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# Rethinking Higher Education Through Social Networks

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*(Disclaimer: The article does not promote any individual social networking site. It is a study of sites similar to those described in the article and their plausible role in higher education)*

## ABSTRACT

The learning agenda has changed from formal to informal learning spaces, mass to personalized learning, competitive to collaborative and restricted to extended formats. Though education and curriculum, worldwide, still point towards fixed and defined knowledge, the world beyond classrooms has changed drastically and continues to do so. There are revolutionary changes in the way people communicate today, as they no longer subscribe to magazines, they subscribe to people. This presents a huge opportunity for educational institutions and instructors to reach out and connect with students, prospective students, parents, alumni, public, administrative bodies and more. Since learning has moved beyond the classrooms and is largely learner-centric, nurturing and maintaining connections is needed to facilitate continual learning. Students or learners live in an internet age where social networking has become a way of life. The use of professional social networking sites like LinkedIn used for building an online portfolio to demonstrate skills and networking with potentially useful contacts for the near future. A connected educator, therefore, has an online presence, uses technology for delivery, has a blog, wiki or podcast site, employs collaborative approach, promotes informal learning, uses social bookmarking and networking tools, and is always e-connected. Using these tools in higher education will enhance learning experience of the students along with giving them individualized attention beyond the classroom and developing their cognitive skills. These and other similar sites can be used for instant lecture feedback, sending interesting and informative links to students on topics covered, sending reminders of deadlines, floating new ideas, grading students, organizing outside class discussions, posting interesting articles and latest information related to the course.

**Keywords:** Social networking systems, Higher Education, Social media, teaching and learning.

## INTRODUCTION

Higher education is facing unprecedented challenges today emanating from factors like high delivery cost, students' changing expectations, new demands on curriculum, emerging technology and revitalization of faculty. These issues can be addressed only by sharing knowledge. Computer mediated technologies have made it necessary to modify traditional modes of academic and pedagogical communication. Higher education professionals need to recognize that online social networking sites like Facebook, Twitter, LinkedIn etc. are a part of large generational development in online communication that epitomize most students on university and college campus today. It is only a matter of time before social media becomes a regular classroom feature as an instructional tool in higher education. Considering students technology habits, educators have already started using social networks to reach out to students. It is anticipated that by integrating their social and academic environments, the students learning experience and grades can be enhanced. Though the power of effectual social networking is yet to be realized, there is a need to adapt to online methods of communication to stay in-tune with the 'always-on' generation.

Universities and colleges are increasingly using new communication technologies for innovative teaching methods, as a way of improving interaction between faculty and students. Social media tools are collaborative, include user-generated content, and allow personalization. They promote social interaction that allows the students to use their cognitive skills, develop critical thinking and be creative. The use of social networking tools has a huge potential for use within academia, as many of the most significant social medial tools are still very young. (Timeline-[www.ibm.com/developerworks/...social-media1/index.html](http://www.ibm.com/developerworks/...social-media1/index.html)). With the widespread use of tools and technologies like You Tube, Twitter, blogs, Wikis and Facebook, social media can be used for teaching in higher education. Students remain highly motivated and excited to connect with their peers online. The teaching faculty, however, has been slower in accepting these new modes of interaction and learning.

## THE STUDY

In 2004, Warwick University was the first UK university to introduce an institution-wise blogging platform (<http://blogs.warwick.ac.uk/>) encouraging staff and students to share professional and personal reflections in a trusted branded public space. This has led to a creative, thoughtful and lively culture of blogging within the university. Arizona State and Columbia College Chicago are using Facebook pages as hubs of university social activity. Most major universities across the world have social media sites on their home page now.

The use of social media has seen upsurge in recent years. By July 2011, Facebook had passed 750 million users; LinkedIn had 100 million members, Twitter hit over 177 million tweets per day and YouTube reached three billion views each day. This popularity of the social media sites with the young has led to their infiltration into the educational arena (3). Unfortunately, social networks have almost no integration into formal learning environments (3). The learning management systems like Moodle and Blackboard, most widely used in traditional higher educational settings, provide limited opportunities for online interaction. Ideas cannot be shared with viewers from outside the institutions, resulting in loss of connectivity and openness. Social networking tools fill these gaps by including members from outside the class. A student can stay in touch with the subject

even beyond a semester. Social networking sites also facilitate increased student-teacher, student-student and student-content interaction.

