* On the Internet *

Multiliteracies for Collaborative Learning Environments

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The notion of 'multiliteracies'

The term 'multiliteracies' was coined in (1996) by the New London Group (*who?*) to address "the multiplicity of communications channels and increasing cultural and linguistic diversity in the world today" for students and users of technology through "creating access to the evolving language of work, power, and community, and fostering the critical engagement necessary for them to design their social futures and achieve success through fulfilling employment." As they define the term more comprehensively:

> The notion of multiliteracies supplements traditional literacy pedagogy by addressing these two related aspects of textual multiplicity. What we might term "mere literacy" remains centered on language only, and usually on a singular national form of language at that, which is conceived as a stable system based on rules such as mastering sound-letter correspondence. This is based on the assumption that we can discern and describe correct usage. Such a view of language will characteristically translate into a more or less authoritarian kind of pedagogy. A pedagogy of multiliteracies, by contrast, focuses on modes of representation much broader than language alone. These differ according to culture and context, and have specific cognitive, cultural, and social effects. In some cultural contexts - in an Aboriginal community or in a multimedia environment, for instance - the visual mode of representation may be much more powerful and closely related to language than "mere literacy" would ever be able to allow. Multiliteracies also creates a different kind of pedagogy, one in which language and other modes of meaning are dynamic representational resources, constantly being remade by their users as they work to achieve their various cultural purposes.

This notion has struck a chord among educators, as a search on the term in Google will amply reveal. The Canadian Multiliteracy Project for example has mounted a study "exploring pedagogies or teaching practices that prepare children for the literacy challenges of our globalized, networked, culturally diverse world." Recognizing that "we encounter knowledge in multiple forms – in print, in images, in video, in combinations of forms in digital contexts – and are asked to represent our knowledge in an equally complex manner," the site aims at how "educational stakeholders might collaboratively construct and disseminate knowledge" - http://www.pkp.ubc.ca/multiliteracies/

This is but one of many projects addressing the considerable impact of technology on how we formulate meaning and represent it in interaction with others, and how we as teachers must prepare those we influence to cope successfully with the challenges facing them in adapting to these developments. Multiliteracy is more than just 'multimedia literacy' or "nontext writing," which was the topic of a talk given by Elizabeth Daley recently at the University of Michigan, School of Information: http://intel.si.umich.edu/news/news-detail.cfm?NewsItemID=136, but encompasses "approaches to learning that place production technology in the hands of the learner ... and recognizes the importance of interactivity and nonlinear skills," so that various forms of technology become an instrumental part of the learning process.

Nowadays, students and particularly their life-long-learner teachers, are not only having to deal constantly with new technologies impacting their lives, but are having to harness these very technologies to help them keep up with developments in order to in turn use these same technologies to build constructive learning environments. Modeling and implementing the heuristics of effective information management are becoming increasingly crucial responsibilities of educators, which means that educators must themselves become familiar with appropriate applications of a wide range of new technologies. A multiliterate teacher not only understands the many ways that technology interacts and intertwines with academic and personal life, but actively learns how to gain control over those aspects of technology impacting interpersonal and professional development. Furthermore, multiliterate individuals are aware of the pitfalls inherent in technology even as they promote empowerment through effective strategies for first discerning and then taking advantage of those aspects of changing technologies most appropriate to their situations. These strategies include managing, processing, and interpreting a constant influx of information, filtering what is useful, and then enhancing the learning environment with the most appropriate applications, and doing so with awareness of a complex set of socio-political impacts (Selber, 2004; Leu et al, 2004).

Other notions: from 'print literacy' to 'connectivism'

This ascendancy of the concept of multiliteracies among educators has been accompanied by an examination of what Myron Tuman (in several works, including his book *Word Perfect*, 1992) referred to as 'print literacy,' a representation of knowledge through writing and graphics placed on paper or similar surface, meant to be read or viewed in the context of that surface, and which has dominated serious communications media well into an era of radio, television, and cinema (and see Murray, 2000). Tuman's book, ironically, is very much a product of the culture of publishing, where thoughts are developed logically, finalized, and fixed in ink. Many of the documents dealing

with multiliteracies both on and off the Web are in that format; for example Unsworth (2001), the New London Group document (1996) referred to previously, and Selber's (2004) excellent book subsuming the various multiliteracies in a tripartite arrangement of functional, critical, and rhetorical literacies.

