

# Standpoint



INTERNATIONAL  
TECHNOLOGY  
EDUCATION  
ASSOCIATION

A newsletter of the International Technology Education Association and its Technology for All Americans Project

Vol. 4, No. 3

September 1998

## News from the Technology for All Americans Project

The Technology for All Americans Project (TfAAP) staff has been actively preparing for the publication of the *Standards for Technology Education: Content for the Study of Technology*. The staff attended a number of meetings and conferences over the summer to promote the *Content Standards* and gather input on the second draft.

The National Academy of Engineering Focus Group met in May to provide TfAAP with input on the second draft of the *Content Standards*. In June, the Advisory Group also met with the staff to offer their comments on the *Content Standards*. After meeting with the Standards Team Leaders and Recorders in St. Louis during July, the staff spent several weeks reviewing the *Content Standards* based on the feedback and input from these groups.

In August, the *Content Standards* and a questionnaire were mailed to 54 schools in the U.S. The teacher or district representative from each school will review the *Content Standards* and respond with their input by the end of September.

This fall the staff will be working to complete the full document. They will focus on writing and revising the introduction to the technology education section, as well as, the standards by grade levels K-2, 3-5, 6-8, and 9-12, the description and format of the standards, and a chapter on advancing technological thinking.

The document will be sent to individuals and groups for review in early October. Among those selected to review the full document will be the Engineering Focus Group appointed by the National Academy of Engineering and the Standards Team. After the reviewers have provided their input on the document, the TfAAP staff will work on the final revision. The *Standards for Technology Education: Content*

*for the Study of Technology* is scheduled to be released at the International Technology Education Association conference in Indianapolis, Indiana, March 28-30, 1999.

### From the Reviewer's View

More comments from reviewers of the second draft. . .

"Excited about potential; agree with 95%. We can have the most impact at the K-5 level."

"3-5 is a great time to introduce technology education; great topic, and your design and guidelines should be well received. Use and manage section looks exciting. Document is well organized, and puts to paper extremely difficult concepts; nice to see people pushing new ideas."

"Quit! You are finished. This is quite good. Now, go try it! . . ."

### The Standards and *ramping*

The Technology for All Americans Project Standards Team Leaders and Recorders along with the project staff have been working to build rigor into the standards for grades K-12. Extensive work on mapping of the *Content Standards* has helped to develop an articulated set of standards at grade levels K-2, 3-5, 6-8, and 9-12. The amount of content at each grade level has been analyzed, and various audits have been completed to assure that the concepts in the *Content Standards* go from levels which are appropriate at the elementary school to the middle school to the high school level. This articulation process is referred to as **ramping** in the narrative description of the *Content Standards*.

# C A T T S : The Center to Advance the Teaching of Technology & Science

The International Technology Education Association has established the Center to Advance the Teaching of Technology & Science (CATTS). The Center's mission is to provide new and experienced teachers with professional development support in the form of curriculum resources, teacher training, and research related to instruction to help them ensure the education of technologically literate citizens. CATTS Director Brigitte Valesey will be coordinating initiatives to provide quality professional development opportunities for teachers and related professionals in technology and science. Valesey has extensive experience in association work, curriculum development, and public school teaching in technology education.

Teachers face challenges for improving student achievement, developing technological literacy and implementing curricula to meet national content standards. CATTS will help elementary and secondary teachers as they strive to provide direct research- and standards-based curriculum support to enhance the teaching of technology and science in school classrooms. Current CATTS projects include development of standards-based classroom resources addressing technology applications of space related research, student enrichment activities, and teacher enhancement workshops. Teachers will find CATTS a valuable professional resource for developing relevant classroom instruction, locating quality standards-based curriculum resources, and promoting technological literacy through exciting student experiences.

CATTS also features a consortium to form professional alliances and pool state/provincial/local/private resources. Consortium participants receive products and services specific to their local professional development needs. Teachers in participating states and organizations receive additional resources and training through consortium initiatives.

**For more information about how CATTS can support technology teaching efforts**, contact the Center to Advance the Teaching of Technology & Science, International Technology Education Association, 1914 Association Drive, Suite 201, Reston, VA 20191-1539; (703) 860-2100; FAX (703) 860-0353; E-mail [cattsitea@iris.org](mailto:cattsitea@iris.org) or visit their web site at <http://www.iteawww.org>.

