

References and further reading

Anderson, A. (2006) 'Literacy and single-sex classes: using *Quality Teaching* to meet the needs of students', *Scan* 25(1), pp. 11–12.

Australian Bureau of Statistics (2006), *Education and Work, Australia, May 2006*, (cat. no. 6227.0 ), ABS, Canberra. Viewed 15 July 2008. <[www.abs.gov.au/ausstats/abs@.nsf/mf/6227.0](http://www.abs.gov.au/ausstats/abs@.nsf/mf/6227.0)>.

Australian Bureau of Statistics (2006), *Australian Social Trends, 2006*, (cat. no. 4102.0), ABS, Canberra, Viewed 15 July 2008. <[www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/CAB662526AE94ADECA25732C002084C6?opendocument](http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/CAB662526AE94ADECA25732C002084C6?opendocument)>.

Beveridge, S. (2008) 'Connected Classrooms Program', *Scan* 27(3), pp. 46–47.

'Boys' and Girls' Education', *Equity Programs and Distance Education*, NSW Department of Education and Training intranet. Viewed 15 July 2008. <[detwww.det.nsw.edu.au/lists/directoratesaz/equity/boysgirlsedu.htm](http://detwww.det.nsw.edu.au/lists/directoratesaz/equity/boysgirlsedu.htm)>.

'Boys' and Girls' Education', *Years K–12 focus areas: learning and teaching*, NSW Department of Education and Training. Viewed 15 July 2008. <[www.schools.nsw.edu.au/learning/yrk12focusareas/gendered/index.php](http://www.schools.nsw.edu.au/learning/yrk12focusareas/gendered/index.php)>.

Diodati, B. (2006) 'Connected learning: action research and engaging girls', *Scan* 25(2), pp. 32–33.

*Gender and IT: ongoing challenges for computing and information technology education in Australian secondary schools*, (2007), Julianne Lynch (ed.) Australian Curriculum Studies Association, Sydney.

*Girls and ICTs 2008*, Education Queensland. Viewed 15 July 2008. <[www.learningplace.com.au/defaulteqa.asp?orgid=48&suborgid=286](http://www.learningplace.com.au/defaulteqa.asp?orgid=48&suborgid=286)>.

*GirlsWork: work options for young women*, NSW Department of Education and Training. Viewed 15 July 2008. <[girlswork.det.nsw.edu.au/](http://girlswork.det.nsw.edu.au/)>.

Henry, S. (2006) 'Boys' education: single-sex English classes at Cherrybrook Technology High School', *Scan* 25(1), pp. 12–15.

Johnson, N. (2006) 'Boys and Girls are the same: gender perceptions in using computers in the classroom', *Computers in New Zealand Schools*, 18(3), pp. 5–11, 33, 41.

*Leading the way in school and classroom practice, Boys' and Girls' Education Strategy support document*, (2008). Viewed 15 July 2008. <[www.schools.nsw.edu.au/media/downloads/schoolsgender/learning/yrk12focusareas/gendered/yr2008/strategy.pdf](http://www.schools.nsw.edu.au/media/downloads/schoolsgender/learning/yrk12focusareas/gendered/yr2008/strategy.pdf)>.

Leech, R. (2007), 'Geek chic: getting girls into IT', *Teacher*, March, pp. 4–10.

McDougall, J. (2007). 'Engaging the visual generation: some Queensland teachers come to terms with changing literacies', *Screen Education*, 46, pp. 130–137.

Mitchell, L (2006) 'Getting girls to go geek', *The Age*, 15 May 2006. Viewed 15 July 2007. <[www.theage.com.au/articles/2006/05/14/1147545200759.html](http://www.theage.com.au/articles/2006/05/14/1147545200759.html)>.

Prahbhu, A. (2007) 'Equity and equality: finding the gender balance', *Information Age*, 12/5/07. IDG Communications. Viewed 15 July 2008. <[www.infoage.idg.com.au](http://www.infoage.idg.com.au)>.

Prensky, M. (2001) 'Digital natives, digital Immigrants', *On the Horizon*, 9(5). Viewed 15 July 2008. <[www.marcprensky.com/writing/default.asp](http://www.marcprensky.com/writing/default.asp)>.

