

Blogs, phlogs, podcasts and wikis:

What in the WWW is happening?



How are our students now communicating?

What tools are they using to communicate?

How should these new technologies affect the way we teach?

How are we to understand this from a biblical perspective?



By Chris Parker

Introduction

It is appropriate that this article start with questions. I suspect that it will ask more questions than it answers. It will provoke us to consider the future of the nature of education (and indeed Christian education) in light of some fairly radical ways that communication, relationships, social networks and knowledge acquisition are changing in the “wired” world. The internet is undergoing a threshold change unlike anything it has experienced since the development of the World Wide Web (WWW) in the early 1990s. This new form of the WWW has been coined Web 2.0. This article will consider the characteristics of Web 2.0, the nature of those embracing it (a demographic largely made up of our students), its impact on education and a brief exploration of some of the questions that arise for Christian education.

Communication and education

Communicating is fundamental to the education process. It's hard to imagine that teaching would be possible without being able to communicate in some form. If the nature of our communication as humans changes, will the nature of the way we educate change? Will it have to change? Communication also plays a central role in the development and maintenance of our canon of knowledge and understanding. The same questions arise when we consider a change in human communication and its effects on knowledge. Will the nature of knowledge development, and the ways we service and maintain that knowledge, have to change also? If the way we communicate changes, will the nature of our relationships therefore change, and if relationship is likewise fundamental to the education process, what affect will this have?

To answer these questions we must take a detailed look at Web 2.0. However, before we explore the nature of this new internet, let us consider the characteristics of the users who are most richly embracing it; our students.

What are our students like?

Our students find it difficult to wait for anything. They want instant chat, fast food, quick research, minimal delays, mobile telephony, txt messaging, portable everything, video music clips with scene edits of less than a second, instant thrills and short sharp bursts of high energy experiences. They are growing up in a culture of instant gratification. They live in a world of microwaves, broadband internet, ATMs, remote controls and wireless everything. This is the generation that has developed web pages like 50WordReview and Book-a-Minute:

We at Book-A-Minute understand that your time is valuable. You want to experience the wonder and excitement of the fine art of literature, but reading actual books requires a significant time investment. We've got the solution for you. Our ultra-condensed books are just the ticket (<http://www.rinkworks.com/bookaminute/>).

They have even developed a new language or techno literacy to assist in making communication brief, punchy and instant. **Can you translate the following examples of txt messages?**

wot do u mean?

xtin is gr8 & quik & easy 2 rite!

hi m8 u k?-sry i 4gt 2 cal u lst nyt-y dnt we go c film 2moz

wen wld u lyk 2 cum ova? im frE wen u r!

Our students also have a high degree of technical savvy. They are a generation that are highly exposed to information and communication technology. This ubiquitous technology is constantly innovating, but our students are the ones that seem not only to easily embrace the new, but to easily learn how to operate the new. This cross generational literacy results in us getting our teenage kids to “setup” our new mobile phones for us. So, we can describe our students then as a techno literate clickerati, seeking instant gratification. Let's turn our attention now to the tools that this generation are therefore developing and playing with.

For activities to promote staff room discussion and analysis see the staff room activities inset box p11.



What tools are our students using?



We will now narrow our attention to the internet. The mid 1980s saw the first crude developments of the internet. However, it was not until the World Wide Web (WWW) was conceived and developed in the early 1990s that there was any public appeal. The development of the WWW might be seen as a threshold change in the internet's history that had a significant affect. In 2004 the term Web 2.0 was coined to describe the next threshold change in the nature of the internet.

The first expressions of the web were characterised by static information based websites that were set up largely by companies and organisations and they rarely made content changes. By contrast, Web 2.0 is characterised by an architecture of participation where there is now interaction by the user with the data on the site. In fact the sites can now be entirely defined and constructed by the community of users. O'Reilly (2006) suggests "a social phenomenon embracing an approach to generating and distributing web content itself, characterised by open communication, decentralisation of authority, and freedom to share and re-use". Web 2.0 has become dynamic and about creating and sharing knowledge rather than just consuming information from static sources. There is a sense of community, transparency, democracy and a decentralisation of authority where the editorial process has become focused on the network of users.

Before we start to look at the effects that this shift is having on our students and the subsequent impact on education, we will look in a little more detail at some of the expressions of Web 2.0. Early examples of Web 2.0 sites might have been internet banking, online shopping sites (Amazon), forums sites and web auctions (eBay). While we need to now talk about wikis (Wikipedia), blogs (Blogger), phlogs (Flickr), vlogs (YouTube), podcasts and social networking sites (MySpace).



