Public Comments
Science Standards

Science Exhibit 1

Date Submitted: Aug. 12, 2014
Terry Gerber, Parent & Administrator
I like that the science standards are very clearly defined for grades K-5. I extremely dislike that we move from grade-level standards to "content-level" standards in grades 6-12. My thought is that the standards should be grade-level standards through 8th grade.....these are the 6th grade standards that need to be taught, these are the 7th grade standards and these are the 8th grade standards. Kids fall through the cracks as they transition from one school to another in SD. Some schools teach life science at 7th grade, some at 8th grade, etc..... Give us grade level standards K-8! They should have all or most of the standards when they take the 8th grade science test. My other comment is to define high school standards by course. If I'm teaching Physical Science, what content do I teach? If I'm teaching Biology, what do I need to cover? If I'm teaching Chemistry, Physics, Anatomy, etc.....what do I need to teach? I hate this ambiguous 9-12 standards. Although Physical Science and Biology are required to graduate from any school in SD, no guarantee that any 2 schools are doing the same thing. Applaud you for your work K-5.....disappointed 6-12 that we still are being ambiguous about what specifically needs to be taught in each grade/course!

Science Exhibit 2

Date Submitted: August 15, 2014
No Name Provided, Educator (teacher, administrator, curriculum director, SPED director, ect)
The science standards are very clear for the elementary grades and become vague and confusing starting with grade 6 because the standards move from being organized by grade level to being organized by science strand. The standards should be organized by grade level through 8th grade and then by course in high school. Because Physical Science is a requirement for every child to graduate from a school in South Dakota, the standards should be listed for that specific course as well as Biology, Chemistry, etc... This committee is missing an opportunity to get all school districts on the same page!

Science Exhibit 3

Date Submitted: August 16, 2014
No Name Provided, Parent
I am thrilled that South Dakota is adopting clear, appropriate science standards and providing support for teachers to implement them! My eldest son's middle school teacher didn't teach evolution, perhaps because she didn't understand it herself, so he will be at a disadvantage when he gets to college, unless the high school teacher covers the subject better. We need to grow scientists (hopefully like my son) in South Dakota, and that starts with good early science education. Good job, SD!

Science Exhibit 4

Date Submitted: August 28, 2014
Robin Cochran Dirksen, Educator (teacher, administrator, curriculum director, SPED director, ect)
Although, I haven't looked at the Unpacked Stds. yet, I would like to thank you for doing such an impressive job at capturing the spirit of the Framework. In practical terms, I think that SD science educators will be able to translate the standards into their practice effectively. I am in my 20th year of teaching upper-level courses- Adv Bio., Rising Scholar Bio., Chem., and STEM Research and would be proud to use this document to guide my teaching. Congratulations on getting it right!

Science Exhibit 5

Date Submitted: September 9, 2014
Dawn Hilgenkamp, Parent
There is nobody that teaches at a higher level than high school. There should be some science college professors on the panel, to make sure our kids are learning the proper things so they are not behind when they go to college. The ball was dropped with the math standards. Kids are not learning enough before going to college. I think the Common Core Standards are ridiculous. The state of SD needs to join the other states in the push to get rid of the Common Core Curriculum.

Science Exhibit 6

Date Submitted: September 11, 2014
Nicole Keegan, Standards workgroup committee member
As part of the committee that worked to create the SD Science Standards, I fully support the revisions proposed to the Board of Education. The revised standards increase the level of rigor for Science Education across all grade levels. Additionally, they create investigative students who must apply their knowledge instead of being able to rely on factual recall. These standards take our current standards to a new level which will require students and teachers to move beyond textbook work. The standards were taken from multiple documents and revised to what was the best fit for South Dakota students and teachers. There has been concern about the middle level standards (grades 6-8) not being disseminated by grade level. Please note that this was realized by the committee, but we felt that more time was necessary to break down those standards appropriately to fit the various types of middle level systems in place across the state. There will be future work to set the grade level bands, allowing the work to be polished and not rushed.

Science Exhibit 7

Date Submitted: September 11, 2014
Jarzab, Educator (teacher, administrator, curriculum director, SPED director, ect)

First of all a sincere thank you to all of the committee members for reviewing the 2005 standards and enhancing them for the betterment of SD students and the future citizens they will become. Regarding 1-LS1-1, this standard seems more fitting for an older grade level, perhaps second grade. Regarding 2-LS2-1, this standard seems more fitting for a younger grade level, perhaps K. (Especially if they are required to make models of land/water bodies, as in 2-ESS2-2, which I think is very age-appropriate, then they will most likely already know that plants need sunlight and water to grow.) Regarding the Middle School Life Science Conceptual Understanding, please consider adding the following, "Plants use the energy form light AND GAS FROM THE AIR to make sugars through…" (p23.) This is an important misconception and I was glad to see this addressed in 5-LS1-1. This concept should be reinforced in MS. Here are some typos to be considered… 3-LS1-1 add a comma before "but" and add a colon after "common" 3-LS4-3 add the word "of" after the word "evidence" MSLSCU (p23) add an apostrophe to the word "its" before populations (second to last sentence in first paragraph) MS-LS1-2 add the word "the" before the word "ways" HS-LS2-6 reword…..Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms DURING STABILITY, HOWEVER in moderate to extreme fluctuations….

