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Implementing the Common Core State Standards for Mathematics: What Parents Know and Support

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Abstract

A wide range of actors will be involved in the implementation of the Common Core State Standards in Mathematics (CCSSM) which has been adopted over the past several years by nearly every state. This represents an unprecedented opportunity to improve U.S. mathematics education and to strengthen the international competitiveness of the American labor force. A set of standards, no matter how outstanding they may be, can only affect the quality of students' education as they are implemented in classrooms. This will require a concerted effort by all stakeholders in the education process including not only education leaders and professionals but students and their parents as well.

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Researchers and educators alike have recognized the critical role parents have in the education of their children as they provide early learning experiences. Aside from this, perhaps the most important role parents may play in how the CCSSM will affect their students learning is through their tacit as well as explicit support of these new standards. Educators sometimes express a lack of support from parents yet the findings reported here suggest parents overwhelmingly support demanding mathematics standards for all and are prepared to make tradeoffs in support of such standards.

The Center for the Study of Curriculum at Michigan State University conducted two surveys in 2011 of the parents of students in grades 1-8 about their perceptions and attitudes towards education and mathematics in general as well as their thoughts about the mathematics education of their own children. The samples were drawn to be representative of the nation as a whole. The Center also conducted surveys of students in grades 4-8 in 2009 and 2010 and again of students in grades 4-12 to ascertain their perceptions and attitudes towards mathematics and their mathematics education.

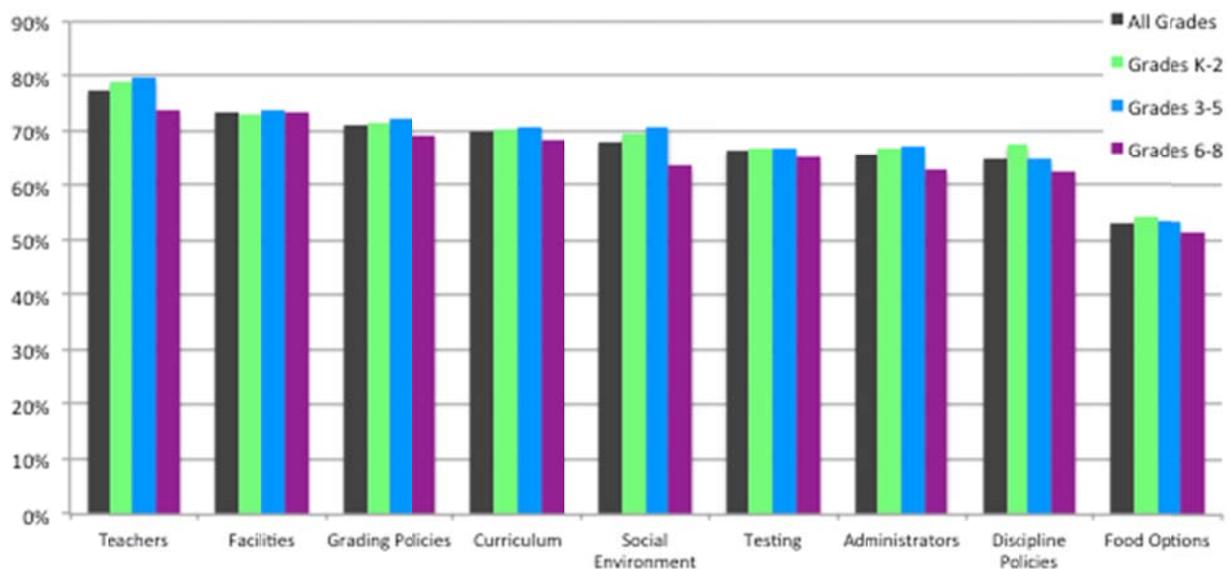
Perspectives on Mathematics Education

The parents responding to the surveys expressed strong support for education in general and more specifically, a challenging mathematics education for all students as well as their own children. The attitudes and perspectives expressed suggest that the vast majority of parents are primed to be enlisted as strong supporters for the implementation of the Common Core Standards for Mathematics. Exactly how they might do this may not be clear to many of them but survey responses suggest most parents are ready to provide support for the CCSSM both in the public arena and in the home.

