

Standardisation, safe and comforting or driving out creativity in teaching?

The higher education sector is vast and in many instances the institutions themselves are trying to find the best ways to cope with extraordinarily large class sizes and student volumes, but obviously without wishing to recruit vast numbers of staff or create an endless loop of administrative burden onto those staff. It's in this area that the latest learning technology project I've become aware of has appeared and got me thinking. It set me thinking about a student paper I wrote specifically about VLEs (virtual learning environments) and to ask questions about creativity in teaching whilst using VLEs as a standard university tool.

I focussed on the thoughts of our digital age and the fact that we have the seemingly limitless resource of the internet at our finger tips and of how it is seen as a highly valuable resource for learning and is heavily used by the current and coming student population who were raised in a world of accessible, digital technology. But there are concerns that these very students are experiencing digital dissonance in educational institutions (Chattie and Jarke, 2007) where these views are not necessarily shared for learning in an educational setting. Some studies have gone so far as to suggest that students have difficulty setting boundaries between formal or informal learning even when the institutions they attend try to enforce them, and that web 2.0 applications are therefore a necessary part of the 21st-century student toolkit (Clark et al., 2009) where today's students have a wealth of experience with blogging, podcasting, sharing and collaborating over the internet in every day life and

therefore it's much more likely that they will adopt a social (web 2.0) driven practice based on collaboration and networking to their studies naturally.

With this in mind, how does the drive in our institutions of standardised platforms, controlled by administration and policy fair against this culture of social learning? Again I think it's important to acknowledge that regardless of our opinions on standardisation of learning tools, there are reasons behind it, reasons of administrative burden, controlling the quality of students experience (to ensure a consistently good experience). As I mentioned, I chose to explore this thought in a much more formal setting of higher education for myself. I examined the affordances of web 2.0 as a tool to create social learning, by looking at its value as an open technology, the amount of control afforded to the creator of content and at the potential outcomes of using the tool. Then turn this same examination onto the virtual learning environments I use both as a student and an employee of higher education, to ask if the homogeneity of education technology is helpful or hindering? Did the good outweigh the bad?

Web 2.0

Web 2.0 is defined broadly as the more communicative, personal and participatory form of the world-wide-web, emphasising active participation, collaboration and connectivity to share knowledge and ideas and to actively contribute content. It's also sometimes referred to as the "Read-Write Web" (Price 2006; Richardson 2006) as it offers more than the read-only, passivity of the original web. Web 2.0 applications have received growing interest from the educational sector over the

last ten years (Alexander 2006) as they are seen to hold potential for addressing the needs of today's millennial student population, enhancing the learning experiences through networking, collaboration and community (Bryant 2006). This then reinforces constructivist pedagogies popular in teaching (Gillani 2000; Jonassen 1995; Jonassen & Land 2000; Relan & Gillani 1996).

Web 2.0 contains software or applications which support social learning through community and group interaction, although we could argue that the previous form of the web supported social interaction through email, chat rooms and discussion boards, the tools available through web 2.0 not only offer social interaction, feedback and networking, but are more flexible and collaborative allowing media to be shared, combined and built on to create new ideas, concepts, and mashups. Social networking applications like facebook and twitter now also offer users the possibility to interact in real time using webcams and microphones. Web 2.0 is not radically different from the previous version of the web; rather it is the affordances offered by the applications available which have changed.

It is these affordances which offer the opportunity to use web 2.0 as an open tool for education. Blogs, wikis, social networking, and video sharing applications all have potential as a pedagogical tool to offer the opportunity to increase communication, interaction and co-creation, supporting learning which occurs in a social, collaborative form when students use these tools to create collective activity.

Being web-based and created with communication in mind, there are little boundaries for the opportunity to communicate and share globally with other users.

The VLE

Web 2.0 collaborative tools and their benefits are widely recognised within our higher education institutions, and the implementation of single point of access technology platforms incorporating these tools are now widespread and known as virtual learning environments (VLE). These systems are mostly proprietary in nature created specifically for the purpose of managing, specifically managing learners, teaching materials, student work and access in an educational setting.

Accessibility to education, control of overheads and quality control are the three most commonly given reasons for the shift in delivery modes to that of technology-driven delivery (Daniel 2003). It's ability to meet these needs means the adoption of VLEs has been swift (Oblinger and Kidwell, 2000), with ninety-five percent of UK universities now using them (Lonn and Teasley, 2009). These platforms also combine a range of course management and pedagogical tools to provide a method of designing, building and delivering teaching. Those tools do include the afore mentioned blogs, wikis and discussion forums.

