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EdTech notes

A topical start-up guide series on emerging topics on Educational Media and Technology

Using Social Media in HIGHER EDUCATION

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> **… the growth of social networking has transformed the way that an entire generation makes links with peers and communicates their ideas to the wider world.**
>
> *- Rennie and Morrison, 2013*

What do we mean by the term "social media"?

Social media is a generic term given to the various types of media used by people to create and share information, usually in a digital form, using interactive internet-based networks. This means of dissemination and exchange of information has become so popular that currently there are literally thousands of software applications, although less than a dozen of the most popular are used by the vast majority of participants. Social media networks have generally not explicitly been established as educational resources, but the flexibility and popularity of the resource has led to many experiments in recent years to incorporate various social media applications in the mainstream process of education at all levels (primary, high-school, higher education, and community education).

The educational challenge

The adoption of social media for networking has been largely pioneered through leisure-time activities, although their influence in journalism, music, the arts, and society in general have been widely reported. It seems natural that we should seek to harness the benefits of social media for educational purposes (Hemmi *et al.* 2009). At the simplest level, social media utilise the fundamental principle of what has been called web 2.0 (a second generation, interactive web) which has the ability not simply to create content and put it up on a website, (a web 1.0 "broadcast" mode) but also to respond and interact with such information, in effect to re-shape and co-create knowledge (Conole & Alevizou, 2010). Perhaps one of the best-known examples of this is Wikipedia, where encyclopaedia-type entries are created, which can then be edited (corrected, enlarged, linked-to) by potentially millions of online users.

As with other uses of educational technology, care is required to ensure that the fad of a new application supports rather than dictates the learning pedagogy. The key challenge is to select the pedagogic style that is appropriate to the learning activities then correctly match this to the identified strengths and weakness of the different media types (Rennie & Morrison, 2013).

How is social media being used for learning?

The relative newness of most social media means that there is not a huge track-record of research into their use in education and most published examples use quite small student cohorts over short periods of time on individual courses. Nevertheless, there has been active experimentation with most of the main service applications (Moran *et al*. 2011). The range of social media applications and their different functions is so great that they cannot all be discussed here, for example wikis (for co-editing websites) Slideshare (sharing slide presentations) Linkedin (professional networks) or Snapchat (sharing photographs with friends) are widely used, but a short summary of the most popular applications will demonstrate the potential for educational use.

Some Examples

Facebook – is probably at present the most popular social networking site, which enables users to assemble communities of "friends" who can follow, exchange, and comment on information posted online. Users can personalise a profile, and the information exchanged can be tailored to be public or private, although novices may have initial difficulty with the settings. As with most digital sites, links can be incorporated to other networks, such as blogs and YouTube. Initial research has suggested that the educational use of Facebook makes little difference either way to students grades (Junco, 2012) but that the application can provide a useful social support for students (Wise *et al*. 2011; Barden, 2014). In particular, students use Facebook to exchange social information about subjects, raise questions, and provide mutual support outside class time, although the extent and style of engagement seems to vary with user personality, suggesting that a uniform adoption is unlikely. The application has advantages in being available for several device types (computer, tablet, phone) allowing mobile access, while also providing both synchronous (instant chat) and asynchronous communication which allows a written record of the exchanges. In addition to the public form, users can create private interest groups which enable closed discussions within a course or conference (Roblyer *et al*. 2010).

YouTube – is a site that provides users with the opportunity to upload their own videos, and to view and comment on others. Initially conceived as a channel for entertainment, the range of topics and the professionalism of the site grew rapidly to include advertising, self-promotion (e.g. musicians) and also open educational presentations and demonstrations (Tan & Pearce, 2011). From the educational perspective, students can learn informally (Tan, 2013) not just from their own institution, and can also view demonstrations that are difficult or sensitive to conduct face-to-face (e.g. laboratory experiments or medical ailments and procedures). Although not critical for learning, videoclips can be embedded in the institutional learning environment to give controlled access to alternative perspectives and to enhance the student experience (Sharoff, 2011). As with other social media there are issues that need to be considered relating to misuse of the application (e.g. copyright infringements or unethical recordings) as well as the quality of the video production – which can range from bad home documentaries to high-quality broadcasts by international experts.

