

New Literacy's Cut and Paste and How Educators Can Assist Creativity

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Introduction

There is little point in teachers and writers arguing for the good old days of copper plate writing and the perceived decay of the English language through on-line modes. We have little choice but to embrace change, Facebook reality and consider the role of new media, so as to avoid being caught in a widening digital awareness gap. Language materials development then needs to align with digital literacy and related skills which are arguably developing more rapidly than the rate of print information. Once we define 'digital literacy' one can argue that our role as facilitators of education is to provide learning which is not seen by the Net generation or 'digikids' (Merchant, 2007) as fossilized. There is a need for wisdom enhancement where wisdom arises both from the use of technology to access intellectual capital and from wisdom in the prudent use of technology with many varied text types and ways of expressing oneself (Prensky, 2009). Drawing on an overview of rapidly changing uses of written and symbolic representation, it is suggested that new literacies link to sourcing information, in both senses of the word. The emphasis in this paper is on the varied literacies which can inform educational choices. Understanding the changed roles of formal and informal

language in digital literacy and varied text types can inform learners' choices, classroom practice and materials development..

Defining Digital Literacy

If one briefly examines the core part of describing digital literacy, namely defining literacy, there are functional models which view literacy as the mastery of decoding and using symbols with sub-skills as espoused in many planning and competency based statements. Kress states that 'literacy is the term to use when we make messages using letters as the means of recording that message'. (2003, p.23) while adding that 'the context of images and the text genre itself play a major part in contributing to being literate'. Others note the importance of literacy from a socio-cultural perspective where making meaning relates to the social context in which symbols are imbued with value related to the context; a contemporary example is the choice to 'unfriend' a potential contact in Facebook. On a broader scale, there are intellectual empowerment models which argue and analyse how literacy enriches and provides for the transformation of human activity. This latter aspect also informs debate about the digital divide (van de Bunt-Kokhuis et al, 2009). I would suggest that all these elements in defining literacy play a part in the debate on **digital literacy**. Clearly the addition of new media has added much complexity. Like any neologism or newly coined item of vocabulary, the term 'digital literacy' has spread in a variety of types of writing describing various technical aspects (Bruce & Peyton, 1999) as well as cognitive and sociological meanings (Glister, 1997).

In earlier work, the mediation of communication through varied media was central to defining digital literacy. Glister defined digital literacy as “the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers” (1997, p.2) yet we now have a plethora of devices, Web 2 and different modes of communication in social networking. Microsoft has its own use of the literacy term with certification based on a Digital Literacy Curriculum. The computing giant contends that “The goal of Digital Literacy is to teach and assess basic computer concepts and skills so that people can use computer technology in everyday life to develop new social and economic opportunities for themselves, their families, and their communities.”

<http://www.microsoft.com/about/corporatecitizenship/Citizenship/giving/programs/UP/digitalliteracy/default.mspx>. Such a framework for digital literacy focuses on the skills necessary for understanding and using computers along with much needed initiatives to address the digital divide of access to new media. While these much needed computer skills need to be acquired, for those of us involved in teaching and learning there remains a need to include language and symbol processing skills in a more encompassing definition of digital literacy.

Digital literacy requires more than computer skills and a computer license. Merchant (2009) argues for a broader definition beyond the skills directly evoked by competencies in usage of the tools. He suggests that ‘digital literacy could...be seen as the study of written or symbolic representation that is mediated by new technology. Its prime concern would be the production and consumption of the verbal and symbolic aspect of screen based texts’ (Merchant, 2007, p.121). He notes that a proliferation of binary ‘us and them’ definitions may not have

enhanced our understanding'. Such binary views include that of Gee (2004) who argues that those who are video gamers are better prepared for late capitalism, as opposed to those who do not video game. Prensky (2009) sees the digital world as a cleavage between 'digital natives' and 'incoming immigrants.' Yet a complex continuum of users and usage is developing exponentially as many users of digital media blend multiple modes of making meaning. Even defining the making of meaning in new media has been suggested as a new form of literacy. By distancing the defining of the field from printed literacy, the analysis of the changing modes of written and symbolic representation has in itself been defined as a new literacy (Lankshear & Knobel, 2003). Any definition is definitely linked to the mechanisms or tools which convey meaning, bringing a departure from print literacy, whether that be by personal computers, PDAs, mobile phones or 'cloud computing'. However such a departure from print literacy does not preclude the core part of the definition which is the crucial role of making meaning by reading the symbols which create literacy. Examples of the wider use of the term 'literacy' also occur in some language planning. In the United Kingdom 'literacy' has taken over the descriptive terms 'reading and writing' in planning as in the Primary National Strategy (PNS, 2006). Yet literacy as in school text and print based decoding needs to include a 'recognition that what may be called digital literacy can be quite different in character to print literacy, despite the tendency to use new technology to reproduce traditional practices of print literacy, particularly in educational contexts' (Merchant, 2007, p.118). It is to these differences between digital and print literacy that we now turn.

