K-12 Technology

Resources
These sample resources can be used to understand Ohio's technology academic content standards. In addition, these resources can be used to begin implementing standards-based instruction and assessment in technology. When developed, the model curriculum for technology will provide a greater opportunity to explore best practices, research-based instruction and effective lessons and strategies for all children.

**Research Resources**

Resources listed in this section are samples of the available information about programmatic research and publications helpful in building knowledge and understanding of standards as well as other related technology benchmark topics.

**A) Print Resources**


**B) Internet-based Resources**

- Americans With Disabilities Act, ADA Design Standard  
  [www.usdoj.gov/crt/ada/stdspdf.htm](http://www.usdoj.gov/crt/ada/stdspdf.htm)

- American National Standards Institute, ANSI Standards  

- The Center for Applied Research in Education Technology (CARET)  
  [caret.iste.org](http://caret.iste.org)

- EE Sustainability  

- Federal Communications Commission, FCC Wireless Telecommunications Bureau  
  [wireless.fcc.gov](http://wireless.fcc.gov)

- International Standards Organization (ISO)  

- Milken Exchange on Education Technology  
  [www.mff.org/edtech](http://www.mff.org/edtech)

- National Education Technology Plan  
  [www.nationaledtechplan.org](http://www.nationaledtechplan.org)

- The National Institute for Occupational Safety and Health (NIOSH)  
  [www.cdc.gov/niosh/homepage.html](http://www.cdc.gov/niosh/homepage.html)

- National Skill Standards Board  
  [www.nssb.org](http://www.nssb.org)

- No Child Left Behind: A Toolkit for Teachers  
• North Central Regional Educational Laboratory (NCREL)  
  www.ncrel.org

• Research Center for Educational Technology  
  www.rcet.org

• State Education Technology Directors Association (SETDA). *National Leadership Institute Toolkit - States Helping States Implement No Child Left Behind.* 2003.  
  www.setda.org

• U.S. Copyright Office  
  www.copyright.gov

• U.S. Patent and Trademark Office  
  www.uspto.gov

**Professional Resources**

Resources listed in this section are samples of the professional organizations, agencies and technical associations available to help educators stay informed about different technology fields and related technology benchmark topics.

**Professional Organizations**

• American Association of School Librarians  
  www.ala.org/aasl

• Association for Educational Communications and Technology  
  www.aect.org

• American Society for Engineering Education (ASEE)  
  www.asee.org

• Environmental Education Council of Ohio (EECO)  
  www.environmentaleducationohio.org/eeohio/index.html

• International Society for Technology in Education  
  www.iste.org

• International Technology Education Association  
  www.iteawww.org

• Ohio Academy of Science  
  www.ohiosci.org

• Ohio Educational Library Media Association  
  www.oelma.org

• Ohio Technology Education Association  
  www.otea.info

• National Society of Professional Engineers (NSPE)  
  www.nspe.org
• Society for the History of Technology
  shot.press.jhu.edu

• Society of Women Engineers
  www.swe.org

• State Educational Technology Directors Association (SETDA)
  www.setda.org

Departments of Education

• Ohio Department of Education
  www.ode.state.oh.us

• Office of Curriculum and Instruction
  www.ode.state.oh.us/curriculum-assessment/ci

• Office of Assessment
  www.ode.state.oh.us/curriculum-assessment/Assessment

• Other state Departments of Education (via CCSSO)
  www.ccsso.org/seamenu.html

• United States Department of Education
  www.ed.gov

  www.ed.gov/about/offices/list/os/technology/inits_current.html

Agencies/Associations

• American Institute of Architects
  www.aia.org

• American Institute of Graphic Arts
  www.aiga.org

• Central Ohio Clean Fuels Coalition
  www.cocfc.org

• Center for Advancing the Teaching of Technology and Science (CATTs)
  www.iteawww.org
car.eng.ohio-state.edu

• Center for Automotive Research and Intelligent Transportation

• Division of Recycling and Litter Prevention, Ohio Department of Natural Resources
  www.ohiodnr.com/recycling

• Division of Safety and Hygiene, Ohio Bureau of Workers Compensation
  www.ohiobwc.com
**Instructional Resources**

Resources listed in this section are samples of teaching materials and resources to assist educators seeking practical and creative ways to implement standards-based instruction in technology and related benchmark topics.