Science Exhibit 8

Date Submitted: September 16, 2014
Frances Linn, Standards Workgroup Committee Member

I believe these new science standards represent where science education needs to go. The practices and cross-cutting concepts teach students to be critical thinkers and prepares them to face the problems of tomorrow.

Science Exhibit 9

Date Submitted: September 17, 2014
Rosa Yellow Boy-Vocu, Parent

One of the many reasons why I chose to use the proposed standards is that they clearly state more reasoning and definition on certain topics. For example in the present standards they only list what is to be essential. On the proposed standards they go into complete detail. While on the present standards they have a standard on cells. Where they just list a section when the standards are to

identify basic cells. While the newer, extended edition provides more into depth about cells. They also provide three standards on cells only.

Science Exhibit 10

Date Submitted: September 17, 2014
NM, Representing Self

I think that the proposed standards are more indebt and more informative to helping the teacher/students understand all 3 of the different standards and meanings. Which I think that the proposed standards would be more efficient to teach with in the classroom. I myself would rather use the purposed science standards they are more indebt to the contrast of teaching different levels of science with a better understanding. The proposed standards are completely different from the current standards in giving much more information to learning and understanding the science standards.

Science Exhibit 11

Date Submitted: September 17, 2014
Brice H., Teacher Candidate

When comparing the proposed standards to the current standards, I think the more descriptive proposed standards would be easier to teach because of the good description. In the proposed standard MS-ESS2-1, the teaching of the earths water role is associated with energy. The connection is stated in the proposed standard while in the current standard 6.E.1.2., it is a brief description of the earths water role. The current standard doesn't make any connection to energy. Energy is an important aspect in learning about the earths water role. As a new upcoming teacher, I would prefer to teach with the more clear standard so I can focus on improving my teaching effectiveness.

Science Exhibit 12

Date Submitted: September 17, 2014
Lauretta R., Teacher Candidate

The newly revised South Dakota standards give you list at the beginning about the core ideas that are covered. The standards for Physical Science, Life Science, and Earth and Space science are a lot more descriptive in what is expected. The new standards do however ask for more research and that the student is able to present data in tables and graphical displays. I like the new standards also because they make it a lot easier to plan your units you are teaching.

Science Exhibit 13

Date Submitted: October 9, 2014
Nicomas Dollar, Educator (teacher, administrator, curriculum director, SPED director, ect)

I would like to see examples of activities used to teach the new standards. For example: How would you teach the following standard and what activities could you use? K-2 the standard LS1.A Using plant and animal anatomical function to design a solution to a human oproblem of growth and development.

Science Exhibit 14

Date Submitted: October 19, 2014
No Name Submitted, Educator (teacher, administrator, curriculum director, SPED director, ect)

Kudos to all the people who put these proposed standards together. They look good, and I'm anxious to implement them!

Science Exhibit 15

Date Submitted: October 30, 2014
No Name Submitted, Educator (teacher, administrator, curriculum director, SPED director, ect)

Are you proposing that the MS standards be broken up to physical science in 6th grade, life science in 7th grade, and earth science in 8th? I don't understand how students will be able to transition from one school to the next if the districts are asked to decide what to teach when.

Science Exhibit 16

Date Submitted: November 12, 2014
No Name Submitted, Educator (teacher, administrator, curriculum director, SPED director, ect)

I am a 4th grade teacher. I compared the new standards with what I currently teach. Only about half of them are similar. According to the new ones, I would not teach matter, electricity, magnets, the human body, the water cycle, weather, and the Earth, Sun, and Moon. Instead they have added the concepts of sound, light, waves, the eye, non-renewable and renewable resources and I am sure more that I have missed. Some of these "new" standards aren't in my book so I will need to spend many hours finding material to teach these concepts...just like I had to do with the older standards. I don't mind transitioning our students to think like engineers, however I do not understand why we shift the concepts around between the grade levels? This is very time-consuming as a teacher when we have to develop whole age-appropriate units for new concepts. If we are going to be trained...than hopefully it is time spent on developing these units as a team.