

# What is happening to literacy?

Norbert Pachler, Institute of Education, London

**Abstract** – In this paper I attempt to show that under the prevailing economic, social, cultural, technological conditions new forms of appropriation and meaning-making are required, namely those that valorize the cultural resources and media practices of everyday life and that take seriously the subjectivities and identities of learners and their modes of (self)representation.

**Index Terms**—mobile complex, mobile learning, literacy, modes of representation, cultural resources, appropriation, meaning-making

-----

## A WORLD IN FLUX

In 2009 the Beyond Current Horizons programme (Facer, 2009) reported on potential futures for education as a result of current and projected social and technological changes. The research programme was tasked to develop a range of scenarios for the future of education 2025 and beyond based on evidence from a wide range of experts in the field. The final report posits the following long-term trends (pp. 3-5):

- for the information landscape to get denser, deeper and more diverse;
- for individuals to increasingly ‘wrap their information landscape around themselves’ in the form of a ‘personal cloud’ rather than managing it through institutions;
- for ‘machines’ to take on more and more roles previously carried out by humans and for non-human bodies to become more embedded into human bodies;
- for the importance of distance to decrease in terms of engagement with ‘information resources’ whilst geography remaining important in a number of respects;
- for learning about new and evolving technological environments to be a life-long endeavor;
- for there to be a growing disaggregation of information from institutions (broadly conceived) and a continuing weakening of institutional boundaries;
- for an increased polarization of the world of work as a result of demographic and technological developments;
- for there not to be easy solutions to complex educational issues.

In his challenge paper, David Buckingham (2008: 1), writing from a media education perspective, lists the following aspects of children’s relations with technology which, in his view, are likely to become of increasing significance (for education):

- the convergence of technologies and forms of communication;
- the ability to ‘multitask’, or engage flexibly with a diverse range of media;
- the individualization of access to media;
- the potential for communication and participation in creative media production;
- the changing role of media in identity formation;
- the difficulty in establishing the credibility of online information;
- the growing influence of commercial forces.

In my own work, in particular in the context of the London Mobile Learning Group ([www.londonmobilelearning.net](http://www.londonmobilelearning.net)) the ongoing transformations in the economy, culture, society, media, education and technology also play a central role. Of particular interest to us are the implications of these changes for education in general and literacy in particular. In recent work, together with Ben Bachmair and John Cook (2010) as well as Gunther Kress (2007), we have used the metaphors of the ‘mobile complex’ and ‘new habitus of learning’ respectively to describe and analyse the complexity of these changes,

which manifest themselves *inter alia* in terms of fluidity, provisionality and instability (Kress, 2008), and we explore their implications for learning. Whilst it is not possible here to discuss the metaphor of the mobile complex in detail, it is important to set out some key features.

One such feature are the structural changes, in particular the transferal of responsibility for risk-taking and meaning-making increasingly from the state and its institutions to the individual who is framed as a consumer of services provided by a global market. For a detailed discussion, see Pachler, Bachmair and Cook, 2010 and Kress and Pachler, 2007. Another dimension of structures, quite apart from the technological infrastructure available, are dispositional and social milieu-related differences in learners. Drawing on Giddens (1991) and Schulze (1992), Bachmair (2007: 134) observes that personal life-worlds are characterized by the individualization of collective risks and a self-referential frame of personalized experiences of reality and, with reference to empirical data from Germany, he shows the importance of a segmentation of society into milieus which act as socio-cultural frames for the identification of media patterns. Yet another aspect of structures is the impact of these changes on power, authority and conventions incl. the blurring of boundaries and the questioning of 'canonicity' (see e.g. Kress, 2008).