Wikis

Wikipedia (an online encyclopedia based on the concept of a wiki) defines a wiki as a:

...type of website that allows the visitors themselves to easily add, remove and otherwise edit and change some available content, sometimes without the need for registration. This ease of interaction and operation makes a wiki an effective tool for collaborative authoring.

(<http://en.wikipedia.org/wiki/Wiki>)

A wiki such as Wikipedia is a representative example of a Web 2.0 website. It is entirely collaborative. There is no editorial process besides that performed by the community of users. There are no articles on Wikipedia that have not been contributed by the users. Not only can our students use Wikipedia for information and research, but they can edit articles, create new articles or even flag an article for deletion (flagged articles stay that way for a week while the user community offer suggestions as to why it should or should not be kept and come to a majority opinion). It is interesting to reflect on why people might be involving themselves in the contribution process. The following quote from a university student might help us to see that Web 2.0 is also characterised by an interaction between the personal with the global:

You write all these pages for college and no one ever sees it, and you write for Wikipedia and the whole world sees it, instantly.

The concept of a wiki may not seem too offensive and largely seen as a helpful tool for collaboration and group development of ideas. However, when the notion is used to develop an online encyclopedia that has become very popular to many (and is often the first to come up in search engine hits), teachers may not warm so well to its existence. Many questions can be raised by educators about the accuracy and integrity of the information and many questions raised by teachers teaching christianly about the philosophy or biblical perspectives of its existence.

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Blogs

If nothing else, the community of Web 2.0 developers and users is coming up with great names for these new technologies. The name blog comes from the two words web and log. A blog is a kind of log or journal of entries in reverse chronological order in the form of a website. With some hesitation (after the last section) I offer this definition from Wikipedia:

Blogs often provide commentary or news on a particular subject, such as food, politics, or local news; some function as more personal online diaries. A typical blog combines text, images, and links to other blogs, web pages, and other media related to its topic. (<http://en.wikipedia.org/wiki/Blog>)

Anyone and everyone is keeping a blog or two. They may have some photos and maybe the occasional video or audio link but they are principally text based. There are lots of blogging websites that offer you a free blogging space and a blog can be set up and entries made in minutes. In research for the writing of this article, I experimented with setting up a blog and it took me approximately 15 minutes. (<http://tofflahblah.blogspot.com/>)

If you would like to set up your own blog (just for fun or because you have thought of a good educational use for one) or you would like to randomly read other people's blogs to see what is being journalled by Web 2.0 users, then try the most popular blogging website – www.blogger.com. When you start to read some blogs you notice quickly some interesting features. They are inane with a frequently blogged topic being what food the blogger has been consuming. They have facility for people who are reading a particular blog entry to click and then make comment on that entry. You also notice the lack of editing and censorship of ideas. But you also get a feel for the extent in which these blogs have been embraced by the clickerati. Many blog entries have had comments added and many blogs are linked to other blogs which

are then linked to other blogs. This intertwined online community or social network is sometimes referred to as the blogosphere. As a creative educator, you may already be thinking of ways in which you might be able to embrace this technology in your teaching. Can I encourage you to keep thinking and to visit edublogs (<http://edublogs.org/>) which is an educational blogging website set up by an Australian teacher that offers "Free blogs for teachers, trainers, lecturers, librarians and other edu professionals".

The notion of a free website that already has all the code written and graphic design done for you and is ready for you to make entries simply, has also now morphed into media storage and interaction sites for photos (phlogs) and videos (vlogs). These sites offer two main features; photo storage and management as well as facilitating easy sharing of your photos with people all over the world. One of the most popular of these sites is Flickr (www.flickr.com) who claim that "Flickr is the WD-40 that makes it easy to get photos from one person to another in whatever way they want." When you spend a few minutes looking around on sites like this it becomes quickly apparent that they are more than just data storage. The Web 2.0 elements of global community, open sharing and transparency are richly evident. The site is structured for ease of sharing and comments are able to be made on anyone's photos.

These phlogs and vlogs have the notion of a personal space to them (even though your data can be readily shared). Interestingly, two of the fastest growing websites (in terms of visits and contribution) at the moment are the video sites YouTube and Google Video (although Google has just taken over YouTube). With facilities for recording and editing video so ubiquitous (video cameras and mobile phones) it is no wonder that there is a great desire for somewhere that people can share their footage. These websites provide exactly that.

