

August 14, 2013

Members of the House Common Core Subcommittee,

My name is Marie Smerigan and I am a resident of Flat Rock, Michigan. I want to thank each of you for taking the time to listen to the reasons I support the Common Core State Standards. I know that each of you have a difficult job sitting on this committee. You each feel pressures from many different places to make a decision to either support the implementation of the Common Core or to stop the implementation of the Common Core State Standards. I hope that you are able to hear testimony from both sides of this debate and make a decision that is based on what you feel is best for students regardless of the outside pressures you are feeling.

I have two sons that attend Gibraltar Schools. My son Blake is going into 7<sup>th</sup> grade and Adam will be a sophomore. As I think about the world we live in and what qualities make a person successful there are three that stand out to me. The first is to approach a problem or situation that they are unfamiliar with, identify a plan of attack based on what they know, adjust their thinking if their plan isn't working and evaluate their solution. The second is the ability to communicate with others. People need to be able to explain their ideas as well as be able to disagree with others in a respectful manner. The third quality that I feel successful people possess is the ability to select and use appropriate "tools" to help them accomplish a task. I believe that the Common Core State Standards will help instill these qualities in my children and yours.

Let me support my claim that the Common Core State Standards will help my sons be better problem solvers by giving some examples from the Mathematics Standards. First, if you look at the Common Core Content Standards, you will see that many of them state that students be able to approach problems using multiple strategies. For example, in the Numbers and Operations domain of Fourth Grade, students are asked to "Illustrate and explain the calculation (multiplication) by using equations, rectangular arrays, and/or area models." In the function domain of Eighth Grade, students are asked to "Compare properties of two functions each represented in a different way (algebraically, graphically,

numerically in tables, or by verbal descriptions)". Finally, in the domain Reasoning with Equations and Inequalities in High School, students are asked to "Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically". There are many more examples of where the content standards ask students to find or use more than one strategy to solve a problem. Building this skill throughout the course of my sons' education will help them to look at a problem or situation, recognize that there is usually more than one way to solve the problem and allow them to choose whichever strategy they find most useful or easiest for them. All children learn differently. Until the Common Core, students were usually only taught one way to solve a problem and that usually involved memorizing a rule. It didn't offer those students who were visual learners the opportunity to see through arrays or graphs, for example, what was happening conceptually. In addition to the Content Standards, the Mathematical Practice Standards found in the Common Core will also help my sons be better problem solvers. Specifically, Practice 1: Make sense of problems and persevere in solving them. This standard states that students should "start by explaining to themselves the meaning of a problem and looking for entry points to its solution. Make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. Monitor and evaluate their progress and change course if necessary." As these practice standards are taught in the classroom, my sons will graduate not only with content knowledge of mathematics but with knowledge that they can use in all aspects of their life.

The second quality that I want to make sure that my sons graduate with is the ability to communicate with others. I recently interviewed for a new position, in my series of interviews I was asked multiple variations of this same question, how I would handle a situation in which there was disagreement. My answer had two parts. I have to make sure that I am really listening and seeking to understand the other person's perspective, but if I don't agree, I need to explain why giving examples, not just my opinion. Disagreement can be uncomfortable, as I am sure you are all aware, however, if you don't make it personal and keep your conversation on the facts, you have a better chance of finding some common ground. This is not a skill you are born with but that needs to be taught

and practiced. This skill is taught in Practice Standard 3: Construct viable arguments and critique the reasoning of others. In this standard students are asked to “justify their conclusions, communicate them to others, and respond to the arguments of others.” In addition, this standard asks students to “compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is”. Although this is a mathematics practice standard, I am sure that you can see how these skills will cross over into all parts of my sons lives and enable them to be better communicators.

The last quality that I feel the Common Core will help teach my sons is the importance of knowing how to use different “tools” in different situations. In Mathematical Practice 5: Use appropriate tools strategically, students learn to use tools such as “pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software”. In addition, students learn to “make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations”. Finally, proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts. Even though this standard refers specifically to mathematical resources, I hope you can see that these skills can be used by students in all content areas. Although the Practice Standard 5: most directly applies to the teaching of this standard, it is also taught in many of the content standards. I say this because I believe that drawing pictures or using objects or number lines, which I would consider tools, are referred to specifically in various content standards from Kindergarten through 7<sup>th</sup> grade when working with domains of Numbers and Operations in Base Ten or Fractions as well as the domain of the Number System.