Another key feature of the mobile complex are the changes to the nature, production and use of cultural resources in society linked to a growing range of media and devices and rapidly changing media habits and social behaviour in (young) people's everyday life-worlds, in particular in relation to friendship- and interest-driven online activity in which social and recreational media use become sites for (peer-based) learning through new genres of participation – in Ito et al.'s terms (2008) 'hanging out', 'messaging around' and 'geeking out'. We refer to this as 'cultural practices'. Jim Gee, most recently in a blog post dated 12/2/2011 (<http://www.jamespaulgee.com/node/50>), puts forward the term 'passionate affinity-based learning' for people learning something connected to a shared endeavour, interest or passion, often online. He notes that people associate with, are attracted to or have affinity with others because of a shared endeavour or interest and not because of other people's 'credentials', i.e. formal qualifications. In the work of the LMLG we similarly stress the importance of learners' interests and appropriation in relation to individually constructed life-worlds in order to be able to bring about transformative engagement with the curricular ground provided by educational institutions. For a detailed discussion of appropriation, see Pachler, Cook and Bachmair, 2010.

A third key feature of the mobile complex is the emergence of a new habitus of learning in which learners constantly view their life-worlds with expectancy and contingency and see it framed both as a challenge and as a potential resource for learning in which their expertise is individually appropriated in relation to personal definitions of relevance. We view learning as a socio-culturally contingent process of meaning-making through communication among people across contexts utilizing various semiotic resources characterized by a range of affordances. (see also Kress and Pachler, 2007 and Böck and Kress, 2010) In the socio-cultural ecology of the LMLG (Pachler, Bachmair and Cook, 2010) refer to this as 'agency' and we consider 'cultural resources' to include various media, social networking sites, mobile devices and services etc. and related literacies and habitus.

In their interrelationship these features determine the learners' capacity to act on the world (agency), the stable routines they engage in in their everyday lives (cultural practices) and the socio-cultural and technological structures that govern their being in the world.

## **IMPACT ON LITERACY**

One of the prime reasons why literacy is such an important lynchpin in the current processes of transformation, and why there is such a keen interest in it as evidenced *inter alia* by the myriad of terms littering the specialist discourse and blogosphere alike (literacies, new literacy, new literacies, digital literacy, digital literacies, electronic literacy, visual literacy, critical media literacy, literacy for the 21<sup>st</sup> century etc.) is the fact that learners do not act directly on the world when making-meaning of and in it and when they seek to augment their inner, conceptual resources but that their actions are mediated by socio-semiotic tools such as language as well as by material artefacts such as technology. Literacy must be seen as an essential and core element of education and schooling in that it plays a crucial role in empowering learners to gain access to, and utilise effectively key cultural resources (see also Kress, 2008 and Cope and Kalantzis, 2009) and in that it has a significant impact on the personal welfare of individuals (as well as more widely on society and the economy) (Kirsch et al., 2002).

Importantly, as the term 'socio-semiotic' and the earlier definition of learning implies, literacy is not merely a cognitive phenomenon, i.e. governed by mental processes, but comprises a set of social practices with cultural resources that differ across domains/genres and social groups (see Gee, 2010). Gee (2010) also stresses the importance of situated cognition and argues that human understanding is not the result of storing general concepts in the head or applying abstract rules but, instead, based on using prior experiences, which differ across social and cultural groups, as a guide for action.

Carrington and Marsh (2008: 4) explore changes in literacy as part of the Beyond Current Horizons project. They posit that the range of texts will expand together with 'repertoires of practice' required to develop mastery in their consumption as well as production and distribution. At the same time they remind us that established models of literacy such as Freebody and Luke's four resources model (1990) – code breaker (coding competence), meaning maker (semantic competence), text user (pragmatic competence) and text critic (critical competence) continue to apply. And, Carrington and Marsh outline the following key concepts for the future of literacy:

- ubiquity: building connections between people and spaces within which people live and work though access to texts at the point of need;
- convergence: integrated forms of digital text;
- personalisation: a bricoleur approach towards textual construction;
- mobility: use of portable and personal technologies for more authentic and engaging learning experiences bridging school and community contexts and opening up new forms of inquiry;
- remix, mashups and copyright.

