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Testimony before the **House Committee on Education** on

HB 2292 Development and establishment of K-12 curriculum standards.

by
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2010 Kansas Mathematics Curriculum Standards Committee Member
Kansas Department of Education

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Chairman Highland, Members of the Committee;

Thank you for the opportunity to comment on **HB 2292**. I am testifying today in opposition of this bill on two grounds. First, the curricular standards adopted by the Kansas State Board of Education in October 2010 known as the Kansas College and Career Ready Standards for Math and English/Language Arts as well as the those adopted in June 2013 known as the Kansas College and Career Ready Standards for Science were vetted and recommended by groups of educators who were and still are highly respected as instructional experts around the state while following protocols established by the Department of Education at the direction of the State Board of Education. Second, there is already a growing base of empirical evidence which documents great success where the standards have been implemented.

The adoption process

Kansas educators participated in the process to adopt the Common Core State Standards (CCSS) in both math and language arts as well as the Next Generation Science Standards (NGSS) from their earliest stages. The standards review process as specified by the Kansas State Board of Education was followed, which included opportunities for public feedback. Through this process, the standards were adopted as the Kansas College and Career Ready Standards (KCCRS). In all cases, feedback was submitted to writing teams, and with each subsequent draft, it was clearly evident the writers included specific elements from each round of the feedback we provided.

As you consider this bill, please remember these standards were reviewed, vetted, and approved by Kansas educators during every step of an established process. Regardless of the false notion that these standards represent some attempt at a federally initiated curriculum, all of these standards were examined closely and determined to be an extraordinary improvement over the previous standards by many of our state's finest educators. The group of instructional leaders brought together challenged the early drafts of each standards document, determining where they fell short of the best interests of all Kansas children. They spent countless hours reading current and relevant research in order to better understand best instructional practices, curriculum reform efforts, and the teaching and learning of rigorous content. Only after much deliberation did each committee make their recommendations to the State Board of Education to adopt their respective sets of standards. It is therefore reasonable to conclude our appointed Kansas experts would have developed very similar standards independently and thus our currently adopted standards already meet the expectation of **HB2292** that "revised Kansas standards in these subjects may be developed through the process provided for in K.S.A. 72-6439, and amendments thereto" and no repeal of these standards is necessary.

As I have previously testified during last year's legislative session, I believe it is fair to state, that because of the transparent nature during both the standards and assessment development, Kansans have never had more ownership in their standards than they do with the KCCRS for Math, English/Language Arts, and Science. Further, it is my belief that the educators who invested significant time and effort to research and develop the currently approved standards did so with the best interests and welfare of children across Kansas in mind. These standards should not be declared null and void; rather, they should be supported and allowed to continue to direct instructional practices in classrooms throughout the state.

Classroom successes of implementation

Education curriculum standards state what students should know and be able to do and we use standards to measure students' progression of learning. Standards, and assessments of them, drive what teachers do with curriculum. While serving on the state mathematics standards review committee, members studied relevant research about learning progressions, content placement, and instructional strategies. Following this review, two things became clear: 1) Our then-current educational system did not adequately allow for the kinds of instructional practices which help students make meaningful connections to the curriculum (standards) or understand the content deeply, and 2) the catalyst for these much needed changes or shifts in instruction would come from the KCCRS-Math.

The math standards include content standards and practice standards, and it is with the 8 Mathematical Practice Standards that the greatest shifts occur. All eight of these shifts together define "mathematically proficient students" and the skills they need. These standards expect students to be able to persevere through problem solving, reason abstractly and quantitatively, construct arguments and critique the reasoning of others, model mathematically, use tools strategically, attend to levels of precision, make use of structure in problems, and reason repeatedly. In other words, 21st century learners must apply mathematics to the world around them and think critically about the problems they attempt to solve.

Because standards, and the assessments of them, drive instruction, then it becomes necessary to ensure our instruction begins to focus on application and critical thinking skills. But the 8 Mathematical Practices are not the only shift. The KCCRS-Math include expectations at each grade level K-8 that students will work fluently with mathematics. I believe, for example, this fully meets the call for children to learn basic number facts. These standards focus on mastering curriculum and then building on and advancing to more rigorous concepts each year rather than re-teaching concepts each year.

Districts and teachers in Kansas have been working hard as they learn about how this will change their instruction in their classrooms. And the Kansas Association of Teachers of Mathematics (KATM), a state organization of over 700 members, has helped lead the implementation of the KCCRS-Math. All 20 Executive Board members unanimously support these standards. To ignore this fact implies this committee does not consider those persons elected as mathematics education leaders in Kansas knowledgeable enough in their field to give such support, yet math teachers across the state would disagree.

As districts across Kansas continue their transition to the new standards, teachers are validating what KATM and the 2010 math standards review committee determined to be true: the KCCRS-Math are having a significantly positive impact on the way our students interact with mathematical content as well as they way they interact with each other mathematically. Undeniably, the results from the field tell us that after only three years of transition (and shorter, in some cases), Kansas children are successfully meeting the cognitively rigorous challenges set by the new standards. While the standards alone are not enough to have this impact, they have caused teachers to reevaluate their instructional practices. Together, these more rigorous standards and the more challenging instruction have helped our students make richer and more meaningful understandings and connections of the content to the world around them.

Shawnee Heights, USD #450 in Tecumseh, KS, has been one of the state's earliest adopters. Following their own curriculum review, which included analyses of relevant research in math, English, and science the district began to implement the math and ELA standards and instructional shifts in August 2011. Students and teachers have witnessed the transformation in their classrooms as instructional practices began to focus more on deeper student understanding of material and requiring students to work with the mathematics and English in a variety of ways before moving on to new concepts. Results from this transition include students retaining information throughout the year, student conversations about the content reflect much deeper and more meaningful understanding of the content, and students' reflections stating their enjoyment of the content is higher than it ever has been.

Now in year four of the transition, students are making connections to concepts faster than before. This means that even though the curriculum is more rigorous, students are learning more and teachers are teaching more. Teachers at Shawnee Heights point out they believe it is because of the KCCRS and the instructional shifts they have had to implement. The new curriculum, which requires students to think critically and apply concepts, allows them to make connections to new material independently. These successes are echoed across the state in classrooms which have already begun to implement the KCCRS. Shawnee Heights is in the

second year of transitioning to the KCCRS-Science. Already we have seen students able to exhibit similar growth in scientific thinking and understanding. Teachers have said the transition is moving forward at an appropriate pace and they point to the earlier and similar transitions to the math and ELA standards as helping to ease students towards similar instructional approaches in science classrooms.

Summary

I oppose **HB2292** because 1) the KCCRS for math, English, and science were vetted by highly respected educators in their respective fields and both Kansas educators and the public were afforded the opportunity to participate during the adoption process and 2) teachers across Kansas have concluded the new standards have positively and significantly impacted instruction and student achievement as evidenced by the Kansas Association of Teachers of Mathematics and the continued unanimous support of the 20 members of its executive council due to feedback from the field as well as the empirical evidence given from districts like USD #450 Shawnee Heights, where students have showed higher achievement and deeper understanding and reasoning under the 2010 adopted KCCRS for math and English. For these reasons, I ask you to vote in opposition of this bill and not allow it out of committee.

Thank you for your consideration.

Respectfully submitted,

Fred Hollingshead

Hollingshead - 4 -