



STATE OF MICHIGAN
DEPARTMENT OF EDUCATION
LANSING

RICK SNYDER
GOVERNOR

MICHAEL P. FLANAGAN
STATE SUPERINTENDENT

April 30, 2015

MEMORANDUM

TO: Intermediate and Local School District Superintendents
Public School Academy Directors
Science Education Leaders

FROM: Linda Forward *Linda Forward*
Interim Deputy Superintendent
Education Services

SUBJECT: Michigan Science Standards

As you are probably aware, new Michigan Science Standards have been presented to the State Board of Education in the last year in order to present a range of implementation benefits and considerations for these standards, so that the Board is better informed about issues prior to adoption. The following information is an update and status report on the standards to date, and provides possible next steps to address what educators can do to support student learning of science.

The Michigan Department of Education (MDE) presentations included a general vision of implementation of the standards, considerations for teacher preparation and professional development, assessment, course structuring, and school improvement, as well as more general preparations that schools can be doing to provide the best preparation in the sciences for our students. Additionally, the MDE contracted an independent review of the current and proposed state standards which recommended adoption of the new standards for a variety of reasons. These resources can be found on the MDE website at the URL below:
http://www.michigan.gov/mde/0,4615,7-140-28753_64839_65510---,00.html

The proposed Michigan K-12 Science Standards represent a significant change in the approach to teaching and learning science, as they are the first such standards to be developed specifically from research on science education. The standards focus on three interwoven elements: disciplinary core ideas (the content of the individual strands of science areas), cross-cutting concepts (the underlying concepts that span all areas of science, such as patterns, or cause and effect), and science and engineering practices. These elements are fundamental to quality

STATE BOARD OF EDUCATION

JOHN C. AUSTIN – PRESIDENT • CASANDRA E. ULBRICH – VICE PRESIDENT
MICHELLE FECTEAU – SECRETARY • PAMELA PUGH SMITH – TREASURER
LUPE RAMOS-MONTIGNY – NASBE DELEGATE • KATHLEEN N. STRAUS
EILEEN LAPPIN WEISER • RICHARD ZEILE

608 WEST ALLEGAN STREET • P.O. BOX 30008 • LANSING, MICHIGAN 48909
www.michigan.gov/mde • (517) 373-3324

Page 2
April 30, 2015

science learning and are central to the K-12 Framework for Science Education, a document created by the National Research Council, and adopted as Michigan's framework for science education. We encourage educators to continue to utilize the framework to guide instructional practices and selection of learning resources. The K-12 Framework for Science Education can be found at the URL below:

<http://www.nap.edu/catalog/13165/a-framework-for-k-12-science-education-practices-crosscutting-concepts>

The MDE is finalizing an implementation plan to support new Michigan Science Standards, once adopted. It is anticipated that the standards will need to be incorporated into several local considerations, such as teacher professional learning, teacher assignments, learning resource selection, and course design and standards alignment at the district level. Likewise, Michigan's colleges and universities will need to collaborate on issues around the inclusion of these new standards in the preparation of new educators. The MDE will seek input from educators and leaders in science education on supports that can be provided around these issues following adoption.

The MDE will also engage in public information and comment activities in order to gather feedback on the standards prior to adoption. These will likely happen later this summer and in early fall, and will include both online surveys to capture public comments, as well as a set of face-to-face presentations and facilitated discussions to document comments and considerations on the revised standards. We encourage your participation as the MDE moves forward with these events which will be scheduled upon approval from the State Board of Education. Stephen Best, bests1@michigan.gov, the Assistant Director of the Office of Education Improvement and Innovation, and Gregg Dionne, dionneg@michigan.gov, Supervisor of the Curriculum and Instruction unit at the MDE, will lead these efforts. Please contact either of them if you have any questions regarding this, or other aspects of the standards adoption process.

cc: Michigan Education Alliance