Report on Parents and Students

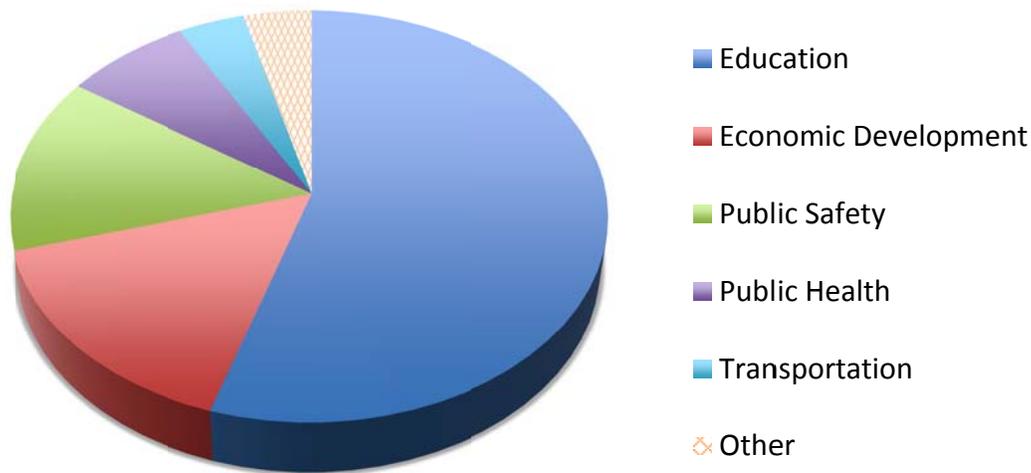
Teachers especially should be encouraged to learn that the great majority of parents identify teachers as an outstanding component of schooling in the United States to a greater degree than any other aspect. This is true not only in general across the population, but across ethnic and economic categories as well as for parents of younger students and older students (see Display 1). Fewer parents with students in grades 6-8 expressed this perspective yet this did not unseat teachers as the most identified praiseworthy aspect of education. This group of parents also less often identified the “social environment” of schools as an outstanding aspect of education. The food options available were the least frequently praised aspect. Perhaps a not too surprising finding given the recent media press to the issue of childhood obesity and the major contribution the typical diet, including the meals provided in schools, has in the development of this type of health issue.

Display 1. Percent of Parents Indicating Each Aspect of School is “Excellent” or “Very Strong”



In a time of fiscal distress many states have faced reduced revenue budgets, which has necessitated cuts rather than expansions even in historically valued areas. In this context, parents were asked which aspect of the budget should be most protected as their state may need to consider reductions. Most parents indicated that education should have the most protected status in state budgets (Display 2). This sort of support for preserving the level of funding for education from budget cuts is not likely to be translated into support for increased spending. Nonetheless, the level of support evidences a level of practical support that should be noted by educators and policy makers.

Display 2. What category of the state budget should be most protected from budget cuts?



In spite of the strong support expressed for education and teachers, parents were not entirely uncritical of education in the U.S. Most agreed that the international comparisons that report U.S. students have mediocre performance are accurate. However, when asked to give a reason as to why schools that have been labeled “failing” or “underperforming” have struggled, parents were willing to point an accusatory finger at themselves or, perhaps, their less enlightened peers, as the most frequently cited reason was a lack of parental support. A very close second reason for struggling schools was that schools were poorly managed. This is consistent with the very low excellence rating provided administrators (Display 1). In any case, parents were more likely to see problems in schools that were more removed from those their students attended: the average grade awarded public schools in their state was a “C”; the average grade given the public schools in their community was a “C+/B-”; but they awarded their own child’s school a solid “B”.

