

The Digital Literate World of 2040

Matthew D. Erdmans

Western Oregon University

Abstract

Our way of life is going to continue to evolve around new technology that is going to continue to impact and enhance our existence. From the barrage of smart devices, the internet of things, and social media, technology is only going to become a much larger part of our lives than it is already. How are we going to prepare the workforce for the robot future? How will we interact with one another and get ahold of valuable information to enhance our knowledge or to spend our free time? This paper is aimed to discuss three main points regarding the future; collaboration within the global community and informational related tools, enhancing our information and leisure time through virtual and augmented and the future of our education system and the potential careers that will be available. Technological advancements is not the be all end all solution, but we can use it to help enrich our lives and provide meaningful relationships with technology.

The Digital Literate World of 2040

Our lives are being intertwined with technology no matter which direction we look. The internet of things, the idea that everything is connected through the internet has begun to creep more and more into our personal lives. Everything from education, communication, transportation, leisure, and business has seen an impact. This paper is looking at the future through a glass that is half full of potential for our global society due to the rise of better technology. This paper aims to touch base on how technology will link together education, the future job market, the global world, our personal devices, and how we spend our time. Technology is only going to expand its reach into each of our personal lives. We best learn to adapt or be left in the dust.

Education

Education is going to be shaped by the idea of OER (Open Educational Resources). Technology is giving us the freedom to access the internet anywhere there is a connection. Within this interconnected network, we can have access to a seemingly unlimited amount of free educational content to teach us anything we want. A current example is the website Youtube. “What Youtube really imagines is a world in which any person with high speed Internet can access can, if she or he is adequately motivated and works hard, have access to a good education through an online video,” says John Green (Jaworski, 2012 p. 2)

This resource, or perhaps the idea of Youtube will only flourish into a one stop educational resource your students. “There is no way that online video can replace physical classrooms led by educators. But in the developing world, these resources could be revolutionary” (Jaworski, 2012 p. 2). Traditional classrooms are here to stay because many

parents can't afford to homeschool or pay for private school, but an OER such as Youtube can provide students with content that can push them in new creative directions.

Using a resource like Youtube is a part of the shift in pedagogy we need to make as a society. Bonnie Bracey Sutton, a technology advocate and education consultant at the Power of US Foundation, said "educators have to break through the old paradigm and implement new tools. "We were previously harnessed by text and old models of pedagogy,"(Anderson & Raine 2012, p.21) she wrote. Teachers are constrained today by traditional methods and ways of thinking. Quitney Anderson and Raine (2012)"When we move to transformational teaching it is hard to explain to traditional teachers what we are doing in a way that allows them to understand the beauty of using transformational technology. Many ways of learning are involved, and the work is not all done by the teacher.(Anderson & Raine 2012, p.21) Learning can be done on it's own, in fact I would argue the best learning is completed outside of school when the student is doing something they are interested in. "The technology makes it all possible, and we can include new areas of learning, computational thinking, problem solving, visualization and learning, and supercomputing."Anderson, J., & Raine, L. (2012, February 29).

Future Careers

When education adapts technology, what is the outcome? From the Pew Research Center, out of the 2,462 Advanced Placement (AP) and National Writing Project (NWP) teachers finds that 92% of these teachers say the internet has a "major impact" on their ability to access content, resources, and materials for their teaching, 69% say the internet has a "major impact" on their ability to share ideas with other teachers, 67% say the internet has a "major impact" on their ability to interact with parents and 57% say it has had such an impact on enabling their

interaction with students.” Purcell, K., Heaps, A., Buchanan, J., & Friedrich, L. (2013, February 28)

What are we teaching our students to be prepared for? If our world revolves around technology, computer science and coding needs to become an integral part of our elementary, middle, and high school curriculum. More and more each year jobs are going to shift to this format. More apps and software being built means more jobs for people who know how to update, fix bugs, and design new interfaces. Companies need full stack developers, those people who can develop a sleek front end and a back end that does everything the software needs to.

Mobile device

Alan Bachers, director of the Neurofeedback Foundation, says Creativity, demand for high stimulus, rapidly changing environments, and high agency (high touch) will be what makes the next revolution of workers for jobs they will invent themselves.” (Purcell, Heaps, Buchanan, and Friedrich 2013, p. 24) There will always be careers changing, jobs come and go. Some examples of jobs that used to exist are bowling alley pinsetter, “knocker uppers” or human alarm clocks, radio actors (could these have evolved into modern day podcasts?), and lamp lighters. We as a species have made progress. No longer do we have people wandering around tapping on people's windows to wake them up. We have alarm clocks. We are slowly moving away from coal and pushing for more renewable resources (hopefully). This idea of change and transition is what is going to keep us going as a species. With the inclusion of more technology into our daily lives, we need change. We need students who are digitally fluent who are going to be able to expand their abilities to work in software development.