From the work of the LMLG similar issues and themes emerge, in particular convergence. By comparison with Carrington and March, the LMLG considers convergence important for two main reasons: on the one hand, because it captures the multi-functionality of mobile devices in particular combining a wide range of tools in one device characterised by important resources and affordances for meaning-making, representation and content generation such as, for example, copy-and-paste; on the other hand because of the access to internet-based services, tools and networks and related context generation they afford. For a detailed discussion of user-generated contexts, see Cook, Pachler and Bachmair, 2011.

The normalization of mobile devices has attracted a mixed response from educational institutions, practitioners, policy makers and the popular media. The former tend to be worried about issues such as e-safety, cyberbullying, associated crime. The latter frequently express concern about an alleged negative impact on standards of literacy. John Humphry's, for example, asserts that texting wrecks 'our' language (2007):

It is the relentless onward march of the texters, the SMS (Short Message Service) vandals who are doing to our language what Genghis Khan did to his neighbours eight hundred years ago. They are destroying it: pillaging our punctuation; savaging our sentences; raping our vocabulary. And they must be stopped.

Researchers have taken up the gauntlet in recent years to investigate such assertions and evidence is starting to emerge which takes issue with them: various contributions to a recent special issue of the *Journal of Computer Assisted Learning* (27-1), for example, conclude that – according to the limited amount of experimental research available to date – the links between 'textese' use and literacy skills in children "actually seems to be positive" (Kemp, 2011, p. 1).

As Kress (2008: 344-5) notes, the changes in structures, agency and cultural practices discussed above manifest themselves in a range of significant changes in forms of text making, knowledge production and in the disappearance of a number of boundaries: around epistemology and ontology; concerning social-interactions; around power, authority and convention; and between knowledge and information. The 'world' of communication has seen significant changes in recent decades with the medium of screens and the mode of image becoming increasingly important leading to reduction in the significance of the mode of writing and print media. New media and social structures lead to texts becoming increasingly multi-modal, dynamic, fluid, contingent, multiply authored and 'shared' and, as a consequence, more provisional. The question arises, what cultural techniques are appropriate in encoding and decoding etc. artefacts relating to a wide range of fragmented and individualised practices across different and heterogeneous

ous groups. In the context of communication practices involving mobile devices this includes the need to develop an understanding of the affordances and limitations of these devices and to acquire practices such as identifying, evaluating and installing applications that augment the basic, pre-determined functionality of devices (cf. factory settings) to personalise and enhance access, storage and retrieval to information. Mobile phone and related genres such as texting, for example, require a redefinition of linguistic principles in relation to redundancy and recursivity due to limitations in representational resources imposed by the technology relating, for example, to maximum message length and relative complexity of inputting text on some models such as menu-based, navigational rather than textual input which leads to text-generation by selection. At the same time, the camera function enables the easy capturing of aspects of users' life-world as digital artefacts in the form of still or moving images for subsequent re-contextualisation. For a detailed discussion, see Pachler, Bachmair and Cook, 2010. Adami (2010: 44) shows that user-generated content with mobile phones is mainly produced through a process of selection and transformation of (snippets of) text which are combined and re-combined into new texts and re-contextualised in new contexts which in turn leads to a "scattering of traditional coherence patterns between its so-formed representation and its new context" (p. 45). The latter is a concept also used by Hug (2010) in his discussion of mobile learning with mobile devices. Adami likens these processes to the techniques of pastiche and bricolage (p. 46). In addition, she argues that instead of coherence determining the success of communication, in the context of 'mobile text' "the usability of forms (re-signified in different contexts)" is foregrounded rather than the intended meaning; as "a consequence, communication becomes an individualized participation in chains of semiosis according to the participants' interests" (p. 47).

#### IMPLICATIONS FOR PEDAGOGY

The importance of an effective response by schools to the mobile complex is regularly underlined by the results of the Programme for International Student Assessment (PISA) which show that a large number of students in many countries demonstrate limited literacy skills, that reading is the aspect of schooling most influenced by families and practices in every-day life and that in terms of literacy young males from low socio-economic and migration backgrounds are particularly affected in relation to literacy (see e.g. Kirsch et al., 2002); the LMLG refers to young people from these backgrounds as 'at-risk' learners.