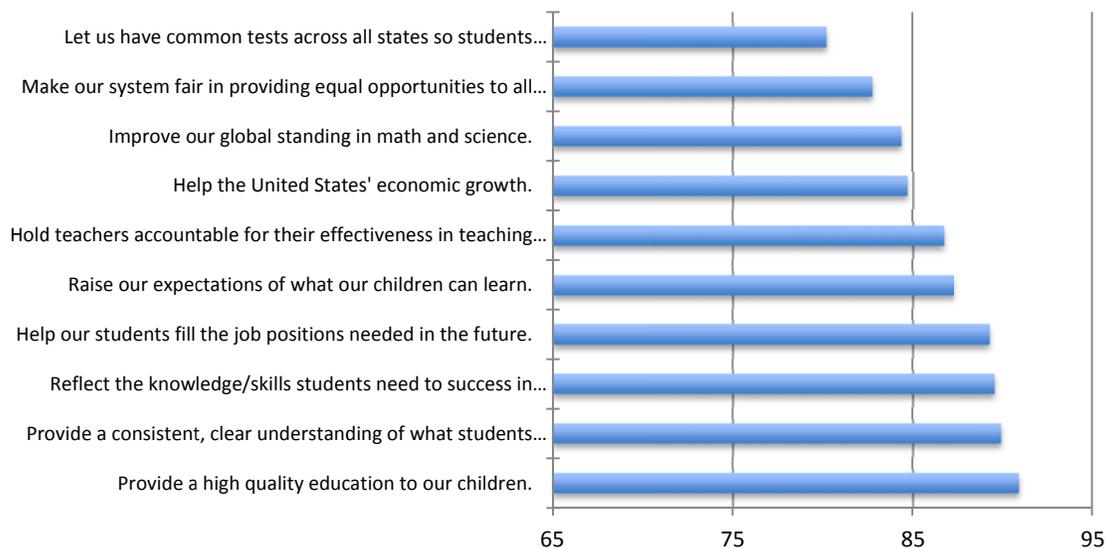
CCSSM Awareness and Attitudes

As might be expected, professional educators, i.e., curriculum directors and teachers, were more aware of the Common Core than were parents during 2011. All curriculum directors and nearly 90 percent of the teachers surveyed were aware of the Common Core. In early 2011 only about 2 out of 5 parents reported hearing anything about the Common Core but this had increased by the fall to half of all parents. Those in the highest income brackets were more likely to report that they were aware of the Common Core and ethnic minorities less often reported such awareness. Nonetheless, across ethnic and income brackets, once the Common Core was explained, about 60 percent of parents said they were in favor of the idea of common standards. Parents expressed the greatest support for common standards for math, about 68 percent. Slightly fewer, about 65 percent, expressed support for common standards for English/language arts and science.

Why might parents think that having common standards was a good idea? Parents were provided with a list of reasons that have been given as to why the U.S. needs common

standards and asked to indicate how important they thought each was. This list was the same as that provided to teachers except for the one emphasizing a “high quality education by international standards.” The three reasons most endorsed by parents were the same three reasons endorsed by the most teachers. These three reasons emphasize consistent expectations and a high quality education that reflects what students will need for their future success. The vast majority of parents, over 80 percent, endorsed each as being an important reason for having common standards. After the first three, the other reasons most endorsed as important differed a bit from the responses of teachers. For example, the fair and equitable reason was the fourth most popular among teachers but was nearly last among parents. The issue of common assessments across all states was also a more salient issue among teachers as it ranked seventh but was the least endorsed reason among parents.

Display 3. Percent of Parents Reporting Each Reason is Important for having Common Core Standards in the U.S.



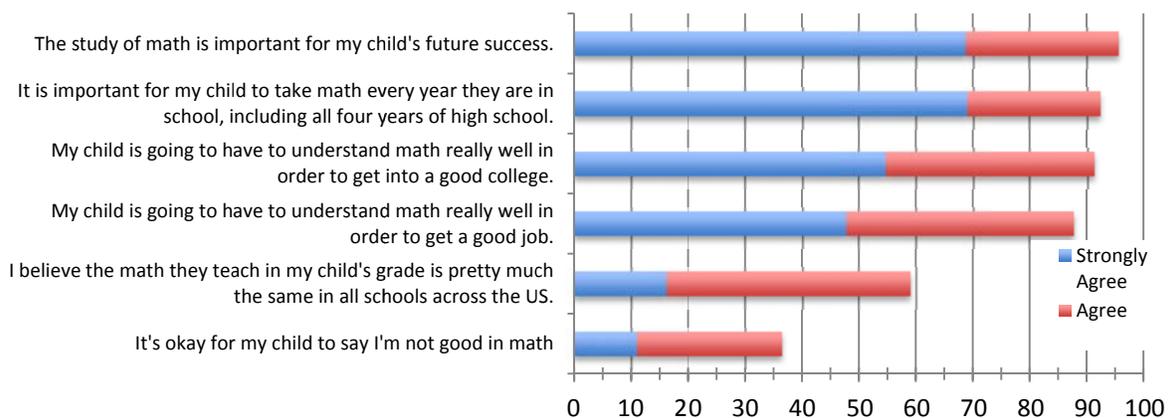
In general, there may well be very good reasons for a particular action but if the anticipated result in unacceptable for some reason support for pursuing that action could be affected. Thus parents were asked what sort of impact they expected the implementation of Common Core Standards for Mathematics would have. Of the nine different aspects of education listed parents anticipated a positive impact on all of these but two. Parents thought there may be a slightly negative impact on “children who struggle to learn” and on “students with special needs.” Fewer ethnic minorities expressed this view yet the overall trend was the same. The most positive anticipated impact was for the “United States’ ability to compete with other countries.” The next most positive impact related to teachers: the training of new teachers and teachers’ professional development. The next two, still viewed as being positively impacted, related to students: student performance in general and the “brightest students in the school.” In considering reasons for common standards (Display 3), parents put more emphasis on students than on the professional lives of teachers. However, in considering areas they expected to be positively affected, more parents

expected a positive impact on teachers' professional lives than anything related to students, unless the U.S.'s competitive relation to other countries was seen as directly related to better student performance. The positive impact of the CCSSM parents' expected on their own student was essentially the same as their expectations for the standards on students in general.

