

CAN TECHNOLOGY PROMISE ANYTHING?

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When I got up this morning, my coffee pot had promised me that the aroma of a fine dark-roast would fill my house and open my eyes bright and wide. Alas, it failed to keep that promise. It was not, of course, deliberate, but I had made that classic “AM/PM” error setting the timer.

By definition, technology must have a practical application; it must have a purpose. If that is true then progress is not an intrinsic property of the technology, but rather an extension of the purpose that those using it have defined. Consider the parallel with the publishing industry. Many times throughout history, the printed word has been used to incite revolution and change when it was most needed; it has been used to spread hatred and fear in some of history’s darkest times, and it has been used to for every conceivable use in between. It is a stark contrast to consider that *National Geographic* and *Hustler* are reflections of the exact same advancement.

Technology is neither inherently positive nor negative. It cannot advance us as a human species, nor can it hold us back. Because technology itself cannot advance human development, as educators we must be very aware of our purpose when we seek to introduce a new tool. Consider the recent advent of interactive white boards in North America. In 2008, there were an estimated 256,000 interactive whiteboards purchased by schools and school districts, and then in 2009, an additional estimated 319,000. Clearly the educational community has adopted this technology as an effective teaching tool. However, for a farsighted student, the interactive whiteboard is a serious impediment. Although touching a screen and seeing an immediate reaction yields positive results for many students, the farsighted student will have difficulty reading when standing in arms-reach of a screen.

Progress should not mean that we must accept new technology, but rather that when a tool can make the task at hand more effective, then we adopt that tool for that task. The classic example is the axe and the chainsaw. No one would propose that an axe is as efficient as the chainsaw, and yet there are tasks that are still better served with an axe.

Consider the impact of social networking on the public school system. Classes have been able to make connections with students from far corners of the world that would have not been possible in years past. We see new connections being made within school communities, in the greater community, and in the global community. People from near and far are beginning to have a presence in the classroom as has never been possible before. Yet that same technology has yielded new issues in cyber-bullying, professional ethics, and codes of conduct.

In 2010 there was a specific incident in a New Brunswick high school where a student fell victim to a particularly aggressive form of cyber-bullying. The situation escalated to the point where a group of this student's peers were actually plotting to physically assault the student at the school. However, because the method they chose to plot their attack was essentially public, a disinterested third party was actually able to observe the development of the situation, and alert the school where the staff was able to intervene before a crime was committed. This particular case shows both sides of the issue.

Obviously, the cyber-bullying problem is a new issue that schools are now forced to contend with, but the same example shows greater community involvement within the school community. The same situation could be carried even further in that the greater community involvement in this example was for the good of all of the students, but it could have just as easily been someone with a vested interest on one side or the other, or someone who sought to assist but instead of contacting the school became directly involved. In July of 2009, the popular social networking website Facebook reported that over 4.6 million of their users were high school students.

A number of years ago I took part in a classroom discussion on the topic of Technology. As a group, we decided that the intrinsic characteristics of technology can be reduced to three essential traits:

1. It cannot exist in nature- a tree is not "technology".
2. It must be a product of humankind -- a frog uses a lily pad as a flotation device, but that unto itself is not a technological advancement.
3. It must serve a purpose -- a lunar lawn mower does not constitute a technological advancement.

When considering the promise of progress, the origin of that promise must be considered. Technology can no more make a promise than a pen can write a great work of literature. It is how humankind uses that technology that brings progress. In the classroom, progress could be defined as reaching more students in a positive manner. However, it might also be defined as any advancement that reaches more students in a more positive and effective method thus allowing the educator more time to spend with the student who trails behind because their needs are not met with the majority. Progress, using technology, might also be defined as the use of tools to reach the minority of students who are not reached by so-called mainstream teaching methods. Technology does not possess the intrinsic property of will and thus cannot make any promise. It is incumbent upon all of humankind to use the tools at our disposal for the betterment of everyone.

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