In The Battle Over Technology in Our World:

A Truce Must Be Called

By Diana Wanek
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Having been introduced to four new authors, Nicholas Carr, Mark Bauerlein, Steve Johnson and Clay Shirky, it is clear that the opinions in regards to technology in our society and technology education have a wide breadth. Each of these authors presented their opinions, thoughts, and, in some cases, research to support their arguments and concerns about technology and its effects on our society, particularly with the youth of today. However, one thing is clear from my readings; there will be no resolutions or agreement quickly when it comes to the use of technology in the future. There will continue to be both pros and cons on the issue of technology and its effects on the individual and society as a whole.

Both Carr and Bauerlein feel that technological advancements of our society has dumbed down our intellectual capabilities. Carr notes in his book, _The Shallows: What the Internet Is Doing to Our Brains_ (2010), because of technology we now lack the ability to concentrate on sustained reading due to our increasing exposure to web text vs. linear text found within the printed word (p. 97). Carr believes that we have allowed ourselves to be manipulated and to be conformed to the technologies we have created (p. 47). Carr claims, we have chosen to relinquish who we are to the technologies we have created. The loss of our identity affects each individual as well as our society as a whole. To this I will say, "Yes, the Internet and Google in particular are hampering our old way of reading linear text, but in exchange we have the ability

to retrieve information like never before". No longer must we rely on our recall for so many facts

and other frivolous information that so quickly and easily can be garnered from readily available

sources. Now, we have the ability to quickly find the information we might need and have

forgotten. Personal items such as family memories, personal conversations and daily living can

now be given a higher priority in the memory bank over other memorized information that can

be obtained quickly from easily accessible sources. Now, more than ever before, we have the

ability to know about places and things, to go more places and experience more of the world

and its people through the use of technology. No longer are we left to sequester ourselves alone,

to learn through silent reading within the pages of a book. Our learning can be more authentic

and rich. I am sure Carr would agree with author David Shenk, who says that traditional reading

offers a journey with a built in purpose that is learned from both the parts of the story, but also

the whole of the story (Shenk, 1997). With this, I agree. Don't get me wrong. I believe reading is

key to our society. I am a reading advocate and strongly feel that the loss of linear reading in our

culture is a step backwards. However, the use of Internet reading and liner text reading can go

hand-in-hand in our culture for a stronger, richer life. While Carr (2010) contends, "The internet

encourages cursory reading, hurried and distracted thinking and superficial learning" (p. 116), I

believe the Internet offers us the ability to search out new information to go deeper into a subject

to cross reference with a few mere clicks. The Internet offers us convenience. There are many

wonderful resources, all easily within our fingertips. This saves us time and effort in research as

well as answering common questions that arise as we explore and learn. No longer knowing

facts is key; knowing how to find the facts is what students need to know as well as how to place

judgment on what they locate online. Indeed, I believe we have learned to adapt to this infusion

of stimulus to some degree. I agree the adaptation is easier for some than for others. Guy Saddy

(1996), author of _Do Computers Change How We Think_, points out that some individuals are

better skilled at learning to hyperlink. While we must retain the ability to read linear text, we

must look to add to our repertoire the ability to read online materials. We need the ability to

negotiate, navigate, use appropriate judgment, and multitask for our future benefit. I will

agree with Carr; there is a value in slowing down and being attentive, but there is a lot at stake if

we pass up the value of online reading. We are sure to be left behind in this world of progress

if we do not gain these skills and see that our youth do as well. As Howard Rheingold states,

using the web requires mental discipline (Rheingold, 2010, par 1). So, I say we encourage our

students to have a love of reading and teach them mental discipline as well as web reading and

Internet browsing skills.

Mark Baurerlein, the author of, _The Dumbest Generation: How the Digital Age Stupefies_

Young Americans and Jeopardizes Our Future (Or, Don't Trust Anyone Under 30), points to the

youth of today as having more opportunities for enlightenment, but the enlightenment hasn't

happened (p. 16). Baurerlein believes that the youth of today no longer read (p. 53). The youth

of today are focused merely on their socialization and never grow to maturity(p. 202). Bauerlein

claims the youth of today no longer have an investment in the society they stand to inherit

(p. 178). Bauerlein asserts that too much of our youth's time is consumed with media. Yet to

function within our world today, I believe the youth of today need to be taught the appropriate

online skills for success. The authors of *Hanging Out, Messing Around, and Geeking Out: Kids*

Living and Learning with New Media believe that the ability to access technology and navigate

online and the ability to communicate with others is becoming increasingly central to our

everyday lives (Mizuko, 2010). The use of social communities online need not mean that all that

is communicated between teens is mere idle chatter with no real purpose. Clay Shirky, author of

Cognitive Surplus: Creativity and Generosity in a Connected Age, points out that the combined

use of our collective intelligence and our contributions as a collective group on the Internet can

increase the knowledge and abilities of all of us in society. Shirky looks to the Internet as a

positive force in its ability to open up new platforms of expression for the common citizen,

allowing for social organization around common causes and the openness of sharing information

across the globe. According to Shirky, the Internet has allowed for a democratization and collective action within our world. Now, we all have the power to create and share. Core economic activities are in the hands of the people, as content can be provided by us. With this new open source world, we have yet to see the limits of our ability individually and collectively. When looking at the title of social media, we must look at it as meaning a variety of things in our ever changing world. Social media can indeed include, but not be limited to, Twitter, Facebook and MySpace. Social media can allow us to find people with common interests and common goals for the betterment of our society. Social media can allow for the sharing of vital information, for making our world a better place. The Internet can allow for civic engagement, social connection, and the new ability to network globally. This networking and communication has ramifications we cannot even imagine at this point in history.