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Podcasting and feeds

When you visit wiki based websites you will notice references and links to blogs and podcasts. When you visit blogging sites or media sharing sites you will also see links to wikis and podcasts. There is a blending together of Web 2.0 concepts in all Web 2.0 enterprises. Although not a website in itself, the concept of podcasting is richly embraced by the Web 2.0 clickerati. Podcasting is all about sharing of media files.

For some time, websites have been offering the option to either download audio files or to stream these files to your computer (or mobile device via your computer). However, this required you to visit the site and choose to download the data each time it was made available. Podcasting technology allows the user to subscribe to a "feed" or broadcast of these files on a regular basis. If the user has a podcatcher (or aggregator) they can subscribe to a chosen feed and it will be automatically delivered to their PC via the internet. The term podcast blends the trade name iPod (one of the first MP3 players) and broadcast. Examples of podcasts are the weekly radio programs on ABC radio. If you visit the ABC Radio website (www.abc.net.au/radio)

you will have the option of subscribing to the regular feeds. Your favourite programs will always be there on your hard drive ready for you to listen to at a time that suits you. This is being referred to as content pushing rather than each user going to the site and pulling off what they want. This technology is not limited to audio (though this is principally how it is used). The Flickr site allows subscription to people's photo collections. If you want to know if a certain fellow member of the Web 2.0 community has added new photos to their collection without having to continually check, you can subscribe to their space on Flickr and the new photos will be pushed or podcast to you. Are getting a feel for how all these technologies are blended/mashed together?

On the company's site, Apple (<http://www.apple.com/>) claims podcasting to be a means to "free learning from the constraints of the physical classroom." There are schools in Australia that have issued every student an iPod and learning content is podcast directly to each student. It is interesting to consider the length and breadth of possibilities of technology like this in education.

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Social networking sites

I have made reference already to the overlapping and interweaving of the technologies that seem to typify Web 2.0. This is happening in an informal way. What happens when you formalise all these technologies and concepts into one website that will offer a "space" to any user? The space will offer blogging, media sharing of audio and video, podcasting, inbuilt search, forums, personal profiles linking to other community member's spaces and wikis (and you make the interaction between all these features click-simple). What you get is a social networking site. One of the fastest growing entities on the planet in the last four months is a social networking site called MySpace (<http://www.myspace.com>). I do not have one single year 9 student in my school who does not have a MySpace account. The 100 millionth account was created in August 2006 and it is claimed to be growing by 230 000 new users per day (Sellers, 2006). Again, let's turn to Wikipedia:

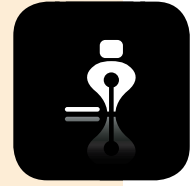
MySpace is a social networking website offering an interactive, user-submitted network of friends, personal profiles, blogs, groups, photos, music, and videos. MySpace also features an internal search engine and an internal email system. According to Alexa Internet, it is currently the world's fourth most popular English language website, the sixth most popular website in

any language and the third most popular website in the United States, though it has topped the chart on various weeks. The service has gradually gained more popularity than similar websites to achieve nearly 80 percent of visits to online social networking websites. It has become an increasingly influential part of contemporary popular culture, especially in English speaking countries. MySpace is also home to various musicians, filmmakers, celebrities, and comedians who upload songs, short films, and other work directly onto their profile. These songs and films can also be embedded in other profiles, an interconnectiveness which adds to MySpace's appeal. (http://en.wikipedia.org/wiki/My_space)

The popularity of these online communities with our students should force us to consider them. Not to just ponder the "problems" or dangers associated with them (of which I am sure that there are many) but to think outside the education square and wonder and dream about how we might be able to embrace them. Not to just incorporate them into our standard teaching practices, but allow us a few moments to ponder the way in which our educational paradigm might actually shift entirely into new forms.

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Learning Management Systems



It would not be completely fair to say that there has not already been a blending of notions of Web 2.0 and education. Learning Management Systems (LMS) have been used by some educational systems for up to a decade. An LMS takes the existing internet features of file transfer, email, forums, wikis etc and packages them all together into a system customised for teaching and learning asynchronously and remote from face to face tuition. Wikipedia helps us at this point also:

A Learning Management System (or LMS) is a software package, usually on a large scale (that scale is decreasing rapidly), that enables the management and delivery of learning content and resources to students. Most LMSs are web based to facilitate "anytime, anywhere" access to learning content and administration. At a minimum, the LMS usually allows for student registration, the delivery and tracking of elearning courses and content, and testing, and may also allow for the management of instructor led training classes. In the most comprehensive of LMSs, one may find tools such as competency management, skills gap analysis, succession planning, certifications, virtual live classes, and resource allocation (venues, rooms, textbooks, instructors, etc.). Most systems allow for learner self-service, facilitating self enrolment, and access to courses. (http://en.wikipedia.org/wiki/Learning_Management_System)

There are both commercial and open source options available. The most popular open source version is probably Moodle, which is currently growing in popularity in Australia.