This new way of teaching is going to lead to new careers of engineering, computer science, and maintenance. What do I mean by maintenance? If we are not at the point where we have computers/AI to fix themselves we still need people with the appropriate skills to manually solve the problems at hand. What happens when a major machine breaks down? If a factory becomes fully automated, moving parts don't last forever and will .

Purcell, Heaps, Buchanan, and Friedrich (2013) Gina Maranto, a co-director in the University of Miami's graduate program, said "The way philosopher Kwame Appiah conceives it—the ability to listen to and accommodate to others" (Purcell, Heaps, Buchanan, and Friedrich, 2013 p. 33)

Technology is going to continue to become a more personalized experience. Tech companies are going to work to build the next social media giant or app that connects and helps people. It's the general nature of technology to do so.

Global Community

Technology is going to continue to give us the opportunity to collaborate and communicate in simplified ways. Already we have resources such as blogs, email, video sharing websites, and social media. We can create content that will be potentially seen by millions of people in an instant. (Anderson, n.d., para. 6) "Five years ago an amazing teacher or professor with the ability to truly catalyze the lives of his or her students could realistically hope to impact mabe 1-- people each year. Today that same teacher and have their words spread on video to millions of eager students. There are already numerous examples of powerful talks that have spread virally to massive Internet audiences." This is extremely incredible for the future of the developing world.

Globalization is going to continue happening, regardless of what people want or desire. The internet has truly brought a change that has changed the way the world works and has allowed us to instantly connect with people all over the globe.

This new foundation of interconnectivity is breaking boundaries. By incorporating technology into education, we promote better and more creative ways to design/use technology, and in return get access to more unique ways to communicate with anyone at anytime. Business can be done solely through the screen of a computer. If someone wanted to sell artisan candles they no longer have to be at the status of a fortune 500 company, the candle maker could use a website like Etsy to reach people all over the world with ease. Look at the rise of Etsy. Right from their website “Etsy is a global creative commerce platform. We build markets, services and economic opportunity for creative entrepreneurs.” People have the opportunity to create and sell their own work to anyone in the world who has access to the internet. This is unbelievable. What is so neat, is Etsy considers itself a global community. The maker’s online are all united under one creative outlet to buy, sell, and communicate. People no longer have to relocate for a job! (Etsy About Page, 2017)

The internet is providing what seems like unlimited potential for business and people who have a dream to create

Constant Connection

Barry Chudakov from Florida is a research fellow in the McLuhan Program in Culture and Technology in the University of Toronto. He wrote “Technology will be so seamlessly integrated into our lives that it will effectively disappear.(Anderson & Raine, 2012) This is going to be our future. The future of business, education, and the future our our spare time.

Similar to how cars have the technology now to automatically sync up with a smart device, eventually our homes will push into that realm. We have technology like Amazon's Alexa and Apple's Siri that allow us to speak to the computers and have them run simple tasks such as ordering food, changing the temperature, playing music

I think with the continual development of robotic AI and the idea of a personal assistant, we are going to see the evolution of such software like Amazon's Alexa and Apple's Siri. This software is developed to help better run a person's life and to provide simple solutions for rather mundane chores. The technology can currently order food, play music, and check the weather among things. This idea of a centralized communication hub located in the home will provide a wide variety of assistance to the user to hopefully make life simpler.

Technological Leisure Time

Even with the advancement of this centralized home device, people will still continue to spend their leisure time on more social oriented apps they can access on their personalized devices.. The general idea behind social media software is communication and sharing information with one another or large groups of people. Consumers use Instagram to share photos or promote themselves. Facebook is a tool to keep in touch with people at its most primitive. Youtube allows you to share videos with everyone who uses the internet. Snapchat allows friends to quickly send photos and it allows people to live blog their day to day existence. This allows people to stay connected. It allows people to connect with other people without actually communicating. The future will remain socially oriented and provide new experiences to remain connected.

We are going to remain connected in more ways than we can imagine. “The Internet of Things which is a type of computing characterized by small, often dumb, usually unseen computers attached to objects. These devices sense and transmit data about the environment or offer new means of controlling it. (Regalado, 2014) Our smartphones have the ability to connect through a specifically designed app to any device that has a signal. We can practically control our homes from the comfort of our phones.

Each of the main points are all intertwined and related to one another. Schools that implement technology successfully are going to help the students become fluent in digital literacy that will open up more opportunities in the future job market. These jobs are going to become more globally oriented as communication technology becomes even more integrated into our daily lives. Business is being done on a more global scale like never before. The employees who work in this era are no longer going to be necessarily tied down to geographical limitations, will be able to use information related mobile devices to access the internet just about anywhere.

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