Digital Literacy and Print Literacy

Definitions of digital literacy are often based on the electronic delivery media of images or symbols of sounds or concepts; these letters or “print” are often misnamed by Malaysians as ‘alphabets.’ Clearly symbolic representation through writing in the new media is limited in defining current literacy, if only based on print literacy or word and letter based communication. Print itself is increasingly varied, visually augmented by images and delivered in varied modes. In 2010 by the second week of the year alone there had already been three new typeface fonts announced (New York Times Online, 2010). One could argue that ‘looks do matter’ in conveying meaning as the visuals of print are changing and symbols are increasingly used with the print message. This is a situation recently celebrated with over three decades of the Smiley with popular recognition of the face icon, as the Smiley has become interwoven in written communication for billions (Savage, 2009). Symbols such as this are now an accepted part of several written genres, as can be seen in E mails, SMSs and Web 2 usage. We are then involved in not only reading but also with looking at accompanying images which support print (Keddie, 2008). This is not a new language acquisition finding, as early reading is reliant on pictures when infants decode meaning (Synder, 1999). However, digital literacy is made even more complex by the modes of delivery, where navigating a screen is a speedy process which uses eye movements differ from print-based reading and pathways of unpacking meaning are often not linear. Merchant notes ‘that context is of central importance in any practice of literacy and the multi-modal nature of many screen-based texts highlights the importance of combining our reading of visual and other modes with digital writing as we make meaning.’ ((2007, p.120). Making meaning therefore requires varied reading approaches

because of the way both visual and written messages are presented in digital media.

Digital text is presented in more fluid modes than print based messages, as text is not enclosed in a defined start and finish, defined by page numbers or by a book cover. Reading and writing paths are often not linear with an increase in synchronous communication, adding the element of co-construction. Twitter is the most recent 'here and now' example of this in which one could argue that temporality often overrides the importance of content. Increasingly texts become collaborative and multivocal with overlaps creating the need for 'netiquette', as evident in everyday inquiries such as "but didn't you read the second E mail from person B before you replied to my mail". Paradoxically, digital message making is often in a shared communicative space which can be physically distant, creating a need for other kinds of communicative etiquette (Thurlow,2003).

With the spread of new media, such as 3G devices and wireless communication, further complexity occurs as boundaries between work and play are often being blurred. Mobile phones may be seen as part of leisure. Yet there are rich resources for learning at hand. For example they provide links to music, language learning sites, images and text at a learner's beck and call, as well as providing for recording of ones own spoken language; one of many modes of learning which educators may neglect. (Hahharainen, 2007). With the growth of broadband in many contexts, including modern classrooms, the local may become more 'glocal' and have a widespread social impact through information flows, as oppressive politicians and student activists are beginning to discover. With all these changes,

there have been recent calls to consider the social elements of digital literacy in pedagogy and teaching materials selection. Martin (2009) includes such educational and social aspects in describing digital literacy. He links how people, in particular seniors, see his or her social networks as well as social and intellectual needs to connect with others by making social choices and through synthesizing the vast amount of knowledge available. Such an emphasis on evaluation, analysis and synthesis has implications for language materials development and pedagogy. As teaching and learning move beyond print literacy with rapidly changing ways of making meaning, there is a need to consider practical approaches to digital literacy in educational contexts.

Approaches to Literacy

Photo-visual literacy

Writing began as pictures in which associative meanings became encoded with evolution away from purely pictographic representations. Clearly, the modern alphabet with its more abstract symbols or letters requires higher order cognition. Yet with internationalization in which computers cut across languages, we see an increasing use of graphical interfaces to encode meaning; reversing a centuries old trend. As digital processors with increasingly sophisticated hardware attain greater capacity to process visual data we see more intuitive graphic interfaces and the widespread use of UTube. Synder (1999) suggests that the use of images is a revival of a picture based literacy which benefits those who have a good visual memory and those who use intuitive- associative thinking. Eshet-Alkali (2004) describes *synchronic literacy* in which materials writers can take advantage of linking text, images, sound and motion in multimedia simulations. Her recent

research in a study of the 'living books' genre found that young learners perceived words as pictures by using digital, aural and visual stimuli in synchronicity. Recently this aspect has been explored on useful pedagogic sites such as <http://www.teflclips.com/>.

