

From the Editor

Addressing the Crisis of Identity

Once again, we face a crisis of identity. Ironically, “technology education” was chosen to eradicate our former identity crisis. The old name carried too much baggage. Most thought “technology” would capture the public’s attention and put us in good stead. Though its ambiguity was apparent from the onset, the ambiguity was thought to be more an asset than a liability. It was presumed preferable for the public to be clueless when they heard “technology education” than to think of us as industrial arts.

“Technology” *was* a good word. It had, for example, served the Science, Technology, and Society (STS) movement well. No one confused STS with Science, Computers, and Society! But that was because there *were* no computers in education when STS was developing its identity. Now, of course, “technology” *means* “computers” to all but a relatively small percentage of the population who work to understand its intended meaning.

The name change was intended to fuel a “paradigm shift” in the profession. Technological literacy for all was the underlying assumption long before it was formally adopted by the Technology for All Americans Project. But just when we were hoping the American public would begin to associate “technology” with our field, the digital revolution changed nearly everyone’s perception of the term. Thus, we’re back where we were two decades ago—ensconced in a crisis of identity.

The public *knew* what industrial arts was, but now has no concept of “technology education” and we’re not reaching them with clarification. Science education, on the other hand, has begun to educate the public about *their* technology education efforts, further confounding our dilemma. Specifically, the science education community is parading technology competitions before the public with considerable support from corporate giants. I’m not sure if they’re getting everyone’s attention, but they certainly have mine.

Though our field has sponsored technology competitions for as long as I can remember, the public has little awareness of our work in this arena. I suspect it never occurred to us to use them as corporate bait and media sound bites. But that’s exactly what science education has been so successful in doing. They’re capitalizing on the widespread appeal of technology competitions in ways we never imagined. The National Science Teachers Association (NSTA) receives more than a million dollars a year corporate support for three nationally promoted and recognized technology competitions, all of which are well publicized in the media. As a result, the public will increasingly see science education as *the* delivery vehicle for technology education.

Sam Micklus, one of technology education’s own, showed us the potential and provided the formula for big-time technology competitions. Single-

handedly, he established the Odyssey of the Mind (OM) competition (though now broader in scope, OM began solely as a technology competition). He wasted no time in landing network television air time and corporate support for the idea. He sold the OM competition all across America and later throughout the world. If my small town is indicative of others, most educators and parents of school age children know about OM competitions. In a very short span of time, Sam Micklus managed to make OM highly visible throughout America, and to some extent, throughout the world.

Similarly, science education is capitalizing on technology competitions, spreading the perception with the American public that they're leading the way in the study of technology as we know it. Technology competitions first became big business for the NSTA in 1982, with the advent of the "Duracell/NSTA Scholarship Competition." Very simply, it's a competition which challenges students to "create and build a working device powered by Duracell batteries." The competition has little to do with science; it's a technology contest. This year's scholarships total approximately \$125,000, which is just the beginning of Duracell's financial commitment to this effort. This year, for the first time, the competition includes grades 7-9, in addition to 9-12. Since science is required of all children from 7-10th grades, all students 11 years of age or older potentially have an opportunity to compete for the \$57,000 in scholarships offered at the 7-9 level and again at the 9-12 level. I suspect many parents are hearing about this competition through their children, thereby building the public perception of science as the purveyor of technology education. If not, they may be reading about it in the popular press (see, for example, *USA TODAY*, Sept. 22, 1993, pp. 8a-9a [full pages]).

The Duracell contest was just the beginning for NSTA. In 1993, Toshiba began sponsorship of the "Toshiba/NSTA ExploraVision Awards," perhaps the richest technology contest on the planet. ExploraVision has four levels of competition, from K-12. Students work in teams of three or four. Their charge is simply to "select a technology, or an aspect of a technology that is present in the home, school, and/or community.... explore what it does, how it works, and how, when, and why it was invented." The students project what the technology will look like in 20 years, build a prototype, and describe it with a technical report, storyboard, and videotape. ExploraVision awards approximately \$350,000 in Savings Bonds and another \$70,000 in travel to winners and their families *annually*. It is my understanding that, in all, Toshiba contributes as much as \$1 million/year to sponsor all aspects of the competition, presumably for promotion, judging, scholarship awards, travel, and media publicity, in addition to the prizes.

The latest NSTA technology competition, sponsored by Sears, is the "Craftsman/NSTA Young Inventors Awards Program." Targeted to grades 4-6, this competition "encourages students to combine their creativity and imagination with science, technology, and mechanical ability to invent and build a tool or modify an existing tool." US Savings bonds totaling \$65,000 will be awarded contest winners this year.

Each of the contests is at the heart of a public relations extravaganza. Philanthropic as these sponsors may be, it is obviously in their best interest to promote their participation in these competitions to the American public. They do this, of course, through the media, and therein lies the point. Aided by substantial corporate funding, science education is doing a terrific job of fostering the image of science as *the* delivery mechanism for technology education. Never mind all three contests are extracurricular. The *perception* these contests create is that all kids are doing technology in science class.

I think our profession should take notice of this trend. Despite having the most dynamic curriculum in all of education, technology education—as a field and school subject—remains a well-kept secret. Meanwhile, the public reads annually about three major technology competitions sponsored by the NSTA and associated with science classes across America.

Given our crisis of identity, I think we need a piece of this action. Perhaps corporate sponsored technology competitions are our best shot at gaining the visibility we so desperately need. I find it ironic that Sears is sponsoring a “science” contest that is all about the tools, materials, and processes of technology. Most science teachers do little or nothing with the tools Sears is promoting by putting the “Craftsman” name on the contest marquis. We teach about those tools every day, and the best we’ve managed in this regard was the “golden hammer” plaque from the Stanley Tool Company!

There are any number of technology contests that might appeal to corporate sponsors and subsequently draw attention to our field as never before. Obvious candidates for competitions include those in Manufacturing, Communication, Transportation, Computer Control, Power/Energy, and Technical Design/CAD, to name just a few. Three years ago, I promoted this idea in the ITEA Section for Communication Technology, but the Section had neither the resources nor the personnel to pursue the idea, so it never got off the ground.

So, once again, I’m wondering aloud about the potential of corporate funded contests as a possible antidote for our lingering/festering identity crisis. The influx of more than a million dollars a year from corporate sponsors for technology contests has undoubtedly bolstered the notion of science education as the delivery agent of technology education. The adage “image is everything” suggests that it behooves us to follow suit with one or more highly visible technology competitions of our own.

In the meantime, I suggest we make every effort to step up technology teacher and student participation in the Duracell, Toshiba, and Sears contests. I think we can and should incorporate the contest activities *within* the technology education curriculum. They are educationally sound and completely consistent with our current mission, goals, and best practice. ITEA has done a good job of promoting the Duracell contest in the past, but those I’ve polled in our field have little or no knowledge of the ExploraVision or the new Young Inventors contests.

Beyond what ITEA might do to promote technology teacher/student participation in the NSTA competitions, we should incorporate these contest guidelines and entry forms into every appropriate technology education curriculum guide, teacher education class, teacher in-service workshop, and

publication of the profession. As several technology teachers have already discovered, many of the competition winners come from the same teachers and programs each year. Thus, individual technology teachers and programs could gain widespread recognition by competing successfully in these competitions, as have several already. It would bolster our image as technology educators and help to clarify our identity.

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Note: For more information on the NSTA sponsored technology competitions, see <http://www.nsta.org/programs/> (look for the links to the “Student Award Programs” halfway down this page).