

## WHERE IS THE 'M' IN INTERACTIVITY, FEEDBACK AND ASSESSMENT?

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### ABSTRACT

This paper derives from the opening keynote address of the Second International Wireless Ready Symposium on digital learning technologies and language education. It examines a number of trends in mobile learning through the lens of three concepts: interactivity, feedback and assessment. The emergence of the new digital technologies has led to a renegotiation all three terms, given the emergence of a new type of learner and of new relationships between learners and teachers.

### INTRODUCTION

It was not long ago that I didn't consider myself a mobile learner. I considered mobile learning to be something that was used by people who had a Personal Digital Assistant (PDA) or similar mobile device, and who were constantly pressing buttons on a tiny screen. As I prepared for my presentation at the Wireless Ready Symposium I began thinking about how I learned and read about the field of mobile learning. Around the same time, Stephen Downes identified a post on this issue from Leonard Low, a colleague in Canberra. Downes (2007) wrote: "Low clarifies his thoughts about mobile learning concentrating more on social factors like ubiquity, ease of use, appropriateness, cost, rather than on the device itself" (n.p.). Low was saying that it's not about the technology; but about *the mobility of the learning*. And what we need to do to fully exploit the use of mobile devices is look at *the context and the mobility of learning*, not the device itself. From this perspective it seemed I may indeed be a mobile

learner. I'm not a mobile user in the sense that I'm not into mobile technology in the cutting-edge sense, but I know I study and research things very differently to how I used to, and I now understand that that is very much a consequence of mobile learning.

These ideas all became even clearer for me at the mLearn Conference in Melbourne in 2007 where Norbert Pachler presented a paper on "Thinking about the M in mobile learning," which he co-authored with Gunter Kress. As I listened to him speaking, illustrating point after point to make his case, I realized what an enormous task it is that we are asking teachers to take on when they go down the path of teaching with emerging digital technologies. It's not just about pointing and clicking; it's about an *accompanying conceptual change* that is required before one can teach effectively with these new tools. I subsequently asked Pachler if I could base my presentation at Wireless Ready on the paper he presented in Melbourne and in the true

spirit of Web 2.0 he readily agreed. I am very much indebted to Pachler for much of what I say here.

### **FROM TEACHER TO LEARNER AND FROM TEACHING TO LEARNING**

In the past, if a student failed, educators didn't really ask questions about whether that student failed because the teacher was poor, as we more or less assumed that the teacher was not the problem. The teacher was the teacher and the teacher was right. These days if a student fails, observers may well examine the teaching methodology, and ask if the teaching style was appropriate or not. It amazes me when I think back – and I'm sure many of us have had the same experience when we were at school – when I was a student at school lessons were delivered in a one-size-fits-all approach, and it was assumed we could all cope with the same style of delivery. It was taken for granted that we were all able to read reams of text (without images), and write coherent essays. It was assumed everyone had the skills to complete these tasks, and if you didn't you simply had to learn them. It was *your problem* and nothing to do with the teaching method. Fortunately contemporary educators accept that teaching styles need to be varied to cater for a variety of student learning styles.

With this change in agency from teaching to learning there has been a shift from a teacher-centred broadcast model to a more student-centred model where user-generated content, that is, student-generated content, may be part of the educational equation. This change has been precipitated partly by the growth of mp3 players, digital cameras and other mobile devices that have made it so easy to be your own media creator or movie maker. Getting students to generate content is not a new idea. As early as 1994, David Jonassen was urging educators to adopt this approach as part of the constructivist method, but the recent proliferation of social media has created an

expectation that student-generated content be incorporated more widely.

### **WEB 2.0 – THE WAY?**

I should stress at this point that that I will be referring to a model of education that is not intended in my view to completely displace traditional or current practice (Nichols, 2008). I am talking about a model of education that may also be very difficult for language learners to pursue as a mode of study, and for language teachers to implement. I think we can surmise that the higher the language level, that is with more advanced students, the more likely they are to respond to these new kinds of approaches. I am talking about what is referred to as Web 2.0, or 'distributed learning' or 'networked learning'. Networked learning is my preferred phrase. This model is being pushed, encouraged, and promoted as *the way* of new learning by web 2.0 evangelists.

