

Handout for SD Board of Education—October 15, 2025

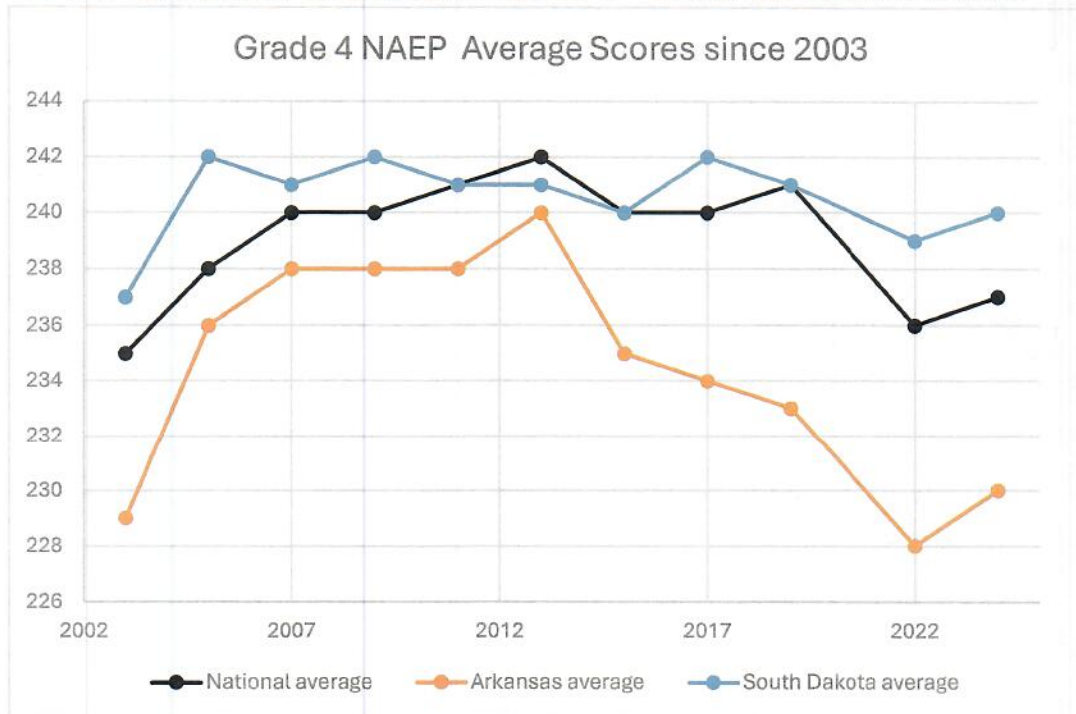
Sharon Vestal, President, South Dakota Council of Teachers of Mathematics

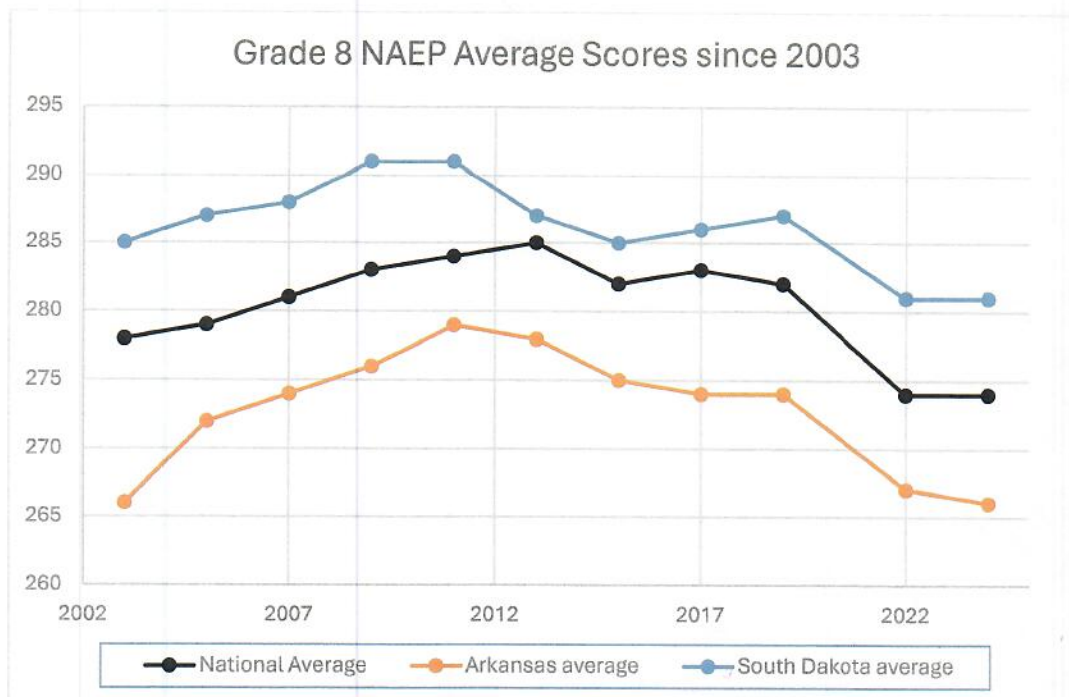
- **Key Point #1: What prompted the choices for the “model” standards that were given to the Math Advisory Group?**

On page 2 of the proposed standards, it says that the Math Advisory Group looked at other standards.