Redmond, P. (2006) 'First aid for female casualties of the information highway', *Australian Educational Computing* 21(1) pp. 26–32.

Redmond, P. (2006) 'Increasing female participation in ICTs', *Quick* 99, Winter, pp. 15–18.

Scheckelhoff, T. H. (2006) 'Gender and technology: how can we support girls in integrating technologies more fully in their learning', *Library Media Connection*, August/September, pp.52–55.

Southall, E. (2006) 'Improving ICT outcomes for girls in the primary school', *Scan* 25(2), pp. 34–35.

*Women in ICT*, Australian Information and Industry Association. Viewed 15 July 2008. <[www.aiia.com.au/pages/industry\\_women\\_in\\_ict.aspx](http://www.aiia.com.au/pages/industry_women_in_ict.aspx)>.

# Web 2.0 tools for teaching and learning



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showcases ways in which teachers can use Web 2.0 tools in their practice, and directs readers to tutorials for using these tools.

**I**n this article I will look at a number of the Web 2.0 tools that are making an impact on teaching and learning, and describe some of the ways teachers are using them to enhance their practice. These tools include blogs, wikis (eg *Wikipedia*), RSS, file sharing (photo share with *Flickr*), social bookmarking (eg *Del.icio.us*) and social networking sites such as *MySpace* and *Facebook*.

Some teachers are still working in the Web 1.0 world. In this world, the internet contains content that is

created by the author, published, and then passively absorbed by the reader. The Web 2.0 world allows teachers to move beyond this passive role by providing tools for them and their students to:

- be creative
- interact with each other
- participate in the creativity of others (*Wikipedia*).

Dr. Ross Todd in his keynote address to the *School Libraries Leading Learning* conference, jointly presented by the School Libraries and

Information Literacy Unit (NSW Department of Education and Training) and ASLA (NSW) Inc., described the Web 2.0 world as:

*a platform that moves beyond the selection of information, to facilitating the creation and production of ideas; users generate content rather than consume content ... Web 2.0 seeks to facilitate community, communication, collaboration and creativity between users.*

With new technologies, teachers are legitimately asking themselves: why should I bother? Is there anything in this for me, my students and my colleagues? There are a number of reasons for teachers to use Web 2.0 tools in their teaching. Using Web 2.0 tools:

- allows students and teachers to collaborate and communicate
- enables teachers to collect evidence of participation in formative and summative assessment tasks
- encourages higher order skills such as group work and problem solving
- enables students to use this technology away from school
- prepares students for a workforce in which industry likes employees who can communicate, collaborate and be creative.

George Siemens (2008), who has an excellent weekly blog to which you can subscribe, says any tool has to go beyond *hey, cool* and contribute something useful. According to George, the tools which seem to be having the greatest impact on teaching and learning are:

- Flickr (image sharing)
- social networks (*Facebook, MySpace, Bebo*)
- personal information management tools (*Del.icio.us*)
- collaborative tools like wikis.

*It was never really about the technology, but rather what the technology enables (two-way flow of information, personal control, and so on).*

Siemens (2008)

Elliott (2007) reports that when a Web 2.0 student is given an assignment they will:

- look up *Wikipedia*
- search for information on *Google*
- seek help from friends using text messages, *MSN* or *MySpace*
- use web based and other desktop software to publish (make it look nice)
- unless of course the question is the same as last year's; then the social network will quickly provide the answer.

### Using the Web Filter Check

Some Web 2.0 sites and tools are not yet available in the secure environment of NSW Departmental schools. The *Web Filter Check* tool, accessible in the portal, can be used by teachers to verify available sites. See *Scan 27(1)*, pp. 6–7 and the School Libraries and Information Literacy website <[www.curriculumsupport.education.nsw.gov.au/schoollibraries/](http://www.curriculumsupport.education.nsw.gov.au/schoollibraries/)> for information on how to use the tool. Additional Web 2.0 tools will be made available as part of the Connected Classrooms Program.

