

Education Technology Implications  
On Global Companies

Research Paper

By

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## **Education Technology Implications on Global Companies**

Technology is here to stay. The needs of technology education are growing. If you don't know technology, you will fail. There are so many implications in today's world about the need for technology education. The following paper will show examples of the needs of more technology education not only in the US, but the implications of the need for education technology globally and their implications on global companies and the global economy.

Locally, we have an opportunity to use technology to travel the Midwest to Northeast of the United States, using a tool called an EZ-Pass. By having an account and keeping money in the account, there is no need for the driver to have cash on hand to drive through the tolls on these roadways. As a traveler for my contract jobs, I have an EZ-Pass that allows me to quickly and easily get through all tolls. A friend, who also travels the same distances as I, has a different opinion on the use of the EZ-Pass. She said to me that by having one, I am helping to put people out of work. Even in the United States, there are people who have not grasped the need for higher education and education in technology. After a personal trip to New Jersey, not only are there more uses of the EZ-Pass, but also many exits that do not even have the spaces built for toll booths where individuals could sit and collect tolls. Technology is here to stay. As a traveler, I am embracing the ease of technology in my need to travel. Those who have lower levels of education need to realize they need higher levels of education or lose their jobs.

"Inequalities grow more pronounced" (Altbach, Higher Education...). Not only in the United States, but locations around the globe, there are inequalities in educational opportunities. As we have discussed over this semester, in most of the regions, those who are entitled to the education are those who have the wealth. Unlike in the United States, where education is for all.

Education has become strongest where English is the primary language or where the economy/culture is considered a “Western” culture. “The traditional academic center becomes ever stronger and more dominant—mainly in the English-speaking countries of the North (the United States, the United Kingdom, Canada) and in Australia, and in the larger countries of the European Union (notably Germany and France, and to some extent Italy and Spain)” (Altbach, Higher Education...)

However, with other regions of the world, economic opportunities are increasing, not only from Western companies expanded into those regions, but also from region-specific companies who are starting and immediately trying to become globalized companies. Innovation and education become weaknesses of these countries. Because they lack individuals who are educated and can innovate, these companies have weaknesses. In the Chinese culture, for example, there have been great strides to create and run globalized companies. “...compared to most Western Born Global companies, which treat innovation as core competence, the innovation culture becomes one of the biggest weaknesses of Chinese manufacturing Born Globals’ internationalization” (p. 25, Andersson). Innovations come from the individuals’ understanding through education. When an employee is not highly educated, the company has issues.

The project where I am currently working, the company is Yanfeng. They are a global manufacturing company that is headquartered in China. They acquired a portion of Johnson Controls during the company’s breakup. This helps Yanfeng to become a better global company is that they can leverage the innovation and education capabilities of the employees they acquired, who are located in Western cultures. Working with this project for the past few months, I have seen issues in how the company operates, being that they move slower than if the

employees were still members of the Johnson Controls company. The new company is definitely as a disadvantage.

Learning how to educate adults in non-Western cultures, even those who are not US-based will continue to be an undertaking. “In Chinese business culture, the term for network or relationship is ‘Guanxi.’ It means a special relationship between individuals, which enables them to make unlimited demands on each other. Different from the definition of network in Western, Guanxi is a more utilitarian principle than emotional, which is based on family and friendship with overtones of unlimited exchange of favors” (p. 28, Andersson). Specifically, within the Chinese culture, it appears they have been working hard at incorporating their culture in their business relationships. More and more individuals need to be educated. For the country to become a global leader, as has been stated in the media, their citizens need the education, not only the primary education, but also technology education.

“Today, trends such as the rise of the Internet and the globalization of knowledge have the potential for creating severe problems for academic institutions and systems in smaller or poorer nations. In a world divided into centers and peripheries, the centers grow stronger and more dominant and the peripheries became increasingly marginalized” (Altbach, Higher Education...). When countries increase their global companies, their need for learning increases. We have discussed this semester how difficult it is for regions to educate their citizens in general education/basic education, now factor in the need for technology education. Not only do individuals need to learn technology to become successful, they also need to incorporate the use of technology into their education requirements.