At its first meeting the advisory team discussed the current state of math instruction in South Dakota, identified strengths and challenges, and reviewed instructional frameworks from other states and the South Dakota Literacy Framework. The work continued at the second Math Advisory meeting where the group reviewed research findings, discussed effective instructional methodologies, and examined standards from other states and organizations, including Arkansas, North Dakota, South Carolina, and the Archimedes standards. The group provided feedback that aided the department in finalizing its key priorities for the revised standards. The revision process should produce standards that use clear and concise language, contain a balance of procedural fluency and conceptual understanding. In addition, they should align across grade spans and identify essential standards.

Why was the Math Advisory Group given Arkansas' K – 12 Math Standards to look at?





- **Key Point #1: Removal of the Mathematical Practices**

From SD Searchlight article, “State education department searches for ways to improve science, math scores,”

Graves told lawmakers on the Joint Appropriations Committee his department wants a similar evidence-based standard for math instruction. **Mathematics competency relies on calculation and numeracy, or number sense, Graves said.** Math instruction across the nation might emphasize one or another. To have students become proficient in math, they have to “get both of those together,” Graves said.

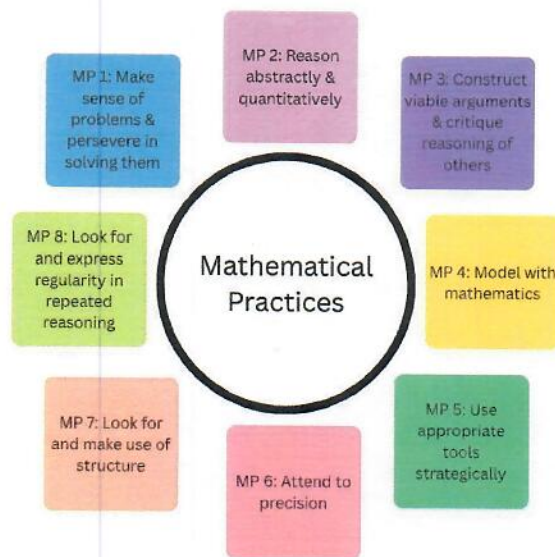
**SOUTH DAKOTA BOARD OF EDUCATION STANDARDS
NOTICE OF PUBLIC HEARING REGARDING ACADEMIC CONTENT STANDARDS**

A public hearing will be held at the Ramkota Hotel, 1400 8th Ave NW, Aberdeen, South Dakota, at 9:00 a.m. Central Time, October 15, 2025, to consider the adoption and implementation of the following: Health Education content standards and Mathematics content standards. This is the first of four public hearings regarding these standards.

Health Education: The goal of the Health Education standards is to equip students with skills they need to obtain, interpret, and understand basic health information and services, and use this knowledge to enhance their own health and the health of others.

Mathematics: The goal of the Mathematics standards is to develop mathematically proficient students who can problem-solve, think critically, communicate, and reason.

Problem-solve: MP1; Think critically: MP 1 – 8; Communicate: MP3; Reason: MP2



Is the Department of Education willing to consider adding some sort of Mathematical Practices back into the proposed standards?

- **Key Point #3: Why were the Arkansas Geometry Standards selected as a model for the High School Geometry standards?**

Using the current South Dakota Math Standards as a foundation, the department applied the advisory's guidance and identified priorities to create a first draft of standards. In July, the Math Standards Review Committee—comprising members of the advisory group and additional math educators—convened to review and provide feedback on the draft standards. Working in grade-band teams, the committee engaged in a detailed review process, applying the Quality Standards Checklist. This checklist, originally developed during the English Language Arts standards revision, served as a tool to ensure the standards reflected the established priorities: improving clarity, removing or replacing vague language, incorporating critical content and skills, and balancing conceptual understanding with procedural fluency. It also emphasized the importance of horizontal and vertical alignment—making meaningful connections within and across grade levels.

The current SD high school geometry standards has 46 individual standards. The proposed ones have 47 individual standards.

<i>Proposed SD High School Geometry Standards</i>

47 individual standards

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| <ul style="list-style-type: none"> • 30 of these come directly from the Arkansas high school geometry standards • 2 are very similar to Arkansas geometry standards but modified slightly • 7 come directly from the Archimedes standards • 7 come from the current SD high school geometry standards • One is of unknown origin |
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In one case, one current standard was replaced by several standards, a couple of which are not mathematically accurate.

- “G.CO.A.1: State and apply precise definitions of angle, circle, perpendicular, parallel, ray, line segment, and distance based on the undefined notions of point, line, and plane.”

In the proposed high school geometry standards:

G.GF.2 Understand a line to be a one-dimensional object **with length but no width or height, extending indefinitely in opposite directions.**

G.GF.3 Understand a plane to be a **two-dimensional object with length and width but no height, extending indefinitely in both directions.**