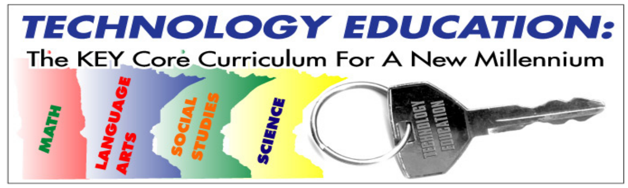
What is Technology Education?

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

Technology Education students learn about:



- Designing, developing, and utilizing technological systems
- Open-ended, problem-based design activities
- Cognitive, manipulative, and affective learning strategies
- Applying technological knowledge and processes to real world experiences using up-to-date resources
- Working individually as well as in a team to solve problems

Our schools are working with the Project Lead The Way® Gateway To Technology® programs. This rigorous academic curriculum is designed to challenge and engage the natural curiosity of students.

Gateway To Technology® Grade 7 (1 Trimester - required)

Students will participate in learning activities introducing them to a wide variety of concepts and projects which incorporate the technology principles of the Design Cycle to study transportation, electronics, hydraulics, rocketry and space - with emphasis on measurement and engineering concepts.
Developed with NASA, this Flight and Space unit explores the technology of aeronautics, propulsion, and rocketry. Students see connections between hands-on projects and academic subjects such as math and science. In the Automation and Robotics unit students design and build automated systems that incorporate the principles of electrons, physics, and robotics to gain an enriched understanding of the contemporary mechanical world.

Gateway To Technology® Grade 8 (1 Trimester - elective)

Students will continue to use the technology principles of the Design Cycle to focus on learning activities which will require them to use a variety of tools to study production, manufacturing, and construction. Systems, processes, materials safety, tools and machines will also be studied. In the Science of Technology unit, students apply scientific principles and concepts of simple machines and energy to solve real-world problems. Students will be engaged in relevant hands-on projects, as they unravel the mysteries of digital circuitry in the Magic of Electrons unit.

Communication Technologies (one trimester - grade 9 - elective)

Information and communication technology skills are a necessary part of joining the workforce in the future and here is another stepping stone to technological literacy. Communication Technology students will be pushed to test their artistic limits as they learn about the design and layout process through photography, screen printing, website production and desktop publishing. In addition, students will be introduced to new concepts, challenged to analyze products and expected to generate their own visual arts examples. Students will be exposed to a variety of lab activities meant to develop problem solving skills and responsibility. ***Upon successful completion of the Communication Technologies course, students will earn credit for the MN Academic Standard for the Arts/Media, a graduation requirement.***

Design and Production Technologies (one trimester - grade 9 - elective)

Use machines, equipment, and a variety of materials; including wood and metal, to design and produce projects. This class will offer students a chance to explore designing, machining, metalworking and woodworking technologies. Students will learn safe processes as they work with various materials, tools and machines. This is a fast paced course with many fabricated project choices. ***Upon successful completion of the Design and Production Technologies course, students will earn credit for the MN Academic Standard for the Arts/Media, a graduation requirement.***

Gateway To Technology® Grade 9 (one trimester - elective)

Using 3-D solid modeling software, students use geometry, problem-solving, teamwork, and project management skills to design and develop product prototypes in this Design and Modeling unit. The Magic of Electrons unit will engage students in relevant hands-on projects, as they unravel the mysteries of digital circuitry. Students will be expected to use the technology principles of the Design Process to create a products and solutions. Vehicle design and completion of scale models will be covered. Students will also learn about circuits and other electronic technologies as they build a variety of electrical projects.

Learn more about **Technology Education** by visiting MGJH web page at
http://www.district279.org/sec/mgjh/ or
http://www.district279.org/sec/mgjh/studentrefs/teched/te.htm