Iowa Core Mathematics K-8 Transcript

Slide 1
The topic of our webcast is Iowa Core Mathematics grades K-8. My name is Judith Spitzli and I am a Mathematics Consultant at the Iowa Department of Education. This is an introduction to the new Iowa Core Mathematics after the adoption of the Common Core for Mathematics by the State Board of Education. This webcast is the first in a planned series that will address Iowa Core Mathematics.

Slide 2
Our learning goals are that participants will understand the structure of the new Iowa Core Mathematics document in grades K-8 and also understand the terminology used in the document.

Slide 3
The first topic is the structure of the mathematics document. The document has two sets of standards identified for K-12 mathematics. The first set of standards is the Standards for Mathematical Practice, and the second set is Standards for Mathematical Content.

Slide 4
The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

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There are eight Mathematics Practices. The practices include:
1. Make sense of problems and persevere in solving them,
2. Reason abstractly and quantitatively,
3. Construct viable arguments and critique the reasoning of others,
4. Model with mathematics,
5. Use appropriate tools strategically,
6. Attend to precision,
7. Look for and make use of structure, and
8. Look for and express regularity in repeated reasoning.

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The second set of standards is the Standards for Mathematical Content. These are grade level specific for grades K-8.

Slide 7
The format for grades K-8 is grade level specific, then domain, cluster and finally standards.
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On the previous slide, we learned that the format for the content standards included the label domains. Domains are large groups of related standards. Standards from different domains may sometimes be closely related. Look for the name with the code number on it for a Domain.

Slide 9
The next level of the format is clusters. These are groups of related standards. Standards from different clusters may sometimes be closely related, because mathematics is a connected subject. Clusters appear inside domains.

Slide 10
The final level is the standards and they define what students should be able to understand and be able to do. Standards are part of a cluster.

Slide 11
This is an example from grade 1. Notice that the domain is Operations and Algebraic Thinking. The cluster is: Represent and solve problems involving addition and subtraction. There are two standards in this cluster and standard number 1 is: Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

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Grades K-8 all have the same basic structure in the document. The first page of each grade level addresses the identified critical areas for that grade. These critical areas are very similar to NCTM’s Curriculum Focal Points.

Slide 13
The next page provides an overview of the domains and clusters for that specific grade. The following pages are the actual domains, clusters and standards.

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Each state was allowed to add up to 15% in additional content to the Common Core. Two additional standards were added in Mathematics K-8 and one paragraph was added to Mathematical Practice #7 “Look for and make use of structure.”

Slide 15
In order for readers to identify which content was added to the document, the following format was used. There is a capital IA in front of each the added standards. There are two additional standards in the K-8 portion of Iowa Core Mathematics and both of these are in second grade within the Measurement and Data domain.

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This concludes the K-8 Iowa Core Mathematics webcast. If you have questions or concerns, please contact me. Thank you for taking the time to listen to this webcast.