

Michigan Environmental Education Curriculum Support (MEECS)

Vision Statement

The future of Michigan's environment and natural resources depends, to a great extent, on today's youth. Today's students can expect to face environmental challenges in their workplace, in their communities, and in their families throughout their lives. We hope to broaden the opportunities for Michigan youth to acquire basic information about the environment – how it functions, how it is affected by human activity, and how harmony between human activity and the natural environment can be achieved to benefit our economy, our environment, and our quality of life. A greater understanding of our environment will lead to greater care and stewardship.

What is Michigan Environmental Education Curriculum Support (MEECS)?

The Michigan Environmental Education Curriculum Support (MEECS) is a set of environmental education curriculum lessons and support materials, carefully designed to help teachers integrate environmental materials into their classrooms – materials that are Michigan-specific, balanced, science-based. The materials were carefully developed with broad-based review and teacher-tested in Michigan classrooms.

The MEECS curriculum consists of seven foundation environmental education units that support Michigan's science and social studies Grade Level Content Expectations (CLCEs) and High School Content Expectations (HSCEs). The units are Ecosystems and Biodiversity, Land Use, Water Quality, Energy Resources, and Air Quality. The second edition also includes a new unit on Climate Change and an adaptation of the Land Use unit for use in 3rd grade Michigan studies.

What are the important elements of the MEECS project?

- **MEECS units are a flexible resource for teachers and schools.**

MEECS units use several strategies to allow easy adoption by Michigan teachers and school districts. MEECS units are self-contained, so that any unit can be taught by an interested school or individual teacher. Used together by a school or school district, the seven units are coordinated so that they can be used over several years to provide the foundation of an environmental education curriculum.

MEECS units are aligned with science and social Grade Level Content Expectations (CLCEs) and High School Content Expectations (HSCEs). The Ecosystems and Land Use units are the most elementary focused and can be used in grades 4 through 6. The Water Quality, Air Quality, and Energy Resource units, in addition to the Biodiversity Extension, are targeted at grades 6 through 9. All units address both science and social studies GLCEs and HSCEs, but the Land Use unit is the most social studies-focused. The new 3rd grade unit is adapted to support the shift of Michigan studies from 4th grade to 3rd grade. The new Climate Change unit was developed for use in middle schools, but can also be used in many high schools.

- **MEECS provides thoroughly reviewed and classroom-tested materials along with teacher training.**

MEECS units have been reviewed by a variety of organizations, teachers, university faculty, environmental groups, business and industry trade associations, and government agencies. Each curriculum unit was field-tested by 20 to 30 classroom teachers and then thoroughly revised based on their feedback

The curriculum units are distributed through teacher training workshops, conducted by trained facilitators, to help educators more easily understand and integrate the materials into their classrooms.

- **MEECS is Michigan-specific.**

The MEECS Project will help schools provide an environmental education curriculum specific to the environmental challenges that Michigan citizens are likely to encounter and make decisions about as individuals, citizens, employers, and employees.

- **MEECS units stress common themes.**

Each unit incorporates key elements. As students work with the units they will consistently learn about and apply *science concepts and principles* as well as *data-based decision-making*. No one can predict all of the issues the next generation will face, but we can help prepare students to apply core scientific knowledge and use data to investigate problems. MEECS units are intended to present a *balanced approach to environmental issues*, not an advocacy approach. Where possible the units address both economic and ecological sustainability along with a *focus on individual decision-making*, especially with respect to *stewardship and pollution prevention*. To prepare students to be citizens in a democracy, the units also include *the role of government*. The second edition also includes additional material on Great Lakes Sustainability.

How can I learn more about MEECS?

MEECS units are available without cost to educators who participate in a MEECS workshop. MEECS workshops are being offered statewide at Math and Science Centers and at many professional development conferences and summer institutes. To learn more about MEECS, visit the Michigan Department of Environmental Quality web site at www.michigan.gov/deg-meecs.