

For more information about the
Standards for Technology Education,
contact the **Technology for All
Americans Project** or the **International
Technology Education Association**:

Technology for All Americans Project

1997 South Main Street, Suite 701

Blacksburg, VA 24060

Phone: (540) 953-0203 Fax: (540) 953-0014

Email: tfaa@bellatlantic.net

Home Page: <http://scholar.lib.vt.edu/TAA/TAA.html>

**International Technology
Education Association**

1914 Association Drive

Reston, VA 22091-1539

Phone: (703) 860-2100 Fax: (703) 860-0353

Email: itea@iris.org

Home Page: <http://www.iteawww.org>

Technology for All Americans Project staff:

William Dugger, Jr., *Director*

Pam Newberry, *Senior Research Associate*

Melissa Smith, *Research Assistant*

Jodie Altice, *Administrative Assistant*

Diane Kitts, *Secretary*

Constance Moehring, *Librarian*

Brochure photos by: Gary Colbert, Rick Griffiths,
Constance Moehring, Charles Shoffner, Bob Veltri.

Standards for Technology Education



Design

Problem solving

Creativity

Invention

*Technology is
human innovation
in action*



**INTERNATIONAL
TECHNOLOGY
EDUCATION
ASSOCIATION**

Standards for Technology Education

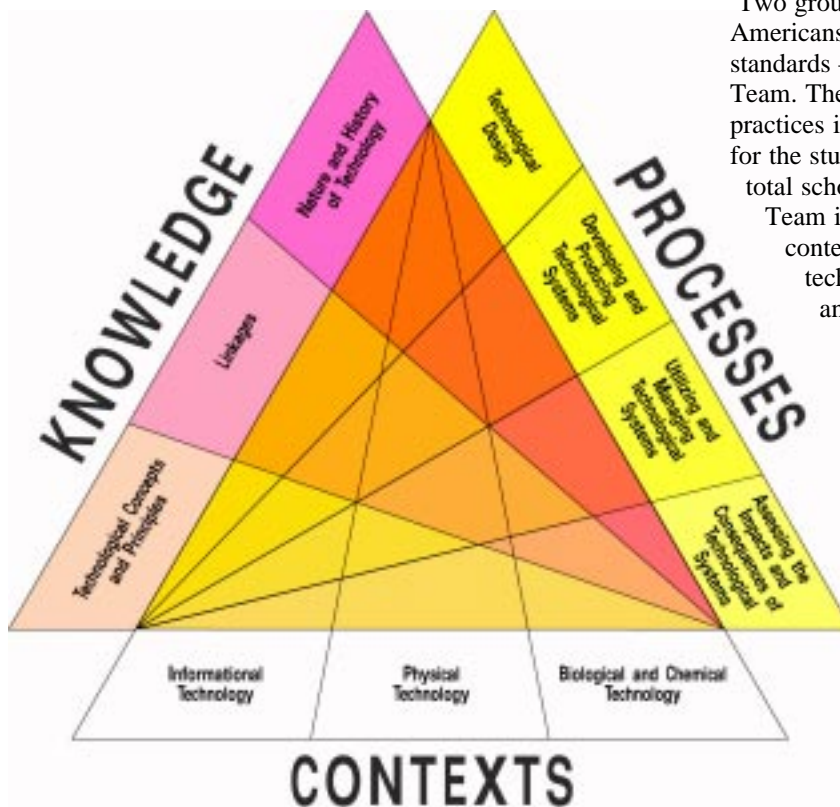
The school reform issue that really matters to make positive change in education is not vouchers or charter schools, or breaking the unions, or even rewiring the classrooms. It is developing standards that will have a lasting impact to improve the quality of education in every town, city, and state in the country.

— New York Times

The *Standards for Technology Education* will serve as the basic recipe for building a strong technologically literate population, making sure that all students have the ability to use, manage, and understand technology.

The standards are based on a set of three significant study areas called *universals*. These areas are considered to be timeless, even in an era of uncertainties and accelerated change. The universals for technology education are:

- Knowledge:** How technological content is developed and applied.
- Processes:** Human activities to create, invent, design, transform, produce, control, maintain, and use products or systems.
- Contexts:** The larger areas where technology is developed, applied, and studied, which are categorized by informational, physical or biological/chemical systems.



Two groups will advise the Technology for All Americans Project during the development of the standards — the Advisory Group and the Standards Team. The Advisory Group will recommend the best practices in standards development and determine ways for the study of technology to be integrated within the total school curriculum. The role of the Standards Team is to propose, evaluate, and approve the content of the standards. Representatives from technology education, and mathematics, science, and engineering make up the team.

