

# **Is technology changing the meaning of literacy, and if so, then how is it changing teaching and learning in adult literacy programs?**

*Published: June 10 2013*

The other day I was having supper with my family in a restaurant. Nearby, at other tables, were two young families with children under the age of ten. Each of the four children had their own I-Pad. They spent the time before and after dinner totally engrossed on their computers. I was struck by the fact that I-Pads, and computers in general, are an integral part of kids' lives. And it made me think about how technology is changing the way we live and learn.

## *Some interesting statistics*

Did you know...

- 27.4 million Canadians are online (80% of the population)
- 93% go online for product information
- 60-70% of Canadians have a mobile phone
- 80% of those use a smart phone

(September 2012 Google Engage Canada Conference)

The International Adult Literacy Skills Survey (IALSS, 2005) told us that 42% (over 9 million) of Canadian adults do not have the reading, writing and numeracy skills needed to function well in their lives. Ironically, according to the statistics from Google Engage, many of those 42% of Canadians are online and using their mobile or smart phones to search for information and communicate with one another.

Using FaceBook, texting, emailing and reading online – our ways of communicating are changing and, likewise, our ways of learning. Today, we are far beyond using paper and pencil as primary tools for building literacy. New technologies are transforming the way we interact with, and use text, for reading, writing and numeracy.

Using technology for education is not new. In 1925, the Canadian National Railroad radio network began providing educational programming as a public service to children and adults (Buck, 2006). In 1927, CKUA, Canada's first public broadcaster operating out of the University of Alberta, started broadcasting concerts, poetry readings and university lectures, and the Department of Education of Nova Scotia's broadcasts started in 1928 (Keast, 2005).

What is different today is the rapid and unprecedented growth in the use of technologies in all areas of our lives including learning and teaching. Technology is more than the invention of new machines, and much more complicated than just learning how to use a cell phone or personal computer. New technologies (the Internet in particular) are influencing how we understand and learn about the world, locally and globally.

When we think about using technology for learning, it helps to consider two different but connected approaches.

### ***Using technology to learn***

The first approach looks at technology as a set of tools (electronic machines) that can be used to help people improve what are considered traditional literacy skills (i.e. reading, writing and numeracy). For example, Speech-Assisted Reading and Writing (SARAW) at Bow Valley College is a talking computer program that teaches basic reading, writing and math skills to adults who are reading and writing at levels between beginners and Grade 6. Dragonally Speaking and Kurzweil are other examples of speech to text technologies that help adults with dyslexia and other learning disabilities as well as English Language Learners.

### ***Learning to use technology***

The second approach does not separate traditional literacy practices from digital literacy. A study by Australia's National Centre for Vocational Education Research (NCVER) proposes that "literacy education is equally and simultaneously digital literacy education." The study calls for "a fundamental shift in understandings of what constitutes adult literacy teaching and learning, and recognition that adult literacy programming should be re-envisioned to meet the learning needs of learners in a society that is changing based on the pervasive availability and use of technologies." (Moriarty, M., 2011)

Digital literacy is more than simply being able to turn on a computer. The NWT Literacy Council ([http://www.nwt.literacy.ca/digital\\_literacy.htm](http://www.nwt.literacy.ca/digital_literacy.htm)) has developed the following introduction to digital literacy within the framework of adult literacy:

"Digital literacy is the ability to locate, organize, understand, evaluate, and create information using digital technology. The term 'digital literacy' relates to the functional skills of knowing about and using digital technology. These include:

1. The ability to analyze and evaluate digital information
2. Knowing how to act sensibly, safely and appropriately online
3. Understanding how, when and why to use technology"

(Moriarty, M., Finding Our Way, p.17)

Digital literacy has become fundamental to communication (e.g. mobile phones) and for many people, using digital technologies enable fuller participation in life and learning. The challenge for adult literacy practitioners/educators is how do we integrate more traditional teaching approaches to building literacy skills with the emergence of what is called digital literacy skills? The technology jargon alone can be overwhelming for both practitioner and learner. "Digital Literacy" for example, is changing how literacy is defined and understood. A fundamental question is: How do we as instructors and tutors help learners to both use technology to learn, and learn how to use technology?

The AlphaPlus 2012 report *Incorporating Digital Technologies into Adult Basic Education* (<http://alphaplus.ca/en/web-tools/online-publications-a-reportsgroup1/incorporating-technologies-in-abe-2012.html>) presents five vignettes of community organizations incorporating technology into their programming. They speak about these promising practices, among others:

1. **Access** to up-to-date computers with Internet, a printer and speakers.
2. **Sustainability:** People need to know that once they commit to learning that the resources will continue to be there.
3. **Integrity** in learning programs requires opportunities for practicing new skills.
4. **Trained literacy educators** who can recognize and provide support in the moments when people's literacy needs and interests shift. (For example from being curious to surfing the net to creating web pages; from reading other people's writing to creating their own texts.)