I am aware that there are many assumptions being made when I describe this as a new model that should be embraced. But many educators are assuming that the kinds of approaches that are implicit in networked learning are what educators *need to do* in order for their students to be successful citizens in the world of the twenty-first century. It's not just about what goes on in schools and colleges; it's assumed that these new ways of learning are what students will require to be effective participants in a workforce when they leave school/college/university. And if we don't offer, and model, these new approaches we're going to have a generation of students, or a group of students at least, who don't have the skills to take their place in the workforce – a new workforce demanding new and different skills (Anderson, 2007).

### **PARTICIPATORY MEDIA AND QUALITY CONTROL**

Let's assume students have phones, or other mobile and media-capturing devices, and the skills to use them effectively. I know that's not always true, but let's just stay with the assumption. These media-capturing devices can be used anywhere and any time - I saw evidence of this every day here in Nagoya. And I do it myself almost daily: I have my camera, my mobile, or my mp3 player with me at all times, and I'm constantly recording materials – documenting everyday life.

If some of this content created by me or my students becomes part of class content how important is quality control? If we're going to use content that students have created – or, indeed, *you've* created away from your work environment on the weekend – does someone need to check the quality of that material that you're using in class? Or are there now different criteria with which to assess whether or not this user-generated content has value? Is it more important that people are engaged and motivated? That there are increased levels of communication and participation? What percentage of course content *should* be user-created? Are we talking about using student-generated content for teaching purposes? For teaching items on the syllabus or curriculum? Or are we talking about using it for assessment? There are many challenging questions.

Where does this content go? If you're going to have students creating content, and this may be in the forms of blogs, podcasts, or wikis, does it go on a school server, on a school or college website, or does it go out on the web at sites like Wikispaces, and Blogger? Do schools and colleges have the right to disallow or sanction the publishing of this kind of content to public sites? The implications are far-reaching, and they turn the machinations of how a school or college works completely on its head (New Practices Project, 2006).

### **WEB 2.0 AND THE INSTITUTION**

Earlier this year in my home town, Adelaide in Australia, a primary school teacher had his blog closed down by the Education Department. It had been a very successful experiment in blogging with primary school children, but a parent saw that some people from overseas, from outside Australia, unknown citizens of the planet, were responding to the children's blogs – at the teacher's request. These were people who were part of the teacher's network, and who he trusted. A parent saw these comments, made an official complaint, and the Department ordered that the blog be shut down. This is absolutely the wrong course of action, though perhaps understandable. Will Richardson takes a different view: he actually wants his children to have the opportunity to interact with 'strangers' in that he believes this is a skill that people will require to succeed in the new world of networked communication (Coghlan, 2008). As Pachler (2008) argues: "We don't have a common frame of reference any more as to what constitutes truth or beauty or logic or anything. It's all up for grabs. It's all contingent, dynamic, mobile" (n.p.).

In a political sense, a primary goal of schools in the past was to present a curriculum that was common to everyone, and a body of knowledge with a set of embedded values that would assist all students make their way in the world when they left school.

Many schools are still operating like this, but the world outside education has changed. Schools and colleges are now producing and teaching content based on a model of education which has less and less relevance to the lives of many students, and neglecting the skills that people need for the dynamic world beyond.

This prompts an ethical challenge because we now have a group of people – young people in particular, but not only young people - who are

operating in spaces on the Internet without any guidance. There are few adult role models and few adult educators examining life with the new technologies *with their students*. Asking, for example, questions about what is appropriate, or where and why care needs to be taken when you put content on the Internet.

We, as adults, have abrogated our responsibility in this area and have responded by and large by banning and blocking access to sites and technologies that many are using in their non-school, non-study life.

Educators have caused this sense of 'disconnection' between study and play themselves because they haven't been willing to engage in this other space of activity where social media prevails.

The channels where many are receiving and sharing their information are no longer principally television and radio, not the teacher at school, and not the school textbook.

