

**OHIO DEPARTMENT OF EDUCATION
ACADEMIC CONTENT STANDARDS
TECHNOLOGY CHECKLIST
~KINDERGARTEN~**

Nature of Technology—Students develop an understanding of technology, its characteristics, scope, core concepts and relationships between technologies and other fields.

Benchmark A: Recognize the characteristics and scope of technology.

- ___ 1. Identify objects created within the human-made world (e.g., books, chairs, houses, buses) and objects that occur in nature (e.g., trees, flowers, rocks and rivers).
- ___ 2. Describe how people use tools to help them do things.

Benchmark B: Describe and give examples of technology's core concepts: systems, resources and processes.

- ___ 1. Identify common systems in the school or home (e.g., the plumbing system delivers water to and from your bathtub).
- ___ 2. Recall that planning is necessary to successfully complete a task.

Benchmark C: Describe the relationships among technologies, and the connections between technology and other fields of study.

- ___ 1. Identify technology devices in the classroom (e.g., bells, computer, fire alarm, pencil sharpener).
- ___ 2. Recognize the connection between technology and other fields of study (e.g., technology can be used to make or create music or musical instruments).

Technology and Society Interaction—Students recognize interactions among society, the environment and technology, and understand technology's relationship with history. Consideration of these concepts forms a foundation for engaging in responsible and ethical use of technology.

Benchmark A: Identify responsible citizenship relative to technology and its use.

- ___ 1. Describe how the use of tools and machines can be helpful or harmful.

Benchmark B: Recognize that technology has an interrelationship with the environment.

- ___ 1. Explain how waste results from making and using things, discarding them.
- ___ 2. Identify materials that can be reused and/or recycled.

Benchmark C: Describe and demonstrate how technology has had an influence on our world.

- ___ 1. Recognize that technology changes the way people live and work.

Benchmark D: Collect information about products and discuss whether solutions create positive or negative results.

- ___ 1. Collect information about products and systems used at home by asking questions (e.g., electronic toothbrush, toaster, TV).
- ___ 2. Describe how a product or system can be used the right way and the wrong way (e.g., using scissors as a knife, a screwdriver as a can opener).

Technology for Productivity Applications—Students learn the operations of technology through the usage of technology and productivity tools.

Benchmark A: Understand basic computer and multimedia technology concepts and terminology.

- ___ 1. Locate computer and multimedia technology in the classroom and identify it by name (e.g., computer, VCR, listening station).
- ___ 2. Name the basic parts of a computer (e.g., monitor, keyboard, mouse, printer).
- ___ 3. Use computer and multimedia technology with teacher assistance (e.g., computer, VCR, listening station).

Benchmark B: Demonstrate operation of basic computer and multimedia technology tools.

- ___ 1. Listen to directions and use proper care when handling computer and multimedia technology.
- ___ 2. Follow the correct order for turning computers and multimedia technology resources on and off with teacher assistance.
- ___ 3. Identify and use input (keyboard, mouse) and output (printer) devices to operate computer and multimedia technology tools with teacher assistance.
- ___ 4. Use software programs with teacher assistance.
- ___ 5. Discover that technology tools can help solve problems.
- ___ 6. View multimedia presentations and discuss motion and sound.

Benchmark C: Use productivity tools to produce creative works.

- ___ 1. Recognize productivity tools (e.g., presentations, drawing programs).
- ___ 2. Identify/recognize technology resources (e.g.,

pre-selected Web sites, educational software).

Technology and Communication

Applications—Students use an array of technologies and apply design concepts to communicate with multiple audiences, acquire and disseminate information and enhance learning.

Benchmark A: Investigate the nature and operation of communication systems.

- ___1. Explore different types of media formats used to communicate information (e.g., e-mail, TV, newspapers, film, phones, Web pages).

Benchmark B: Explore how information can be published and presented in different formats.

- ___1. Examine digital images in learning (e.g., students select pictures of community helpers from teacher-identified materials).

Benchmark C: Participate in group projects and learning activities using technology communications.

- ___1. Engage in teacher-directed online learning activities (e.g., 100th day of kindergarten activities, online field trips).

Technology and Information Literacy

Students engage in information literacy strategies, use the Internet, technology tools and resources, and apply information-management skills to answer questions and expand knowledge.

Benchmark A: State what information is, and show where it can be found.

- ___1. Identify what information is and recognize that it can be represented in a variety of ways (e.g., numbers, words, pictures, sounds).
- ___2. Identify places where information can be found and retrieve information from a specified location (e.g., classroom, school library, public library, the Internet, computer folder, hard drive,

Web site, book).

Benchmark B: Use a simple research process model which includes deciding what to use, finding resources, using information and checking work to generate a product.

- ___1. Ask questions about an identified topic.
- ___2. View information in an information source selected by the teacher or librarian.
- ___3. Tell what was learned using technology tools (e.g., use a computer drawing/paint program to draw a picture that explains what was learned).

Benchmark C: Apply basic browser and navigation skills to find information from the Internet.

- ___1. Talk about the Internet as an information source.
- ___2. Use Web page functions:
 - a. Scroll up and down page;
 - b. Click on links; and
 - c. Use back button.

Design—Students apply a number of problem-solving strategies demonstrating the nature of design, the role of engineering and the role of assessment.

Benchmark A: Identify problems and potential technological solutions.

- ___1. Identify problems solved by tools (e.g., list tools and describe the problem that they solve such as crayons—communication, coats—protection from elements, clocks—time, toothbrush—cavities).

Benchmark B: Understand that changes in design can be used to strengthen or improve an object.

- ___1. Make observations of how things are made strong (e.g., using more of the same material).

Benchmark C: Explore how products are invented and repaired.

- ___1. Ask questions and make

observations about how things work (e.g., take a mystery device and ask questions to determine what it does).

- ___2. Communicate information about a product (e.g., describe a favorite toy and how to use it).

Designed World—Students understand how the physical, informational and bio-related technological systems of the designed world are brought about by the design process. Critical to this will be students' understanding of their role in the designed world: its processes, products, standards, services, history, future, impact, issues and career connections.

Benchmark A: Develop an understanding of the goals in physical technologies.

- ___1. List the things around the home that use energy (e.g., TV, stove, washing machine, computer).
- ___2. List different energy sources that we use (e.g., electricity, coal, gasoline).
- ___3. Know that a transportation system has many parts that work together to help people travel (e.g., driver, mechanic, police, road repair crews).
- ___4. Name products that are manufactured (e.g., toys, cars, furniture).
- ___5. Describe different types of buildings (e.g., houses, apartments, office buildings and schools).

Benchmark B: Develop an understanding of the goals of informational technologies.

- ___1. Explore ways to share ideas (e.g., speaking, drawing, modeling).

Benchmark C: Develop an understanding of the goals of bio-related technologies.

- ___1. Recognize how medicine helps people who are sick to get better.
- ___2. Describe different tools and equipment you might see on a farm.