There exist a number of pedagogical responses to the transformations discussed at the outset of this paper, notably by the New London Group (1996; Cope and Kalantzis, 2009) as well as by Kress.

The New London Group put forward the notion of a pedagogy of multiliteracies which emphasized a lateral definition of texts and argued for the need to ensure all forms and resources of representation were included and viewed learners as makers and remakers of signs and transformers of meaning. In so doing they frame the learner as designer of meaning rather than recipients and/or reproducers of "received, sanctioned and authoritative representational forms" (Cope and Kalantzis, 2009: 175).

In various publications in the 2000s, Kress argues the need for a curriculum of 'navigational aids' in relation to text making, reading, discernment and discrimination. By that he means a curriculum that focuses on judgement and evaluation in ethical and aesthetic issues and moves from critique to design in which learners design and re-design based on their interests. (see e.g. 2008) For Kress (2009) the learner as interpreter is central who brings his/her interest to the material to reshape it. Important in this context is also an issue frequently raised in the field of media education, namely that texts, in particular commercially produced ones, come 'branded' and "shaped through an economics of sponsorship, if not overt advertising" (Jenkins, 2006: 16).

Böck (2010) puts forward the case for a pedagogy of social inclusion and mobile devices without fully delineating its constituent parts. Drawing on Freire (1972) it aims at "changing horizons, potentials and affiliations of individuals and groups at the margins of a society ... in order to connect them with groups in the mainstream of society" (Böck, 2010: 32).

The LMLG is also working on a didactic model around a number of parameters and focal points. In Pachler, Bachmair and Cook (2010) we identify four parameters - learning sets, relationship to the object of learning, institutional emphasis on expertise and modes of representation - in relation to which pedagogical decisions can be made along a continuum between different poles:

---

Parameter A: Learning sets

Pole: Practice of the school – Pole: Practices of mobile media

Parameter B: Relationship to the object of learning

Pole: Mimetic reproduction – Pole: Personal reconstruction

Parameter C: Institutional emphasis on expertise

Pole: School curriculum – Pole: Personal expertise

Parameter D: Modes of representation

Pole: Discrete (mono media, mono modal) – Pole: Convergent

---

For example, a decision can be made to focus on convergent modes of representation whilst focusing on the school curriculum. In subsequent work (Bachmair, Pachler and Cook, 2011 and Friedrich, Bachmair and Risch 2011) we have started to elaborate on and exemplify these, in particular by delineating what we call focal points for teachers and scenarios of use. We distinguish the following focal points:

- to integrate informal learning by means of the mobile phone;
- to set up episodes of situated learning;
- to generate learning and media contexts;
- to construct conversational bridges;
- to support students as experts of media use in everyday life within the school; and
- to set up responsive contexts for development and learning.

Episodic planning can, for example, start from using mobile devices to getting to know the subject matter, for example a particular phoneme and move on from there to practicing it and then to deepen one's understanding of it.

Two important dimensions of a pedagogical response to the ongoing transformations in the work of the LMLG are a focus on composition and narratives (incl. learning trails) as participatory meaning-making (see e.g. Bachmair and Pachler, forthcoming). Both are for us dynamic phenomena with an experiential dimension (imagination, performance, self-expression, engagement in social and cultural practices etc.) which function as aids for meaning-making by which what is known is reconfigured for making sense of experiences and for 'learning how to be' in particular contexts (see e.g. Polkinghorne, 1988). In Kress' terms (cf. 'navigational aids'), they can be seen as mechanisms to mediate and scaffold learners' individualised view of the world within existing structures. Notably for us, discontinuity is an important cultural and textual feature in the engagement with, and production of contemporary texts which needs to be addressed in the field of (language) education.

-----

**Norbert Pachler** is Professor of Education at the Institute of Education, University of London. In addition to technology-enhanced teaching and learning, his research interests include teacher education and development and all aspects of foreign language teaching and learning. He has published widely, researches, teaches and supervises in these fields. He is the convenor of the London Mobile Learning Group (<http://www.londonmobilelearning.net>), which brings together an international, interdisciplinary group of researchers from the fields of cultural and media studies, sociology, (social) semiotics, pedagogy, educational technology, work-based learning and learning design.

