



American Statistical Association

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Michigan Department of Education
Post Office Box 30008
Lansing, MI 48909

Dear President Straus, Superintendent Flanagan, and Deputy State Superintendent Vaughn,

As president of the American Statistical Association with its 18,000 members, I am writing to express my concern about most statistics and probability expectations being removed from Michigan's Merit Curriculum for Algebra II. In an age in which citizens confront data on a daily basis and make decisions based on those data, I urge you to integrate statistical literacy into the state curriculum to ensure Michigan students are prepared to succeed in an increasingly competitive work force.

The removal of the statistics components runs contrary to national trends that acknowledge the importance of statistically literate students. National standards and benchmarks, such as Achieve, The College Board, The National Council of Teachers of Mathematics (NCTM), and the new Common Core State Standards Initiative,¹ support data analysis and probability as essential components of mathematics education.

Foundational statistical concepts should be introduced and nurtured in the elementary grades and strengthened and expanded throughout the middle, high-school, and postsecondary grades. Statistical literacy skills help students deal with information they encounter in areas from health to financial management. Data analysis strategies, evidence-based decisionmaking, and other related concepts learned while becoming statistically literate are essential to mathematics and science education because of their relevance to life and work and their role in motivating student interest in math and science. The statistics discipline teaches a framework for the scientific process; develops critical thinking skills; and links science, technology, engineering, and mathematics (STEM) disciplines in a process that generates innovation in areas as diverse as pharmaceuticals, automotive design and manufacture, and agriculture.

The ASA and, especially, its four Michigan Chapters would be happy to be a resource for you. The ASA GAISE report² (enclosed) is an authoritative guide for what should be included in curriculum from pre-K through high school. It also provides a basic framework for what is meant by a statistically literate high-school graduate and provides steps to achieve the goal of a statistically literate citizenry.

Thank you for your consideration. If we can provide additional information or assistance, please contact Rebecca Nichols, ASA K-16 education manager, at rebecca@amstat.org or (703) 302-1877.

Sincerely,

Sally C. Morton, PhD
President, American Statistical Association

cc: Governor Jennifer M. Granholm

¹ See Achieve's *College and Workplace Readiness Benchmarks for Mathematics*, The College Board's *College Board Standards for College Success: Mathematics and Statistics*, NCTM's *Principles and Standards for School Mathematics*, and Common Core State Standards Initiative's *College and Career Readiness Standards for Mathematics*.

² *Guidelines for Assessment and Instruction in Statistics Education (GAISE) Report: A Pre-K-12 Curriculum Framework* (www.amstat.org/education/gaise)