The greatest potential of the VLE to the university is that they are scalable systems able to support a class cohort of hundreds as easily as ten thereby offering the opportunity to enroll and teach a larger volume of students offering an economy of scale. They can also be used to provide administrative support to an entire university's teaching programmes or to house the entire catalogue of teaching materials but are creating a battle over control of teaching and pedagogy (Chattie and Jarke 2007). The key to the use of these technologies by the University, however, is the

enrollment of students. These systems are locked down only allowing access to the materials and tools within to those who are enrolled as users, meaning the university dictates the community within.

Web 2.0 technologies in general, are seen to reinforce constructivist pedagogies (Gillani 2000; Jonassen 1995; Relan & Gillani 1996). Theorists claim that the internet can improve learning by giving learners access to an infinite library of resources. Arguing that internet technologies can be used to make course contents more cognitively accessible (Coates et al., 2005) to the individual by encouraging interaction with a richer, more diverse knowledge network.

Some VLEs do offer tools for pedagogical functions including; synchronous and asynchronous communication like email, blogging, announcement pages, and discussion forums content development and delivery by hosting learning resources in repositories, offering links to resources and text-based information areas choice tests and group work and feedback tools, as well as course or student management from enrollment to managing student activities, But the network connections of these are restricted within the “safe” confines of the institution’s systems, reducing the potential for the creation of communities of learning or collaboration outwith that student’s class cohort. VLEs, therefore, suggest a closed classroom approach to learning at a time when some scholars are calling for the increased use of open, community technologies to be brought into effective learning and teaching for the twenty-first century (Brown and Adler 2008).

Control

In contrast to the restriction of community and locking of design, web 2.0 applications like blogs allow infinite customisation options to users through both editable “skins” and access to the underlying code for those who are more skilled. The content users generate on these can also then be shared publicly through the platform used to create the content or by sharing with other platforms and application.

VLEs offer “universities a hitherto undreamt-of capacity to control and regulate teaching” (Coates et al., 2005, p.p. 25). The built-in functionality within each system allows for easy customisation of the look and feel of the student experience, within limits, without the need for web development skills. Many institutions provide a ready to use standardised template or guides for such customisation to ensure quality control and to help reduce the administrative workload placed on staff. This allows course owners to make use of customised headers and graphics to identify their course from others but limits the ability to alter structure or tool performance, essentially forcing conformity. VLEs can also be seen to conform to a classroom metaphor, encouraging didactic teaching (Sheely, 2006) rather than creativity and by “locking down” the system elements, transfer the control of teaching material design from the teacher and onto the institution itself reducing the influence of the teacher over the teaching of her class.

Outcomes

“VLEs are not pedagogically neutral technologies” (Coates et al., 2005, 27), instead, through their design, they can and do influence teaching. As the VLE and other learning technologies become part of everyday teaching practice, they will invisibly influence and may even define teachers’ creativity, expectations, and behaviours. This may be particularly the case for newer academics with less experience (Frans 2000). The inclusion of VLEs into universities makes it likely that new teachers will gain a great deal of their experience in design and delivery of teaching through these systems (Coates et al., 2005). These are important considerations given the possibility that, increasingly, VLEs will play the major role in how teachers learn to teach.

Currently, there has been a lack, if any studies on the pedagogical effects of VLEs and this must be corrected. The hyperbole of technology being an educational remedy often stalls critical discussion of educational technology as a tool for teaching and learning (McLoughlin and Lee, 2008a). Therefore research tends to focus on implementation rather than pedagogy with regard to VLEs (Lonn and Teasley 2009) meaning more investigation is needed into pedagogy and learning to allow implementation decisions to focus on these rather than administrative wins.

Although web 2.0 applications can offer increased community of learning opportunities and personal control over the student’s own work, it must be remembered that these too come with potential outcomes for the student and teaching. Access to a great library of content to use and share must be respected, and web 2.0 and its sharing abilities for learning and teaching should go hand in hand with teaching about responsibilities and rights regarding the work of others. Because the ability to share everything that is available, means students must be taught about when it is and isn’t appropriate to share.

Conclusion

Educational technology can only raise the levels of learning and teaching if we allow it to be fully part of the process of both rather than merely an administrative tool clothed as pedagogy. Web 2.0 applications allow users choice and control as well as learning opportunities through rich, global, communities of knowledge rather than passive and solitary learning. However by restricting the ability of the student to access these tools, for the teacher to design how to incorporate these tools, or by simple restricting the community students can access, we are offering no more than the didactic or cartesian classrooms of the industrial era. Learning management systems offer much in the way of cost reduction and quality assurance for institutions, but aside from being a single point of entry, offer little to improve student learning and can shackle the creativity of the teacher.

