

[The Effect of Technology on Human Intelligence]

[Is technology making us dumb and incompetent?]

[Nedj Alsagoff, Courtney Snyder, Lauren Pezze]

SMAD 470

In today's world, many people are questioning the impact of technology, whether it is positive or negative. There are many questions regarding whether or not technology is dumbing down Americans. Think about the last time you picked up a dictionary to look up how to spell a word correctly. In most cases, people usually skip this step due to the numerous, effortless alternatives that are easily available. Sometimes the word is even automatically corrected, due to the glory of T9 and spell-check. Gone are the days of lugging around heavy dictionaries and thesauruses, as most information is readily available on the Internet or on your Smartphone. It is obvious that technology lifts most of the heavy burden and reduces the overall effort. While the advantages of technology are substantial, the effect of technology overuse can hinder the perception of how much people really rely on it. With the advent of new technologies, there is a growing concern that the abuse of technology will lead to a loss of basic learning skills. Leaving society with an important question- is technology making people dumb and incompetent?

As technology continues to advance at a highly progressive rate, a quick reflection on the timeline of inventions puts us in a state of shock, as most people today cannot imagine a world without cell phones or the Internet.

The digital age once aroused our hopes: the Internet, e-mail, blogs, and interactive and ultra-realistic video games promised to yield a generation of sharper, more aware, and intellectually sophisticated children. The revolution introduced an information super highway, and it was assumed that teens would use their know-how and understanding of technology to form the vanguard of this new, hyper-informed era (Bauerlein 2007).

But what was promised and hoped seemed to back fire as Mark Bauerlein, author of *The Dumbest Generation* wrote "technology that was supposed to make young adults more astute, diversify their tastes, and improve their minds had the opposite effect"(2007).

Recent studies convey that there is an overall decline in the value of cultural and political entities among young adults in the United States. These include the depreciation of classic literature and cultural artifacts, irresponsibility in careers, and political apathy. This generation lacks the ability to compute basic scientific and mathematic calculations, detail the origins of their country, or identify their local politicians. Mark Bauerlein states, "What

they do happen to excel at is each other. They spend unbelievable amounts of time electronically passing stories, pictures, tunes, and texts back and forth, savoring the thrill of peer attention and dwelling in a world of puerile banter and coarse images (Bauerlein 2007). Priorities have shifted from an informational to a social culture, enlarging the generational gap.

Popular culture has infiltrated our society through new new media, causing our attention spans to slowly decrease, especially with the emergence of Facebook and Twitter. While it can be argued that kids raised in previous generations dealt with other distractions such as television, talking on the phone or hanging out a friend's house, it can be justified that space and time were still prevalent. Digital technology and social media combined has erased the borders of space and time making social life continue anytime and anywhere (Bernstein 2009). A plan for a good night's sleep can be ruined just by logging onto a computer and getting lost in the realm of digital technology.

With the constant stimulation from technology, basic learning skills are becoming obsolete. Many schools in America are replacing the need for dictionaries with computers and their accompanying features, such as spell check. Calculators are altering the way students learn. They no longer have to write out the problem and figure it out by hand. Basic algebra, like the dictionary, is becoming lost. The way students read is also changing; information is no longer analyzed and retained to the same extent as previous generations. The Internet provides students with condensed versions of literature that is commonly taught in schools. Students are less likely to do thorough scholarly research for projects, than to skim the first sources search engines, like Google and Bing, provide.

Recent studies have shown that many young people have acquired attention deficit disorders. According to Lianne George in her article, *Dumbed Down* she states that "those in their 20s and younger, usually called Digital Natives, use their brains differently than any other generation in history. . .at any given moment—or so the cliché goes—they're wielding an iPod and a cellphone; they're IMing a friend, downloading a Rihanna video from iTunes, and playing Resident Evil 4 with their thoughts"(2008). The use of technology has far exceeded society's expectations and has now almost posed as a threat from the over use of it. A study from the California-based Kaiser Family Foundation found that young people absorb an average of 8½ hours of digital and video sensory stimulation a day. By the age of

20, the average teen has probably spent more than 20,000 hours on the Web, and over 10,000 playing video games (George 2008).

The overall worry is what will happen to our brain when we spend that much amount of time using technology. Brain specialists have speculated that too much technology may get in the way of normal frontal development and stunt the maturation process, leaving Digital Natives in a teenage brain state mode where empathy and complex reasoning skills are not fully developed. Enter the reason why teenagers are predisposed to being self-centered, seeking instant gratification and not being able to always put themselves in others' shoes—an attribute they have to develop over time, through social contact.

Even as I sit and type this paper, my hand continuously moves the mouse back and forth between Microsoft Word and my Mozilla Firefox browser filled with 5 different tabs. While my ability to multi-function is convenient for me, it also impedes my ability to type this paper all in one sitting and places my brain in a heightened state of stress. While advancements in technology has made our society an easier world to live in, the overuse of technology is one that could turn into an eternal vicious cycle that we may not realize will be hard to break out of. Therefore it is important to educate the effects to our fellow Digital Natives, before we solely rely on technology and create a brainless society.

The Effect of Technology on Human Intelligence: "Is Technology Making Us Dumb and Incompetent?" Works Cited

Bauerlein, Mark. (2007). *The dumbest generation*. Retrieved April 5, 2011 from

<http://www.dumbestgeneration.com/home.html>

Bernstein, Richard. (2009). *Don't trust anyone under 30?*. Retrieved April 10, 2011 from

http://www.nytimes.com/2009/01/14/world/americas/14iht-letter.1.19344224.html?_r=1

George, Lianne. (2008). *Dumbed down: the troubling science of how technology is rewiring kids' brains*. Retrieved April 10, 2011 from

<http://www2.macleans.ca/2008/11/07/dumbed-down/>

We'll be doing a series of three poster-sized print designs. These would be placed around college campuses- in the library, dining halls, student union buildings, etc. We would display them at the top 20 technology-oriented colleges in the US.

- a) Calculator
 - a. The first design would highlight our reliance on calculators. It will show a comparison between older, more complicated mathematical methods (like an abacus) versus the ease of a calculator.
- b) Spell check
 - a. This print will feature a word document with misspellings and grammar mistakes, along with Microsoft Word's accompanying spell check function.
- c) Google search
 - a. In this print we will do a play on the Google search AJAX feature. We'll start of with a search of "y," like the word why, and suggest different questions pertaining to our topic.