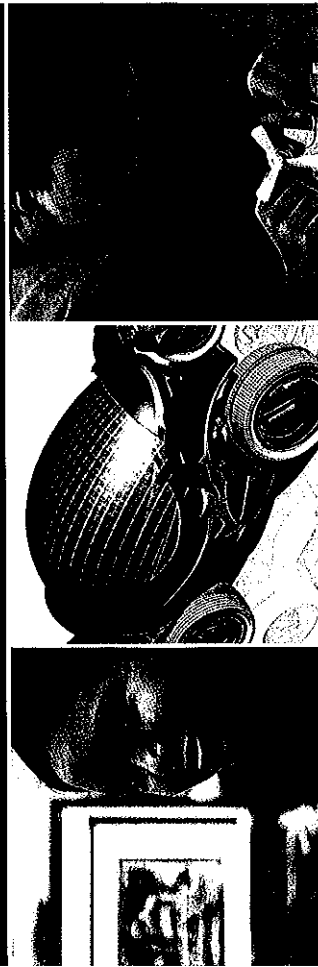




Engineering



PROJECT LEAD THE WAY
PLTW

InnovationMS
Engineering for Middle Schools

Igniting Innovation through imagination and learning.

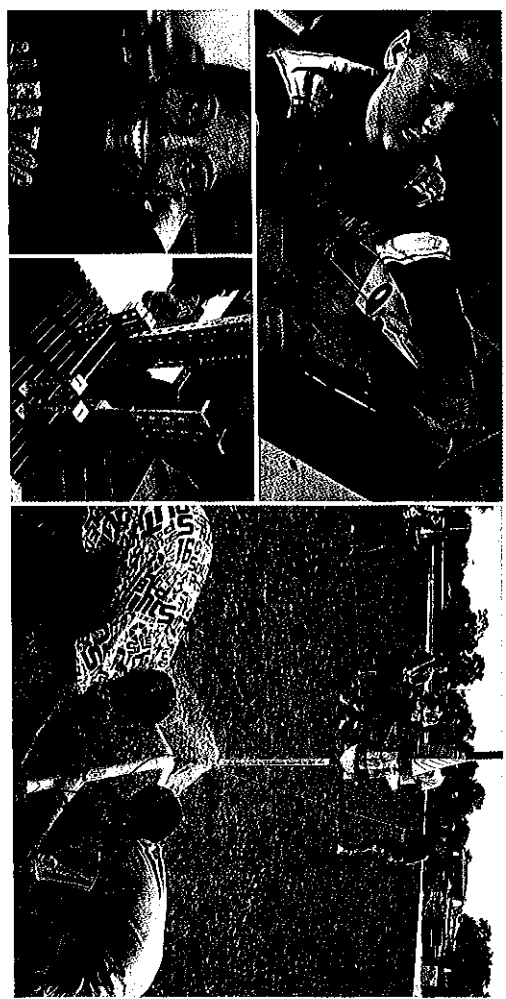
Project Lead The Way (PLTW) prepares students to be the most innovative and productive leaders in science, technology, engineering, and mathematics (STEM) and to make meaningful, pioneering contributions to our world. PLTW partners with middle schools and high schools to provide a rigorous, relevant STEM education. Through an engaging, hands-on curriculum, PLTW encourages the development of problem-solving skills, critical thinking, creative and innovative reasoning, and a love for learning. The PLTW middle and high school STEM education programs give students a brighter future by providing them with a foundation and proven path to college and career success in STEM-related fields. STEM education is at the heart of today's high-tech, high-skill global economy.

www.pltw.org

For more information contact your school counselor and don't forget to ask about PLTW's High School Programs, too!



The PLTW Gateway To Technology Program is taught in conjunction with a rigorous academic curriculum. The hands-on project-based program is divided into six independent nine-week units. Students envision, design and test their ideas with the same advanced modeling software used by companies like LockheedMartin, Intel and Sprint. They study mechanical and computer control systems. Think robotics and animation. Students also explore the importance of energy, including innovative ways to reduce, conserve and produce it using solar, thermal and wind power. The knowledge that students gain and the skills they build from the Gateway To Technology Program create a strong foundation for further STEM learning, from nanotechnology to applied engineering.



DM

Design & Modeling
Introduction to the engineering design process and tools used, including engineering notebooks and Autodesk Inventor.

AR

Automation & Robotics
Model mechanical systems, energy transfer, machine automation and computer control systems.

EE

Energy & the Environment
Investigate the importance of energy in our lives and the impact that using energy has on the environment.

FS

Flight & Space
Explore the history of and science behind aeronautics and space flight.

ST

Science of Technology
Explore the science and relevance of chemistry, physics and nanotechnology.

ME

Magic of Electrons
Acquire knowledge and skills in the behavior and parts of atoms, basic circuitry design and sensing devices.