

From the Editor

If you haven't read *Project 2061: Science for All Americans* (AAAS, 1989), it's time you did. My guess is it will have more significance for technology education in the 1990s than any other single document published in the '80s or '90s. Subtitled *A Project 2061 Report on Literacy Goals in Science, Mathematics, and Technology*, it is, first and foremost, a call for action.

Project 2061 is a set of recommendations from the National Council on Science and Technology Education, a group of scientists and educators appointed by the American Association for the Advancement of Science. It serves to draw attention to the critical need for scientific literacy for all Americans, a literacy which the report says "embraces science, math, and technology."

Unlike other national reports that seem to ignore or downplay the role of technology education, this one speaks to our needs and interests throughout. The tone sets the stage for establishing alliances, rather than turf. Through this and a set of accompanying documents, the AAAS seems to be suggesting that this is a time for us to pull together the common interests of science, math, and technology education so that the cumulative whole may exceed the sum of the parts.

In addition to the main report, five companion volumes were produced by the National Council, each directed toward different areas of the curriculum. The one of most interest to technology educators is titled *Technology: Report of the Project 2061 Phase I Technology Panel* (Johnson, 1989). This report should make your decade. The panel, which former 3M Company executive scientist James Johnson chaired, sought to answer the question: "What is the technology component of scientific literacy?" (p. viii). They deliberated for two years before issuing their answer in the form of this report. Among the ground rules provided the panel by Project 2061 was a directive to "Propose a common core of learning in technology that can serve as part of the educational foundation of all students, regardless of sex, race, academic talent, or life goals." (p. ix).

The report acknowledges the contributions industrial arts programs have made over the years: "The Technology Panel continually emphasized the importance of this experiential learning process, and nearly every consultant advocated the need for more. A key question is how to expand the technique to serve a much broader pedagogical role." (p. 5). Johnson suggests the answer lies in providing more science and math in technology courses, and more

technology in science courses: “They [mathematics and the biological, physical, and social sciences] should be a part of technology education curricula, just as technology should serve to bring additional meaning to the curricula of the sciences.” (p. 7).

The discussion of technology that fills this document is one with which technology educators should be familiar. Section III provides brief essays on “selected technology fields,” including Materials, Energy, Manufacturing, Agriculture and Food, Biotechnology and Medical Technology, Environment, Communications, Electronics, Computer, Transportation, and Space. Not many surprises for our field in this list; we've been working on it for four decades.

I think it is immensely significant that technology education and science and math education are being mentioned in the same breath, particularly when the voice is that of the science establishment. The symbiotic relationship suggested by these reports has obvious implications for all parties involved.

Talk is cheap, you say? Where's the beef? Well, it is true that change of this magnitude in public education may be unprecedented. Yet, the wheels are beginning to turn even as you read this. A few days before Labor Day, I learned the National Science Foundation is, for the first time, actively seeking proposals relating to materials development and teacher enhancement in technology education... and *that* is unprecedented! If interested, contact Dr. Gerhard Salinger, NSF Program Director for Instructional Materials Development at (202)357-7066.

Perhaps indicators such as these signal a return of technology education to the general education arena it enjoyed as industrial arts education for the first three quarters of the 20th century? I, for one, hope so.

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References

- American Association for the Advancement of Science. (1989). *Project 2061: Science for all Americans* (AAAS Publication 89-01S). Washington, DC: Author.
- Johnson, J. (1989). *Technology: Report of the Project 2061 phase I technology panel* (AAAS Publication 89-06S). Washington, DC: American Association for the Advancement of Science.