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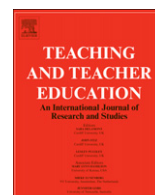
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Contents lists available at ScienceDirect

Teaching and Teacher Education

journal homepage: www.elsevier.com/locate/tate

Essay review

Beyond technology: Children's learning in the age of digital culture, David Buckingham. Polity Press, Cambridge (2007). p. x + 209. ISBN-13: 978-07456-3881-2 (reprinted in 2008)

Teaching and learning today are underlined by educational technology in the experience of many teachers and learners. Timely to current learning, this book situates suggestions for and against educational technology within the broader social political milieu. The adoption of digital media in school-based learning and other social settings is thoroughly assessed in the book. Limiting the discussion of educational technology in United Kingdom (UK), the author revisits some popular views and cross-examines them with findings from other parts of Europe, United States (US), and Australia to a lesser degree.

In the first chapter, the orchestrated display of the state-of-the-art hardware and software available in BETT (British Education, Training and Technology) are identified as marketing effort to push educational technology to the schools. Public education is said to *provide a kind of alibi for companies to create a positive brand identity within the broader marketplace* (p. 10). The freedom of teaching and learning brought about by digital media is viewed with a pair of critical lenses. Microsoft's motto, for example, *What ever you want to do, YOU CAN!* (p. 6) is in doubt because the so-called freedom is often meant to carry out top down instructions (p. 8).

The question could media-based education deliver a more differentiated pedagogy was investigated in Chapter Two. The author critically examines the purported learning support that was made possible by means of digital media to cater to different kinds of intelligence. What seems like a coordinated approach to individual talents proposed in the use of Multiple Intelligences (MI), on further inspection, reflects a conservative categorization of knowledge. According to the author, the proclaimed varied intelligences of individual learning resemble discrete disciplines in the traditional curriculum (p. 24). Contrary to the author's view, MI-based pedagogy tackles docile imagination to develop experiential understanding amongst disinterested students (Sew, 2009). Moving around with embodied experience and learning at the same time is well at ease with the author's critique of disembodied mathematical skills learned in right and wrong absolutes (p. 135).

In the critical standpoint, ideas against educational technology are not spared in the book. The reported physical, emotional, social, intellectual, and moral hazards from subjecting children to computer-based learning are deconstructed in the third chapter (p. 44). Coming into view from the purported hazards is the assumption that children have innate needs for which computers fail to provide (p. 46). The motion against educational technology erroneously implies that a pure childhood culture exists prior to educational technology (p. 47). Research findings are selected to show that students with learning disabilities actually have gained greater access to learning opportunities through technology (p. 73).

Chapter Four offers a bottom-up perspective on the implementation of digital media in current education. There are several reasons for the lukewarm attitude in the adoption of information communication technology (ICT) in school curriculum. Indifference to the systemic barriers including teacher's self-monitoring evaluation system and structured time-tabling are among the root causes. A concerted effort to tackle the blind spots could reap greater benefit from educational technology. The author also cautions against pigeonholing ICT skills according to the requirements of different subjects as the compartmentalizing approach may not attain learning transformation (p. 64).

Readers are told that commercial marketing is a main source that contributes to the rhetoric of digital childhood. Equating digital childhood with commercial exploit, the author points out:

...every text has become an advertisement for other texts. After watching the latest Disney movie, for example, it is now possible not only to buy the toys, the clothes, the books and the spin-off videos from the Disney shop in your local mall, or to watch further episodes in the Disney Channel, but also to visit the website, play the computer game and obtain the 'educational' CD-ROM. (p. 82)

Not all marketing stunts succeed in a competitive niche market given the difficulty to define the media interest of children (p. 83).

The author appropriately raises the pertinent question how schools may maximally harness the potential of digital media. Regulating ICT may not be effective as the teenagers are already comfortably engaged in digital networking at home (see Stern, 2007). The relevance of policing teenagers in a networked environment is falling short not least their digital behavior inside the school is a total opposite of that outside the school.

The prevalent claim that computer games teach children to think by developing problem-solving skills transferable to real-life situations persists among supporters of computer games as a way of fun learning. That gaming skills are relevant to real life is imaginary because games are representations and worse, the characters in the game do not reflect the reality (p. 112, 155). Another widespread view that real learning is associated with pleasure and play (p. 110) is countered with the learning of music and sports. Although these learning practices come with frustration, boredom and endless repetition they are important to provide significant outcomes (p. 111). Furthermore, the author points to the less serious response among the academically oriented students by citing a game-based history lesson in Denmark. These history students have failed to connect the experience of game with the broader historical concepts (p. 115–116). In this respect, one may want to rethink the idea that kids could be motivated to learn through computer gaming (cf. Will Wright, the creator of games like *SimCity* and *The Sims* in Supian, 2008).

The section on computer use amongst children, whose parents subscribe to computer software as learning tool, reveals that

computer-based learning software is less interactive compared to online learning (p. 132, 134). With a tendency to minimize the learning difficulty for a direct access to the game children are not inclined to access online resources for education (p. 136). A lack of social connectedness is identified as the hinder to the application of technology for home learning:

*Very few parents knew how to support their children in using the computer...This lack of social connectedness was also reflected in the absence of an **audience** for this material. Children described how they would show their productions to their mum or stick their designs on their bedroom wall, but otherwise nobody ever saw or knew about them... (author's emphasis, p. 137–138).*

Although media education should be a core subject in contemporary education the author opines that it should not be used without a proper understanding and ability to critique the media (p. 146–147). Adding to the point, the responsible appropriation of digital media could prevent random cut-and-paste of copy-righted online material.

Digital media literacy is a core component in school curriculum not least the diverse forms of audio-visual representation has become mainstream literacy in the current world (p. 180). The author explicates further that splitting group work into specific subtasks may not effectively arrive at the benefit of digital media production (p. 172). Additionally, the gap between teachers' critical perspectives and students changing experiences of digital media becomes an intellectual dissonance (p. 162). To cite an example, that teenage girls become the target of digital advertising in their daily socialization via instant messaging is a digital phenomenon obvious to teachers but less so to teenagers (see Stern, 2007: 97 on the online marketing strategies of Nordstrom fashion line).

In defense of schooling, the author informs that adolescents will not find similar social motivation at institution level in other places (p. 179). This review further reports that adult brain is plastic enough to reprogram itself and alter the way it functions. Hence feeding the brain with a barrage of information at the touch of

button depletes concentrated thinking (Carr, 2008: 60). And more alarmingly, a prolonged use of internet may condition a drifting and fidgety mind accustomed to skimpy reading as noticed in a five-year study of two popular online sites carried out by researchers in London (Carr, 2008: 57–58).

While the author supports the integration of digital media in education he is skeptical about deterministic notions such as natives and immigrants of a digital generation. The author studies popular ideas on educational technology to offer more informed perspectives in each chapter. Following the analyses of this book, readers may contemplate further in which areas has the current educational technology transformed teaching and learning in leaps and bounds, if any. Readers may ponder on why a less fun regime of schooling is still necessary or otherwise. Further inspection on the readers' part begs the question what are the necessary social, structural, administrative adjustments to reinforce the integration of educational technology in learning institutions. This book stimulates a thinking process that separates facts from plain wishful thinking.

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22 September 2008