### How do we as teachers work with our students to maximise the benefits of these technologies and skills?

As a starting point, look at some of the *Common Craft* videos mentioned in the reference list. These well constructed videos provide explanations, in plain English, of a range of Web 2.0 tools. It would be great to ask our students to create similar resources to test their understanding of concepts.

You could also use the two page guides created by Educause in the *7 things you should know about...* series as guides to Web 2.0 tools and other technologies.

### Blogs

A blog is a website; it is like a diary or journal in which the owner and invited participants write their thoughts. Blog entries can include text, images, voice and videos.

One of the most helpful resources related to blogs is *10 ways to use your edublog to teach* (Figure 1) which was written by the *Edublogs* team. Ideas include using blogs to distribute resources, to create an online discussion space, to create a class publication, to integrate multimedia in one place, and to provide opportunities for feedback.



Figure 1 Advice for teachers and students at *10 ways to use your edublog to teach* <[edublogs.org/10-ways-to-use-your-edublog-to-teach](http://edublogs.org/10-ways-to-use-your-edublog-to-teach)>

Another way to think about blogs is to check out some of the blogs being used by other teachers and professional groups. In conjunction with an online book rap, the School Libraries and Information Literacy Unit developed the *Wilfrid rap blog* (Figure 2) which is a discussion space for teachers and students to engage in a range of activities related to the book, *Wilfrid Gordon McDonald Partridge* by Mem Fox. Comments by teachers on the Teachers' page in this blog highlight many of the features of blogging and the benefits it has had for their students.



Figure 2 The *Wilfrid rap blog* <[rapblog.edublogs.org](http://rapblog.edublogs.org)>

The *Del.icio.us/brodiethebeagle/ASLA* site links to a number of other websites which are excellent examples of using blogs and other Web 2.0 tools to assist best practice in teaching.

## Wikis

A wiki is:

*a web page which can be viewed and modified by anybody with a web browser and access to the internet.*

Educause (2008)

Increasingly, wikis are being used by teachers because:

- different people can contribute to a collaborative project
- creative writing tasks can be drafted and tracked
- each person's contribution, as well as other versions, can be tracked
- contributors can add their own pages
- they can be public or private (read by and contributed to, by whoever the creator of the site chooses).

Consequently, a wiki can be a valuable source of information (a Web 1.0 tool) or it can be the mechanism to allow participants to contribute and reflect (a Web 2.0 tool). Alan Levine's wiki on storytelling, *50 Web 2.0 ways to tell a story* (Figure 3), offers excellent ideas for teachers and teacher librarians to support narrative writing. Alan demonstrates how one story can be told in fifty ways by using an amazing array of Web 2.0 tools for combinations of images, text and audio.



Figure 3 Alan Levine's wiki, *Cogdogroo: 50 Web 2.0 ways to tell a story* <[cogdogroo.wikispaces.com/50+Ways](http://cogdogroo.wikispaces.com/50+Ways)>

## Podcasts and vodcasts

A podcast is a digital media file (sound and/or video), distributed over the internet using syndication feeds (RSS) ready for playback on portable media players and personal computers.

A vodcast is a podcast with video. With the new copyright regulations,

teachers can bring these podcast and vodcasts into class for listening, viewing and discussion. With a fairly cheap attachment, an iPod can be hooked up to most television sets for a program, such as *The science show* (Figure 4), to be shown to a whole class or a group. A podcast can also be made available via a wiki or other website, from where any number of activities is possible.



Figure 4 A screen shot of an ABC podcast for *The Science Show* <[www.abc.net.au/rn/scienceshow](http://www.abc.net.au/rn/scienceshow)>

## RSS feeds

RSS is a tool which allows users to subscribe to web pages, and then alerts them to new publications from each site. As an example, the ABC services online allows subscribers to browse RSS feeds and receive updates of ABC content (Figure 5). RSS is often used in conjunction with blogs, podcasts, photo sharing, and repositories.



Figure 5 RSS feeds service from ABC online <[www.abc.net.au/services/rss](http://www.abc.net.au/services/rss)>

## Social bookmarking

Social bookmarking is the practice of saving bookmarks (favourites) to a website and tagging them with keywords. The user decides whether

the bookmarks are public or private. Teachers could use a social bookmarking tool to:

- provide web based reading lists or encourage student teams to create their own
- enable groups to share their research
- allow students to share ideas by accessing other students' bookmarks.

