Michigan Environmental Education Curriculum Support

- Engaging, innovative hands-on student activities designed to increase understanding and appreciation for Michigan’s environment.
- Michigan-specific data and problem-solving integrates the economy and the environment.
- Meets Michigan benchmarks for science and social studies; provides MEAP-like assessments.
- University credit and SB-CEU credits will be offered for teacher training sessions to be available Jan-Dec. 2006.

Description of Unit Curricula Support:

The goal of MEECS is to provide students in grades 4-9, with an opportunity to learn more about Michigan’s environment through lessons in Science and Social Studies. The units have been field-tested by 120 teachers in nearly 200 Michigan classrooms. Units can be integrated into a school districts established science curricula, or used as the basis for an environmental studies or natural resources course.

**Ecosystems & Biodiversity (grades 4-6)**
Explores how organisms interact with their environment, ecosystem services, Michigan’s environmental timeline, and concepts related to biodiversity including “Michigan’s Web of Life” and “Biodiversity Study.”

**Land Use (grades 4-5)**
Teaches students how to analyze and understand issues regarding land use and the impacts people have on it with lessons from “Classifying land use” to “Solving land use conflicts.”

**Water Quality (grades 6-8)**
Students discover the essential role that water plays in Michigan’s economy and our lives; calculate how much water they use, investigate how land uses can impact water quality, explore Michigan watersheds and characteristics of healthy streams, analyze Michigan stream data, and investigate challenges to the Great Lakes. Students consider “How can we protect Michigan’s water quality and quantity?” and “Are the Great Lakes Really Great?”

**Air Quality (grades 7-9)**
Explores the sources, types and health effects of air pollutants in Michigan and examines current Michigan issues through lessons on: “Why Should We Be Concerned About Air Quality?” and “How Can We Tell What the Quality of Air is Today?” Also includes a series of lessons on global climate change and its potential effects on the Great Lakes.

**Energy Resources (grades 7-9)**
Addresses Michigan energy use and sources, how electricity is generated, renewable and non-renewable energy resources, energy conservation and efficiency, and environmental sustainability. Students keep an Energy Use Diary, compare Michigan and U.S. per capita energy consumption to energy use in other countries, and calculate their energy footprint. What is Michigan’s energy future?
FREE Classroom Materials for Teachers!

Every Unit Includes:
- Notebook of Lesson Plans
- Background Information for Teachers
- CD-ROM with extension lessons, supplemental resources, PowerPoints, and more!
- Hands-on Activities & Investigations
- Pre- and Post-Tests and Unit Assessments
- Colorful Posters & Student Materials

How Can I Get the Materials?

To receive each MEECS curriculum unit, teachers must attend a training workshop. Workshops will be offered at no cost or for a nominal fee* and all materials are provided FREE upon completion. Educators are encouraged to attend as many unit workshops as they like.

Workshop sessions will begin January 2006! They will be offered at a variety of locations across Michigan. Contact your local Math & Science Center or intermediate school district for a schedule of upcoming workshops or visit the Michigan Department of Environmental Quality’s website for a statewide listing of workshops: www.michigan.gov/deq-meeecs

*M nominal Fees may be charged for refreshments at workshops.

MEECS Program History

Michigan voters recognized the need to development environmental education curricula for Michigan schools when they approved $1 million dollars Clean Michigan Initiative (CMI) bond in 1998. In 2003, Governor Granholm announced the beginning of the three-year project. The Michigan Department of Environmental Quality (DEQ) and the Michigan Department of Education have worked hand-in-hand to develop sound science-based supplementary environmental education curriculum materials for use by Michigan educators. The five curriculum units have been created by a team of scientists, resource managers, and classroom teachers with input from government agencies, environmental organizations, businesses, and industry.

“The hands-on lessons really help enforce the materials presented.”- Middle School Teacher

“These lessons gave my students a chance to understand the nature around them. We live in the city and they hardly ever think of ‘nature’.”- Middle School Teacher

Governor Jennifer M. Granholm

Steven E. Chester, Director