## REFERENCES

- Adami, E. (2010) 'Mobile media, mobile texts: assessing the abilities needed to communicate and represent in the contemporary media landscape.' In *International Journal of Mobile and Blended Learning* 2(3), pp. 42-50
- Bachmair, B. (2007) 'M-learning and media use in everyday life.' In Pachler, N. (ed) (2007) *Mobile learning: towards a research agenda*. London: WLE Centre, pp. 105-152. Available at: [http://www.wlecentre.ac.uk/cms/files/occasionalpapers/mobilelearning\\_pachler\\_2007.pdf](http://www.wlecentre.ac.uk/cms/files/occasionalpapers/mobilelearning_pachler_2007.pdf)
- Bachmair, B. and Pachler, N. (forthcoming) 'Composition and appropriation in a culture characterized by provisionality.' In Böck, M. and Pachler, N. (eds) *Multimodality and social semiosis: communication, meaning-making, and learning in the work of Gunther Kress*. New York: Routledge
- Bachmair, B., Pachler, N. and Cook, J. (2011) *Parameters and focal points for planning and evaluation of mobile learning*. Available at: [http://www.londonmobilelearning.net/downloads/Parameter\\_flyer.pdf](http://www.londonmobilelearning.net/downloads/Parameter_flyer.pdf)
- Böck, M. (2010) 'Mobile learning, digital literacies, information habitus and at-risk social groups.' In *International Journal of Mobile and Blended Learning* 2(3), pp. 30-41
- Böck, M. and Kress, G. (2010) 'Soziale Kontexte der digitalen Kommunikation und Probleme der Begrifflichkeiten: 'New Literacy Studies', 'Multiliteracies' und 'Multimodality' as Beispiele.' In *medienimpulse-online* 4/2010. Available at: <http://www.medienimpulse.at/articles/view/271>
- Buckingham, D. (2008) *Childhood 2025 and beyond: children, media and technology*. A Beyond Current Horizons challenge paper. Available at: [http://www.beyondcurrenthorizons.org.uk/wp-content/uploads/bch\\_challenge\\_paper\\_childhood\\_david\\_buckingham2.pdf](http://www.beyondcurrenthorizons.org.uk/wp-content/uploads/bch_challenge_paper_childhood_david_buckingham2.pdf)
- Carrington, V. and Marsh, J. (2008) *Forms of literacy*. A Beyond Current Horizons evidence paper. Available at: [http://www.beyondcurrenthorizons.org.uk/wp-content/uploads/ch3\\_final\\_carringtonmarsh\\_formsofliteracy\\_20081218.pdf](http://www.beyondcurrenthorizons.org.uk/wp-content/uploads/ch3_final_carringtonmarsh_formsofliteracy_20081218.pdf)
- Cook, J., Pachler, N. and Bachmair, B. (2011) 'Ubiquitous mobility with mobile phones: a cultural ecology for mobile learning.' In *E-learning and Digital Media. Special Issue – Media: digital, ecological, epistemological* 8(3), pp. 181-196
- Cope, B. and Kalantzis, M. (2009) "'Multiliteracies': new literacies, new learning." In *Pedagogies: An International Journal* 4(3), pp. 164-195
- Facer, K. (2009) *Educational, social and technological futures: a report from the Beyond Current Horizons Programme*. Futurelab/DfES. Available at: <http://www.beyondcurrenthorizons.org.uk/outcomes/reports/final-report-2009/>
- Freebody, P. and Luke, A. (1990) 'Literacies programs: debates and demands in cultural contexts.' In *Prospect: Australian Journal of TESOL* 5(7), pp. 7-16
- Freire, P. (1972) *Pedagogy of the oppressed*. Harmondsworth: Penguin
- Friedrich, K.; Bachmair, B. and Risch, M. (2011) *Mobiles Lernen mit dem Handy. Herausforderungen und Chancen für den Unterricht*. Beltz Verlag, Weinheim, Basel 2011
- Gee, P. (2010) *New digital media and learning as an emerging area and 'worked examples' as one way forward*. Chicago: MacArthur Foundation. Available at: [http://mitpress.mit.edu/books/full\\_pdfs/New\\_Digital\\_Media.pdf](http://mitpress.mit.edu/books/full_pdfs/New_Digital_Media.pdf)
- Giddens, A. (1991) *Modernity and self-identity. Self and society in the late modern age*. Oxford: Polity Press
- Hug, T. (2010) 'Mobile learning as 'microlearning': conceptual considerations towards enhancements of didactic thinking.' In *International Journal of Mobile and Blended Learning* 2(4), pp. 47-57
- Humphrys, J. (2007) 'I h8 txt msgs: how texting is wrecking our language.' In *Daily Mail*. September 24. Available at: <http://www.dailymail.co.uk/news/article-483511/I-h8-txt-msgs-How-texting-wrecking-language.html>