Importance of Mathematics in Schools

The enthusiasm and support parents expressed for the CCSSM is directly related to their perceptions concerning the importance of studying mathematics in school. Over 90 percent of parents agree that mathematics is important for their child's future success; whether this is in general or in order to get into a good college (Display 4). Perhaps because they see mathematics as being so vital for their child's future success, well over 90 percent of parents also agree that their child should take mathematics every year they are in school including all four years of high school. In the past a great deal of stigma was attached to being illiterate, i.e., not being able to read or write. Recently great emphasis has been placed on many different types of programs designed to help people of all ages to acquire the basic reading and writing skills required to function in our modern society. Yet at the same time, many teachers and other educators have noted that many seem to think it is acceptable to not be good at math, to not be a "math person." Although recognizing the importance of mathematics for their children, about one-third of parents still think its okay for their child to not be good at math. Perhaps because the reading/writing literacy rate has become so high, parents seem to place emphasis on the importance of math yet they also seem to be okay with their child not being good at it. This appears to be a conundrum that requires more understanding about what it means to be "good at math" since the vast majority of parents, nearly 90 percent, also believe that *any child can learn math if they have a "good curriculum" or a "good teacher"* (see Display 5).

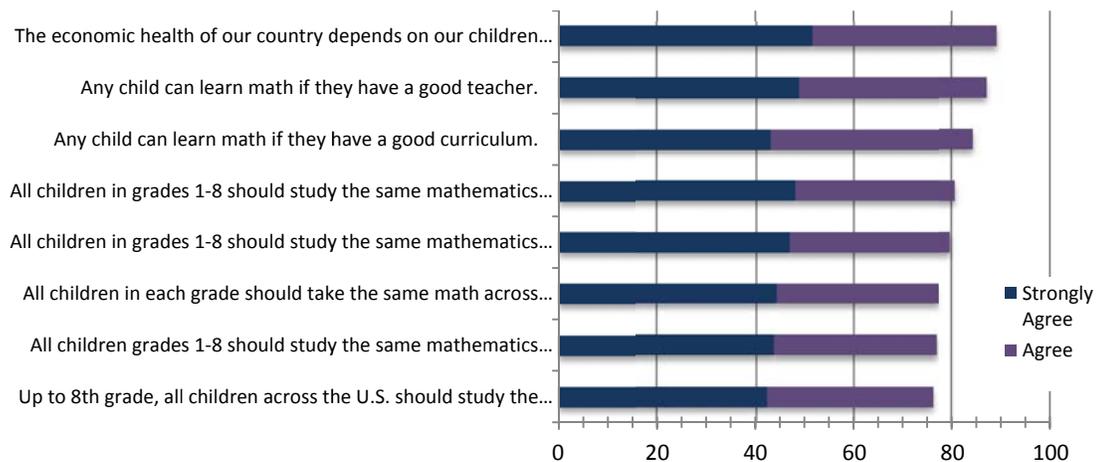
Display 4. Percent of Parents Responding "Agree" or "Strongly Agree" to Statements about Math and Their Child



Around three-quarters of all parents agree with the statements that express the spirit of common standards, i.e., that all children should study the same math no matter what state they live in, the community they live in within the state, or the specific teacher they may have (Display 5). These statements were presented with respect to the mathematics

curriculum for grades 1-8. Over 90 percent of parents agreed that U.S. students should learn as much math as other nations. Perhaps one reason for this is that nearly 70 percent said that the amount of math needed today is more than what was needed 15 years ago. However, less than a quarter of parents think that students today entering high school are prepared to study high school mathematics. This may in part explain why so many parents, a little over half, are willing to see Algebra II dropped as a high school graduation requirement. The interesting contrast is that more students expressed that they were ready to study high school mathematics than might be surmised from parents' assessment. Over 60 percent of high school students surveyed said they were prepared to study high school mathematics upon entering high school. Perhaps parents' perceptions are reflecting to some degree the complaints they've heard from students that math is too hard or too much work? In any case, the students in their opinion didn't seem as ill-prepared as imagined by parents.

Display 5. Percent of Parents Responding "Agree" or "Strongly Agree" to Statements about Math and All Children



In view of this perhaps inflated view of the difficulty of high school mathematics on the part of parents, it is again an encouraging sign that they are willing to support a more demanding mathematics curriculum. Parents indicated that they were in favor of more demanding mathematics even if it meant: a) that their child would need to study more and/or work harder (about 87 percent); that their child would need to do more homework (75 percent); or that more children, at least at first, would fail (67 percent). All of this suggests that parents are, at least at the beginning point in the implementation of the CCSSM, poised and ready to be supportive. However, what happens when their children find the math harder and more fail, especially on the first CCSSM assessment, remains to be seen.