Web 2.0 and education

I remind us again that it is the intention of this article to raise more questions than it answers. It is designed to get educators thinking about future possibilities. It has the dual purpose of preparing us for the future, as well as inspiring us to be equipped to be a part of the moulding and shaping process. If Web 2.0 is in essence user created and defined then let's get in the game as educational users and play our role in helping to define.

It is interesting to reflect on the journey to date in the relationship between computers and education. Rod Paige the US Secretary for Education suggests that "Education is the only business still debating the usefulness of technology" (Mullaney, 2006). What I believe he means is that although education has embraced computers (and the portion of the technology in school budgets has increased dramatically in the last 20 years), it may well be the only industry that has not significantly changed as a result of computers. Computers and the internet have simply been a useful addition to the suite of tools encountered by teachers and students without the traditional didactic paradigm

being challenged by their existence.

How might education change? If the notion of a community of experts and knowledge "creators" is being replaced by a community of collaborative users who share editorial responsibilities, what will this mean for teaching and learning? If communication is changing even to the point of redefining social networks, then what will this mean for education? Many educational observers are asking these questions and sharing a growing excitement about the vast possibilities of the digital age for changing the way we teach and learn. Innovation in education may well be on the verge of a threshold change that it has not seen for quite some time. The continued development of the web and its affect on society combined with the continued innovation of portable computing devices, promotes a great sense of wonder about the future (near future?).

It is already being suggested that there is a shift away from the traditional three R's for the young clickerati. Harel (2003) suggests that the three R's are being replaced by the three Xs; eXploration, eXpression and

eXchange. Harel defines these new competencies as:

- eXploring: discover information and ideas, open ended discovery; children on the driver's seat of their own learning experience
- eXpressing: using digital media for expressing ideas and representing knowledge
- eXchanging: asking questions, sharing ideas and working with others

It is interesting to think of the limited modes of expression a "traditional" student has after they have performed research. They perhaps have a number of paper options with their work being able to be shared with their class mates, or to their family (or maybe to the school community through a newsletter). With a Web 2.0 student, their research could be blogged or offered on a wiki to be shared at a global level, instantly (and edited and "improved" just as quickly).

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Web 2.0 from a biblical perspective

There are a great number of points of contact with the philosophy, practices and culture of Web 2.0 and a biblical worldview. Questions could be raised about humanistic saviour substitution, idolatry and knowledge development. We could easily see God's word speaking to us on issues of censorship, copyright (integrity of intellectual property), bias and of course the safety of the community members (our students). The gradual "death" and replacement of word based communicating with multimedia based communicating may also cause some to ponder. Neuroscientist Marcel Just (2006) suggests that in 200 years we won't need reading and writing to transmit knowledge".

God, in his goodness, gives us many earthly blessings. Technology, including information and communication technologies (like Web 2.0), is one of them. The people who first settled in Babylonia had been blessed by God with some wonderful technologies for their day. They had an understanding of geology and pedology such that they could

choose soils appropriate for clay baking. They had manufacturing abilities such that they could bake and produce bricks. They also had a sense of the principles of civil engineering enough to construct a tower of some height. What is the focus of God's concerns with their technological pursuits in Genesis 11:1-9? Was it their knowledge, innovation and technological skills? God was affronted by their motivations. They were using technology "so that we can make a name for ourselves" (verse 4). They had inflated their view of humanity and underwhelmed their view of God.

When we reflect on the innovation and great benefits of our human technological pursuits, and we dream of the great possibilities of life with these new innovations (including the internet), we must not allow our technological advances to become a kind of saviour substitute. No matter how advanced medical, or agricultural, or industrial technologies, or communication technologies become, they will not improve the spiritual condition of humankind. As those in the developing world look on and aspire to the technological

pro prowess of the west, we must not think that we are making a name for ourselves. The lessons from these early engineers in Genesis 11:1-9 must sober our thinking and processing of things like Web 2.0.

