

All We Really Need to Know about Technology ... We Can Learn in the Restroom by Lewis Rhodes

Some credit human progress to the fact that we are tool-users. This strength has its dark side, though. At times we seem to focus more on the tools and skip questioning why we are using them. We conclude we want drills, when we basically want holes. This can be particularly true when we confront new tools and must focus most of our attention on how to use them rather than the more basic questions of "why?"

The importance of that question was revealed to me several years ago in a surprising place - a men's room. I had been invited back to my alma mater, Syracuse University, to talk about my experiences with technology and education and had stopped by the men's room before going to the lecture hall. After searching fruitlessly for a paper towel, I was standing before the electric hand dryer on the wall. With nothing productive to do with my eyes, I glanced down at the dryer itself and read:

TO SERVE YOU BETTER ...

We've installed pollution-free electric hand dryers that medical tests prove may protect you from the hazards of diseases that may be transmitted by towel litter.

- **Dries hands more thoroughly.**
- **Always available at a touch of a button.**
- **Prevents chapping.**
- **Keeps washroom free of towel waste.**
- **Helps protect the environment.**
- **Saves trees from being used for paper towels.**
- **More sanitary than paper and helps maintain a cleaner facility.**

Before me were all the reasons why I should embrace the use of this modern technology.

- * Research *proof* of its value (medical tests);
- * More *effective* (dries hands thoroughly);
- * More *efficient* (always available at a touch of a button);
- * *Good for me* (prevents chapping and is more sanitary); and at the same time

* *Good for the environment* in this restroom and the world as a whole (keeps it free of paper towel waste and saves trees); and

* Even *fear* (protection from the hazards of disease).

But I was not buying it. I looked to see that no one was noticing and wiped my hands on the side of my pants, and hurried out. Why was I, a technology champion, not using this modern technology?

It was clear. Here was a technology that did not deal with my present needs. My need: get my hands dry as quickly as possible and get out of there. My solution: use whatever is accessible that meets those criteria for time and task. No towels, use pants.

Several years later I was reminded of how much that time and task principle was affecting educator's understandings of technology's values when I visited PS 125 in New York City, the Ralph Bunche Elementary School in Harlem. I first saw computer-using students, who for one small portion of their lives, HAD control over something that was theirs. They did their work in their own personal computer folder. I saw them interacting electronically with students in their class as well as other classes at the school. And I saw them holding mature conversations via the Internet with adults around the country, including universities (Columbia and Penn State).

I noticed one teacher with 23 years of experience at the school smoothly orchestrating a flow of student activity in classrooms and hallways, while constantly staying in tune with each child's emotional state and actions. And I noticed also that his deep knowledge of children was matched only by his apparently effortless understanding of the technological tools arrayed throughout, and in every corner of, his working spaces. It was clear to me that, in the hands of this caring and experienced professional, technology works. He knew not just *how* to use technology, but *why*.

Most of the classrooms in his school, however, lacked technology and teachers like him. Even the principal, assistant principal and their staff worked without computers. Interestingly, PS 125 was located alongside the administrative offices for District 5 of the New York City Schools. There, things were different. There were computers, laser printers, fax machines, scanners. Five leased lines entered the building.

In this part of the building there were more technologies available, and they were used with greater transparency. No one seemed to think before using them. They were expected to. It was accepted as the way to do business. Staff practiced with new tools until they became second nature.

Why were there such differences between the technologies in the school building and those in the central administrative offices? I noticed that in the central offices, technologies added value to the outcomes of work for which each user was directly accountable. In terms of both task and time, they could be justified in the budget because they increased both individual and (as a result) organizational productivity. But

in the classrooms and school building I saw that day, and in most others I have visited since, those lessons have yet to be learned.

Technology: Adding to COSTS or VALUE?

As teachers and administrators confront a variety of choices regarding technology, what basic principles can they learn from a restroom hand dryer? (Or alternately, why should you listen to a guy who dries his hands on his pants, when advanced technology is available?)

First utility lies in the needs of the user. Value comes first from what the tool enables *people* to do. Because educators have been so busy learning to use computers so they can find out what the tool does, they have not been able to focus on the values the technologies provide to what they do. As a consequence, in many schools, computers and information technology tend to be addressed as ends rather than means. School systems have “technology” plans. Seldom has technology been viewed as a strategic tool for accomplishing its other plans.

When technology use is perceived from a fragmented perspective that divides schools into worlds of either instruction or administration, strategic organizational values fall through the gap between them. Lost is its value as an enabler for the changed *roles and relationships* that are the connecting points of restructured or reinvented schools. Without that, technology for classrooms tends to be seen as a separate cost element rather than as part an investment in *total* educational results.

If we truly believe in the empowering potentials of technology for both students and educators, then, as in the restroom, we must understand how technology’s “power” lies in its contribution to the *real time* work in which both are engaged.