An example of teacher librarians using social bookmarking can be found at *Library Journal.com* (Figure 6). Tagging is used to organise links for specific topics or classes. Individual users can tag bookmarked resources and comment on their usefulness.



Figure 6 Tags help make libraries Del.icio.us <[www.libraryjournal.com/article/CA6476403.html](http://www.libraryjournal.com/article/CA6476403.html)>

## Copyright

Web 2.0 tools are readily available and the number of online resources available to schools increases each day. Teachers need to be aware of any restrictions on the use of downloaded materials in schools. The latest copyright information for teachers is found at *Smartcopying* (Figure 7) with



Figure 7 Smartcopying: copyright information sheets for schools <[www.smartcopying.edu.au/guidelines/info.html](http://www.smartcopying.edu.au/guidelines/info.html)>

user friendly downloadable information sheets for schools. Much of this information is also found on the Department's website at <[detwww.det.nsw.edu.au/deptresources/copyright/noticeboard](http://detwww.det.nsw.edu.au/deptresources/copyright/noticeboard)>. The updated Copyright section for the *Handbook for school libraries* is available at <[www.curriculumsupport.education.nsw.gov.au/schoollibraries/ppub/index.htm](http://www.curriculumsupport.education.nsw.gov.au/schoollibraries/ppub/index.htm)> and print copies are being sent to all government schools.

As teacher librarians are responsible for the management of the school's information sources and services, recent amendments to the *Copyright Act* regarding the use of podcasts and

webcasts may be of particular interest (Figure 8). This means that schools can now copy and communicate free-to-air programs such as an episode of *Behind the news* or a *Radio National* program made available as a podcast on *ABC online*.

## What is the future of Web 2.0 tools for teachers?

Two possible scenarios for the future of Web 2.0 tools for teachers:

1. Web 2.0 adds another set of tools to a teacher's armoury. These tools can enhance existing practice by bringing many of the advantages of the internet into class activities.

2. Web 2.0 has the potential to transform the teaching and learning process.

*The deeply social nature of the technologies and digital platforms available today, an ever-expanding set of tools that continue to offer new possibilities for self-expression and for collective expression almost on a daily basis, already puts in question many of the long-held assumptions that have been part and parcel of schooling for so long.*

Connell (2008)

A good starting point for Web 2.0 novices is the 23 *Learning 2.0 things* from *PLCMC Learning 2.0* <[plcmcl2-things.blogspot.com/#23](http://plcmcl2-things.blogspot.com/#23)>. Twenty-three user friendly exercises allow teachers to explore the uses of Web 2.0 tools and the good news is that there is no need to enrol or subscribe.

In conclusion, it is time to be creative, interact with others and work with your students to maximise the benefits of these technologies and skills. ■

### (iii) Podcasts and Webcasts (s 135C)

The Part VA licence has been broadened to include free-to-air podcasts and webcasts. This means that educational institutions can now copy and communicate podcasts, provided that the podcasts originated as free-to-air broadcasts.

Figure 8 A summary of the Copyright Amendment Act 2006: downloadable information sheet <[www.smartcopying.edu.au/guidelines/info\\_summary.html](http://www.smartcopying.edu.au/guidelines/info_summary.html)>