As I have been working through my higher level degrees, I have found that the majority of the classes are only available through Web-based means. This means, I need to have the time

management and capabilities to incorporate my class requirements with my personal and professional endeavors. Currently, with this degree program, I am able to be home or traveling for my career, I am able to continue my program with Cleveland State University, even being in Canada or Japan. This allows my learning experience to be on “MY” time and not having to be constantly local to attend classes in Cleveland. “The integration of technology in the learning experience helps education to be less dependent on a particular time or place” (p. 1, Mirriahi).

More students are using mobile devices for their classes. “These results imply that students may prefer more flexible and blended learning opportunities, as most of them tend to use educational technologies when they are not on campus” (p. 5, Mirriahi). Even with the classroom-based classes where I attended, I used my laptop and iPad to take my notes, recording the classes and typing up notes as the discussions occurred. If I had taken my degrees when I was younger, I would have had to hand-write my notes. Now, I carry with me, no matter where the classes are located, online or in person, I use a laptop and iPad. Being able to have more accurate notes for classes allows me to have better grades. At the same time, as I am traveling, wherever possible, I am purchasing the books electronically. I manipulate the use of my iPad to store my books. Needing to have as little as possible with me while I am traveling, the iPad takes the place of the need to carry heavy books. Also, after the classes are finished, I will be able to use the books as references in my career projects. Other students I have seen are also engaged as such.

On the jobs sites, we are teaching classes in full technology mode. Because of the nature of the company, all employees have to be highly educated, no matter where on the planet they are. The training we have developed deals specifically with technology software used to develop the products that are made by the company for its customers. The training takes places in classes or online as web-based trainings. For the instructor-led classes, the participants use computers to

learn the new software and practice with the software prior to being given access to the software for their every day jobs. The training does not use printed documentation, but documentation is available in an electronic means for reference after the classes. For the web-based classes, the participants will access a learning management system (LMS) to attend the classes, along with access to the SharePoint site from the instructor-led classes where reference materials are available. No matter where an employee is within this company, they have access to the training for their new software system. For those individuals who are located in Europe, training was completed for trainers, a train-the-trainer program who took that knowledge to train the employees in Europe. Even for the employees in Mexico, we completed train-the-trainer programs for a number of the engineers who took the training back to the manufacturing plants for training. Again, just like the employees in Europe, the employees in Mexico have access to the reference materials. So, no matter where an employee is located, they have access to the online learning and the reference materials.

Where I have been employed, this is definitely a global company, headquartered in China and manufacturing locations around the globe. Not only are manufacturing companies needing to be globalized, many companies are needing to become that way. I have been involved with global companies since the 90's. "Globalization is probably both inevitable and unstoppable, and much of it is positive as well" (Altbach, Knowledge...). More and more companies, for their economic stability, need to acquire locations that are not only in Western locations, but in developing countries. They are acquiring these locations to help increase their profits. "It is especially problematical when many of those seeking to enter the global marketplace are motivated by a desire to earn a profit rather than by an educational mission" (Altbach, Knowledge...).

Based on the needs of global learning, accurate information can become an issue. Globalization for profit vs globalization for education itself will continue to be an issue. “Maintaining or even accurate information in a globalized academic environment is problematical” (Altbach, Knowledge...). In many developing locations around the globe, these locations do not have the funds or means to store information, let alone store the information accurately. There have been statements throughout the semester that have said that because the development in certain areas is so slow, the education is poor at best. The degrees that individuals earn are questionable at best. My guess is that, even though the locations are trying to grasp the need to education and knowledge, by not seeking help for the issues will continue to be issues. IT and Education Technology training could help alleviate this issue, even if in those areas, they need to forego their local traditions and cultures and do what the Western cultures to ramp these areas up for education and technology. As they continue on their education journeys, not only in developing countries, but globally, technology continues to become more advanced.

“As IT becomes more sophisticated and the curriculum better developed, distance offerings will become more numerous” (Altbach, Knowledge...). More and more individuals will have an opportunity to attend schooling anywhere on the globe. I chose to continue my education at Cleveland State University to allow me to stay focused locally, but allow me to travel for my career. Going forward, should I find an education program located in another country where my interests are focused, I would cause a disservice to myself by not attending those programs. The training could be located in China or South America. As long as the training is worthwhile, I should attend it. More and more individuals, not just myself, are engaging in distance education, using technology. According to the research, “...distance means of course

delivery enroll well over 3 million students worldwide...” (Altbach, Knowledge...). As long as the education is understandable, it should not matter where the education is located.

