see how many people will “Like” the page.
- Host a class discussion using SecondLife.
- For a marketing class, using Ning, the students create a social network centered on a specific product or service and connect with others to gain feedback.
- Have students debate an ethical topic using Facebook and writing on a wall.
- Using LinkedIn, a student may connect with professionals and use their contacts to get a guest speaker in the classroom.
- For a management class, students work in teams to create a business plan using SecondLife to offer a new service in this alternative world.
- For a literature class, have students make an avatar, using SecondLife, based on specific characters in the literature. Then, the students meet in SecondLife to play out the different roles.
- Teachers, students, and parents can stay connected using the different social networks to stay up-to-date on student progress.
- For a law class, teachers use social networks to teach students about privacy. The students read and discuss the different privacy options.
- Facebook etiquette is a great topic for discussion prior to implementing the social media.
- Teachers use social networks to offer a question and answer session prior to taking a test.
- Students use Facebook as a forum for posting book reviews and movie reviews.
- Students use Facebook, through an Event or Fan Page, to organize a community service project.
- Facebook offers a wide variety of educational applications. For example, through a quiz application, the students create quizzes for each other to assist in studying for an upcoming exam.

- Twitter is used to follow famous people (CEOs, president and other political people) to keep current on changes.
- Teachers use Twitter to keep the students updated with information pertaining to absences, upcoming exams. . .
- Conduct a quantitative study, using probability and statistics, on the type of information tweeted online.
- Teachers use Twitter to focus on writing skills, as tweets are limited to 140 characters.
- Prior to an exam, host a recap quiz where the first student to tweet the correct answer gains a bonus point on the exam.
- Use social information networks to easily find popular articles related to the class topic.

1.2.8 Summary

In conclusion, as exemplified in this chapter, social media is a well-known and widely used mechanism for connecting people and businesses which is now becoming an important part of education as well. Below is a summary of the types of social media tools suggested for using the Bloom's Revised Taxonomy.



1.3 Strategic Analysis Tool for the Teacher for Implementing Social Media in the Classroom

This section will focus on the advantages, disadvantages, and decisions involved in implementing social media in the classroom. This section will introduce a SWOT Analysis, Feasibility Study, and Project Proposal. Why the fuss? In some institutional settings, obtaining the technology and/or access to technology for all students and staff can be a decision which requires buy-in from the school board, board of directors, or other administration. More often than not, gaining internet access within the school system is a sensitive subject. Use of these strategically focused analysis tools should provide teachers and instructors with the confidence and knowledge to move forward to a twenty-first century classroom.

1.3.1 SWOT Analysis

The SWOT Analysis is used to better understand the strategic benefit of integrating social media into the educational institution's goals and missions. It assesses the institution's (or classroom's) strengths, weaknesses, opportunities, and threats associated with social media. The strengths describe the institution's assets, resources, as well as potential benefits of using the social media. The weaknesses describe the challenges the institution will face in adopting a specific social media. The opportunities describe the institution's possibilities for implementing social media. Finally, the threats describe the potential danger or risk associated with the use of social media. For example, School ABC is considering using Twitter to gain real-time information on political candidates for a class on US Government. A potential SWOT Analysis is shown below.