### References and further reading

- '7 things you should know about...'. *Educause learning initiative*, Educause. Viewed 15 July 2008. <[www.educause.edu/7ThingsYouShouldKnowAboutSeries/7495](http://www.educause.edu/7ThingsYouShouldKnowAboutSeries/7495)>.
- '10 ways to use your edublog to teach', *Edublogs: blogging for teachers and students, made easy*, Edublogs. Viewed 15 July 2008. <[edublogs.org/10-ways-to-use-your-edublog-to-teach](http://edublogs.org/10-ways-to-use-your-edublog-to-teach)>.
- '23 Learning 2.0 things', *PLCMC Learning 2.0*, Public Library of Charlotte and Mecklenburg County. Viewed 15 July 2008. <[plcmcl2-things.blogspot.com/#23](http://plcmcl2-things.blogspot.com/#23)>.
- '50 Web 2.0 ways to tell a story', *CogDogRoo*, Alan Levine. Viewed 15 July 2008. <[cogdogroo.wikispaces.com/50+Ways](http://cogdogroo.wikispaces.com/50+Ways)>.
- ABC online*, Australian Broadcasting Corporation. Viewed 15 July 2008. <[www.abc.net.au](http://www.abc.net.au)>.
- CommonCraft*, Common Craft. Viewed 15 July 2008. <[www.commoncraft.com](http://www.commoncraft.com)>.
- Connell, J. (2008) 'Teaching at a crossroads', *John Connell blog*. Edublogger. Viewed 15 July 2008. <[www.johnconnell.co.uk/blog/?p=782](http://www.johnconnell.co.uk/blog/?p=782)>.
- Considine, T. (2008) 'Technology and learning: demystifying Web 2.0 technologies', *Scan* 27(1), pp. 16–19.
- 'Copyright information sheets for schools', *Smartcopying*, Copyright Advisory Group, Australian Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA). Viewed 15 July 2008. <[www.smartcopying.edu.au/guidelines/info.html](http://www.smartcopying.edu.au/guidelines/info.html)>.
- Del.icio.us/ brodiethbeagle/ ASLA*, Del.icio.us. Viewed 15 July 2008. <[del.icio.us/brodiethbeagle/ASLA](http://del.icio.us/brodiethbeagle/ASLA)>.
- Elliott, B. (2007) 'Modernising assessment: the use of Web 2.0 for formative and summative assessment', paper presented at *12th International CAA Conference: Research into e-Assessment*, Loughborough University, July 8–9. Viewed 15 July 2008. <[www.caaconference.com/pastConferences/2007/proceedings/Elliott%20B%20i1\\_formatted.pdf](http://www.caaconference.com/pastConferences/2007/proceedings/Elliott%20B%20i1_formatted.pdf)>.
- Field, L. (2001) *Industry speaks! Skill requirements of leading Australian workplaces*, Department of Education, Science and Training. Viewed 15 July 2008. <[www.dest.gov.au/NR/rdonlyres/110E5861-4B67-443D-ADF9-606D409048CF/2211/case\\_study.pdf](http://www.dest.gov.au/NR/rdonlyres/110E5861-4B67-443D-ADF9-606D409048CF/2211/case_study.pdf)>.
- Foley, C. (2008) 'OASIS Web Enquiry welcomed', *Scan* 27(3) pp. 4–7.
- Handbook for school libraries*, 2nd edn. Viewed 15 July 2008. <[www.curriculumsupport.education.nsw.gov.au/schoollibraries/ppub/index.htm](http://www.curriculumsupport.education.nsw.gov.au/schoollibraries/ppub/index.htm)>
- Keane, C. (2008) 'Time to start rapping into the 21st century', *Scan* 27(3), pp. 10–14.
- Pericles, K. (2008) 'Happily blogging @ Belmore South', *Scan* 27(2) pp.4–6.
- Rethlefsen, M. L. 'Tags help make libraries Del.icio.us', *Library Journal.com*, Library Journal. Viewed 15 July 2008. <[www.libraryjournal.com/article/CA6476403.html](http://www.libraryjournal.com/article/CA6476403.html)>
- Siemens, G. (2008) *elearnspace blog*. viewed Viewed 15 July 2008. <[www.elearnspace.org/blog](http://www.elearnspace.org/blog)>.
- TeacherLibrarianNing*, Teacher Librarian Network. Viewed 15 July 2008. <[teacherlibrarian.ning.com](http://teacherlibrarian.ning.com)>.
- 'Web 2.0', *Wikipedia: the free encyclopedia*, Wikipedia®. Viewed 15 July 2008. <[en.wikipedia.org/wiki/Web\\_2.0](http://en.wikipedia.org/wiki/Web_2.0)>.
- Wilfrid rap blog*, School Libraries and Information Literacy, NSW Department of Education and Training. Viewed 15 July 2008. <[rapblog.edublogs.org](http://rapblog.edublogs.org)>.