

Thank you chairmen and members of the committees for listening to my testimony. My name is Melissa Rykse, and I have been teaching mathematics at Clarkston High School for nine years. I have been involved with implementing the Common Core State Standards for Mathematics in district-, county-, and state-wide efforts since 2009.

To give you a little background about me, prior to teaching I was a management consultant at Deloitte for six years consulting with various Fortune 100 companies both in the U.S. and overseas. In this role, I noticed that the men and women who were most successful could communicate effectively, reason clearly, and problem solve, all while using the tools available to them. When I received the Common Core State Standards for Mathematics, I literally jumped for joy when I read the Standards for Mathematical Practice. I noted that these processes were not taught regularly in Michigan classrooms, in part because past standards and assessments in Michigan have not emphasized and assessed these critical skills. These standards gave me hope that all mathematics teachers would begin emphasizing not only the critical mathematical concepts and procedures, but also the process skills so important for succeeding in the world after “formal” education, particularly in STEM careers.

As a teacher I have been fortunate to lead and participate in groups of Oakland County teachers and administrators who have examined the standards, piloted and reviewed instructional materials that embody the new standards in our classrooms, and helped each other understand how we might effectively implement these new standards. We have delved deeply into learning trajectories evident in the standards so we can more tightly coordinate the development of critical mathematical concepts through the grades and better meet the diverse needs of our students.

With the CCSS-M, we still get final say in our district on what we do and how we do it to best address our students’ needs, but we now have networks of teachers throughout the nation

with which to confer, share resources, and learn about best instructional practices for each concept. Additionally, we have access to free, researched, and field tested materials, resources, and training that support our district's efforts. If the standards were only Michigan's, we wouldn't have access to this wealth of expertise—we would only be able to rely on ourselves and others in Michigan.

My students have benefited most from our implementation of the CCSS-M. For example, in our Introduction to Statistics course, students are now asked to explain what they mean when they answer a question using a reasoning framework that we are adopting in our mathematics classes. This concept of supporting your claims with evidence and reasoning is taken directly from the CCSS for English Language Arts. Because of this approach, all of my students have developed or fine-tuned strong reasoning skills from the implementation of this concept in the space of a three-month course. A few years ago, if I asked a student to “Tell me more” or “What makes you say that?” I would hear silence or something to the effect of “That's just the answer” or “I don't know how to explain it, I just know how to do it.” Now I ask those same questions and in return get sentences and sometimes paragraphs of well-phrased, succinct explanations with strong evidence.

In conclusion, I have both a professional and personal interest in how the CCSS-M are implemented, and how that implementation will affect my students and my own two children. I believe the CCSS-M provide educators the framework and mechanisms to teach children important concepts and lifelong skills in a way that is still local, all with the support of a national coalition of educators, researchers, mathematicians, and industry leaders.

Thank you for your time and consideration.