## Technical Foundation of America Awards Grant to the International Technology Education Association

The Technical Foundation of America has awarded funding to the International Technology Education Association for its Technology for All Americans Project. The grant will be used to develop the addendum, *Technological Studies Series: Grades 6-8*, which will focus on how to implement the content standards for technology education. Arvid Van Dyke, Associate Professor Emeritus at James Madison University, and William E. Dugger, Jr. and Pam B. Newberry of the Technology for All Americans Project staff will be working together to develop the addendum.

The *Technology for All Americans Project* is a project of the International Technology Education Association (ITEA). Funding is provided by the National Science Foundation (NSF) and the National Aeronautics and Space Administration (NASA). All inquiries should be addressed to:



Technology for All Americans Project  
International Technology Education Association  
1997 South Main Street, Suite 701  
Blacksburg, VA 24060  
Phone: (540) 953-0203  
Fax: (540) 953-0014  
Email: [standards@itea-tfaap.org](mailto:standards@itea-tfaap.org)  
URL: <http://scholar.lib.vt.edu/TAA/TAA.html>





## Standards Team Profiles

**Clare Benson** is a professor at the University of Central England in the United Kingdom. She has a master's degree in education. Benson was appointed to the Faculty of Education in 1989, at the time when the National Curriculum was being introduced into all primary schools.



"Since then, I have changed my focus from primary science to that of design and technology education. I am certain that the subject is of great value to young people. . . It is a subject which has great relevance not only to their lives today, but to their future lives."

Professor Benson is involved in undergraduate and postgraduate teaching and supervision, research, and the provision of in-service work for teachers. She also leads the Centre for Research in Primary Technology at the University of Central England. She has written extensively on the subjects of science and design and technology education. Benson has presented papers at numerous conferences, and she has had the opportunity to study the development of design and technology education in other countries.

"Last summer, I felt very honoured to be invited to be part of the [Technology] for All Americans Project. . . It was very rewarding to meet all the people involved, but particularly to work with primary colleagues."

**Denice D. Denton** assumed the position of dean of the College of Engineering at the University of Washington in September, 1996. Previously, she was a professor of electrical and computer engineering and chemistry at the University of Wisconsin-Madison.

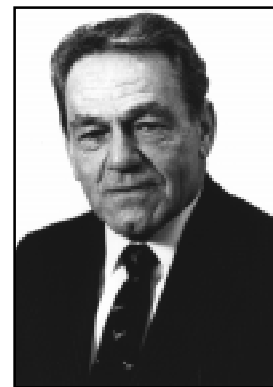
Denton is an expert in the development and use of micromachining for the design and fabrication of microelectronic systems. She was a research leader for the University of Wisconsin-Madison's Engineering Research Center for Plasma-Aided Manufacturing.

Dean Denton received her bachelor's, masters and doctoral degrees in electrical engineering from the Massachusetts Institute of Technology. During her nine years at the University of Wisconsin-Madison, she was named a Presidential Young Investigator by NSF, and she received numerous teaching honors.

Denton was the co-director of the National Institute for Science Education, a \$10 million NSF initiative to boost science, mathematics, engineering, and technology literacy of U.S. students. She also served as director of the University of Wisconsin-Madison's Manufacturing Engineering Education for the Future program, designed to enhance the quality and diversity of undergraduate engineering education.



**Norman Hackerman** is chairman of the Scientific Advisory Board of the Robert A. Welch Foundation. He is President Emeritus (1970-85) and Distinguished Professor Emeritus of Chemistry at Rice University. Prior to his tenure at Rice, Hackerman spent 25 years at the University of Texas where he joined the faculty as an assistant professor of chemistry in 1945; he later became president of the university in 1967.



Hackerman was editor of the *Journal of the Electrochemical Society*, 1969-89. He is author or co-author of 226 publications. He has received numerous awards including the National Medal of Science and the Vannevar Bush Award of the National Science Board, 1993; American Institute of Chemists Gold Medal, 1978; the AAAS-Philip Hauge Abelson Prize, 1987; and the Charles Lathrop Parsons Award of the American Chemical Society, 1987.



