

From the Editor

Branding the Horse We Are Going to Ride into the Green Pastures Ahead

In my career-long pondering about our field and where we are heading, I happened upon a book that caught my attention. The book is titled *No Logo* by Naomi Klein, written nearly ten years ago (1999). She discussed the evolution of corporate America, citing companies like Nike, Microsoft, Tommy Hilfiger, and Intel. She stated that, "What these companies produced primarily were not things, but *images* of their brands" (p. 4). "Some of today's best-known manufacturers no longer produce products and advertise them, but rather buy products and 'brand' them" (p. 5). This caused me to think about what business do we think we are in, what business do we think we *ought* to be in, what business do *others* think we are in, and what business are we *really* in? These thoughts were inspired by the possible integration of the word "engineering" into the title of our profession, consideration of which is going on right now. In fact, ITEA Executive Director, Kendall Starkweather, reported the results of a survey that was recently conducted among the membership (Starkweather, 2008).

Consider IBM. Their brand in the form of the IBM letters and the familiar blue logo that goes with them is known throughout the world. My guess is that few these days even know that IBM is an acronym for the International Business Machine Corporation. Though they have tripped and stumbled a few times, my guess is that they could enter the power tool manufacturing business, for example, if they wished and have an immediate following of customers. Through their natural and planned evolution, they have become much more than a business machine company. In fact, the notion of business machines really does not fit them at all any more. Most recently they have poised themselves in "service science" and have supported some universities to establish a formal academic discipline in this area. Moreover, they state that "From a research and science perspective, we're aiming to put service innovation on the same kind of systemic foundation as computer innovation" (<http://www.ibm.com/ibm/think/>, slide 25). Even though the business they have been in has change many times, I doubt whether anyone in the company would ever consider changing their name or acronym, immediately putting them into relative obscurity. The same is true about Nabisco (National Biscuit Company), RCA (Radio Corporation of

America), and many others. In fact, RCA uses the slogan “Technology Unleashed” in order to promote the company as an innovator, but also to connect to their past, successful heritage in which virtually all advertising included a graphic of the dog, Nipper. In the advertisements, Nipper is curiously looking into the amplifying horn of the gramophone, puzzled by the sound “Of His Master’s Voice,” Thomas Edison, its inventor, emanating from it (<http://home.rca.com/en-us/PressReleaseLanding.html>). ITEA has a slogan as well: “Teaching Excellence in Technology, Innovation, Design and Engineering” along with the acronym TIDE. As with RCA’s, it can change over time while preserving the fundamental identity of the organization and profession it serves.

My thoughts about our profession then changed from IBM blue to green. Recently, I visited the National Building Museum in Washington, DC. I was particularly amazed at the number of books about “going green” on display in the bookstore in the museum, ranging from “Green for Dummies” to complex books on green construction. As I have gotten older, I have become increasingly more interested in ecology and the environment – and green. Perhaps it is an attempt at reconciling some irresponsible behavior in my early years or maybe it is simply due to the maturity that comes with my advancing years. In any case, Earth Day this year took on a lot more seriousness than it had when I supervised my junior high students on a clean-up-the-environment field trip on the first Earth Day during my third year of teaching in 1970. Now my mindset is that we should not be “going green” but rather we should be “going back to green” – a place we should never have left in the first place. I felt particularly proud when the first “green building” on the Millersville University campus opened this year as the new home to the School of Education.

While in Washington, I read a newspaper article about the bottled water phenomenon that led me to an article written by Ramon Cruz, Senior Policy Analyst for Living Cities at the Environmental Defense Fund. We are paying \$15 billion dollars a year for bottled water. More than one-fourth of this water is simply filtered tap water. In fact, the majority of tap water is just as pure as bottled water and sometimes even purer. Cruz cites the Pacific Institute analysis indicating that it required 17 million barrels of crude oil to produce the bottles for the water we consumed in 2006, enough oil to fuel over one million vehicles for a year. The manufacture of these bottles also produced 2.5 million tons of carbon dioxide and required three times the amount of water that eventually ended up in the bottles for sale to the consumer. Cruz also cites data that show that we recycle less than 20% of the 28 billion single-serving water bottles that we use each year. Then there are the non-renewable resources that are used to transport the bottled water from producer to consumer. I can only dream about what we could do with the \$15 billion water money if it was transferred to our profession. I also think about the marketing implications to our field of the \$1.59 per 20 ounce bottle of filtered water compared to the same price charged for 20 ounces of a name brand soda, along with the complexity of metering and mixing the seven ingredients of which the soda consists.

So what is our role in all this? First, in teaching our students about materials and processes we are uniquely poised to provide first hand experiences to them in how bottles are manufactured, including actual experiences with blow molding in at least some of our programs. There are highly engaging problem solving experiences we can provide to our students by challenging them to quantify the waste that is generated in our labs, how it can be reduced, recycled, and/or put to alternative use. As is so often true, we can provide learning experiences to our students, connecting knowledge and emotions in a real world setting, unlike any other program in the school. Second, technology education can be the leader within the school and within the community in developing a responsibility for environmental stewardship and changing attitudes. There is a considerable measure of logic in teaching students about the natural world (science) via the human-made world (technology), rather than the other way around.