Blogs – as the application was an early social media innovation and is easy to use, there is a rich body of literature on the extensive use of blogs in education. Derived from the term "web-log" a blog is a webpage that is simple to create and disseminate which is used as a diary or news journal. Commonly the user (blogger) will post

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comments, opinions, links to other digital resources, and will encourage others to add comments on the theme of the blog, which can be academic, personal, or institutional (Deng & Yuen, 2012). Many companies offer services to host blogs, and whether personal or institutional, these offer opportunities to extend discussion beyond face-to-face meetings and beyond a simple teacher-student exchanges. Blogs can be used simply as personal reflective journals to voice opinions on chosen topics and to build reputation, or by encouraging comments from others they can be fast-moving places to add links, share information, and answer questions (Heap & Minocha, 2012). They have been used to provide instant feedback, and also as a promotional record of research projects. They can be voluntary or assessed. There are mixed views about the added-value of blogs in educational terms, although the development of writing skills is generally considered advantageous. As with much digital information on the internet, discriminating between good-value sites and the background noise can be challenging, but links to some of the best thematic blogs continue to be informative and popular.

Twitter – as a micro-blogging site, the limitations of the message length (140 characters) has been criticised by some educationists as encouraging superficial exchanges, but beyond the custom of following tweets by 'celebrities' Twitter has been used to relay news items to students, and to encourage student academic engagement (Junco *et al*. 2011). In general, it is used to encourage real-time participation in raising questions and 'conversations' with large groups of people in classes and in conferences (McNeil, 2010) as a "back-channel" to the main presentations. It has also been used to establish 'communities of practice' between academics with similar areas of interest (Lewis & Rush, 2013) and to encourage social presence among learners (Dunlap & Lowenthal, 2009). Keywords are prefaced with the symbol # (hashtag) to group discussion threads around specific topics. Particular advantages of Twitter are its simplicity of use, and that users can access their messages over a range of devices, making it a highly portable networking tool.

flickr – is one of a number of applications (such as **Picasa** and **Blipfoto**) that allow users to store, sort, share and comment on photographs. These generally allow users to tag the images with keywords (as well as location and technical information) to allow easy searching and sorting under multiple disciplines (Waycott *et al*. 2012). Users can share their photographs publicly, in invitation-only groups, or privately, as well as setting licence types (copyright, Creative Commons etc.) and safety levels (especially useful for working with younger students). As with other social media there are advantages in being able to directly link images created by others to blogs and other educational online spaces, as well as in accessing the work of millions of other users throughout the world. Care requires to be taken with copyright issues (just because an image is on a social site does not mean to say that it is always free to re-use) and with the screening of inappropriate images (although images can be blocked this does not teach students what they need to know to act responsibly online.) Since images can be open to more than one interpretation, photo-sharing offers good educational opportunities to build language skills (Campbell, 2007) as well as to break down geographical, language, and cultural barriers to collaboration (Chu & Van Dusen, 2008).

delicious – is a social bookmarking application where users can store the internet address of digital resources that they find useful, such as webpages, online journal articles, blogs, and open databases. The links can be annotated and make accessible to the public or a specific group of invited users with similar interests. As with many forms of social media, the links can be tagged and sorted by user-defined keywords. Some social bookmarking sites allow users to rate the links, and give notifications, as well as other useful functions. This is ideally suited to groups of students' crowdsourcing selected academic resources relating to particular courses and/or subjects (Farwell & Waters, 2010). Importantly, the network "cloud" is the storage space, so there is nothing to install and users can access their social bookmark list from any computer with internet access.

e-portfolios – are electronic collections of documents and other digital resources that can be used to present a profile of the learning achievements, work, and interests of an individual (or, more rarely, a group). Commonly an e-portfolio is used as a sort of interactive curriculum vitae, perhaps with electronic copies of educational awards attached, or with examples of good pieces of assessment or coursework to which the student may wish to draw attention (Joyes, *et al*. 2010). Different components of an e-portfolio can be selected to be totally private, shared with identified individuals (could be time-limited) internal to the institution or can be publicly accessible (Himpsl & Baumgartner, 2009). They have been used as a form of blog to encourage peer-evaluation and self-reflection by the user, which can be shared and expanded upon by colleagues. A challenge is to decide if the e-portfolio belongs to the individual or the institution, and although the contents can often be exported to other forms of e-portfolio software (some may be open source) it remains to be seen if they will fulfil their promise of effectively following the individual through their journey of life-long learning (Chau & Cheng, 2010).