There is much more that I could say to support the implementation of the Common Core State Standards but I felt that this was most important. In addition, many other people have shared some of my same arguments in previous testimony. Thank you for taking

time to listen to me. Again, I hope that the decisions you make on this important issue for education is made through the lens of what is best for the students.

Senators,

Thank you for allowing me to speak with you today about the importance of supporting the Common Core State Standards (CCSS). Nothing is more important than educating our children. Unfortunately, although we all want what is best, as a state we are challenged to agree upon a common set of standards. Three years ago when the State Board of Education adopted these standards, I never thought that I would be here defending them. I assumed our legislature would trust the judgment of their colleagues at the National Governors Association as well as the professional knowledge of educators and mathematicians from across the country.

I have supplied documentation with my testimony showing that there are now over 45 organizations representing a diverse set of stakeholders that support the CCSS, including ACT, Inc., the US Chamber of Commerce and the National PTA. In addition, the Conference Board of the Mathematical Sciences (CBMS), a board that represents varied and extensive expertise in mathematics and mathematics education, has released a document declaring its support for the CCSS. This organization consists of 16 professional societies which all have as one of their primary focuses, to increase knowledge in one or more of the mathematical sciences. In addition, they work together to promote research, improve education and expand the uses of mathematics. While they share these common foci, the Board's member organizations do not always agree on the best ways in which to increase mathematical knowledge. Yet, they have reached consensus in support for the CCSS for Mathematics. With all of this public support from so many diverse organizations, I can't help but wonder why we are even having this debate. To see if I could determine why we are engaged in this debate I conducted an extensive online search for opposition to the CCSS. I was not able to locate any documentation opposed to the CCSS that is comparable to what I have shared with you in support of the CCSS for mathematics. What I was able to find were numerous blogs and articles. These blogs typically represented the opinions of individuals or special interest groups unlike the well-established and respected research-based organizations that are on record in support of the CCSS. It was disheartening to see that many of the articles repeat the same misinformation that I found easy to disprove.

Prior to today, I have repeatedly heard Michigan Representatives suggest that Michigan should not support the CCSS because of the use of the Smarter Balanced Assessment (SBAC) and the fact that the CCSS have not been piloted. The next part of my testimony will speak to these points as well as to the merit of the Common Core mathematics standards.

First let me address the Smarter Balanced Assessment argument. With No Child Left Behind, each state must test its students on the standards that the state has adopted. This means each state must give an assessment regardless of whether it is the MEAP/MME or an assessment created by a consortium of states. This doesn't have anything to do directly with the standards themselves. This is a different issue that should not be confused with arguing for or against the merit of the standards.

The second issue that seems to surround whether or not the CCSS are "good" is this idea that they have not been piloted. When asked, a representative from MDE responded that no standards adopted by the State of Michigan have ever been piloted. In fact, with NCLB, this isn't even possible. The NCLB Act requires that ALL students must be taught using the same standards and assessed with the same test. How can you research, or pilot, the effectiveness of a set of standards when having two sets of students within a state each use a different set of standards would be a direct conflict with the NCLB Act? Not to mention, given the accountability standards, it is highly unlikely that a district would ever agree to "pilot" standards. In addition, why are we now worried about piloting standards when it was never a worry or requirement in the past? In fact, I spent many hours trying to find standards that *had* been piloted anywhere in the world. As of this moment, I have not been able to find documentation that any have been piloted before being adopted with the exception of six districts currently working with the American Federation of Teachers to pilot the CCSS. Based on this, it seems that this notion of having to pilot standards before adopting them isn't reasoned.

I hope that we can focus on the merit of the actual standards. The Common Core mathematics standards have been written so concepts will be developed over time in order to stop re-teaching the same concepts at multiple grade levels. Similar concepts are developed at different levels of sophistication as you move from grade to grade. For example, the CCSS suggests that ratios be developed in sixth grade then in seventh grade ratios are used to

understand proportionality and how that connects to linear functions. In eighth grade, student understanding of linear functions that are proportional are contrasted to relationships that aren't proportional. In addition, the CCSS have eight standards of mathematical practice that students must master to be successful math students. These standards of practice are missing from our Michigan GLCE and HSCE. These practices call for students to be able make sense of mathematical problems to solve real-world situations looking for structure and patterns and using mathematical models and tools to help them find answers that are accurate.

