

Science Core Curriculum

Introduction

The Marysville Public Schools science curriculum is inquiry-centered and based upon the updated Michigan Science Frameworks, as well as National Standards. Inquiry based science is primarily a shift in thinking from teacher-directed lessons to student designed discoveries. Utilizing the scientific method, students actively develop their understanding of science by combining scientific knowledge with reasoning and thinking skills. The National Science Education Standards state that inquiry is central to science learning. While knowledge of facts is important, facts are learned within the context of authentic experience.

Curriculum integration is embedded in the Marysville Public Schools science curriculum. The science curriculum relates science to everyday life, strengthening students' knowledge and skills in other areas of the curriculum. Students develop their reading, writing, speaking, and listening skills when they complete science journal investigations, read about topics that they are studying, read integrated trade books, and share investigations in formal and cooperative learning settings. Students develop mathematic skills from measuring, weighing, comparing, designing data tables, and creating graphs and charts. Extensions include field trips and visits from community professionals distinguished in their science related career. The curriculum relates science to music and art and integrates technology, social studies, and English language arts. Learning is synthesized and applied across the curriculum.

In assessing students, teachers incorporate observations of classroom activities, student work products, written assessment, and oral communications. Embedded assessments also occur within the context of the unit.

Problem-solving methods are formatted to encourage collaborative effort, dialogue with informed expert sources, and generalization to broader ideas and application. Technology is embraced as a tool that supports the learning process. In-depth connected sequence builds toward understanding of district, state, and national benchmarks.

The science coordinators, science curriculum committee and science trainers have worked diligently and with passion to develop and implement the Marysville Public Schools science program. The district is indebted to these individuals for their dedication and fervor.