

**Part I:**

While William Powers offers a fatalistic view of the over-reaching grasp of technology on society in his book *Hamlet's Blackberry*, he does offer some sound advice from an educational point of view. Powers argues that the connectedness of society is detrimental to deep thinking. He argues that through constant connectedness, our inner selves become increasingly ruled by our outer selves. He uses a personal anecdote about a phone call with his mother and the “outing” between Plato and Phaedrus as examples of when being disconnected has allowed him and others to actually become more connected. In the anecdote with his mother, he refers to the moments after he hung up as the “gap” that allowed him to think more deeply about her and the memories that they share. In a moment of reflection, when he was no longer connected to her via the cell phone, he actually felt more connected to her as he had quiet time to really think about her without distractions. Plato and Phaedrus take a walk outside of the city walls and share moments of true connectedness when they can focus on just one another and not the distractions of the bustling streets. Be it modern technology and its devices or some other distraction that busy city streets, finding time in schools for quiet reflection will allow our students to truly think deeply about the material, actions, or selves upon which they are reflecting. By disconnecting, we often can be better connected to ourselves.

Powers uses other great philosophers to argue various other points about connectedness and how it affects us today. While I think there is wisdom in his argument that balance is the key, I also think it is quite naïve to think that the youth of 2017 will do so without resistance. Powers argues through his examples of rituals by Franklin, that the best way to achieve these breaks from technology are through reward systems. While reward systems may work with younger students, they encourage extrinsic motivation. If our goal in education is to plant seeds of learning that will grow throughout one’s life, we will not make progress in this area if we are motivating students through extrinsic means. While the bigger picture that Powers is trying to paint is one that I agree with, the details of this argument do not fit in any education system. It is vital that we educate the youth to take breaks, so as to reach deeply inside themselves to make sense of who they are and the world around them, this break from technology can be achieved without reward systems, simply through the arguments that make sense, the reasons why those breaks from technology are important. Explaining the ideas behind the actions is a better approach to the connected youth than extrinsic motivation which creates bad habits.

**Part 2:**

To understand how our minds respond to the new technologies, we must know from where we are coming. Therefore, Nicholas Carr’s account of the evolution of the written word in *The Shallows*, allows us to understand better how we previously treated the written word, both as producers and consumers. Education was greatly affected by the advances in book technologies after the 14<sup>th</sup> century. The organization of written texts made them easier to read and the new writing conventions meant that more books were being written. In addition, universities began to stress silent reading as a necessary element of the academic program. For years books reflected the oral culture from which they sprang. However, that was changing as writing became more and more an intellectual practice. As Carr so

eloquently states, “The development of knowledge became an increasingly private act, with each reader creating, in his own mind, a personal synthesis of the ideas and information passed down through the writings of other thinkers. The sense of individualism strengthened” (67). This individual and private sense of knowledge acquisition has been shattered with the age of new technologies. What was once reserved for internal reflection is now being played out in the public spaces of the internet as we experience a participatory culture.

Writing and Reading of the past was an intellectual achievement but the word on the screen is very different from the page. Reading on the page is a deep thinking activity. When reading on a screen, our thoughts are interrupted by hyperlinks and other information that may appear on the page, including advertisements. Thus, our minds are constantly distracted by the onslaught of images and words that take us away from the text we are reading. We begin to lose the ability to read deeply and to be able to interpret what we read because our mind isn’t being calmed by the activity but rather it is being stimulated by the distractions. It is harder to follow the story. Thus screen reading, particularly on the internet, breaks down our ability for reflective thought and instead scatters our attention. Mark Bauerlein concurs with Carr and believes that screen reading makes up a new kind of literacy that breaks down texts that “require steady focus and linear attention.” In fact, Bauerlein cites a Nielsen study that determined that people physically read screens differently than they do a book. As we look at a screen, our reading patterns the letter “F.” In fact, 5 of 6 readers jumped around the page. As a result, some, like David Bell, a Johns Hopkins historian, argue that screen reading should complement book reading in the classroom for it allows for a more targeted reading. Indeed, screen reading should not replace book reading, but our schools should teach both.

When teaching screen reading, perhaps through research tasks, it is important to teach informational literacy skills. Gopnick refers to the problem of mis-information when he writes about Wikipedia in his article, “The Information” in the New Yorker, “The trouble comes when one side is right and the other side is wrong and doesn’t know it...Creationists crowd cyberspace every bit as effectively as evolutionists, and extend their minds just as fully. Our trouble is not the overall absence of smartness but the intractable power of pure stupidity, and no machine or mind, seems extended enough to cure that.” In the days following the recent Presidential election, “fake news” made the real news and it has become very clear to me that our schools must do a better job of helping people determine what a trustworthy site is and what is not.

Digital tools also have a great impact on students’ writing according to the Pew Research Center’s survey of high school teachers. The survey results show that teachers overwhelmingly see both positive and negative impacts on the mind. While recognizing that digital technologies allow students to share work with a wider audience and encourages collaboration, teachers also agreed that there is more ambiguity between formal and informal writing and are seeing more and more truncated forms of writing like that which we might see on Twitter. Of course, these writing challenges are ones that can be tackled in classrooms by simply being more deliberate in how we teach different forms of writing and by being explicit in our expectations of writing assignments. Both formal and informal writing have their place in the world; the trick is knowing when to use formal vs. informal writing.

Christine Rose agrees with Nicholas Carr in terms of the effects of screen reading on the mind and goes as far as to cite a neuroscientist, Susan Greenfield, whose research has shown an increased level of dopamine in the brains of those who screen read. It is clear that more research must be done to determine long term effects of screen reading. For now, I argue that in schools, a cautionary approach to

technology is the best approach. There are certainly advantages to new technologies, like increased levels of engagement when games are used in the classroom, increased access to knowledge, or feedback from a wider range of people across the globe. However, in a world where our attention is increasingly scattered by our multi-tasking ways, perhaps taking time to find the “gap” that William Powers refers to so that we can have or create time for quiet reflection, we can still our minds for at least part of our day.