

Technology Education – Technological Literacy

As defined by the International Technology Education Association Standards for Technological Literacy, Technology Education, Technology and Technological Literacy are defined as the following:

Technology Education is a study of technology, which provides an opportunity for students to learn about the processes and knowledge related to technology that is needed to solve problems and extend human capabilities.

Technological Literacy is the ability to use, manage, understand and assess technology.

Technology is human innovation in action that involves the generation of knowledge and processes to develop systems that solve problems and extend human capabilities. It is also the innovation, change, or modification of the natural environment to satisfy perceived human needs and wants.

In Maryland, students taking Technology Education courses apply knowledge and skills in five areas:

- The nature of technology,
- The impacts of technology,
- The engineering design and development process,
- The core technologies (electric, electronic, materials, structural, fluid, optical, thermal, mechanical and biotechnology), and
- The designed world.

Students apply mathematics and science concepts in understanding technology systems. They discover, create, solve problems and construct by using a variety of tools, machines, materials, processes and computer systems.

Educational Technology – Technology Literacy

As proposed by the Maryland Technology Literacy by 8th Grade Consortium and the Maryland Technology Literacy by 8th Grade State Advisory Council are defined as:

Instructional Technology, the use of technology to support student learning and instruction, is a focal point of the *Maryland Plan for Technology in Education* and is infused throughout the Voluntary State Curriculum.

Technology Literacy is the ability of an individual, working independently and with others, to responsibly, appropriately and effectively use technology tools to access, manage, integrate, evaluate, create and communicate information.

Instructional Technology includes all electronic tools, both hardware and software, that assist an individual in his/her ability to acquire and communicate information.