August 14, 2013

Members of the Joint Committee Meeting of Senate Education Committee and the Senate Appropriations Subcommittee on K-12 Funding,

I would like you thank you for taking the time to listen to my thoughts on the Common Core State Standards. My name is Colleen Stamm and I teach 6th grade math. I have been a teacher in public education for 11 years and was a student of public education. I would like to share with you why, from my experiences, I feel that the Common Core State Standards will have a great impact on the students in Michigan.

In a typical day in my classroom before CCSS, my students would be taught a new math concept through the use of examples, given time to practice that concept in class, and then given homework problems to further the practice at home. I would share information and the students solve problems in ways that I demonstrated to the class. Students with a strong math background would memorize the algorithm and do well in class. Those with weak mathematical number sense might still do well because they could memorize the algorithm but not understand what the answer meant or how they arrived at the answers. Since implementing the CCSS content standards and mathematical practices into my classroom, my students have made the math classroom into a place where students' share ideas and concepts with each other. Students understand why a particular method works for solving a problem and can explain what a solution means. They work collaboratively to solve problems, critique each others' thinking, and decide if a solution makes sense. My students are now able to find connections between different mathematical concepts and understand how these concepts can

be used to solve problems. When given a difficult, multi-step math problem, students support and critique each others' thinking to find an answer they can all agree upon. Students' have ownership of their learning and begin to name algorithms after each other, i.e. Susie's method of dividing fractions.

The Common Core State Standards have impacted my students learning by encouraging students to problem solve by providing opportunities for real world, rich mathematical problems. The CCSS mathematical practices challenge students to analyze their own thinking, in addition to the ideas of the peers and teachers. The CCSS encourage students to look for patterns and use these patterns to help solve complicated mathematical problems. Attached is a sample of a multistep problem my students were asked to solve in groups of three. Although this group struggled to find the correct answer, they learned several new concepts along the way and were able to verbalize what errors they made. They were also able to justify they final class solution was correct based on the mistakes this group had made.

The Common Core State Standards help prepare our students for the workplace by encouraging collaboration, connections, and deep thinking for all students. The skills learned through the implementation of the CCSS can be applied to all subjects and all aspects of a child's life. I encourage you to approve the implementation of these standards in our schools so that the youth of Michigan will be prepared to become successful, critical, independent adults.

Sincerely,

Colleen Stamm
National Board Certified Teacher
Farmington Public Schools, Farmington Hills

Locker Problem

- Write factors and find common factors

- Pattern, Even and odd #'s are open
- just right the number's Down in a line

Mess up

Closed

~~2: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24,~~
26, 28, 30, 32, 34, 36, 38, 40 42, 44,
46, 48, 50, 50

3: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48,
51

4: 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52

10

opened
6, 12, 18, 24, 30, 36, 42, 48, 4, 8, 16, 20, 28, 32, 36, 40, 44, 52

Closed
3, 4, 8, 10, 14, 16, 20, 22, 26, 28, 32, 34, 38, 40, 44, 46, 50, 3, 9, 15, 21, 27, 33, 39, 45, 51, 12, 24, 48

~~How many people will touch 1-20~~

1: everyone
~~2: [illegible]~~ all the even
3: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30 [illegible]
4: 1, 4, 8, 12, 16, 20
5: 1, 5, 10, 15

6: 2
8: 2
12: 1, 2, 3, 4, 6, 12 [illegible]
13: 1, 13, [illegible]
14: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
15: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
16: 1-20
17: 1-20
18: 1-20
11: 1-20
19: 1-20
20: 1-20

3: 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 [illegible]
2: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 [illegible]
4: 1, 2, 4, 3, 5, 6, 7 [illegible]
5: 1, 5, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
6: 1, 2, 3, 6, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
7: 1, 7 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
8: 1, 2, 4, 8 3, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
9: 1, 9, 3 2, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
10: 1, 2, 5, 10 3, 4, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
11: 1, 11 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20
1, 2, 3, 6, 12, 4

SAME