The standards will be reviewed in 1997 and 1998 to develop consensus. Input from educators, administrators, and other people will be used to refine the standards until the final document is released in March 1999.

It is not the intent of the Technology for All Americans Project to develop school curriculum. Instead, the *Standards for Technology Education* will provide a general framework from which states and school systems can develop technology curricula that are best suited for their students. The goal of both quality standards and a well-designed curriculum should be technological literacy for all students.



“The promise of the future lies not in technology alone, but in people’s ability to use, manage, and understand it.”

— *Technology for All Americans: A Rationale and Structure for the Study of Technology*

What is Technology Education?

Technology education is a school subject that teaches students in K-12 how to be technologically literate. Technology education should not be confused with educational or instructional technology, which uses technology to enhance teaching and learning. Technology education goes far beyond basic computer knowledge into the whole range of technological systems and ideas. More importantly, by incorporating and complementing science, mathematics, and other disciplines, technology education answers the important question: “Why do I need to learn this?”

We live in a world where technological literacy is as important as other types of literacy. It is no longer possible to gain the knowledge we need to make educated decisions about technology by merely living in this technological world. Just like we need to be taught how to read, write, or calculate, we need to have a formal structure that focuses on technological literacy.

Parents, educators, and citizens must demand that our children get the kind of education that will prepare them for the future, an education that makes them technologically competent and economically competitive. Technology education is a vital part of that preparation and must be included as a core subject in every school system.

The **Technology for All Americans Project** was formed by the International Technology Education Association to provide a formal structure for technology education programs across the country. Funded by the National Science Foundation and the National Aeronautics and Space Administration, the project’s goal is to promote technological literacy in grades K-12.

The first phase of the project resulted in the publication *Technology for All Americans: A*

Rationale and Structure for the Study of Technology, a document that defines the need for standards for technology education and shows how technology can be studied. This phase also helped to build consensus on issues concerning technology education.

Phase II is a three-year project that will develop standards for technology education for all grade levels. The standards, to be released in March 1999, will focus on what students need to know and be able to do in order to be technologically literate.

The Standards Team

William Ball
Clague Middle School
Ann Arbor, Michigan

Clare Benson
University of Central
England
Birmingham, England

Barry Burke
Montgomery County
Public Schools
Rockville, Maryland

Kristin Callender
Deane Elementary School
Lakewood, Colorado

Rodney Custer
Illinois State University

Robert Daiber
Triad High School
St. Jacob, Illinois

Denise Denton
University of Washington

Anthony Gilberti
Indiana State University

Jeffrey Grimmer
Mankato East High School
Mankato, Minnesota

Michael Hacker
The MSTe Project
Stoney Brook, New York

Norman Hackerman
The Robert A. Welch
Foundation
Houston, Texas

Linda Hallenbeck
East Woods School
Hudson, Ohio

Jane Hill
Lanier Middle School
Freepport, Texas

Michael Jensen
Paonia High School
Paonia, Colorado

Stephan Knobloch
Crossfield Elementary
School
Herndon, Virginia

Connie Larson
John Wetton Elementary
School
Gladstone, Oregon

Franzie Loepp
Illinois State University

Chip Miller
Century High School
Hillsboro, Oregon

Michael Mino
The Gilbert School
Winsted Connecticut

Tonia Schofield
Sylvan Middle School
Atlanta Georgia

Kathy Thornton
University of Virginia

Leon Trilling
Massachusetts Institute
of Technology

Brigitte Valesey
Walter Johnson High
School
Bethesda, Maryland

Scott Warner
Lawrenceburg High School
Lawrenceburg, Indiana

Jane Wheeler
Monte Vista
Elementary School
Rohnert Park, California

George Willcox
Virginia Department
of Education

Michael Wright
University of Missouri-
Columbia

The Advisory Group

Rodger Bybee
Executive Director
National Research Council
Center for Science,
Mathematics,
and Engineering Educa-
tion

Daniel Goroff
Professor
Mathematics Department
Harvard University

Thomas Hughes, Jr.
Director of Development
Foundation for
Technology Education

Linda Rosen
former Executive Director
National Council of Teachers
of Mathematics

James Rutherford
Director, Project 2061
American Association for
the
Advancement of Science

Kendall Starkweather
Executive Director
International Technology
Education Association

Gerald Wheeler
Executive Director
National Science Teachers
Association

William Wulf
President
National Academy
of Engineering

