

## Chapter XV

# Mind the Gap!: New ‘Literacies’ Create New Divides

Andrew D. Madden, University of Sheffield, UK

J. Miguel Baptista Nunes, University of Sheffield, UK

M. A. McPherson, University of Leeds, UK

Nigel Ford, University of Sheffield, UK

Dave Miller, University of Sheffield, UK

---

### Abstract

---

*The rapid incursion of information and communication technologies (ICT) into the classroom has meant that, within the space of a few years, computers have moved from being peripheral to being an integral part of the learning environment. However, our perceptions of a technology are affected by the age at which we encounter it. This chapter draws on the findings of a number of research projects at the University of Sheffield. These findings are used to explore some of the ‘generation gaps’ that arise from differing perceptions of learning technologies. The data discussed provide insights into the ICT-based generation gaps that currently exist between and within groups of students, teachers and parents. It is argued that a fundamental gap may exist between students differing in age by as little as 5 years. Results from a related project exploring Networked Information and Communication Literacy Skills (NICLS) are used to introduce a discussion on the nature of any skills gap that must be addressed in light of these generation gaps.*

## Introduction

---

### The Sudden Rise of Computers in the Classroom

---

Computing technologies have been criticized by educationalists and educational philosophers, many of whom feel that they promote shallow learning, mindless copying and pasting, and the decontextualized acquisition of definitions and facts. In short, they are dismissed as being a tool for:

*“jogging the memory, not for remembering ... [providing students] with the appearance of intelligence, not real intelligence ... they will seem to [have] wide knowledge, when they will usually be ignorant.”*

The quotation above however, is not from a modern educationalist, mistrustful of new technology, but is adapted from Plato's 'Phaedrus' (p. 69), in which the author recalls Socrates' criticisms of writing.

It is easy to forget that reading and writing are ICT and, like all technological innovations, would have been subject to reactions ranging from unquestioning enthusiasm to reactionary scepticism. Reading and writing, however, permeated society over hundreds of years, so systems could adapt gradually. ICT has had a much more sudden impact.

Douglas Adams (1999) observed that our attitude to technology is determined by the age at which we first encounter it:

1. Everything that's already in the world when you're born is just normal;
2. Anything that gets invented between then and before you turn 30 is incredibly exciting and creative, and with any luck you can make a career out of it;
3. Anything that gets invented after you're 30 is against the natural order of things and the beginning of the end of civilization as we know it, until it's been around for about 10 years, when it gradually turns out to be alright, really.

Madden, Nunes, Ford, McPherson, and Miller (2003b) looked at the development of various computer technologies in light of this analysis. Adams, somewhat arbitrarily, selected 30 as the age above which technological developments cease to be readily acceptable. Madden et al. considered developments in computing in the 30 years prior to their report. It provided a useful reminder of the speed with which computers have impacted on society.

17 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/mind-gap-new-literacies-create/24042](http://www.igi-global.com/chapter/mind-gap-new-literacies-create/24042)

## Related Content

---

### The Role of ICTs in Rural Schools of Patagonia

Flavio Caldas and Ana García-Valcárcel Muñoz-Repiso (2013). *Multiculturalism in Technology-Based Education: Case Studies on ICT-Supported Approaches* (pp. 38-58). [www.irma-international.org/chapter/role-icts-rural-schools-patagonia/69573](http://www.irma-international.org/chapter/role-icts-rural-schools-patagonia/69573)

### Supporting Foreign Language Vocabulary Learning Through Kinect-Based Gaming

Mehmet Fatih Urun, Hasan Aksoy and Rasim Comez (2017). *International Journal of Game-Based Learning* (pp. 20-35). [www.irma-international.org/article/supporting-foreign-language-vocabulary-learning-through-kinect-based-gaming/171666](http://www.irma-international.org/article/supporting-foreign-language-vocabulary-learning-through-kinect-based-gaming/171666)

### The Influence of Cognitive Styles on Learners' Performance in e-Learning

Robert Z. Zheng (2012). *Interactivity in E-Learning: Case Studies and Frameworks* (pp. 95-115). [www.irma-international.org/chapter/influence-cognitive-styles-learners-performance/61685](http://www.irma-international.org/chapter/influence-cognitive-styles-learners-performance/61685)

### Towards More Intelligent Assessment Systems

Sonya Radenkovic, Nenad Krdžavac and Vladan Devedžic (2008). *Technology Enhanced Learning: Best Practices* (pp. 258-283). [www.irma-international.org/chapter/towards-more-intelligent-assessment-systems/30198](http://www.irma-international.org/chapter/towards-more-intelligent-assessment-systems/30198)

### Training Law Enforcement Officers to Identify Reliable Deception Cues With a Serious Digital Game

Claude H. Miller, Norah E. Dunbar, Matthew L. Jensen, Zachary B. Massey, Yu-Hao Lee, Spencer B. Nicholls, Chris Anderson, Aubrie S. Adams, Javier Elizondo Cecena, William M. Thompson and Scott N. Wilson (2019). *International Journal of Game-Based Learning* (pp. 1-22). [www.irma-international.org/article/training-law-enforcement-officers-to-identify-reliable-deception-cues-with-a-serious-digital-game/231648](http://www.irma-international.org/article/training-law-enforcement-officers-to-identify-reliable-deception-cues-with-a-serious-digital-game/231648)