Can “green” be our brand? Not likely, but clearly we have some significant responsibilities. Moreover, the unique challenges in which we can engage our students have some potential to get us in the minds of some influential people. On the other hand, everyone seems to be going green. In fact, going green has entered the forefront of business competition, with companies vying with each other to become the “greenest.” Murawski (2008) mentions the increasing tendency of companies to engage in “greenwashing,” making exaggerated claims about how green they are. No doubt this phenomenon will lead to government intervention to set standards on what green means, just as in the past with organic foods, gasoline mileage claims, and how much actual fruit juice must be in a product before it can be labeled as “fruit juice.” As I remember the news commentator Paul Harvey say over and over, “You cannot have self governance without self discipline.”

Should engineering be part of our brand? Already, what used to be the Technology Education Division of the Association for Career and Technical Education is now the Engineering and Technology Education Division (though the acronym uses a lower case *e*: “eTED”). The National Association of Industrial Technology is considering a name change and it is quite likely that it will contain the word engineering. So, just as companies are clamoring to become identified as being green, do we have a choice considering that our “colleague” organizations appear to be including engineering in their titles? On the other hand, have we changed names and brands over the years to create a more positive, marketable image to all those who we serve or have an influence on us? Or have we really engaged in our renaming and re-branding solely to serve ourselves, who are already in the profession?

There is some irony in this, at least at a personal level. In the 1980s, while I was a faculty member at Virginia Tech, we wished to change the titles of several of our courses in our technology teacher education program, using the word “technology.” The faculty in engineering made it clear that technology was their domain, but compromised as long as “teaching” was part of the course titles. So, we ended up with courses such as “Teaching Manufacturing Technology” and

“Teaching Construction Technology.” We would not even have thought about including “engineering” in any of our course titles or descriptions, certainly not in the name of our program.

In the hallways of the building in which our program is housed at Millersville University, there are display panels that contain the business cards of a number of our graduates who entered industry. Many of the titles on the cards include the word engineering, such as Product Design Engineer, Safety Engineer, and Manufacturing Engineer. Yet none of these graduates actually has a degree in engineering, but rather a degree in industrial technology. Though they may not be recognized as engineers in academia, they are certainly recognized as engineers in the real world since the companies that employ these individuals are the source of their titles. Is the word engineering losing its meaning since it is being used in such pervasive ways, similar to what happened to the word technology in the years since we changed our name in 1984? Will the word engineering soon be so commonplace that it has no significance? When I notice other organizations and entities that have no connection to us using the phrase technology education, I have to admit that it still causes my ire to climb. If we want to collaborate with engineering, do we need to obtain their blessing to use their name?

We do need to brand the horse we are riding. Recently I served on a proposal review panel for the National Science Foundation. All the proposals our panel reviewed were connected directly to technology education, yet few made reference to our field, our Standards, or our professional organization. Similarly, a colleague in our profession remarked to me about how few of the attendees at the recent American Society for Engineering Education knew about our field, adding that the organization appears to be “reinventing the wheel” that we have already made. Equally frustrating is how often a positive news article appears highlighting the wonderful things that one of our teachers is doing with students without making any connection whatsoever to technology education. Making this connection ought to be one element of a code of ethics for our profession.

When I think of the horse that we will ride into the future, I have to think (with tongue in cheek) of agriculture. While I was a faculty member at Montana State University some 30 years ago, I became increasingly impressed with agriculture education programs. At the time, there were 80 agriculture teachers in the State and 79 of them showed up for the annual summer conference in 1979. The no-show was very ill at the time. Agriculture educators have been able to connect their discipline tightly with their professional association and with their student organization. The Future Farmers of America (FFA) is their brand and is known and respected by all, from legislators to ordinary citizens. They were able to accomplish this with little effort in Montana since all of the teachers belonged to their professional association and were active in it. They had an effective “phone tree” to connect their profession to the state and federal government and collectively knew many government officials on a first name basis.

Starkweather (2008) concluded his report on the name change survey indicating that what is really important is not so much our name, but what we teach our students and what they will learn that will serve them well for the future. Having a good healthy horse that can get the job done, headed in the right direction, is more important than the saddle, the bridle, or the brand. Some of that bottled water money would help, though!

JEL

References

- Cruz, R. (2008, March 26). Bottles, bottles, everywhere.... *Environmental Defense Fund Blog*. Retrieved June 13, 2008, from http://environmentaldefenseblogs.org/climate411/2008/03/26/bottled_water
- Murawski, J. (2008, June 1). Green saves green: Companies' eco-friendly changes do more than make a social statement. *The News and Observer*. Raleigh, NC. Retrieved July 2 from <http://www.newsobserver.com/front/story/1092148.html>
- Starkweather, K. N. (2008). ITEA name change survey: Member opinions about terms, directions, and positioning of the profession. *The Technology Teacher*, 67(8), 26-29.