Mi-STAR Academy:
Online PD for Michigan Science Standards

Michigan Science Teaching and Assessment Reform
Sponsored by the Herbert H. and Grace A. Dow Foundation

The Mi-STAR Academy is a series of online modules that provide educators with the resources and skills to develop curriculum aligned with the newly-adopted Michigan Science Standards. These modules provide approximately 15 hours of instruction time, and can be taken at your convenience between February and August 2016.

Mi-STAR is approved by the Michigan Department of Education as a professional development provider through the State School Aid Act, Section 99s(5) “Professional Development (PD) Support for Teachers in STEM Instruction.”

➢ School districts can apply for MDE funding that will cover the cost of enrollment for their teachers. Application information can be found at http://www.michigan.gov/mde/0,4615,7F140F5236F343832FF,00.html. Applications for MDE funding are due on December 15, 2015.
➢ Educators who are not MDE funded can participate in the Mi-STAR Academy for a cost of $25.
➢ To enroll in the Mi-STAR Academy, go to https://docs.google.com/forms/d/126aLte_bgubsxeFWNdDKNk7cTH89qZJeZGiuxQwAU0CQ/viewform.

Highlights include:
➢ Builds a working understanding of the three dimensions (Science and Engineering Practices, Crosscutting Concepts, Disciplinary Core Ideas) of the Michigan Science Standards and the National Research Council’s Framework for K-12 Science Education
➢ Demonstrates best practices for aligning curriculum with Michigan Science Standards
➢ Illustrates how science and engineering can be taught using a “challenge”-based-learning approach that integrates STEM content from different science and engineering disciplines
➢ Reviews topics that support three-dimensional instruction and learning, including “backward design” and 5E lesson development strategies
➢ Demonstrates strategies to achieve interdisciplinary study of real-world topics of relevance to students in Michigan and society
➢ Provides guidance for designing learning experiences that integrate the content in Common Core State Standards in Math and ELA with the Michigan Science Standards

Modules include:
• Introduction to the Michigan Science Standards
• Examples of 3D Learning in the Classroom
• Engineering in the Middle School Context
• Integrating the Michigan Science Standards and the Common Core
• Constructing Michigan and Locally Relevant Units
• Applying the 5E Learning Cycle to the Michigan Science Standards
• Backward Design With the Three Dimensions