Engaged in a process that exemplifies what Pachler (2008) refers to as the "diversification of cultural expression" (n.p.), they are using YouTube, Facebook, blogs and the like - that's where networked educators and networked students are getting their information from.

### **THE EMERGENCE OF THE NON-LINEAR NARRATIVE**

*The Bugbear of Literacy* by A. K. Coomaswamy was published in 1949. A central premise of this book was that the written word had destroyed the oral tradition and was affecting people's ability to commit things to memory, and to memorize and tell stories – the author was concerned by the fact that books were destroying our ability to demonstrate the skills of narrative.

Let's wind forward thirty years to 1979. Sitting in my lounge room watching rock videos around that time I noticed a change in how they were presented.

Initially rock videos consisted of the artist or band playing the song. That simply was all the video contained. Over time rock videos evolved into something that consisted of a rapid succession of images that may or may not have any connection with each other, and it was left up to you, the consumer, to make your own meaning of them. There may be a narrative in these videos, but it was very definitely open to interpretation.

Sometime in the 1980s I first heard people talking about rhizomes. The term rhizome comes from the field of Botany. Rhizomes are the roots of plants under the ground that grow in chaotic, unpredictable fashions out from a node. A principle of rhizomatic thought is that connections can be formed between items or ideas that wouldn't on first appraisal appear to be connected.

Enter the Internet age and the power of the hyperlink. If I'm creating pages on the Internet I can associate, for example, Idea A with Idea F because I see an association *in my mind* between those two ideas. It doesn't matter if no one else sees the link between these ideas. So when you go onto the Internet as a user, you start clicking links, and within a short space of time you've moved from starting point A to finish point Z by a series of paths that other people have created, and where there may be no apparent connection between starting point A and finishing point Z. It wasn't a learning pathway that *you* or your teacher mapped out; in fact you've actually taken a journey that's probably quite different from the one that your teacher wanted you to go on. If you use the Internet in the classroom this will have happened to you – you end up on your own at a place where you wanted your students to join you but the class has gone off on their own individual rhizomic journeys.

Coomaswamy may well have been justified in his concern over the decline of the oral narrative

tradition, but the skill of narrative has of course been evidenced in countless literary works since 1949. The new rock videos popularized a different view of the narrative that was open to interpretation. Rhizomatic thinking in the 1980s argued that connecting any two ideas could legitimately be quite random, and seemed to pave the way for the age of the hyperlink, where connections between ideas are constructed by the author and where the reader of hyperlinked texts is allowed to explore suggested connections and in effect create their own narrative, linear or otherwise.

So, along the way from the Bugbear of Literacy to the present Internet age, the way knowledge is assembled and processed has changed from something that was once very controlled and defined, to something that allows both author and user (the reader) to assemble information and establish connections between ideas in any way they wish to.

To this fragmentation and decentralization of narrative we can add the phenomenon of multitasking – which has also been called “trans-media navigation” (Jenkins, 2006). I think it’s fair to say that it’s a younger generation before me, before the Baby Boomers, that were the first generation to adopt multitasking as a way of being, where they were able to talk on the telephone, listen to music or watch TV, chat on the Internet, and do their homework all at once. I watched my daughter when she was at high school operate like this – and many parents of my age will testify to something similar - our children engaged these multiple channels, and they passed, got good marks, and they did it all while engaging in *horizontal learning*.

### **HORIZONTAL AND VERTICAL LEARNING**

When I first started to characterize these approaches to learning as horizontal *versus* vertical learning to describe what I saw going on in education I was unaware that Etienne Wenger, the Community of

Practice theorist, actually used these same terms to describe something different, but similar (Cross, 2004).

By vertical learning I am referring to the process I was routinely exposed to at school and university. Students were given a topic to research and asked to read books and journals about it before finally writing an essay. Students were expected to explore the topic in great detail, going down into the depths, the vertical depths of a topic, as opposed to a horizontal method of learning (multitasking).

