Technophobia of the Highly Educated

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For more detail, read *Learning as it influences the 21st century*

Technophobia Megatrends:

- **Technology eliminates thought processing**. Adding, subtracting, multiplying and dividing using mental calculations has been replaced by calculators. "I contend calculator use in lower grades causes underdevelopment of students' thought process. Student brains, taught arithmetic with calculators, will not mature to a level where calculating in their heads becomes possible. Should students graduate with the ability to calculate and reason, or simply have the ability to operate a computer?" (Learning pg. 73)
- Technology slows thought, or it can speed it. Thought slows when unable to functionally use technology. Computers, for example, cannot be used to capacity when the user is not trained in typing (keyboarding). "Teachers are now coming out of universities without being able to mentally calculate, (type efficiently) or even read cursive. Students, if they need to explain a test question, cannot quickly write it on a piece of paper or computer screen and show it to the teacher. Without good typing skills (trained keyboarding), or cursive writing, students must resort to the much slower method of printing or hunt-and-peck typing. Many new graduates can only understand typed text or legibly printed letters as if high schoolers were still in first or second grade." (Learning, pg. 73-74). Nineteenth century's efficient typing system is no longer a school system focus. "Forced slowing of physical maneuvers (like typing) will slow the mind to a similar pace." (Learning pg. 123)
- School systems no longer focus on students. Interpreting a definition from Merriam-Webster, "The 'school system' is a legal entity managing divisions of labor. It is important to note, words not found in the definition are 'student', 'child', or 'learning'." (Learning pg. 124) Like nineteenth century Luddites, the school system focuses on the number of laborers. "Labor interests do not run parallel with technology adoption. Efficiency always wins." (Learning pg. 125)
- Civilization changing by transportation and communications systems. The 21st century culture has not finalized development of 20th century personal freedoms granted by transportation and communication systems. Adoption of those freedoms is changing cultures around the world. Textbook author Willis E. Johnson wrote in 1915 "...Modern freedom, intelligence, prosperity and easy means of transportation have broken up the fixed social relations which characterized past civilizations." (Learning pg. 125) Communication, not available a century ago, is furthering social change from past civilizations.

- Civics training switched from parents to schools. "Societal positioning begins at home and parents, without promise, expect it to continue in the school system. Dr. Johnson (in his 1915 textbook) placed responsibility on the teacher and student as a means of preparing students for society. If students do not understand their basic role in society, is it any wonder they have not established civil expectations? Young minds (ten to fifteen) have been blocked by the school system from their societal expectations. In five years or so, they should be the wage earners. They should be taxpayers. They will be the ones funding schools." (Learning pgs. 126-127)
- Schools slow maturity and acceptance of established society. In most developed countries, students reach adulthood in school, but are not prepared for adulthood. "Historically, the young and the aged have always expected teenagers and young adults to be society's source of muscle and innovation. Fear of adulthood is not innate. It is learned. Harbored by a system that blocks youth from life's realities, schools create apprehension. By the time they reach adulthood, fear of employment and physical labor has developed. To diminish the fear, they extend their schooling, expect others to pay for it and their livelihood...while being free to express their opinions at no cost through voting, legal obstruction, and environmental and social activism." (Learning pg. 128)
- Stagnation blocks technological advancement. "Schools are stagnant. Is it any wonder students get frustrated and fail to reach their potential in school? By nature, stagnant systems are not as adept as the rest of society. Is it any wonder students follow teachers' lead in fearing business technology? Technology is new. It is scary. Business is outside the system that has protected them." (Learning pg. 127)
- Schools restrict technological implementation. "Developed countries have an implementation system gap: It is called schools. After age ten, their teachers should continually be driven to prepare students and utilize their classroom lessons to use, deliver, develop, and envision future technology and systems to sustain society. It is not just a civics or history lesson. Classes in math, languages, writing, and the sciences should be the bedrock of knowledge to process thoughts constructively and further develop civilization. Those suffering technophobia have irrational fears that may not be apparent, but symptoms appear in daily activities." (Learning pg. 128)
- Today's highly educated resist historical advancements. Scientific implementation of nineteenth and twentieth century technology is being rejected by the highly educated in the 21st century.
 - O lodine deficiency of highly educated: "As an example, in a study of highly educated German students, it appears they either resist even low-tech insertion of iodine into salt or prefer to ignore health recommendations. ...Young educated pregnant and nursing mothers lacking proper iodine intake may be causing sluggishness, slower thinking, and lower intelligence of their children since iodine gestation recommendations are nearly twice that of a normal person. Technophobes' children could be getting dumber as mothers switch from iodized salts." (Learning pg. 130)

- Vitamin D deficiency in school: "Through government intervention since the 1930s, vitamin D has been added to milk in the U.S. and Canada to prevent rickets in children. Many children today are sitting in classrooms or in their bedrooms manipulating gadget rather than playing outside where vitamin D is supplied by the sun. ... Not exposed to enough sun may be increasing bone injuries and suppressing children's immune system. This may be even a bigger concern for those with darker skin that naturally blocks vitamin D from sun exposure." (Learning pgs. 131-132)
- o Educated shun food production technology: "Organic food is another example of divergence between those who accept technology and those who reject it. Conventional food production (using twenty-first-century methods of commercially available pest control and fertilizer management) is often rejected by those with higher income and education in favor of foods labeled organic. Technophobia is developing along with organic food designations and is more apparent in demographic groups with more formal education. In recent decades, those with food technophobia are more likely to fear high-yield agricultural systems, preserved and processed foods, climate change, and the use of nuclear technology." (Learning pgs. 132-135) By regulation, organic food producers are forced to reject modern food production technology. "Who then is the most likely to purchase organic vegetables? No doubt, it is the group that least understands or trusts technology." (Learning pg. 141) Based on a U.S. Department of Agriculture survey, "From these results, well-educated Caucasians with higher incomes are the most likely sector to focus marketing of organic vegetables. Increases in education led to higher likelihoods to purchasing organic produce...." (Learning pg. 142)
- Educated shun nuclear power: "Nuclear power is another issue where those that have spent more time in our school system are most likely to actively oppose generating electrical power with it." (Learning pg. 138)
- Educated shun modern medicine. Alternative healthcare minimizes use of modern technology. Dr. John A. Astin in 1998 published a national study of alternative healthcare users. The study found "...Those with more school system education are more likely to employ alternative medicine than those in poor health. It is easy to deduce that the school system affects values, beliefs, and philosophical orientation of students. The public school system has become an anti-technology religion." (Learning pgs. 145-146)
- What's the source of 21st century Technophobia? "Technophobia is alive and well in the modern school system." (Learning pg. 151)