Research has suggested that learning is not an individual acquisition activity but is a social discourse (4). Studies have also suggested that collaborative learning is more effective than individualistic learning. Such a learning experience enhances motivation to achieve higher goals and has positive social outcomes (5). The Connectivism theory integrates social learning to social media technologies (6, 7, 9). Learners gather information and knowledge by connecting with others' using RSS, Wiki and other similar platforms. A teacher's role, therefore, is not just about making, defining and generating content but also about making connections with existing and new knowledge resources. Formal learning is only a fraction of the actual learning process. The role of formal learning is 19% till the twelfth grade, 8% in undergraduate years and just 5% in graduate years (8). Informal learning is progressively becoming more and more important. Social connections and networks are helping acquire knowledge and are changing the way we learn, organize work and ideas.

There is limited research on how social media influences students learning experience (12, 13). EDUCAUSE Center for Applied Research reported that 90% students responded to social networking services but less than 30% used it for the enhancing learning like using video sharing tools, blogs, presentation and bookmarking tools. The use of social media by teachers is even lesser. A survey of 4600 faculty members of 50 US colleges and universities by Faculty Survey of Student Engagement (FSSE)(11) found that over 80% did not know about the use of tools like blogs, video conferencing, virtual worlds etc and most instructors continued to teach using lecture based instruction. However, more and more instructors are now adopting the new tools into their teaching and the face of higher education is in for a permanent change.

Ethical concerns regarding use of social media in academic environments has also been a debatable issue where student's privacy and security are of prime concern (1, 14). As a result of students spending lot of time online, certain health issues like weakening of immune system, change in hormonal level and function of arteries have emerged. Lesser face-to-face communication has also lead to miscommunication of certain ideas and affected real friendships.

### **Use of Social Networking systems in Higher Education**

Social networking services routinely enroll millions. These services offer huge advantages as anyone can add or edit information on social media enabling creation, change or publishing of dynamic content (17). Implementing use of social media in higher education is an innovative process being tried by many universities. The response of colleges and universities to this social transformation of the environment is yet to be realized. However, these tools can have a powerful impact on teaching and learning. There are two aspects of learning that every teacher yearns to achieve i.e. engagement and achievement. These can be achieved by use of social networking tools. As students get involved in communication and interaction through these tools, this engages them emotionally and automatically enhances their learning curve (18). Bandura's Social Learning Theory also emphasizes that people learn from one another, via observation, imitation and modeling. Hence, Social Learning is an important tool in the entire learning process. Integrating social networking systems in higher education also helps in better use of time outside the classroom. It encourages dialogue with silent individuals reluctant to a face-to-face interaction. It

provides opportunity for improving writing and the teachers can choose to grade the writing quality as part of rubrics that may include grading social media based assignments. Social media is becoming increasingly important to business, and one of the goals of education is to position learners in successful careers. Building connections and maintaining communications is an important facet of social networking systems, as it is for success in any career or life. Despite these benefits, the use of these systems in higher education has been limited. However, the most popular social networking sites can be used extensively in higher education.

Microblogging and social networking platform like Twitter allow users to post 140-character updates. It has more than 200 million users sending 160 million messages (tweets) per day (Junco, 2012, Twopblog, 2011). Educators have been keen on using Twitter as a part of their courses. In fact, a study on 1400 faculty members found that 56% of faculty who were Twitter users also used Twitter as a learning tool in the classroom. Student engagement was found to be higher by Twitter use. The use of Twitter in educationally relevant and productive ways gave the most effective results. Twitter could be used to send pointers to online resources based around the course. The educator could post reminders about deadlines. Twitter could also be used to break down barriers between the instructor and the student. Twitter is very useful in getting instant lecture feedback and keeping the learners up to date with relevant course-based information from the educator. Junco et al, 2012 conducted a study on Twitter usage in post secondary courses. Qualitative analyses of tweets and quantitative outcomes showed that faculty and student participation on the platform and integration of Twitter into the course based on a theoretically driven pedagogical model were essential components of improved outcomes. However, the study also emphasizes that the design of teaching strategies related to virtual engagement is extremely important in achieving positive educational outcomes.