Using a horizontal learning approach you might skip along the top of a topic you’re studying (reading an article, checking an email or discussion forum, watching a video) *as well as* embracing other topics in the same manner simultaneously, without going in depth into any of them. There may or may not be connections between these simultaneous topics.

Now, as a contemporary teacher it is not an option to ban multitasking (horizontal learning), because the horse has already bolted. Rather than try and prevent students from multitasking, better to accept that it now exists as a common, everyday practice, and integrate it into your classroom.

We should also however be encouraging students to employ vertical learning approaches. We might say to our students, “Let’s spend some more time on this particular topic and go further into it” (Nicols, 2008, n.p.).

### **DOES USING THE INTERNET CHANGE THE WAY WE THINK AND BEHAVE?**

Pachler (2008) argues that there now exists a ‘new habitus of learning’, or what some have called ‘Learning 2.0’. Despite Prensky’s (2006) assertion that Generation Y’s brains are wired differently because of their activity with what he calls twitch devices (gaming consoles for example), Pachler and others question whether this is the case, arguing that

there is no evidence that there is any different form of neurological wiring occurring. But the conditions and environments within which we learn have certainly changed. Learning is no longer confined to the classroom and our peers; the teacher is no longer the sole source of content; there is “a decentralization of resource provision” (Pachler, 2006, n.p.) and a blurring of social and academic spheres of activity. Put in a nutshell, the whole world has become curricularized.

When I went to visit Nagoya castle I saw a group of young women taking turns photographing each other as they mimicked the pose of a soldier depicted in a statue in the castle grounds. Those photographs could be taken to school and used in a History class, or perhaps used as a starting point for a creative writing lesson. The point is these students were having a wonderful time, they were totally engaged in this exercise at the foot of the statue – here was an example of how the world, potentially, has become curricularized. To capitalize on this new facility to document and record using the new media teachers of many subjects could tell their students to go out on the weekend, photograph, record, get materials, and bring it back on Monday for use in class.

### **TURNING INFORMATION INTO KNOWLEDGE**

This new model of teaching and learning, where it's not the teacher up the front with the answers giving the ordained curriculum, supplies users with *stuff*, and it's up to the individual to assemble that *stuff* in ways that make sense to them, and which capitalizes on their interests. Formerly text was knowledge pushed, and arrived as a settled, final, coherent body of work from an acknowledged source. Contemporary text is contingent, and can be regarded more as a resource that the learner must make sense of in the acquisition of self-knowledge.

Contemporary text may have multiple authors, and may not be the authoritative source (with the attendant power that carries); it's provisional. This is what's happening in wikis, blogs and podcasts, where the power of authorship is shared.

### **THE LANGUAGE LEARNING CONTEXT**

This changing relationship between text and knowledge is especially interesting to contemplate in the language-learning context, because in that context language is the domain, or body of content being taught. A student of Aged Care or Sociology is likely to find that the amount of available information in their field is expanding exponentially. An English as a Foreign Language (EFL) student won't have that same sense that “what is true today may not be true tomorrow” (Siemens, 2008, n.p.), and therefore then language teachers are not faced with the same challenge of keeping abreast of rapid changes in the body of content they teach (the target language). Languages do not change that quickly.

Are the texts we use to teach language subject to this rapid change? Probably not. So it is different in the language-learning context. However, if we focus on how language teachers are self-organizing using web 2.0 tools for their own professional development, then there is ample evidence that language teachers are in the vanguard of this approach. The Webhead online community of practice (Webheads, 2008), is perhaps the most striking example of this kind of global collaboration. Many in the language teaching community have recognized the value of networked learning as a strategy to keep abreast of rapid developments in the practice of teaching language using technology. And even though the domain of language teaching – the target language – is not subject to the same rate of change as other fields of knowledge, if we accept that a core skill of 21<sup>st</sup> century living will be managing the ever increasing

abundance of information, then language students, like all students, need exposure to Web 2.0 approaches to develop the skills they'll require for the workplace and the wider world when they graduate.