skype™ – is probably the most popular of a number of services that enable video and audio calls across the globe using internet telephony (commonly with relations overseas). Peer-to-peer calls can be made freely to other users of the application, and calls outside the network to land-lines and mobiles can be made at very low cost. The application also supports instant messaging and conference-calls for small groups. This is another example of a technology with massive popular appeal that has been adopted by some users for educational purposes, including meetings between users at remote sites, tutorials, short presentations and sharing feedback with distance education students. Usually it is an optional extra rather than a mainstream method of communication, and may include, for instance, short (5-10 minute) guest presentations to share ideas or answer questions (Waxman, 2012). The use of real-time imaging can enhance the sense of intimacy beyond a simple phone-call or e-mail, but like all disruptive technology the session needs to be kept focussed to be educationally valuable (Flavin, 2012).

Strengths of the Resource

In summary, although the vast majority of the use of social media is for personal and recreation activities, there are clear opportunities to apply many of these applications in the educational context. The one-to-one and one-to-many aspects of web 2.0 social media (as well as the many-to-one aggregating services) enable fast and extensive networking of knowledge, largely informal learning at present, but with the trend towards increasing openness of digital resources this is an area to watch. The popularity of social media applications and the familiarity that many users have with them in their lives suggest that these are tools that could be exploited for educational purposes. There are, however, two considerations; a) just because users have some engagement with social media does not mean that they understand the appropriate techniques for educational use, so some induction training is advised; b) just because individuals use certain applications in their personal life does not necessarily mean that they wish to merge their private life with their education/work contacts, so some sensitivity is advised.

A real strength of social media applications is their immediacy and the ability to provide direct feedback to other users, both in real-time and asynchronously. This effectively exploits the web 2.0 ability to share and network information, and to essentially contextualise and co-create knowledge rather than simply consuming information from others. It allows the personalisation and multi-layering of knowledge to a greater extent than is normally achievable in a face-to-face format. The digital nature that is the backbone of social media means that there is a high level of interoperability – different social media applications can be linked and can share information – with resultant opportunities for innovation and serendipity. Being digital also allows the resources to function on several different platform devices, in turn allowing for a greater level of personal choice of user interface (from desk-top computer to hand-held phone) and of engagement location (office, classroom, home, mobile).

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Potential Disadvantages

As with all new technology, there are potential disadvantages as well as benefits. Some inherent tensions are small and easily resolved by individual choice, whereas others are more fundamental and require an institutional or even a legislative response. At the individual level is the choice between using social media applications for private or public communications, or indeed using varying degrees of openness with different applications at the same time. The ease of use and the ability to forward/replicate messages can be advantageous, but can also be a problem if messages are inappropriate or used out of context (personal comments to a friend might be embarrassing in a classroom context).

In addition to coping with the enormous volume of information available digitally, the lack of a formal structure to information (metadata) may lead to confusion, for instance the lack of standard tag nomenclature (e.g. using e-book, ebook, or ebooks) can make searching difficult. This makes it necessary to ensure learners (staff and students) have at least a basic element of training in the applications that they intend to use. It is not sufficient to assume that users can and will use applications properly, nor that they can all self-teach, so there needs to be clear institutional guidelines and examples of best practice. In particular, the openness of the system requires special vigilance in matters relating to online safety, especially if access to the application is available to children and vulnerable adults. Perhaps the biggest unresolved issue, however, is the balance between the university deciding to use externally managed social media, or to host/create its own applications. There are benefits and disadvantages to both options; internal resources allow greater control and safeguards behind the institutional firewall, but may be expensive to maintain, less glamorous than commercial applications, and create a duplication of resources which might not attract students; external applications may cost less, and be more familiar to users, but if anything goes wrong they are not controlled by, or responsible to, the university. Many external applications also reserve the right to monitor the use by the individual, which may make users uncomfortable, and means that students who have concerns can be encouraged but not compelled to use these applications. Finally there is the issue of trendiness – the pace of technological change means that all applications have a varied popularity and shelf-life, and there is a balance to be struck between experimenting on the learners by encouraging the adoption of leading-edge technology or using applications that have been thoroughly tested with a good track-record of reliability.