Photo-visual literacy has benefits for teaching and learning in languages and the use of synchronic literacy has led to a plethora of multimedia programmes, In this writer's experience a useful example is linking the visuals of speech patterns with listening comprehension and articulation. Yet such programmes in capital-intensive language laboratory showcases often highlight a lag in teacher awareness of technologies and the hardware and software's potential to stimulate digital literacy, and a younger generations' usage. Often administrators ignore the time needed for teachers to become 'nativised' into newer modes of thinking and visualizing (Prensky, 2009). However some reading skills do cut across any generational differences if one sees that text processing is linked to visual scanning and applicable in varied genres and delivery modes. It could be useful to highlight the differences between skimming, scanning and retention of detail reading in varied modes. One needs to then see that visual scanning is not an act of from top to bottom and that on-screen literacy also involves perceiving the role of different size fonts, varied colours and the placement of images and text in a screen. When one begins to read on screen and to use the hyperlinks to other pages or sites there is a further dimension as hyperlinks in on-screen environments often branch off in directions which one may not expect. .

Hypertext literacy

Hypermedia based situations require a literacy which differs from unpacking meaning in the linear form of books or the static images of photography or painting, as described earlier. This change is driven by technology. Earlier computer based literacy was often very linear because of the operating systems and programming (Towndrow, 2007). Data choices have increased exponentially in number and speed since the mid 1990s with sophisticated web developments, a growth in the amount of readily accessible knowledge and greater complexity in linking. A click may lead to a pathway which is not obviously linear in terms of levels of specificity or taxonomy.

The association through key words when searching the Net or using the array of choices on a web page often requires the reader to think in a networked lattice of nodes of meaning. This concept is perhaps easier to visualize if we picture the pedagogic tool of mind mapping, which often uses a branching approach. Mind mapping which is built on earlier concepts of semantic networking also mixes images and words in associative thinking with a tree like form. Mind mapping and screen usage often require one to be more associative in ones use of language, rather than linear as with frameworks such as the general topic sentence/ supporting detail type framework. Search engines and multiple choices on a web page screen present wider choices in unpacking text and images requiring effective users to adopt a branching hypertext literacy. Then there is a greater degree of freedom in navigating seas of information as we can toggle between many varied levels of specificity. Yet few educators explore the use of the learners' internet History to see how learners search on the internet. The search

information reveals much about learners own semantic networks and levels of vocabulary with which they operate. When we see how learners navigate on the internet, we also gain information on how intuitive or creative they are in their thinking. It can be argued that a creative approach of analysis, evaluation and synthesis is important if one is to see originality in using the vast amount of information available digitally.

Creative literacy

With the growth of computerized digital reproduction, the ability to copy images and large amounts of text has become easier than the older methods of cut and paste, which in this writer's earlier newspaper experience involved an eye for precise detail, a light table, scissors and glue. The speed of 'drag and drop' means that all users of digital information have opportunities to be very skilled copyists. This can challenge the concepts of being original in ones literacy. I am assuming here that literacy equals the use of letters, words and or images to represent one's own identity, thoughts or creativity.

The challenge to digital literacy is therefore whether a user of text and images adds a creative element, acknowledges the sources - both letter and image based- and contributes some original thought. It is also possible to argue that mere copying may mean that there is little cognition with shallow level processing. This is linked to pedagogy which assumes that deep processing is valued more than rote renditions of the obvious. As such, those working in the academic language field can and need to confront plagiarism with tools such as Turnitin (www.turnitin.com), or other anti-plagiarism systems (Blog Herald, 2009). These

can be effective as they push students to acknowledge sources and push them to learn to paraphrase with some originality. Bumiske (2000, p. 28) cited in Towndrow (2004) links creativity and the need for originality with ethical issues arguing that ‘Computer ethics must ...be an integral part of any class that uses computers- and a prerequisite for computer (*digital*) literacy’ This may need to be extended by teachers asking students to reflect on their text and their on line identity, to analyze sources and to contribute original thoughts which they have added to a piece of writing or in their use of graphics. Creative literacy therefore assumes the need to add some of one’s own identity to interacting with text and adopting an ethical stance by being critically aware.

Critical literacy

When critical is defined as expressing or using an analysis of the merits and faults of a work of art or literature, we often assume an elitist view of criticism. One could argue however that being critical of all information is valid when so much of written text and image creation available on line is often not checked for its validity or authenticity. Some tertiary students have suggested to this writer that “it must be true as it is in Wikipedia”. Researching the sources of text and images then becomes important as a part of digital literacy skills, as it is not enough to believe something because it is in print. Critical reading and the discrimination of fact and fiction are also needed for more than Wikipedia and E mail scams.