However, Tuman envisaged in his book a 'docuverse' where texts interlinked, were neither owned nor fixed, were annotatable (as in a wiki, like Wikipedia http://www.wikipedia.org/), and where print culture was subsumed under a wider range of communications media. Accordingly, there is an emerging body of work distributed over the Internet touching on multiliteracies which incorporate many of these elements. Interestingly, a certain level of multiliteracy is achieved not only in recording and uploading these presentations to the Internet, but also in assuming that there is a multiliterate audience somewhere that has assembled the components on individual computers to enable them to download and play these presentations, and follow the links given that will open a docuverse of resources, some perhaps annotatable. The rapid proliferation of such digital documents suggests a new benchmark regarding the literacy competencies required of a modern multiliterate educator. And the assumption is not necessarily that each educator *has* the wherewithal to access and understand such presentations, but it does assume that modern educators know how to interact with learning communities that will help them *learn from each other and through discovery* how to access such presentations, and then make sense of the concepts under discussion.

There have been many studies of how educators form and sustain such communities. One notion is that of communities of practice, two central references for which are Eric Snyder's ongoing web project at http://www.tcm.com/trdev/cops.htm and Jeroen van de Wiel's community of practice "hub" at http://communities-of-practice.pagina.nl/. Another revelatory notion is social network analysis, such as that explored in the work of Bronwyn Stuckey http://www.bronwyn.ws/publications/. Noting that the three learning theories with greatest impact on instructional technology (behaviorism, cognitivism, and constructivism) were all developed before technology had impacted educational environments, George Siemens (2005) has written a compelling article to introduce the notion of "connectivism" and his conclusion is worth quoting:

> The pipe is more important than the content within the pipe. Our ability to learn what we need for tomorrow is more important than what we know today. A real challenge for any learning theory is to actuate known knowledge at the point of application. When knowledge, however, is needed, but not known, the ability to plug into sources to meet the requirements becomes a vital skill. As knowledge continues to grow and evolve, access to what is needed is more important than what the learner currently possesses.

> Connectivism presents a model of learning that acknowledges the tectonic shifts in society where learning is no longer an internal, individualistic activity. How people work and function is altered when new tools are utilized. The field of education has been slow to recognize both the impact of new learning tools and the environmental changes in what it means to learn. Connectivism provides insight into learning skills and tasks needed for learners to flourish in a digital era.

Examples of and about 'multiliteracies'

Returning to the topic of what documents both convey and encapsulate concepts inherent in multiliteracies, I have chosen a sampling for an online course I am teaching on the topic. The course is offered by the TESOL, Inc. Certificate Program: Principles and Practices of Online Teaching under the course title PP 107: Multiliteracies for Collaborative Learning Environments. It is described in detail here: http://www.homestead.com/prosites-vstevens/files/efi/papers/tesol/ppot/portal2005.htm

One interesting document, itself a model of multiple literacies in its navigation scheme and content visualization, is a hypertext dissertation by Ahtikari and Eronen (2004) describing a learning space called Netro, in and out of which the document interleaves. Although a good example of 'docuverse' there are other presentations touching on multiliteracies which are more ambitious in the 'multimedia literacies' involved. Some examples which I use in my course are:

- A presentation by Stephen Downes on "Reusable Media, Social Software and Openness in Education" at http://www.downes.ca/files/utah.ppt with accompanying audio at http://www.downes.ca/files/utah.mp3. Downes engages our rhetorical literacy skills in confronting us with such dichotomies as

    open vs. closed
    broadcast vs. conversation
    institution vs. individual
    hierarchy vs. network
    centralized vs. decentralized
    product vs. remix
    planned vs chaotic
    static vs. dynamic
    push vs. pull
    Internet vs. television
    VOIP vs. telephone
    blogging vs. newspapers
    duplication vs. obliteration
    lock-out, lock-in
    directed play vs. improv
    bundled vs. 'just there'
    layers vs. channels

Although there is no overt mention of multiliteracies in the talk, Downes speaks directly to the language of technology: "the idea that new media is like a new vocabulary, a new language ... This new media *is* how we talk." He says that the potential of the Internet as a communications tool is realized when we speak not only in the old language but in the new language, "in the syntax of new media." He says that people need to have a voice in the conversations he refers to, and addresses the power aspects of media control, how free and open access to technology-based media threatens established interests. Control lies at the heart of many of the tensions mentioned above. His parting advice to educators is to 'let go' and let chaos be a part of the learning blend. These concepts are discussed in a second part of Selber's tripartite breakdown of multiliteracies: critical literacy, or an understanding of the socio-political aspects of how technology impacts all our lives, including the time we spend in the educational sector.