While privacy issues have discouraged educators from using social media in teaching, social media tools like Google Plus are a new way of communication. It can be used to post information to students, encourage video-conferencing between groups, get updates on selected topics and achieve cross-course communication (17). Most of the services of Google Plus can be adapted for educational use. The main features of such a tool are circles, hangouts, sparks and huddle. It has the potential to improve students' collaboration through circles, conduct research for projects with sparks, improve the instructor-student and student-student relationship and support blended learning with the hang out functionality. Circles are contacts that can be grouped, using different criteria for grouping and posted content can be shared with groups or individual users as per requirement. An instructor can create circles for each course, posting information not visible to other contacts. Sparks allows users to mark (and label into groups) articles, blogs and other information relevant to topics of interest. This makes sites like Google Plus a research-sharing tool in the classroom. The hangout facility allows up to ten users to video chat simultaneously. This also facilitates interaction between learners and teachers. Google Plus offers possibilities for students to share links and build a classroom community. The flexibility of Google Plus offering personalized learning to students will prove to be a very effective social networking tool in future.

Once exclusively for college students, Facebook has become one of the most popular social networking site. It has grown in its popularity and usefulness. A comparison of faculty and student responses indicate that students are more likely to use Facebook and similar technologies in the classroom than faculty members who still use traditional technologies like email (21). However, educators are beginning to realize the powerful



potential of Facebook in the classroom as a collaborative learning tool and less of a distraction. Its great benefits lie in it being fun and free. Students connect beyond classrooms, with events and calendars easy to share (22). Online resources are more convenient and even absent students can stay in loop. Daily learning activities can be scheduled and review material can easily be organized. Facebook creates a social bond and is great for professional development. It is great for reminders, posting your work, getting instant feedback, and discussing other students' work, sharing resources, conducting group projects and taking debates online. Students can stay connected anywhere and get an opportunity for collaborative learning. It is also an excellent tool for communicating with parents. Ophus and Abbitt, (2009) studied the feasibility of using Facebook for a biology content course and found that it proved to be potentially beneficial with some doubts raised about privacy and distraction. (23)

Blogging is a popular web tool that is being extensively used now in higher education. Blogs are personal web pages used for development of traditional learning logs for students and teachers, to complement the traditional lectures and also as an e-learning tool. The use of blogs has increased tremendously in the last decade because of Open Universities and virtual-environment courses (24, 25). There are five major motivations for blogging: documenting one's life; providing commentary and opinions; expressing feelings; articulating ideas through writing; and forming and maintaining community forums. The possible uses of blogs in higher education include improving writing skills, encouraging reflective writing, reading students blogs for assessment, sharing resources and ideas, recording progress, course administration, group work, in-class discussions, conducting extensive seminars, posting class announcements, syllabi, assignments, links to resources and relevant material. Blogs are easy to set up and administer. Publishing and updating all types of resources is very easy. Blogs have the ability to reach a large audience anytime, anywhere. No special blogging software is needed. Blogs can create connection between students of diverse opinion and interest. This encourages critical thinking and instills value of respect for others' opinion.

Video creating and sharing technologies like YouTube that were originally created for entertainment are quickly gaining popularity in academic areas. Students across the globe and on campus have access to a growing range of educational video content from segments on small topics to full lectures, all available online (26). E-sources similar to YouTube are an excellent resource for teacher in any discipline. They contain lectures and screen casts of procedures ranging from computer software usage to analysis of English literature. They can serve as a very important tool in teaching and learning. It can be used for distance learning by sharing lectures online along with procedural details. They can be a resource of supplementary lectures. They can be used for contextualizing and researching an issue by watching an old video or film. YouTube can also be used to critically examine any issue. Presentations with screen capture of the teacher can help students relate to the lecture beyond the classroom and stay connected with the teacher after the class. The students feel a sense of belonging and connectivity with their teacher visible on the screen. YouTube can also be used for short lecture breakers in between classroom lectures. The videos can be used in discussions, critical analysis, virtual field trips and Web quests. The students can upload their video assignments for grading. This allows students to critically examine an issue, develop online skills and get feedback from people beyond the classroom. TED talks, Teachers TV, Teacher Tube etc. are other excellent resources of information for teaching, detailed research and investigation.