While many people are skeptical of gossip there may be a lack of transfer of such skepticism of the spoken word to the written word in digital contexts. Furthermore, in digital literacy we have speed creating the use of oral language in

the written form (Crystal, 2008) so that the importance given to written forms is merging with varied levels of informality. Many E mails use an informal oral register which can create problems in corporate settings. Some writers may hide behind the written word while using a spoken conversational tone for a message which they could not say face to face. Spoken grammar (Hall, 2003) then acquires an aspect of permanence and communicative weight by being a record on screen and possibly in libelous print. Such possibilities mean that the knowledge of genres and register along with levels of formality in written communication acquire great importance for those aiming for effective workplace communication. For educators we face the need to teach genres and varied text types linked to communicative purposes and we cannot avoid Facebook postings, SMS or E mail. It may be pedagogical useful to embrace these as text types for specific contexts. Face book short phrases are not going to be overly effective in job applications and the limits of 170 character in SMS are little reason for truncated prose when writing argumentatively. There are dangers in overvaluing the short and quick with little supporting evidence or detail (Eco ,2002). A critical literacy is therefore needed so that readers probe for sources and validity and also align the tone of language beyond the speedy demands of Facebook, Twitter and SMS. With all these changes and the proliferation of text types how one positions one's self in terms of a digital presence becomes important.. It is to this positioning of one's self and the need for socio- emotional literacy (Eshet-Alkalai, 2004) that we now turn.

Socio-emotional literacy

While there may be writers who have created fame, social or professional, through blogging, for most producers or consumers of digital writing or image making our digital identity is more of a prosaic social statement. With the growth of Facebook and social networking one could describe a personal on line presence as a ‘digital identity’ with the presentation of Self as a social part of networking. This is more than one’s choice of E mail name or one’s own Facebook page, web page or blog. Recent developments now involve opportunities to assume roles and identities in video games, be an avatar or create an imaginary world if one wishes with such virtual playgrounds as ‘Second Life.’ (Yet imaginative worlds and the use of groups to social network have many positive and negative factors as in all social settings, with the added dimension of the scale of billions of people and widespread opportunities to disguise one’s real identity. With examples such as cyber crime and dating on line one sees a need to educate users about source verification so as to enhance wisdom and safe guard one’s privacy (Prensky, 2009). When Prensky writes of enhancing wisdom he is talking intellectually of critical literacy and being wise about content and he is also suggesting that being socially wise is part of being digitally literate. Many recent news reports describe the Internet’s possibilities of being socially exciting, and beneficial in linking across the globe, but if one is not socially aware it could become threatening. In such a vast field of information one needs to consider the ethical use of information and how as producers of words and images we position our identity on line.

The expressions of emotion and sharing of one's self have many pedagogic possibilities as with learners' blogs and on line groups. However, being digitally literate may require understanding to what degree a digital identity is shared and with whom. Socio-emotional literacy (Eshet-Alkalai,2004) could be developed by analyzing how far the public and private worlds of celebrities become commoditized and the language which drives such processes. Using blogs and discussing the degree of exposure of one's self has proven motivating to some learners, in this writer's experience and it is evident that social and emotional issues abound with the ease of creating a digital identity. Nurturing a digital identity then requires skills of analysis of how one is represented, not just in terms of accuracy but also in terms of the communicative goals a digitally literate person wishes to achieve.

Conclusion

Effective digital literacy requires recognition of messages which convey meaning in very different ways when compared to the linear delivery of print literacy. It is evident that images play an important role as billions of people interact with graphic interfaces and swap files. This will not decline because of text messaging, but will probably expand with the growth of video phones, increased social networking on Web 2 and the increased capacity of broadband delivery. Images therefore play an important role in contemporary communication and can be useful in building digital literacy with related print linked to language development (Keddie, 2009).

There are cognitive changes with the rapidity of processing and unpacking meaning on screen where the display is not linear. From all the information links on screen, users have branches of information which they can follow creating a need to understand varied levels of specificity, such as is needed for effective internet searching. Yet there are productive as well as receptive uses of digitized information and clearly as educators we may need to foster ethical use of how learners position themselves in the global public domains of information. Digital literacy development will however depend on administrators, education providers and material developers developing an open approach to continuous learning. It is highly likely that much of what I have written here may have been overtaken by changes which you can see in Utube, Bluetooth about, hear online or read about in a student's blog.

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