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Key Points for Effective Practice

The most important point to recognise is that there must be sound pedagogical reasons for the use of a particular social media application – the technological fix must follow the pedagogical task, not vice versa (although educational adoption and adaptation may influence their further development). Second, the successful adoption of online social media should not just be an attempt to mimic offline activities, but rather should utilise the special features of the medium to take best advantage of the appropriate context. Third, although the issue of internal versus external control of applications is a serious one, this may be of lesser concern than ensuring that whichever application is being used is accompanied by clear guidance on the culture of expected behaviour. This should cover the fundamental rules for online engagement, including netiquette (polite behaviour), copyright (understanding what is acceptable to copy and what is not), ethics (issues of trust appropriateness) and digital discrimination (how to differentiate between reliable information and the chaff). Fourth, none of this comes automatically, so at least some basic training is required for all users

in order that they understand the framework of the new context in which they will be operating. Fifth, as this is a changeable environment to learn, it is necessary to constantly encourage users to remain focused on the key issues, to test for relevance, and where necessary to provide a structure for learning, so that learners neither get confused by the volume of information nor side-tracked by interesting but unimportant information. Finally, to get the best of all opportunities, it may be advisable to create an optional "sandbox" (e.g. closed groups on Facebook, blogs, or Flickr) where staff and students can experiment with the educational use of social media in a robust but safe online environment.

Some things to do:

- **Do** behave politely, even when disagreeing with other users, and respect netiquette.
- **Do** think carefully about what you use social media for – each service has different strengths and weaknesses – use it appropriately.
- **Do** get into a routine in using social media – your friends/followers will find it easier to interact with you when you post small amounts regularly.

Some things not to do:

- **Do not** share your password and keep different passwords for different social media.
- **Do not** think that just because you use social media for pleasure that the same rules apply for study and work – you need to learn how it fits your educational purpose.
- **Do not** get distracted by the multitude of links and background 'noise' of the internet – use the social media carefully for the educational tasks intended.

References

Barden, O. (2014). Facebook levels the playing field: Dyslexic students learning through digital literacies. *Research in Learning Technology,* 22, Retrieved from http://www.researchinlearningtechnology.net/index.php/rlt/article/view/18535

Campbell, A. (2007). Motivating language learners with Flickr, *TESL-EJ* 11 (2), Retrieved from http://tesl-ej.org/ej42/m2.html

Chau, J., & Cheng, G. (2010). Towards understanding the potential of e-portfolios for independent learning: A qualitative study. *Australasian Journal of Educational Technology* 26(7), pp. 932-950.

Chu, J., & Van Dusen, E. (2008). Pedagogical uses of Flickr, Retrieved from http://etec.ctlt.ubc.ca/510wiki/Pedagogical_Uses_of_Flickr

Conole, G., & Alevizou, P., (2010). A literature review of the use of Web 2.0 tools in Higher Education, *Methodology*, 17(August), p.111. Retrieved from http://www.heacademy.ac.uk/assets/EvidenceNet/Conole_Alevizou_2010.pdf

Deng, L., & Yuen, A.H.K. (2012). Understanding student perceptions and motivation towards academic blogs: An exploratory study, *Australasian Journal of Educational Technology*, 28(1), 48-66.