- Another multimedia presentation on multiliterate communication (again, with no actual mention of the term 'multiliteracies') is Jay Cross's "Collaboration Supercharges Performance" at http://macromedia.marketing.pr.breezecentral.com/p51746849. The collaborations he discusses are generally blog-based and wiki-based.

One of the first times I heard about blogs was in Jim Duber's final article (2002) as editor of the TESL-EJ On the Internet column (his last article before he handed off to me). At that time blogging was a little known idea on the verge of revolutionizing student publishing through free and *easy* access to web presence.

- Now a better known but corresponding offshoot of blogging strives to help people manage all the information that everyman's access to web publishing has produced. Jay Cross addresses this issue, above, as does Will Richardson in his presentation: "RSS: The New Killer App for Educators" at http://home.learningtimes.net/learningtimes?go=679449. This is an excellent resource explaining RSS in simple terms and, more importantly to educators, how teachers can use RSS in their interactions with students and with peers for professional development, or other collaborative or administrative purposes.

RSS: New killer app for education

The significance of RSS lies in the free-access and open-source side of Downes's dichotomies. It's diametrically opposed to a journal subscription in that it's a way that users of the Internet can generate their own 'publications' by steering the information they want to their computers filed neatly in folders with easily accessible headlines and abstracts. It's a way of filtering all the information that flows over the Internet so that you see just what you think you might be interested in. It is suggested that a derivation of RSS might replace email since its exclusive use would avoid spam. RSS works off Internet sites that provide feeds, i.e. code that feed readers (or aggregators) can read (or interpret, like browsers can interpret HTML and other code) and deliver to your desktop. Many sites that people use to freely publish, such as blogs, YahooGroups, newsgroups, news and weather channels, libraries, and other organizations are increasingly capable of providing feeds that people with feed readers can read.

Many educational thinkers and writers are keeping blogs and updating these almost (and in some cases, as in Stephen Downes's) daily, and consumers of information who want to cut to the chase and harvest this information quickly will get a free account with a feed reader site such as Bloglines <http://www.bloglines.com> and set up their feeds so that they can glean what they need to know over coffee in the morning. This consumer could be a teacher whose students are keeping blogs, and the teacher might be reading their homework conveniently through a feed reader. Or the teacher (or worker, or any individual or professional) could be checking the musings of his or her workgroup through the same Internet tool that is feeding in the students' homework and the day's news, weather, and enlightened ramblings of favored net gurus.

For educators, who are these favored net gurus? Neither coincidentally nor surprisingly, some are the writers and presenters already quoted here, and subscribing to their feed at Bloglines or the feed reader of your choice would keep you current in some small sector of educational technology, on a day by day basis. Here are the frequently updated blogs of some of those cited in this article:

- Bronwyn's Web Journal: http://bronstuckey.bravejournal.com/
- George Siemens's elearnspace blog: http://www.elearnspace.org/blog/
- Jay Cross's Internet Time Blog: http://metatime.blogspot.com/index.html#topofpage
- Stephen's Web: http://www.downes.ca/
- Will Richardson's Weblogg-ed dot com: http://www.weblogg-ed.com/

Conclusion

In trying to think of a good conclusion to my article I decided to borrow one. Writing on the need for a "new literacies perspective" Leu et al (2004) conclude that:

Change increasingly defines the nature of literacy and the nature of literacy learning. New technologies generate new literacies that become important to our lives in a global information age. We believe that we are on the cusp of a new era in literacy research, one in which the nature of reading, writing, and communication is being fundamentally transformed.

This belief is increasingly being echoed by educators worldwide. It is incumbent on practitioners in the field to be aware of these echos and gain familiarity with the emerging technologies themselves, in communities with other practitioners, in such a way that they at least keep current, if not ahead of the curve, in applying them to the learning situations in which they practice.

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Editor's note: This article is dedicated to the persevering participants in my TESOL, Inc. Certificate Program courses.

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