Professional social networking tools like LinkedIn are valuable for students in establishing their career. It is the professional face of the student to the business world. It is like a personal branding to the future employers. The students must join LinkedIn to start building their professional network and connect with other students in the subject area. They can link to their professors and seek their recommendation. Building such networks will be very useful in their career later. Students can explore and find people who are already employed in their desired profession to see what they have done to be successful in this field. They can review the profile of the interviewer before going for a job interview (27). LinkedIn helps get jobs or internship to the students while they are studying. It can also help get referrals through a mutual acquaintance. LinkedIn is used to extend resume by putting the LinkedIn profile URL on the brief resume sent to employers. It is used to share updates with others or for joining a group. It helps provide information about the company one wants to work with. Students can search for job openings in their areas of interest. LinkedIn is also used to increase freelance work, boost business, do market research, jazz up profile, get advice, do research on employers and organizations in desired field. In fact, LinkedIn is an extremely valuable tool in gaining career exposure, marketing and branding yourself for the career of your choice.

### **Exploring The Potential Of Using Social Networking Systems In A University Course**

It is established now that technology integration would be meaningful for learning in higher education. In higher education, curriculum and teaching are the unique purview of the faculty. The often cited barriers to adoption of technology in the classroom include limitation of access, training and computer literacy, lack of evidence of effectiveness, past practice, time pressure, expenses, dearth of appropriate software, limited resources for instructional design and conflicting goals of outcomes (28, 29). The new technology tools have the potential to revolutionize the teaching landscape. With the advent of Web 2.0 and open access tools, instructors have greater options for creating unique online learning environments that can vary to fit needs of specific classes and subject areas, with the potential for developing even more personalized and social spaces to accommodate individual learner style (30, 31)

Luehrmann (1989) suggested three criteria for success in sustainable educational reforms: up-front costs must be small; the system as a whole must not be altered; people must benefit from the reform. The use of social media in teaching and learning encompass all these facets without adding to the cost. Hoffman, 2010 and Minocha, 2009 found that educational goals for employing social networking sites include initiating new ways of learning, giving control to students, providing transferable skills, supporting peer-to-peer learning, enhancing reflective learning, creating a digital identity, fostering social engagement, increasing retention, socialization, collaborative learning, student engagement, sense of control and ownership, problem-solving, sense of achievement, visibility of artifacts created, integration of multimedia, adding novelty and excitement to the learning environment, overcoming isolation and geographic differences, and students' positive perceptions of the educator involved in social networking initiatives.

Social networking is still relatively new for direct use in higher education courses. Hence, its real potential is still unknown though many universities across the world have started offering courses in social media. Case studies are being undertaken by many universities to see the effectiveness of the integration of social media in higher education. Use of social media is still a challenge in traditional universities where most of the teaching happens face-to-face with limited technology integration. Though most of the students are internet-

savvy and use social networking sites like Facebook extensively (Figure-I), the faculty is still not very comfortable with the use of social media for formal communication, social interaction and education. There is a considerable resistance to use of social media for teaching and learning. The students have shown excitement at the prospect of beyond the classroom learning, in a setting where their comfort zone lies i.e. using Facebook, Twitter, YouTube etc. The faculty is still stuck in the email mode and even with exposure to social media, they are reluctant to use social media for teaching and learning. Most of them do not think that use of social media in teaching would help learning in anyway. Around 40% faculty said that it was a bad idea and around 50% were not sure of its use (Figure-II). About 85% of the students, on the other hand, said that it will be a good idea to integrate social networking systems in their learning.