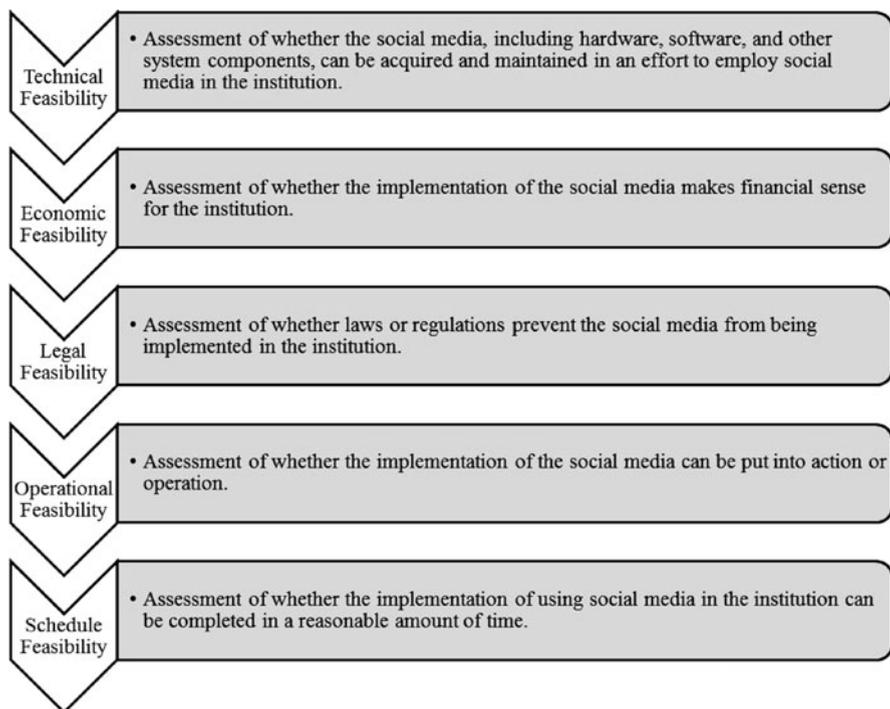
1.3.2 Feasibility Study

The feasibility study is used to explain the risks and probabilities associated with adopting a new social media tool, with respect to technical, economic, legal, operational, and schedule feasibility, as shown below.

1.3.3 Project Proposal

The project proposal is a summary of the information required to make an accurate and justified decision to move forward and implement the social media in the institution. The components of the proposal include goals and objectives, challenges and opportunities, project feasibility (summarized), project costs, project benefits, and recommendation.

<p>Strengths</p> <ul style="list-style-type: none"> • Twitter is free, thus minimal costs are required for School ABC. • Twitter is RSS-enabled, thus students and teachers can receive information directly to their email inbox or other specified location. • Twitter has a strong brand name and good reputation, thus teachers' and students' familiarity should increase the use and satisfaction. • Twitter is real-time, thus teachers and students can have access to accurate and up-to-date information. 	<p>Weaknesses</p> <ul style="list-style-type: none"> • Twitter is often down due to an overload of tweets (i.e. status updates), which means the potential change in teaching plans. • Twitter requires computer and internet access, which means all teachers and students require access.
<p>SWOT Analysis: Adopting Twitter at the School ABC</p>	
<p>Opportunities</p> <ul style="list-style-type: none"> • Twitter has the potential to become a search engine for classrooms to search for education-related information. • Twitter continues to grow and is becoming one of the most popular information networking tools. • Twitter has the potential to become a primary tool connect information and users. 	<p>Threats</p> <ul style="list-style-type: none"> • Twitter received a lot of publicity in a short period of time, thus there is a potential for it to be a temporary fad. • Privacy and ethical concerns could result in legal implications for the educational environment. • Twitter has the potential to become a distraction due to overload of information.



<p>Goals and Objectives</p> <ul style="list-style-type: none"> • Describe the firm’s objective. What are the goals and missions of the firm? What service or product is offered by the firm? What is the culture of the firm? How are the firm’s goals aligned to the goals of the social networking tool? • Describe the social media. Include a picture of the tool, website address, purpose, founding information, how the site earns revenue, etc...
<p>Challenges and Opportunities</p> <ul style="list-style-type: none"> • Describe the challenges and opportunities faced by the firm in incorporating the social media. Who are the stakeholders? What is the main area for using the social media (e.g. streamline processes, increase communication, etc...)?
<p>Project Feasibility</p> <ul style="list-style-type: none"> • Describe the feasibility of the tool with respect to technical, economic, legal, operational, and schedule feasibility.
<p>Project Costs</p> <ul style="list-style-type: none"> • Describe the firm’s costs of adopting the social media. Think about resources in the aspect of both time and money. How much does the system cost to implement and maintain? How much does training cost? What about process documentation?
<p>Project Benefits</p> <ul style="list-style-type: none"> • Use this section to really “sell the idea” including both direct and indirect benefits, as well as both monetary and non-monetary benefits.
<p>Recommendations</p> <ul style="list-style-type: none"> • Recommend a start-up option (e.g. direct conversion, pilot start-up, etc...) and timeline for implementation. Will the use of the social media be mandatory or voluntary?

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