Dunlap, J. C., & Lowenthal, P R. (2009). Using Twitter to enhance social presence. *Journal of Information Systems Education* 20 (2), Retrieved from http://patricklowenthal.com/publications/Using_Twitter_to_Enhance_Social_Presence.pdf

Farwell, T. M., & Waters, R. D. (2010). Exploring the use of social bookmarking technology in education: An analysis of students' experiences using a course-specific Delicious account. *Journal of Online Learning and Teaching,* 6 (2), pp. 398-408

Flavin, M. (2012). Disruptive technologies in higher education. *Research in Learning Technology*, 20 (ALT-C 2012 Conference Proceedings), Retrieved from http://www.researchinlearningtechnology.net/index.php/rlt/article/view/19184

Heap, T., & Minocha, S. (2012). An empirically grounded framework to guide blogging for digital scholarship. *Research in Learning Technology* 20 (ALT-C 2012 Conference Proceedings), Retrieved from http://www.researchinlearningtechnology.net/index.php/rlt/article/view/19195

Hemmi, A., Bayne, S. and Land, R. (2009). The appropriation and repurposing of social technologies in higher education, *Journal of Computer Assisted Learning*, 25, pp.19-30

Himpsl, K., & Baumgartner, P. (2009). Evaluation of e-portfolio software. *International Journal of Emerging Technologies in Learning,* 4(1), pp. 16-22

Joyes, G., Gray, L., & Hartnell-Young, E. (2010). Effective practice with e-portfolios: How can the UK experience inform implementation? *Australasian Journal of Educational Technology*, 26(1), pp. 15-27.

Junco, R. (2012). The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. *Computers & Education*, 58(1), pp. 162-171.

Junco, R., Heibergert, G., & Loken, E. (2011). The effect of Twitter on college student engagement and grades. *Journal of Computer Assisted Learning*, 27, pp 119-132

Lewis, B., & Rush, D. (2013). Experience of developing Twitter-based communities of practice in higher education. *Research in Learning Technology,* 21, Retrieved from http://www.researchinlearningtechnology.net/index.php/rlt/article/view/18598

McNeil, A. (2010). *Twitter in higher education – Case studies of practice*, University of Kingston. Retrieved from http://www.scribd.com/doc/27156556/Twitter-HE-Case-Studies

Mason, R, & Rennie, F. (2006). *eLearning: The Key Concepts*. Routledge: London

Moran, M., Seaman, J., & Tinti-kane, H. (2011). *Teaching, learning, and sharing: How today's higher education faculty use social media*. Research report published by Pearson, The Babson Survey Research Group, and Conversion, Retrieved from http://www.pearsonlearningsolutions.com/educators/pearson-social-media-survey-2011-color.pdf

Rennie, F., & Morrison, T. (2013). *e-Learning and Social Networking Handbook: Resources for Higher Education.* (2nd Edition) Routledge: New York and London

Roblyer, M. D., McDaniel, M., Webb, M., Herman, J., & Witty, J. V. (2010). Findings on Facebook in higher education: a comparison of college faculty and student uses and perceptions of social networking sites. *The Internet and Higher Education*, 13(3), pp. 134–140.

Sharoff, L., (2011). Integrating YouTube into the Nursing Curriculum, *OJIN: The Online Journal of Issues in Nursing* 16 (3), Retrieved from http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol-16-2011/No3-Sept-2011/Articles-Previous-Topics/YouTube-and-Nursing-Curriculum.aspx#Trier07Part1

Tan, E. (2013). Informal learning on YouTube: exploring digital literacy in independent online learning. *Learning, Media and Technology,* 38 (4), pp. 463-477

Tan, E., & Pearce, N. (2011). Open education videos in the classroom: exploring the opportunities and barriers to the use of YouTube in teaching introductory sociology. *Research in Learning Technology* 19 (1) *Proceeding of the 2011 ALT conference*. Retrieved from http://www.researchinlearningtechnology.net/index.php/rlt/article/view/7783

Waycott, J., Dalgarno, B., Kennedy, G., & Bishop, A. (2012). Making science real: photo-sharing in biology and chemistry. *Research in Learning Technology*, 20, Retrieved from http://www.researchinlearningtechnology.net/index.php/rlt/article/view/16151

Waxman, O. B. (2012). How teachers use Skype in the classroom. *Time Magazine* 28 November, 2012, Retrieved from http://techland.time.com/2012/11/28/how-teachers-use-skype-in-the-classroom/

Wise, L.Z., Skues, J., & Williams, B. (2011). Facebook in higher education promotes social but not academic engagement. In G. Williams, P. Statham, N. Brown & B. Cleland (Eds.*), Changing Demands, Changing Directions. Proceedings ascilite Hobart 2011*. (pp.1332-1342).

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