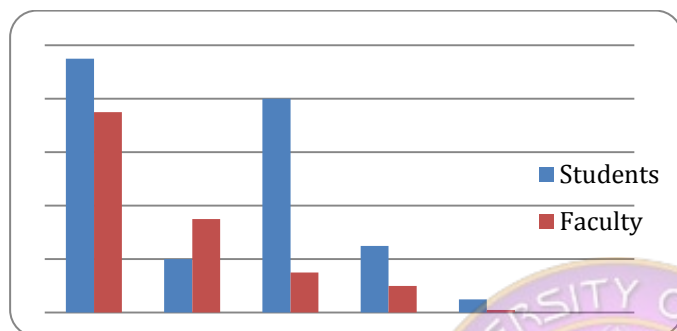


Figure-I: Use of social media by students and faculty

(1. Use of Internet; 2. Use of email on daily basis; 3. Use of social media on daily basis; 4. Use of Internet for subject related work; 5. Use of social media for subject related work)

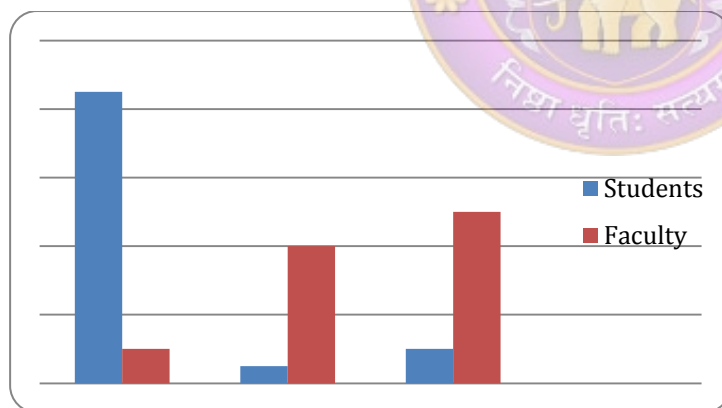


Figure-II: Is the use of social media in higher education a good idea?

(1. Yes; 2. No; 3. Can't say)

This shows that higher education is set to face a challenge as learners yearn for highly personalized, adaptive and usable tools both for learning and socializing. They continue to offer their resistance to standard, outdated and unintuitive tools in formal education. Hence, the faculty needs to gear up and bridge the gap of technology divide that is widening each day. Foraying into the mindset of the student and designing teaching methodologies from the students' perspective has become exceedingly important to engage students and help them achieve their career goals in the way they want. Decentralization of

current higher educational paradigms and introduction of a social media use policy will have broader effects on escalating the learning curves of students.

### **Proposed model course for incorporating social media in higher education**

A model course is proposed for smooth integration of social media in higher education. This proposal is made considering that technology based learning is the future of higher education and engaging students in learning in an environment they are most comfortable in, is the ultimate goal of higher education and this model course. The model course is proposed to have its own Blog starting with introduction to the subject, the syllabus and the content of the course. There would be a special hash tag for the course on Twitter that all students and teacher will follow, a special circle of class contacts on sites like Google Plus where students can video chat together and a special group on Facebook comprising of the teacher and the students. The administrative authorities can have a representative as part of the group to monitor its online activity.

Each student would be encouraged to create a LinkedIn profile to start networking with recognized names and successful professionals in their field. Special discussions on various topics would be initiated in the course Blog. Deadlines, reminders, link to additional audio and video resources and daily messages would be posted on Facebook and Twitter. Social interactions would be encouraged on both these platforms and students would be required to read material posted by others and comment on it. Assignments and grades would be posted in the Blog. Each student will be given a small topic from the course to make a presentation using free online resources with a voice-over. The student would be expected to research the topic online and make a video of the assignment that would be posted in YouTube and the link to the video would be posted on Facebook and Twitter for others to comment on.

The quality of online interaction would be graded as part of internal assessment. The teacher would play the role of a mentor beyond the classroom boundary and keep a track of the individual student's progress so that he can make individual suggestions to the students based on their performance online. The proposed course would facilitate greater teacher-student and student-student interaction along with openness to views from people outside the course. The author proposes to run the model course for a semester on experimental basis as a future extension of this project. The outcomes of the course will be documented online. A proposed policy for social media integration in higher education can be drafted for fair and ethical use.