- Ito, M., Horst, H., Bittanti, M., boyd, d., Herr-Stephenson, B., Lange, P., Pascoe, C. and Robinson, L. (2008) *Living and learning with new media: summary of findings from the Digital Youth Project*. MacArthur Foundation: Chicago. Available at: <http://digitalyouth.ischool.berkeley.edu/files/report/digitalyouth-WhitePaper.pdf>
- Jenkins, H. (2006) *Confronting the challenges of participatory culture: media education for the 21<sup>st</sup> century*. Chicago: MacArthur Foundation. Available at: [http://mitpress.mit.edu/books/full\\_pdfs/confronting\\_the\\_challenges.pdf](http://mitpress.mit.edu/books/full_pdfs/confronting_the_challenges.pdf)
- Kemp, N. (2011) 'Mobile technology and literacy: effects across cultures, abilities and lifespan.' In *Journal of Computer Assisted Learning* (27(1)), pp. 1-3
- Kirsch, I., de Jong, J., Lafontaine, D., McQueen, J., Mendelovits, J. and Monseur, C. (2002) *Reading for change. Performance and engagement across countries. Results from PISA 2000*. Paris: OECD. Available at: <http://www.oecd.org/dataoecd/43/54/33690904.pdf>
- Kress, G. (2008) 'Social, educational and semiotic change: learning in a world marked by provisionality.' In Seipold, J. (ed) *Media art culture. Media culture with reference to documenta 12*. Kassler Beiträge zur Erziehungswissenschaft 1. Kassel University Press, pp. 339-354
- Kress, G. (2009) 'Comments of Cope and Kalantzis.' In *Pedagogies: An International Journal* 4(3), pp. 205-212
- Kress, G. and Pachler, N. (2007) 'Thinking about the 'm' in m-learning.' In Pachler, N. (ed) *Mobile learning: towards a research agenda*. London: WLE Centre, pp. 7-32. Available at: [http://www.wlecentre.ac.uk/cms/files/occasionalpapers/mobilelearning\\_pachler\\_2007.pdf](http://www.wlecentre.ac.uk/cms/files/occasionalpapers/mobilelearning_pachler_2007.pdf)
- New London Group (1996) 'A pedagogy of multiliteracies: designing social futures.' In *Harvard Educational Review* 66, pp. 60-92
- Pachler, N., Bachmair, B. and Cook, J. (2010) *Mobile learning: structures, agency, practices*. New York: Springer
- Pachler, N., Cook, J. and Bachmair, B. (2010) 'Appropriation of mobile cultural resources for learning.' In *International Journal of Mobile and Blended Learning* 2(1), pp. 1-21
- Polkinghorne, D. (1988) *Narrative knowing and the human sciences*. Albany, NY: State University of New York
- Schulze, G. (1992) *Die Erlebnisgesellschaft. Kulturosoziologie der Gegenwart*. Frankfurt a. M.: Campus. 2<sup>nd</sup> edition.