**INTERNATIONAL  
TECHNOLOGY  
EDUCATION  
ASSOCIATION**

Technology for All Americans Project  
International Technology Education Association  
1997 South Main Street, Suite 701  
Blacksburg, VA 24060

*Please contact us with any corrections to  
your name or address.*

Non-Profit Org. U.S.  
Postage  
PAID  
Permit No. 458  
Roanoke, VA

## Reviewing the Standards

Fifty-four schools from across the nation were selected as field review sites to examine the third draft of the *Standards for Technology Education: Content for the Study of Technology*. The goal of the field review process is to obtain feedback from a variety of schools on how the *Content Standards* will fit into current technology education programs, whether the *Content Standards* will be helpful in developing curriculum, and how the *Content Standards*, when implemented, will affect the learning experience at the classroom level. The following schools are currently reviewing the *Content Standards*, comparing it to the school's current technology education program, and providing insights from their perspective:

**Agawam Junior High School**  
Feeding Hills, Massachusetts  
**Agawam Middle School**  
Agawam, Massachusetts  
**Bellevue High School**  
Bellevue, Florida  
**Bloomfield Hills Middle School**  
Bloomfield Hills, Michigan  
**Byron Center High School**  
Byron Center, Michigan  
**Burrus Laboratory School**  
Muncie, Indiana  
**Cass Elementary School**  
Livonia, Michigan  
**Caverna Junior/Senior High School**  
Horse Cave, Kentucky  
**Century High School**  
Hillsboro, Oregon  
**Columbia City Elementary School**  
Lake City, Florida  
**Cumberland Valley High School**  
Mechanicsburg, Pennsylvania  
**Cutler Ridge Middle School**  
Miami, Florida

**Damascus High School**  
Damascus, Maryland  
**Dan River High School**  
Ringgold, Virginia  
**Dublin City Schools**  
Dublin, Ohio  
**Dunkirk High School**  
Dunkirk, New York  
**Forest Hills High School**  
Sidman, Pennsylvania  
**Fruita Monument High School**  
Fruita, Colorado  
**G. Ray Bodley High School**  
Fulton, New York  
**Gilbert School**  
Winstead, Connecticut  
**Gladstone High School**  
Gladstone, Oregon  
**Grant Wood Elementary School**  
Iowa City, Iowa  
**Greenfield-Central High School**  
Greenfield, Indiana  
**Harrisonville Middle/High Schools**  
Harrisonville, Missouri  
**Hellgate Elementary School**  
Missoula, Missouri  
**Hermosa Valley School**  
Hermosa Beach, California  
**Hershey Middle School**  
Hershey, Pennsylvania  
**Hobart Middle School**  
Hobart, Indiana  
**Hoffman T.E.C.H. Center**  
Machesney Park, Illinois  
**Homewood High School**  
Homewood, Alabama  
**John T. Baker Middle School**  
Damascus, Maryland  
**Kalida High School**  
Kalida, Ohio  
**Lakeville High School**  
Otisville, Michigan

**Lange Middle School**  
Columbia, Missouri  
**Lehman Middle School**  
Canton, Ohio  
**Louis M. Klein Middle School**  
Harrison, New York  
**Marlboro Middle School**  
Marlboro, New Jersey  
**Monte Vista Elementary School**  
Rohnert Park, California  
**Normal Community West High School**  
Normal, Illinois  
**Pine River Area Schools**  
LeRoy, Michigan  
**Pleasant Hill Elementary School**  
Austin, Texas  
**Rochelle Township High School**  
Rochelle, Illinois  
**Rocky Hill Middle School**  
Clarksburg, Maryland  
**Suncoast Elementary School**  
Brooksville, Florida  
**Syoset High School**  
Syoset, New York  
**Thomas Dale High School**  
Chester, Virginia  
**Twelve Corners Middle School**  
Rochester, New York  
**Venice High School**  
Venice, Florida  
**Vernon Township Public Schools**  
Vernon, New Jersey  
**Waimea Elementary and Intermediate School**  
Kamuela, Hawaii  
**Walter Johnson High School**  
Bethesda, Maryland  
**Westlake High School**  
Westlake, Ohio