**Instructional Materials**

- 3D Body Scanner (ExploreCornell)
  
  www.explore.cornell.edu/scene.cfm?scene=The%203d%20body%20scanner
• A World in Motion, Society of Automotive Engineers Foundation
  www.sae.org/foundation/awim

• American Memory, Historical Collections for the National Digital Library
  memory.loc.gov

• Ancient Chinese Technology
  library.thinkquest.org/23062/index.html
  www.pbs.org/wgbh/buildingbig/index.html
  www.childrendesigning.org

• Building Big
  www.pbs.org/wgbh/buildingbig/index.html
  www.childrendesigning.org

• The Children Designing and Engineering Project

• DESIGN (Doable Engineering Science Investigations Geared for Nonscience Students), Harvard - Smithsonian Center for Astrophysics
  cfa-www.harvard.edu/cfa/sed/resources/designs.html

• Discover Engineering.Org
  www.discoverengineering.org/home.asp

• Eisenhower National Clearinghouse for Mathematics and Science Education (ENC)
  www.enc.org

• EngineerGirl
  www.engineergirl.org
  www.eos.ncsu.edu/eos/info/computer_ethics
  www.fcc.gov/omd/history
  www.esri.com/industries/k-12
  www.girlscouts.org/girlsgotech

• Ethics in Computing
  www.greatachievements.org/greatachievements
  teched.vt.edu/GCC/HTML/GCCKids/History.html

• FCC History of Technology Project

• GIS ESRI Schools and Libraries Program

• Go TECH

• Great Achievements in Mechanical Engineering
  www.asme.org/education/precollege/achieve/auto.htm

• Greatest Achievements of the 20th Century
  www.greatachievements.org/greatachievements

• History of Graphic Arts
  teched.vt.edu/GCC/HTML/GCCKids/History.html

• Integrated Mathematics, Science, and Technology (IMAST - NSF), Center for Mathematics, Science, and Technology, Illinois State University
  wwwilstu.edu/depts/cemast/imast/imasthome.htm
• Invention Dimension, Massachusetts Institute of Technology
  web.mit.edu/invent/invent-main.html

• The Inventive Thinking Curriculum Project, U.S. Department of Commerce, Patent and Trademark
  Office
  www.uspto.gov/web/offices/ac/ahrpa/opaproj1/invthink/invthink.htm

• Learning by Design, The Edu Institute, Georgia Institute of Technology
  www.cc.gatech.edu/projects/lbd/home.html

• NASA CORE (Central Operations of Resources for Educators)
  core.nasa.gov

• NASA Classroom of the Future
  www.cotf.edu

• NASA Education Home Page
  education.nasa.gov

• NASA Education Enterprise
  education.nasa.gov/home/index.html

• The NEED Project (National Energy Education Development)
  www.need.org

• Ohio Academy of Science, Heartland Sciences, Ohio’s Legacy of Discovery and Innovation
  www.heartlandscience.org

• Ohio Counties, 200 Years of Science and Technology
  www.ohiosci.org/OHIOSCIENCE200.htm

• Ohio Resource Center for Mathematics, Science and Reading (ORC)
  www.ohiorc.org

• Project EXCITE
  www.bgsu.edu/colleges/edhd/programs/excite

• TECH-know Project
  www.ncsu.edu/techknow/aboutproject.html

• U.S. National Archives and Records Administration, Digital Classroom
  www.archives.gov/digital_classroom/index.html

Program Experiences

• Boosting Engineering, Science, and Technology (Best)
  www.bestinc.org

• FIRST LEGO League
  www.legomindstorms.com/fll

• FIRST Robotics Competition
  www.usfirst.org/robotics/index.html
• Future City Competition, National Engineers Week
  www.futurecity.org

• Future Problem-Solving Program
  www.fpsp.org

• Future Scientists and Engineers of America (FSEA)
  www.fsea.org

• International Science and Engineering Fair, Junior Engineering Technical Society
  www.sciserv.org/isef/index.asp

• International Student Media Festival
  www.ismf.net

• NASA Flight Design, NASA Student Involvement Program (NSIP)
  education.nasa.gov/nsip
  www.jets.org/nedc.htm
  www.eweek.org

• National Engineering Design Challenge (NEDC)

• National Engineers Week

• NSTA Young Inventors Award
  www.nsta.org/programs/craftsman

• Project Lead the Way
  www.pltw.org
  www.nationalstep.org

• TechXplore, National Science & Technology Partnership