Both Carr and Bauerlein feel that the overexposure to screens available through a variety of technological devices is a detriment to our society. I am of two minds. I agree that unless we are aware of the effects of technology on our minds, habits and lifestyles, we can fall to its negative effects. Yet, I cannot agree that we must cease our advancement, involvement and education of our youth in these matters. Education is a better response to the negative impacts of technology on your youth.

Steve Johnson author of *Everything Bad Is Good for You: How Today's Popular Culture Is Actually Making Us Smarter*, and Shirky see the advancements in technology in a more positive light. Johnson feels technological advancements in film, television, gaming and the Internet have pushed us to be deeper thinkers, able to respond quickly in decision making tasks causing a rise in our problem-solving skills. Though I agree with Johnson and Shirky that the Internet has allowed for the advancement of collective action and that we have seen some of the current pop culture reflect a new depth beyond that of the past, I still believe that lest we fall prey to the negative impacts of technology we must be aware of the side effects of overindulgence in the use of our time with technological devices as pointed out by Carr and Bauerlein. It is with these new technologies that we need to teach our youth not to focus on the technology itself, but rather on what can be learned using these new media's: to be aware of the medium, but not make the medium the prime focus of learning. With technology here to stay, we must have a broader perspective of what is ahead of us as a society and what is ahead of our youth in their future. We cannot run from the technology that is becoming so much a part of our world. To ignore it is not the right choice for now or for the future.

In this battle over the good and evils of technology, I look to Melton Chen and Thomas Friedmen to help me bring into perspective the arguments of our four authors. First, Thomas

Friedmen, clearly lays out in his video, The World is Flat, what we are now experiencing in our

society. Our world has been shrinking as other countries have advanced in their acceptance of

technology and made technological developments of their own. America over the last several

decades, has strived to be the superpower of nations. We have looked inward at our own

achievements and advancements as our competition has snuck up on us and caught us

as Friedmen says, "sleeping." We clearly are no longer on the top. We no longer have bragging

rights as the superpower of the world. Our jobs and our very livelihoods have become a part of a

very global market. The future of our young people is at stake unless they are adequately

educated in technology and its many supportive devices. Ted Padova, in his article, *Where Are*

We Headed With eBooks? states," The common pitfall of Western thinking is that we plan in

such short terms. It is often said of American culture that we plan for the next quarter while

Japan plans their technology for the next quarter century" (Padova, 2001, para 4). We as a

society are caught in a web of technology that we cannot escape, thus we must move forward in

the use of technology as a society at large. Author Melton Chen in his book, *Education Nation:*

Six Leading Edges of Innovation in our Schools,(2010) puts forth our need to move beyond our

way of thinking as ''either/or'' and think of technology as ''both-and''(p. 12). I believe Chen is

saying to us that technology is not a solution to all our problems and issues as individuals or as a

society, but that technology cannot be dismissed fully from our lives and our education system. This is where I find myself in the argument for or against technology and specifically technology in education.

When I look at what our four authors, Carr, Bauerlein, Johnson and Shirky have expressed in their books and what Friedmen has clearly pointed out to us with this new global economy that America finds itself in, I can't help but agree with Friedmen and thus a need for technology in our society and technology education for our youth. We need a "both-and" system as Chen suggested. Therefore, my feelings on the issue are mixed. I do support Carr and some of Bauerlein's concerns about technology, but I find parts of Johnson's beliefs and Shirky arguments to be equally persuasive. Therefore, I am of the opinion that we as a society need to move forth with integration and an acceptance of technology instruction into our schools, but not without caution. I also firmly believe that with the rise in technology developments and the use of the many devices and innovations there comes a responsibility to raise up a new generation of students and a new generation of citizens who are both skilled in technology and not consumed by its opportunities.

As a society, we must demand accountability to the concepts pointed out by our authors, Carr and Bauerlein, as well as address any other harmful impacts that arise to the fullest extent

by others in the future. Because of the economic situation we find ourselves in currently and what Friedman predicts is ahead of us in the future, I am of the belief that we must neither turn our backs on technology nor be pulled back from technology education. Rather, Americans need to pursue new innovations and teach to the future with a deep awareness of the changes that technology can bring both in a positive and negative realm. I believe that we should continue to study the effects of technology on our culture and in particular with our youth. I maintain that we continue to debate and be consciously aware of the challenges and changes ahead of us with our technological advancements. Yet, I assert that we should move forward with an openness to adopt technology when applicable as Chen referenced to in the "both-and" system. We need to be cautious to avoid quickly passing judgment and stereotyping those who use technology and participate in the new rise of pop culture. I say we show prudence in the management of our free time in regards to the value of the content with which we fill those cognitive surplus hours. It should be our utmost priority to establish ourselves again as a nation that protects the jobs and security of its citizens through the education and advancement of technology and not be caught "sleeping". In doing so, though, we must not compromise the morals and values within our society because we have become consumed by our own technological advancement.