In a world that is changing so rapidly, it is important for our children to learn how to use the content they know to solve problems that they may not have been introduced to previously. I believe the CCSS are the standards that will teach our students to be able to do this. They will prepare our students for college, careers, and life.

Thank you for your time,

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**Common Core State Standards for Mathematics  
Statement by Presidents of CBMS Member Professional Societies**

In a great act of foresight for this nation, most of the states have now adopted a consistent set of expectations for school mathematics, called the Common Core State Standards. Building on long years of work, the Common Core State Standards are an auspicious advance in mathematics education. They define the mathematical knowledge and skill that students need in order to be ready for college and career, and provide the basis for a curriculum that is focused and coherent. If properly implemented, these rigorous new standards hold the promise of elevating the mathematical knowledge and skill of every young American to levels competitive with the best in the world, of preparing our college entrants to undertake advanced work in the mathematical sciences, and of readying the next generation for the jobs their world will demand. Much remains to be done to implement the standards, in curriculum, assessment, and teacher education. But we now have, for the first time in our history, a common blueprint for this work across state lines. This is not the time to turn away from our good fortune. We, the undersigned presidents of the following member societies of CBMS, hereby express our strong support for the Common Core State Standards for Mathematics.

James Roznowski

American Mathematical Association  
of Two Year Colleges

Hans Kuensch

Institute of Mathematical Statistics

David Vogan

American Mathematical Society

Robert Devaney

Mathematical Association of America

Marie Davidian

American Statistical Association

Nathaniel Dean

National Association of Mathematicians

Alasdair Urquhart

Association for Symbolic Logic

Valerie Mills

National Council of Supervisors of Mathematics

Ruth Charney

Association for Women in Mathematics

Linda Gojak

National Council of Teachers of Mathematics

Fran Arbaugh

Association of Mathematics Teacher Educators

Irene Fonseca

Society for Industrial and Applied Mathematics

Diana Kasbaum

Association of State Supervisors of Mathematics

Don Balka

TODOS: Mathematics for ALL

Vanessa Cleaver

Benjamin Banneker Association



## **Statements About the Final Common Core State Standards**

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- American Council on Education
- American Statistical Association
- America's Great City School Superintendents, Chancellors and Chief Executive Officers
- Bill Schmidt, University Distinguished Professor of statistics and education at Michigan State University
- Business Endorsement Letter
- California State Superintendent of Public Instruction Jack O'Connell
- The College Board
- Coalition for a College and Career Ready America (CCCRA)
- Colorado Governor Bill Ritter, Jr.
- Council of Administrators of Special Education (CASE)
- Council for Exceptional Children (CEC)
- Council of the Great City Schools
- Maryland Board of Education
- Massachusetts Business Alliance for Education
- Michigan Department of Education
- Missouri Board of Education
- National Association of Secondary School Principals
- National Council of Teachers of Mathematics
- National Mathematics Education Organizations
- National Parent Teacher Association (PTA)
- NCTM, NCSM, ASSM and AMTE Joint Statement
- North Carolina Board of Education
- Ohio Department of Education
- Partnership for 21st Century Skills
- Presentation by Dr. Hung-Hsi Wu
- Quotes from Supporters
- Statement by the National Higher Education Organizations
- Wisconsin Department of Public Instruction

## **Statements about the K-12 Standards**

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- Achieve
- Alliance for Excellent Education

- American Federation of Teachers
- Association of American Colleges and Universities
- Business Roundtable
- Coalition for Student Achievement
- Core Knowledge Foundation
- International Reading Association
- National Association of State Boards of Education
- National Council for Accreditation of Teacher Education
- National Education Association
- U.S. Chamber of Commerce

### **Statements about the Common Core Standards Initiative**

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- Achieve
- ACT, Inc.
- Alliance for Excellent Education Statement
- American Federation of Teachers (AFT)
- ASCD
- The Business-Higher Education Forum
- The College Board
- Evans Newton Incorporated (ENI)
- Great City Schools
- Hunt Institute
- Military Child Education Coalition
- National Association of State Boards of Education (NASBE) Statement
- National Council of Teachers of Mathematics (NCTM) Statement
- National Education Association
- National PTA
- National School Boards Association (NSBA)
- State Higher Education Executive Officers (SHEEO)
- The United States Army
- U.S. Department of Education

Taken from the Common Core State Standards using the following link:  
<http://www.corestandards.org/resources/statements-of-support>