### **CONCLUSION**

Technological advances have made young minds increasingly reliant on social media. They use it for communicating with peers, forming communities, gaining instant information and juggling with available resources. Integrating social media into higher education and making it an integral part of teaching and learning is the only way of keeping students interested and excited about their subjects. This way, the teacher would be talking in a language that students understand, belong to and relate to. Students across the world are welcoming the idea of the use of social media in education as this is the way they listen, learn and discuss ideas. Most of the popular social networking sites have enormous potential of furthering higher education, providing a wider exposure and helping students think beyond the face-to-face lecture. The use of these sites for educational



purposes will definitely shift the learning curve of the student upwards. The proposed model course is set to enhance the cognitive skills of the student, while also enhancing critical thinking and creative skills. However, it is very important to maintain the focus on the goal of enhancing learning experience rather than getting distracted and wasting time online. The design of teaching strategies related to virtual engagement has to be carefully designed for achieving positive educational outcomes. The teaching faculty must embrace the changing trends to constructively engage the learner and keep them interested in the subject. Social media has become a very powerful medium to reach targeted audience in any area. Embracing it will go a long way in connecting and delivering the subject content and helping students put on their thinking caps rather than making the experience drab, monotonous and boring. The universities must work on a policy for formally integrating social networking systems into the course format in higher education systems.

## REFERENCES

1. Jalal, A. and Zaidieh, Y. (2012) The use of social networking in education: challenges and opportunities. *World of Computer Science and Information Technology Journal*. 2(1): 18-21.
2. Osborne, N. (2011) Using social media in education: Opportunity, risk and policy retrieved from [www.ibm.com/developerworks/...social-media1/index.html](http://www.ibm.com/developerworks/...social-media1/index.html)
3. Chen, B. and Bryer, T. (2012) Investigating instructional strategies for using media in formal and informal learning. *International Review of Research in Open and Distance Learning* 13(1) and retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/1027>
4. Hanson, J. M., & Sinclair, K. E. (2008). Social constructivist teaching methods in Australian universities: Reported uptake and perceived learning effects: A survey of lecturers. *Higher Education Research and Development*, 27(3), 169-186.
5. Snowman, J., McCown, R., & Biehler, F. (2009). *Psychology applied to teaching*. Boston, MA: Houghton Mifflin Co. Retrieved from <http://www.worldcat.org/title/psychology-applied-to-teaching/oclc/228007807?page=citation>
6. Siemens, G. (2004). Connectivism: A learning theory for the digital age. Elearnspace. Retrieved from <http://www.elearnspace.org/Articles/connectivism.htm>
7. Siemens, G. (2005). Connectivism: Learning as network-creation. elearnspace. Retrieved from <http://www.elearnspace.org/Articles/networks.htm>
8. Banks, J., Au, K., Ball, A., Bell, P., Gordon, E., Gutierrez, K., Heath, S., et al. (2007). *Learning in and out of school in diverse environments* (Consensus Report). Learning in Informal and Formal Environment (LIFE) Center. Retrieved from <http://www.life-slc.org/knowledge-base/report-learning-in-and-out-of-school-in-diverse-environments>
9. Downes, S. (2007). *An introduction to connective knowledge*. Presented at the International Conference on Media, Knowledge & Education—Exploring New Spaces, Relations and Dynamics in Digital Media Ecologies. Retrieved from <http://www.downes.ca/post/33034>