I realize there are some who will challenge my views as too lukewarm and indecisive,

and that we must address the concerns of technology now before moving forward, that we must

not be blinded to the concerns pointed out by Carr and Bauerlein. Some may say we must not

ignore the concerns of these two authors and others like them. Yet, it is Bauerlein himself who

says, "It's a question of balance" (p. 160). Likewise, as Carr states in his interview with ABC

News entitled, "*Is the Web Rotting Our Mind*", "Each of us as individuals is responsible for the

choices we make as to how we use or don't use our minds" (Is the Web Rotting Our Minds,

2010).

Furthermore, as our future is destined to be one with technology at the heart of all our

lives to some degree, be it for leisure or for work, we must, as Howard Rheingold endorses,

become a healthy society of "Netizens". Rheingold states, "The health of the online commons

will depend on whether more than a tiny minority of Net users become literate "Netizens"

(Rheingold, 2010, par 12). In this world of instant information, we need to educate our students

on fundamental literacy skills, time management and mental discipline, decision making skills,

discernment and personal filtering skills, as well as personal awareness to participation and

personal online safety. With digital technology here to stay, individuals need to take

responsibility and control for the effects of the Internet on their own lives. Every advancement in

technology brings pros and cons, risks and rewards. Not moving forward for fear of the future

however is not a future. "Our only constant is constant change" according to Cindy Davidson, in her article Happy 20th Birthday Internet (Davidson, 2009. p.1). Davidson goes on to point out that we find ourselves in a very different world than a matter of a few decades ago as so many things are rapidly changing around us (Davidson, 2009 p.1).

In looking at what I have learned from these four authors, it has became more clear to me that there are some people, and maybe even many more than I realize, who are deeply rooted in the belief that technology is not a good thing in our society. There are those who believe that technology education is something that should not be allowed to influence our children during their time in a government-funded educational setting. I used to think that much of the lack of technology education in the schools was due to budget issues, as well as to those who were set in the "old way" of doing things and not open to the new way of technology education. I had felt up to this point it was just a matter of convincing those who were against the change in the way that education was presented, as well as the lack of funding, that needed to be altered. If education could just slowly bring technology into the classroom in a positive light, then all would be fine, and we would convince those few naysayers that we were indeed headed in the right direction. We should persuade them to see that the terrible things that they thought would come to pass with technology and technology education were all just imaginary monsters lurking

under the bed. I felt that if we could get everyone onboard with technology in the schools so

everyone would stay relevant to the 21st century skills all would be good. Don't get me wrong, I

never for a moment believed that technology was the save all to our failing educational system,

but I knew in my heart that we would be doing what was right for children in bringing

excitement back to education as well as better preparing our students for the future. As pointed

out by Michelle Klampe, staff writer for The Press-Enterprise, when students use tools that they

are comfortable with this brings interest back into the classroom (Klampe, 2011, par.9) . Mobile

devices and technology allow for teamwork and collaboration and push students beyond the

classroom and the confines of a textbook. Using technology prepares our students for the future.

"Much like in the 1880's when educators recognized the need for every child to have a textbook,

today's educators are drawing the same conclusions with modern day technology tools" (Klampe,

2011, par. 9). So now, after reading two books pointing to the opposition of technology

in our society and in education, I am seeing that the concerns go deeper than a few individuals

"crying wolf". I will, however, compromise; I will come to the camp of needing to strengthen

our use of technology education to be more purposeful and productive and more conscious of the

negative outcomes of its use. We must not "merge with the machine," yet it is more than just a

matter of moving from the old way of education to a new way of doing things. Some of the

information presented by Carr and Bauerlen drives me as an educator to think even deeper how I can incorporate technology in a way that is very meaningful to the learning that is taking place in the classroom while not letting the technology be the focus of the learning. I want to work harder at making learning the focal point of the lesson and making technology less a point of attention in the lesson. Technology should be just another tool for learning. To me, I need to see if the tool is relevant to helping students learn or whether the tool is the object outside of the content of learning. I also will side with our two authors who are opposed to technology and be more concerned about teaching my students that, along with everything positive in technology, there come risks that one must be aware of in the use of technology. I can see that there needs to be more of a conscious effort to point out the negative issues of technology in our society and incorporate this into the technology education.

Our four authors bring to the forefront of our awareness that with technology comes both pros and cons. Yet a truce must be called in the battle over technology in our world if we are to survive as American citizens in this new global market. I feel it is with these diverse reflections from these individuals that I can become a more educated consumer of technology and a better educator. This will allow me to personally move forward toward responsible use of technology in the classroom in the future and in helping to raise a new generation of responsible technology users.

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