

EAD 878- Education in the Digital Age

Unit 1

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“Technology challenges us to assert our human values, which means that, first of all, we have to figure out what they are. That's not so easy. Technology isn't good or bad, it's powerful and it's complicated. Take advantage of what it can do. Learn what it can do. But also ask, "What is it doing to us?"

-Prof. Sherry Turkle- Digital Nation

Throughout the history of man we, as a race, have sought to continually develop our knowledge, understanding and experiences. As such many of the challenges that we face today, as part of a *Digital Nation*, have developed from inherited issues explored by our ancestors. Many theorists, including Clay Shirky, believe that “we are on the crest of an ever-surging wave of democratized information”, highlighting the Gutenberg printing press as the catalyst for development into the digital age, spurning reformation, the scientific revolution and finally the Enlightenment. Progress has shown that each development has become increasingly more innovative and liberating than the one before. John Tooby states “We see all around us transformations in the making that will rival or exceed the printing revolution”. However, with every new development concerns have been raised with regards to its future impact - a fear of the unknown. “Printing ignited the previously wasted intellectual potential of huge segments of the population. . . . Freedom of thought and speech—where they exist—were unforeseen offspring of the printing press.” Each story has two sides however, and, just like the opposing sides and views of the issues raised in *Digital Nation*, the article *The Information* outlines similar opposing views of the printing press and freedom of speech. “If you’re going to give the printed book, or any other machine-made thing, credit for all the good things that have happened, you have to hold it accountable for the bad stuff, too. The Internet may make for more freedom a hundred years from now, but there’s no historical law that says it has to.”

One key message explored by many theorists, and indeed throughout *Digital Nation*, is the decline of literacy and the loss of the book. Throughout the chapter ‘The Dumbest Generation’ we are given an insight into the difficulties faced throughout the development of the written word, from the development of papyrus leading to the decline of the aural tradition and memory, to ‘reading’ on the internet and its impact on concentration levels. Nicholas Carr brings our attention to the idea of reading as a relatively new invention, and as a support tool for aural communication. He states that reading online can be seen in some ways as a return to the more primitive ways of reading. Early reading required reading out loud, as text was written without word spaces, requiring a high degree of cognitive processes in order to separate the words. Carr believes that we now need a similar degree of cognitive concentration and focus in order to filter out all the external distractions involved with onscreen reading. “As a technology, a book focuses our attention, isolates us from the myriad distractions that fill our everyday lives. A networked computer does precisely the opposite. It is

designed to scatter our attention. . . . Knowing that the depth of our thought is tied directly to the intensity of our attentiveness, it's hard not to conclude that as we adapt to the intellectual environment of the Net our thinking becomes shallower." This level of focus and distraction is also explored in *Digital Nation*. We are all aware of the level of multitasking required in the digital world; however, the documentary highlights the detrimental effect this is having, with tests showing that even those who believe they are able to multitask efficiently struggle when moving between tasks.

Ann Blair sits on the other side of the argument. She believes that "information overload" was already in place before printing began, and that it began with paper and not printing. "During the later Middle Ages a staggering growth in the production of manuscripts, facilitated by the use of paper, accompanied a great expansion of readers outside the monastic and scholastic contexts." Blair also notes that "early modern finding devices" were used, from lists to headings to indexes and contents pages. She argues that just as technology is challenged today, it was also challenged then. Scholars believed the flood of books was detrimental to attention, that printed pages and pamphlets were stopping children from being able to focus on larger books, and that handmade works of art were being lost to 'soulless' printed works. Indeed, the "book index was the search engine of its era, and needed to be explained at length to puzzled researchers" while simplification and summaries of denser material (even in the 1500s) was originally regarded as highly damaging. Blair outlines the difficulty that scholars faced in the 16th century with regards to finding relevant information amongst so many books. They struggled with filtering through the seemingly endless list of "useless" books, stating that the search for worthy information was simply too time consuming – complaint echoed by many when discussing downfalls of the internet. Blair acknowledges that the scale of information stored and easily accessible over the internet is unprecedented, but points out that the potential to gather more information than necessary has been an issue for centuries.

Ultimately as a race we have faced many challenges in our history. However with each new development we have found ways in which to evolve. Marc Presky states "...there were people who complained when we moved from horses to cars. There were people who complained when we moved from letters to the telephone. And it's not that they're wrong totally because things get lost. So you might have less memory. We don't have as flowery writing. But we gain other things. And life moves on."