References

Alexander, B., 2006. A New Wave of Innovation for Teaching and Learning? *Educause Review*, 42(2), pp.32–44. Available at: <https://net.educause.edu/ir/library/pdf/ERM0621.pdf>

Brown, J. S. & Adler, R. P. 2008. Minds on Fire: Open Education, the Long Tail, and Learning 2.0. *Educause Review*, 43(1), pp.16–32. Available at: <http://er.educause.edu/~media/files/article-downloads/erm0811.pdf>

Bryant, T. 2006. Social software in academia, *Educause Quarterly*, 29(2), 61-64. <http://www.educause.edu/ir/library/pdf/EQM0627.pdf>

Chatti, M.A., Jarke, M. & Frosch-Wilke, D. 2007. The future of e-learning: a shift to knowledge networking and social software. *International Journal of Knowledge and Learning*, 3(4-5), pp.404-420. Available at: <http://www.inderscienceonline.com/doi/abs/10.1504/IJKL.2007.016702>

Clark, W. et al., 2009. Beyond Web 2.0: mapping the technology landscapes of young learners. *Journal of Computer Assisted Learning*, 25(1), pp.56-69. Available at: <http://dx.doi.org/10.1111/j.1365-2729.2008.00305.x>

Coates, H., James, R. & Baldwin, G., 2005. A critical examination of the effects of learning management systems on university teaching and learning. *Tertiary Education and Management*, 11(1), pp.19-36. Available at: <http://www.tandfonline.com/doi/abs/10.1080/13583883.2005.9967137>

Daniel, J., Kanwar, A. & Uvalić-Trumbić, S. 2009. Breaking Higher Education's Iron Triangle: Access, Cost, and Quality. *Change: The Magazine of Higher Learning*, 41(2), pp.30-35. Available at: <http://dx.doi.org/10.3200/CHNG.41.2.30-35>

Downes, S. 2005. E-learning 2.0. *eLearn Magazine*, an ACM Publication. Available at: <http://elearnmag.acm.org/featured.cfm?aid=1104968>

Frاند, J.L. 2000. The Information Age Mindset: Changes in Students and Implications for Higher Education. *Educause Review* 35(5), 14-24. Available at: <https://www.educause.edu/ir/library/pdf/ERM0051.pdf>

Gillani, B.B. 2000. Using the Web to Create Student Centred Curriculum. In R.A.Cole(ed.), *Issues in Web Based Pedagogy*. London:Greenwood Press.

Jonassen,D.H.1995.*Constructivism: Implications for Designs and Delivery of Instruction*. New York:Scholastics.

Lonn, S. & Teasley, S.D. 2009, "Saving time or innovating practice: investigating perceptions and uses of learning management systems", *Computers and Education*, Vol. 53 No. 3, pp. 686-94. Available at: <http://www.sciencedirect.com/science/article/pii/S0360131509001006>

McLoughlin, C. and Lee, M.J.W. 2008. The three P's of pedagogy for the networked society: personalization, participation, and productivity, *International Journal of Teaching and Learning in Higher Education*, Vol. 20 No. 1, pp. 10-27. Available at: <http://www.isetl.org/ijtlhe/past2.cfm?v=20&i=1>

Oblinger, D. & Kidwell, J. 2000. Distance Learning: Are we being Realistic? *Educause Review* 35(3), 30-39. Available at: <https://er.educause.edu/~media/files/articles/2000/5/erm0032.pdf?la=en>

Price, K. 2006. Web 2.0 and education: What it means for us

all. Paper presented at the 2006 Australian Computers in Education Conference, 2-4 October, Cairns, Australia.

Relan, A. & Gillani, B.B. 1996. Web Based Instruction and the Traditional Classroom: Similarities and Differences. In B.H.Khan(ed.), Web Based Instruction. Englewood Cliffs: Educational Technology Publications.

Richardson, W. 2006. Blogs, Wikis, Podcasts, and other powerful tools for classrooms. Thousand Oaks, CA: Sage.

Sheely, S. 2006. Persistent technologies: Why can't we stop lecturing online? In L. Markauskaite, P. Goodyear & P. Reimann (Eds), Who's learning? Whose technology? Proceedings of the 23rd ASCILITE Conference (pp. 769-774). Sydney, NSW: CoCo, University of Sydney. http://www.ascilite.org.au/conferences/sydney06/proceeding/pdf_papers/p167.pdf

Sclater, N. 2008. Web 2.0, Personal Learning Environments, and the Future of Learning Management Systems. Available at: <https://library.educause.edu/resources/2008/6/web-20-personal-learning-environments-and-the-future-of-learning-management-systems>