

The Beginning of MEECS

In 2003 Governor Jennifer Granholm announced the beginning of a three-year project to develop environmental education curriculum materials for Michigan schools. The Michigan Department of Environmental Quality and the Michigan Department of Education worked together to develop sound science-based supplementary environmental education curriculum materials for use by Michigan educators.



Photo by Al Goldis

The curriculum units were carefully created by a team of experts with input from scores of scientists, writers, teachers, environmental organizations, and business groups.

What is MEECS?



Photo By Joan Chadde

The Michigan Environmental Educational Curriculum Support (MEECS) contains five Michigan-specific units which provide an opportunity for students in grades 4-9 to learn about Michigan's economy and environment through outstanding, inquiry oriented, data-based lessons in Science and Social Studies. The units have been field tested by 120 Michigan teachers in 200 classrooms. The units can be used individually, adopted into a school's multi-year science curricula, or combined to form the basis for an integrated science course.

"Wonderful! Thank you! This is an outstanding unit for our 8th grade program. I will definitely send our other teachers!"

-Rochester Schools

School districts are encouraged to schedule one or more workshops at the school as part of an in-service day.

For more information, to find an upcoming workshop near you, or to arrange a workshop visit the website:

www.michigan.gov/deq-meeecs



Jennifer M. Granholm, Governor
Steven H. Chester, Director

Michigan Environmental Education Curriculum Support

MEECS



FIVE outstanding Michigan-specific

science and social studies units are ready for Michigan classrooms:

- Ecosystems & Biodiversity (grades 4-6)
- Land Use (grades 4-5)
- Water Quality (grades 6-8)
- Energy Resources (grades 7-9)
- Air Quality (grades 7-9)



All Five MEECS Units Feature engaging, hands-on lessons that encourage student participation and inquiry. Units are designed to increase appreciation and understanding of Michigan's environment and its role in Michigan's economy. MEECS is aligned with science and social studies content standards and MEAP assessment.

Land Use - grades 4-5

Students learn how to analyze issues regarding land use and understand human impact on the environment.



Photo By Joan Chadde

"The materials are user-friendly. The units will provide better and more locally relevant hands-on activities than our current curriculum."

-6th grade teacher, Holy Family School

Ecosystems & Biodiversity - grades 4-6



Photo By Joan Chadde

This unit provides students with a better understanding of ecosystems by examining how organisms interact within their environment. A second set of

materials explores concepts related to biodiversity.

"So much great stuff!"

-Midland Public Schools

Each Unit Includes a Classroom Kit

- ◇ Binder of lesson plans for each unit
- ◇ CD-ROM with electronic version of units, extension lessons, supplemental resources and materials, PowerPoints, videos, and more!
- ◇ Background information for teachers
- ◇ Hands-on activities and experiments
- ◇ Pre- & Post-tests and MEAP-like Unit Assessments
- ◇ Colorful posters and worksheets

The intent of MEECS is to provide Michigan students with the skills and understanding needed to make informed choices based on:

- ◇ Use of science concepts, principles, and theories.
- ◇ Economic and ecological sustainability
- ◇ Role of government
- ◇ Stewardship and pollution prevention
- ◇ The impact and consequences of individual decisions
- ◇ Data-based decision-making.

MEECS Units are Available Through Training Workshops

Teachers must attend one 4-6 hour workshop in order to receive each of the unit notebooks on 7-9 lessons and classroom kit. All workshops and MEECS materials are FREE through December 2006. Contact your local Math/Science center (<http://mscenters.org>), or visit the DEQ website www.michigan.gov/deq-meecs.

Water Quality - grades 6-8



Photo By Joan Chadde

Discover the essential role that water plays in Michigan's economy and in everyone's lives. Students calculate how much water they use, investigate the link between

land uses and water quality, and find out how water is monitored and standards are set.

"All of Water Quality unit is useful to me. It fits into several of our benchmarks and provides great handouts and student oriented activities."

-Grade 7-12 teacher, Novi Community Schools

Energy Resources - grades 7-9

Investigate a broad array of topics such as electricity generation, renewable and non-renewable energy resources, energy conservation, and sustainability.



Photo By Heather Luoto

Air Quality - grades 7-9



Diagram from Janet Val

Air Quality Outlook for Nov 0-7, 2005

Explore the health effects of air pollutants and examine current Michigan air quality issues. Lessons utilize hands-on activities to provide students with a

broad understanding of air quality.