However, we must not throw the baby out with the bath water! The innovations of Web 2.0 are a blessing from God. If our motivations for embracing them are not ungodly and we wisely consider all relevant issues and pass them through the filter of scripture, we should not be scared to explore, contribute and even be prepared to be a part of the radical changes to education that may result. Yes, there will be those that will use it sinfully and to self serve and we must anticipate this. Even this morning as I write, Tim Berners-Lee (main developer of the WWW) suggested his concern for the way the internet may be used for bad ends if it is left to develop without wise oversight. But the call for us as Christians is to embrace and nurture the blessings from God while having a healthy theology of sin.

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Teaching christianly

Teaching christianly means **character plus curriculum**. It means living a faithful life in the classroom and unfolding your faith perspectives in what you teach. This does not change in a world where education has been impacted by notions of Web 2.0. Our call to godliness as Christian teachers and our call to teach christianly by critically evaluating everything we teach, and the methods we use, will still demand our attention. Teaching christianly means that our **perspectives plus pedagogy** must honour God. A change to educational paradigms simply provides the challenge for us to keep evaluating our character, curriculum, pedagogies and perspectives as we face the exciting future as God's adopted sons and daughters.

Conclusion

Predicting the future is fraught with difficulties. Predicting the future of computing technologies is perhaps most difficult. Bill Gates once said "640K of memory ought to be enough for anybody" (Gates, 1981; quoted by Mullaney, 2006). We do not know what the future holds for education. The development of Web 2.0 and its philosophies and culture will impact education. We must not let this take us by surprise. As Christian educators we must keep discussing this and working together to make sure we evaluate everything through the light of scripture while not being scared to embrace new and exciting possibilities.

Staff room activities for discussion & analysis

Our students

Brainstorm, as a group, the characteristics of our students that make them different from when we were their age. Has the author overstated the notion of instant gratification?

TXT literacy

Make one wall in your staff room represent the notion that this new form of literacy is "awful" and the opposite wall represent the notion that it is "simply great". Then move to a position on a line between these two opinions and take a place that represents what you feel. Be prepared to explain why you are standing where you are.

Wikipedia

Break into small groups. Your task is to imagine that you are a board of parents at a Christian school. The association, the teachers and the students have brought to you the issue of Wikipedia being blocked by the school filtering software. The proposal is before you to remove the ban and give free access. What ought to be some of the issues that discussion should cover at this board meeting?

OR

Same context, however, the proposal is that the school budget for a donation to Wikipedia (runs on donations) as the students are using it for a majority of their research.

Blogging

As a large full staff group, brainstorm ways that you might be able to use a blog in your teaching starting from tomorrow.

Podcasting

As an individual, write down a paragraph that details how you would feel about your school issuing iPods to every student with a view to having all lessons podcast. Explain why you feel the way you do.

MySpace

Set up an impromptu debate among the whole staff:

"MySpace (and websites like it) should be blocked by the school server"

Education and web 2.0

Draw a dial on your page going from 0-10 (like the speedometer on your car). Imagine that this is an index of how much education will likely change in the next 10 years. Be prepared to justify your "speed".

Biblical perspective

Break into small groups. Choose either idolatry, censorship, copyright (intellectual property rights), bias or safety and list / discuss the issues related to Web 2.0.

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Thanks must be given to Dr Jim Mullaney of FuturePD for getting my juices flowing at a recent AIS IT Integrators Conference. He opened my mind to the possibilities of Web 2.0 and education.

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Join the Blogosphere

Want to have a little play with what I have been referring to? Why don't you visit the blog that I have set up for this article and make a contribution to the Web 2.0 community? Leave a comment, start an e-dialogue or just lurk and read what others are saying about the ideas presented. Simply go to the following link: www.chrisparkercrctj.blogspot.com.

References

- BBC News: Thursday, 2 November 2006, (<http://news.bbc.co.uk/2/hi/technology/6108578.stm>)
- Harel (2003): 'Future trends in education: Where are we heading?' Paper given at conference
- 'Education and IT: The next 10 years'. Barcelona.
- Just. M. (2006): 'The Death of English'. The Bulletin - 3rd November 2006
- Mullaney. J. (2006): 'How do kids communicate and how should technologies affect the way we teach?' Paper given at conference - "AIS IT Integrators Conference". 2006. Sydney.
- O'Reilly. T. (2006): 'Levels of the Game: The Hierarchy of Web 2.0 Applications'. O'Reilly radar.
- Sellers. P. (2006): 'MySpace Cowboys', CNN. Retrieved on 28th August 2006.