Mobility then, as I have been discussing it, implies not just movement in a physical sense, but a sense of incompleteness moving towards completion. Mobility in the sense that the individual is always ready to be a learner and to turn the environment into a site for learning (like the girls at Nagoya castle), and where knowledge is continually in a state of incompleteness. 'Mobile' not only physically but conceptually, and this is the important thing, and it's what finally gelled for me as I listened to Norbert Pachler at the mLearn conference. It's not about the device, it's not about how clever I am with a PDA or smart phone; it's how I internalize this new 'habitus of learning' conceptually, and understand the significant shift in teaching and learning that it affords.

Greg Whitby, the principal of a new school established in the suburbs of Sydney to put into practice many of the ideas that I've been discussing, provides a neat summary in table 1.

Table 1. The Changing Learning Agenda

The Changing Learning Agenda		
Formal Learning	>	Informal Learning Spaces
Mass Learning	>	Personalized Learning
Competitive	>	Collaborative Learning and Assessment
Instruction	>	Personal author and innovator
Content	>	Knowledge and understanding

**Note:** Adapted from Whitby (2008).

Formal learning is giving way to informal, mass learning to personalized learning; where education was once seen as an essentially competitive endeavour, now the emphasis is on collaborative learning and assessment; teacher-led instruction is making way for a model where the student can act as a personal author and innovator; and the focus is shifting from content provision to an emphasis on knowledge and understanding.

### CONTINUING THE DIALOGUE

The collaborative nature of web 2.0 authorship highlights something of a problem in academic circles. In academia one moves up the chain of command, that is, gets promoted, through publishing, and academia is struggling with the idea that in the web 2.0 world you don't publish as the expert. You publish as just one contributor of a collective of minds which together address a topic. You can now find some journals and books that will actually have a wiki or blog at the end of them with an invitation informing users to contribute to the discussion in the blog or wiki, and the next edition of that work may be based on the input from the collective intelligence of the author's networks, and not just them as the acknowledged expert.

To model this shift towards collaborative authorship I've created a basic companion wiki for this paper at the following site (<http://whereisthem.wikispaces.com/>). It is a public wiki which anyone can edit and contribute to. You are invited to contribute to the dialogue around issues raised in this paper. I don't have the answers; I have a few ideas which I hope will stimulate you to think about your own teaching practice from a web 2.0 perspective. As a networked educator I want to hear from you, because the state of knowledge in this field is provisional, contingent, and *mobile*. Far from being the end of the story, what I say is more a starting point

from where you acquire your own knowledge and understanding in dialogue with others. And this we should be modelling for our students.

The mobility of knowledge acquisition and creation, and the availability of resources and 'sources for learning' coming from literally everywhere, will mean that we will come to rely less on authoritative institutions. The student of the future may find that 'in most any place that suits him, all on his own initiative, the habit of relying on authoritative institutions, which operate through commands enforced by penalties and inducements, may sharply diminish' (Sessums, 2007, n.p.).

### NOT SKILLS BUT A MINDSET

How do we, as educators, acquire the skills to manage effectively in the kind of world I'm describing? First and foremost we need to understand that these new practices are more predicated upon an awareness that things have changed, not so much in the skills that you may or may not have with a PDA or the Internet or mobile phone or an .mp3 player. To date education by and large has not changed to accommodate the changes brought about by Internet and mobile technologies. The world outside has changed a great deal, but education is still operating within an old paradigm – a clichéd phrase perhaps, but it is an *old* paradigm. The new paradigm is about learning to be part of a participatory culture, and to see yourself as part of a network or community. It's no longer 'me, the expert' knowing all the answers; it's 'us, together' working in a world where mobility means dynamic content coming from multiple channels that are not authorized by any one expert or traditional gatekeepers. It's the result of many minds working as part of a network.

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## NOTES

Slides accompanying this presentation are available at: <http://www.slideshare.net/michaelc/where-is-the-m-in-interactivity-collaboration-and-feedback>.

The keynote presentation podcast is available at: [http://michaelc.podomatic.com/entry/eg/2008-03-29T07\\_39\\_46-07\\_00](http://michaelc.podomatic.com/entry/eg/2008-03-29T07_39_46-07_00).