“The technologies used in programs should reflect the everyday lives of learners and support opportunities for practice, moving closer toward a closer match between formal curricula and learners' everyday technology uses” (Smythe, 2012).

Other studies (Jimoyiannis & Gravani, 2011) emphasize that the principles of adult learning still apply to teaching technology, namely:

- a) self-directed learning as a preferred model
- b) adults' prior experience and interests as a rich resource for the course
- c) a task based, rather than a technology centered approach (e.g. learning to do online banking, researching health resources) and
- d) the importance of the wider social context in technology cultivation and learning.

Digital technologies are constantly evolving. What are the implications for training and professional development for practitioners? Adult literacy practitioners are particularly challenged to both develop their own technology skills and understanding of digital literacy, and to create a meaningful approach to the inclusion of digital literacy skills in their programming. Ongoing training and professional development for educators is essential if we are to provide coherent, integrated programs that encompass all literacies, traditional and digital (Snyder et al, 2005).

“We have confirmation that we are headed in the right direction with the inclusion of online technologies for the instruction and engagement of adult learners, even those with the most limited skills and language proficiencies. What the field needs now is a compass and a few strategic landmarks to chart a course forward with online technologies – our learners already inhabit the landscape.”

(National Institute for Literacy, 2008, p. 34)

*Stories from the Field* is a research project that hopes to uncover some navigational themes that best support literacy learning and teaching in the areas of reading, writing, numeracy and technology. We invite you to join the discussion with your points of view, teaching and learning practices, and references that guide you as instructors and tutors as you steer your own course

through this digital landscape.

Please contact Sandi Loschnig at [sloschnig@bowvalleycollege.ca](mailto:sloschnig@bowvalleycollege.ca) or 403-283-6343 for more information and to share your stories from the field.

## **References**

AlphaPlus (2012). *Learning Together with Digital Technologies: Illustrative Case Studies*: Retrieved May 18, 2013, from <http://alphaplus.ca/en/web-tools/online-publications-a-reportsgroup1/learning-together-with-technologies-2012.html>

Breikss, Chris. (2012, Nov.21). Infographic: Canadian Internet Usage Statistics on Mobile, Search and Social. [Web blog]. Retrieved May 20, 2013 from [www.6smarketing.com](http://www.6smarketing.com)

Buck, George H., (2006). The first wave: The beginnings of radio in Canadian distance education, *Journal of Distance Education*, 21 (1), 75-88.

Jimoyiannis, A. & Gravani, M. (2011). Exploring Adult Literacy Using Learners' and Educators' Perceptions and Experiences: The Case of the Second Chance Schools in Greece. *Educational Technology & Society*, 14 (1), 217-227.

Keast, R. (2005). A brief history of educational broadcasting in Canada. Canadian Communications Foundation website. Retrieved May 23, 2013 from [www.broadcasting-history.ca/index3.html?url=http%3A//www.broadcasting-history.ca/programming/History\\_of\\_Educational\\_Broadcasting.html](http://www.broadcasting-history.ca/index3.html?url=http%3A//www.broadcasting-history.ca/programming/History_of_Educational_Broadcasting.html)

Moriarty, Maria (2011). *Finding Our Way: Digital Technologies and E-Learning for Adult Literacy Students, Educators and Programs Literature Scan: 2005-2011*, AlphaPlus, Toronto, Ontario. Retrieved May 18, 2013 from <http://alphaplus.ca/en/web-tools/online-publications-a-reportsgroup1/finding-our-way.html>

Silver-Pacuilla, H. & Reder, S. (2008). *Investigating the Language and Literacy Skills Required for Independent Online Learning*, National Institute for Literacy, Washington, DC. Retrieved May 20, 2013 from <https://lincs.ed.gov/publication/pdf/NIFLOnlineLearningReport.pdf>

Smythe, Suzanne (2012). *Incorporating Digital Technologies in Adult Basic Education: Concepts, Practices and Recommendations*. Retrieved February 9, 2013, from <http://alphaplus.ca/en/web-tools/online-publications-a-reportsgroup1/incorporating-technologies-in-abe-2012.html>

Snyder, I., Jones, A., & Lo Bianco, J. (2005). Using information and communication technologies in adult literacy education: New practices, new challenges. NCVER. <http://www.ncver.edu.au/publications/1608.html>

Snyder, I. et al. (2005). Using ICT in adult literacy education: Guidelines for reform. *Literacy and Numeracy Studies*, (14) 1, 17-32.