In conclusion, many companies are engaging in global economies for financial gain. Education Technology is a primary focus for these companies. More individuals need to learn the technologies earlier and earlier in life if they are to become members of the global economy. Issues arise to start with based on the fact that around the globe, basic education is lacking. Add in the need to technology education, that just adds a layer into the mix that countries need to face. Globalization is inevitable. Globalization will not go away. This is a HUGE issue that all of us need to embrace. If we don't, as we are seeing inequalities will continue and grow.

### **Personal Impact of Research**

I have been training adults in education technology for over 20 years. Originally, I started working for Ernst & Young with an Associate's Degree. Because of my role within the organization, I was tasked with learning how to develop training. The company was not sure where they would place me for a position within the organization due to the fact that my job role was not specific to one of their named roles. I learned the basis of my knowledge in instructional design from this company, and trained the employees for a global company. This was the early days of technology education in the late 90's, where I was developing technology training and training new hires from 1997 to 1999. All new employees, no matter what their employment level (new hire college grads to new partners) was involved in a one-day new hire technology class. They learned all of the specified software that would help them complete their jobs with their clients. New hires from around the globe came to the US to learn technologies required for their positions.



After that, I was employed with Cuyahoga Community College in the Nursing Education department. I was hired because of my technology experience. Part of my role within the department was to be the main contact with the contractors when the physical space where the department expanded the floor from a constructor project. I managed to confirm that all of the faculty settled into their new offices well and all of the technology worked. Along with those tasks, I taught the faculty in a one-on-one basis how to use Microsoft Office as they were unavailable for scheduled classes as they taught classes.

For the past eight years, I have been developing training in manufacturing IT systems for global companies. There have been two companies where I have developed customized training for the same technology software. The individuals who have learned how to use the software are in multiple locations around the globe. Without a structured technology training program in both locations, the companies would not have the capabilities for their employees to understand how to use the software. One company was Ridge Tool Company who makes the products sold under the RIDGID Brand name. They had been using this software for a long as eight years prior to deciding they needed training for their employees. The company is ISO qualified, meaning they needed to have documented their employees were trained in the technology to remain ISO qualified. The company was penalized for not having this documentation. They requested as part of my job to develop the training and to take the training to all of the manufacturing plants globally. By completing the training and understanding the processes to develop and launch products. After the training and better understanding of the software allowed the company to speed up their launch timeframes for new products. The other company has been an automotive interiors manufacturer, Yanfeng. This company is brand new to this same software that has been used by RIDGID. Change is very difficult for most people. The company was shutting down

existing software and using this new software platform to design, develop, and launch new products for their customers.

Developing software training that is understandable no matter who the individual is, keeping in mind where the participants are located, their cultures/traditions, will allow me to continue in my chosen practice of developing and training technology education no matter where in the world the participants are located.

### Works Cited

- Altbach, Philip G. (2015). Higher Education and the WTO: Globalization Run Amok. *International Higher Education*.
- Altbach, Philip G. (2003). Knowledge and Education as International Commodities: The Collapse of the Common Good, *International Higher Education*.
- Andersson, S., Danilovic, M. and Huang, H. (2015) Success Factors in Western and Chinese Born Global Companies. *iBusiness*, 7, 25-38. doi: 10.4236/ib.2015.71004.
- Hashim, Junaidah (2007). Information Communication Technology (ICT) Adoption Among SME Owners in Malaysia. *International Journal of Business and Information*, 2, 221-240.
- Khanam, Suby, Siddiqui, Jamshed, and Talib, Faisal (2013). Role of Information Technology in Total Quality Management: A Literature Review. *International Journal of Advanced Research in Computer Engineering & Technology (IJARCET)*, 2, 2433-2445.
- Mirriahi, Negin and Alonzo, Dennis, Shedding Light on Students' Technology Preferences: Implications for Academic Development, *Journal of University Teaching & Learning Practice*, 12(1), 2019.
- Poell, Thomas and Van Dijck, Jose (2015). Higher Education in a Networked World: European Responses to U.S. MOOCs. *International Journal of Communication*, 9.
- Pavlik, John V. (2015). Fueling a Third Paradigm of Education: The Pedagogical Implications of Digital, Social, and Mobile Media. *Contemporary Educational Technology*, 6(2), 113-125.

Sjøberg, Svein (2015). PISA and Global Educational Governance – A Critique of the Project, its Uses and Implications. *Eurasia Journal of Mathematics, Science & Technology Education*, 11(1), 111-127.