10. Facebook. (2011). *Facebook statistics*. Facebook. Retrieved July 22, 2011, from <http://www.facebook.com/press/info.php?statistics>
11. FSSE. (2010, July 25). Professors' use of technology in teaching. *The Chronicle of Higher Education*. Retrieved from [http://chronicle.com/article/Professors-Use-of/123682/?sid=wc&utm\\_source=wc&utm\\_medium=en](http://chronicle.com/article/Professors-Use-of/123682/?sid=wc&utm_source=wc&utm_medium=en)
12. Hew, K. F. (2011). Students' and teachers' use of Facebook. *Computers in Human Behavior*, 27(2), 662-676.
13. Mix, K. K. (2010). *Online social networking: Exploring the relationship between use of Web-based social technologies and community college student engagement*. ProQuest, UMI Dissertations Publishing.
14. Foulger, T. S., Ewbank, A. D., Kay, A., Popp, S. O., & Carter, H. L. (2009). Moral spaces in MySpace: Preservice teachers' perspectives about ethical Issues in social networking. *Journal of Research on Technology in Education*, 42(1), 1-28.
15. Twitter. (2011, March 14). Twitter blog: numbers. Retrieved July 22, 2011, from <http://blog.twitter.com/2011/03/numbers.html>
16. YouTube. (2011). YouTube - broadcast yourself. Retrieved July 22, 2011, from [http://www.youtube.com/t/press\\_statistics](http://www.youtube.com/t/press_statistics)
17. Oberer, B.J. and Erkollar, A. (2012) Google Plus in Higher Education Space. Are educators ready for social media learning in schools? 2012 Retrieved from: [http://www.iiis.org/CDs2012/CD2012SCI/IMSCI\\_2012/PapersPdf/HA183CF.pdf](http://www.iiis.org/CDs2012/CD2012SCI/IMSCI_2012/PapersPdf/HA183CF.pdf)
18. Walsh, K. (2011) Seven reasons to leverage social networking tools in the classroom. Retrieved from: <http://www.emergingedtech.com/2011/06/7-reasons-to-leverage-social-networking-tools-in-the-classroom/>
19. Junco, R., Elavsky, C.M. and Heiberger, G. (2012) Putting twitter to test: Assessing outcomes for student collaboration, engagement and success. *British Journal of Educational Technology* doi:10.1111/j.1467-8535.2012.01284.x Page 1-13
20. Twopblog (2011). What does 300 million registered Twitter accounts mean? Retrieved July 6, 2011, from: <http://www.twopblog.com/2011/05/what-does-300-million-registered.html>
21. Roblyer, M.D, McDaniel, M., Webb, M., Herman, J. and Vitty, J.V (2010) Findings on Facebook in higher education: A comparison of college faculty and student uses and perceptions of social networking sites. *Internet and Higher Education* 13: 134-140
22. Barseghian, T. (2011) Fifty reasons to invite Facebook in the classroom. Retrieved from <http://blogs.kqed.org/mindshift/2011/08/50-reasons-to-invite-facebook-into-your-classroom/>
23. Ophus, J. D. and Abbitt, J.T. 2009. Exploring the potential perceptions of social networking systems in university courses. *Merlot journal of Online Learning and Teaching* 5(4): 639-648
24. Lujan-Mora, s., and Juana-Espinosa, S. 2010 The use of Weblogs in Higher Education. Retrieved from <http://gplsi.dlsi.ua.es/proyectos/webeso/pdf/inted07.pdf>
25. Fard, H.E, Tasir, Z., Ziden, A. A., and Esa, N. (2010) A case study on Blog's Effects as a learning activity in Higher Education environment. *World Applied Sciences Journal*. 9(5): 567-572

26. Snelson, C., (2008) Web-based video in education: possibilities and pitfalls. TCC 2008 Proceedings. Retrieved from <http://etec.hawaii.edu/proceedings/2008/Snelson2008.pdf>
27. Walsh, K. 2011. Eleven reasons why every college student needs a LinkedIn page. Retrieved from <http://www.emergingedtech.com/2011/03/11-reasons-why-every-college-student-needs-a-linkedin-page/>
28. Hoffmann, E. (2010) Social Media and Learning Environments: shifting perspectives on the locus of control. Retrieved from : <http://www.ineducation.ca/article/social-media-and-learning-environments-shifting-perspectives-locus-control>
29. Dillenbourg, P. (2008). Integrating technologies into educational ecosystems. *Distance Education*, 29(2), 127-140. doi: 10.1080/01587910802154939
30. Bonk, C. (2009). *The world is open: How Web technology is revolutionizing education*. San Francisco, CA: Jossey-Bass.
31. Weller, M. (2009). Using learning environments as a metaphor for educational change. *On the Horizon*, 17(3), 181-189. doi: 10.1108/10748120910993204
32. Luehrmann, A. (1989). Technological innovations in education: Are they even possible? *Journal of Computing in Higher Education*, 1(1), 117-127.
33. Minocha, S. (2009). *A study on the effective use of social software by further and higher education in the UK to support student learning and engagement*. Bristol, UK: JISC. Retrieved from <http://kn.open.ac.uk/public/document.cfm?docid=12120>

