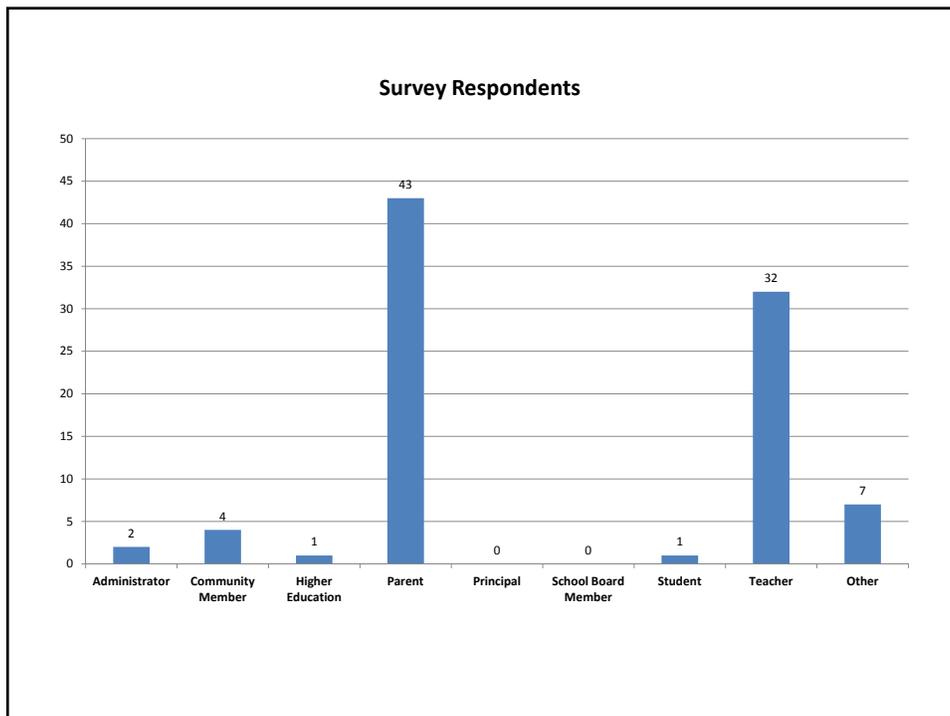
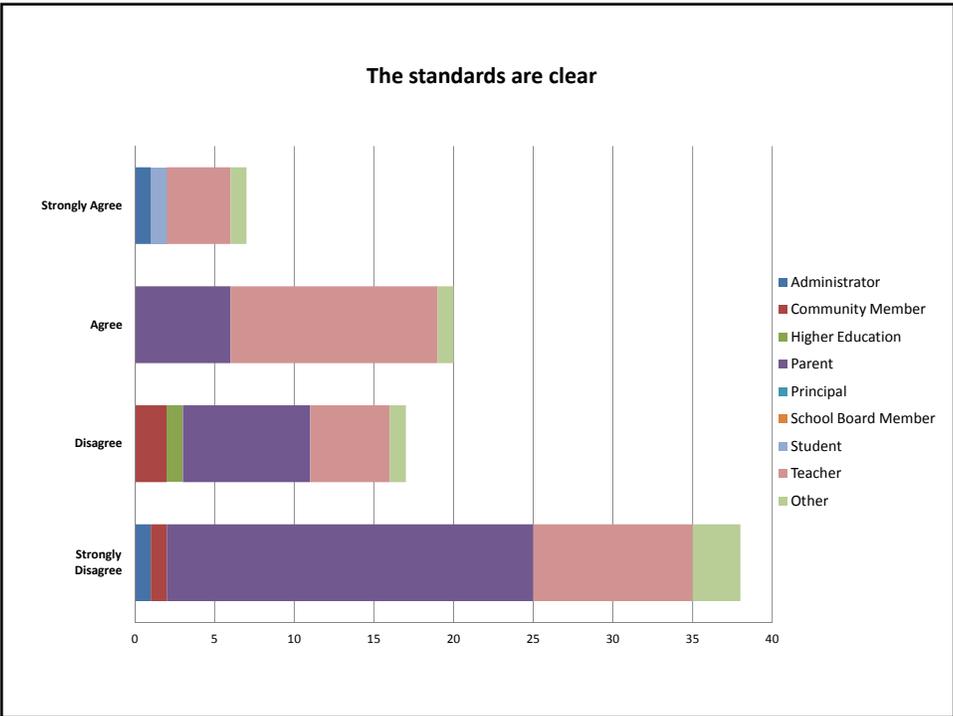
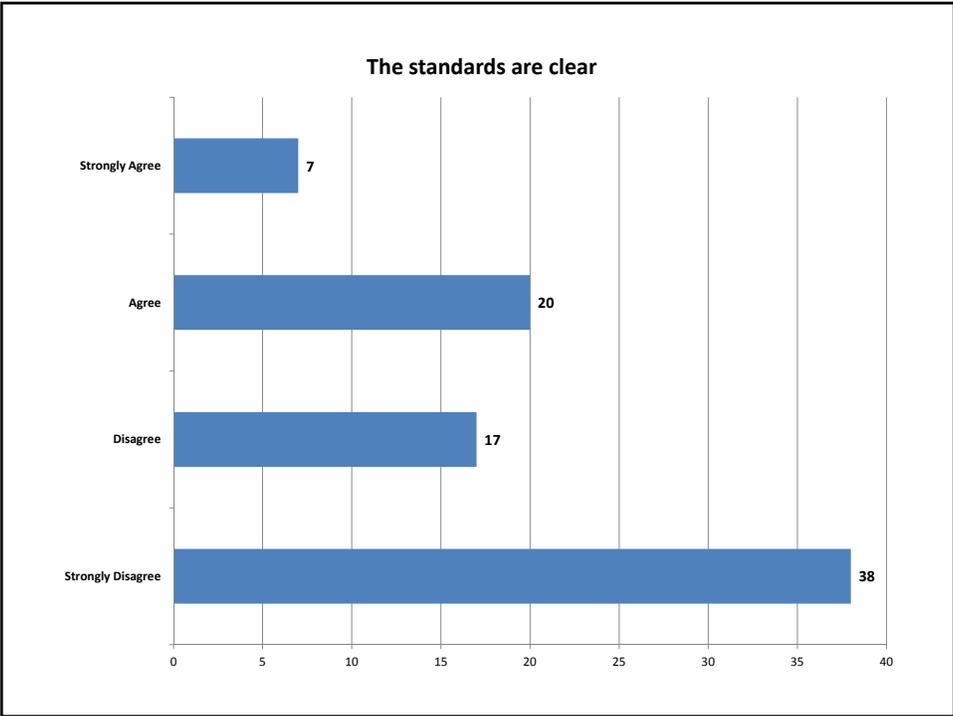
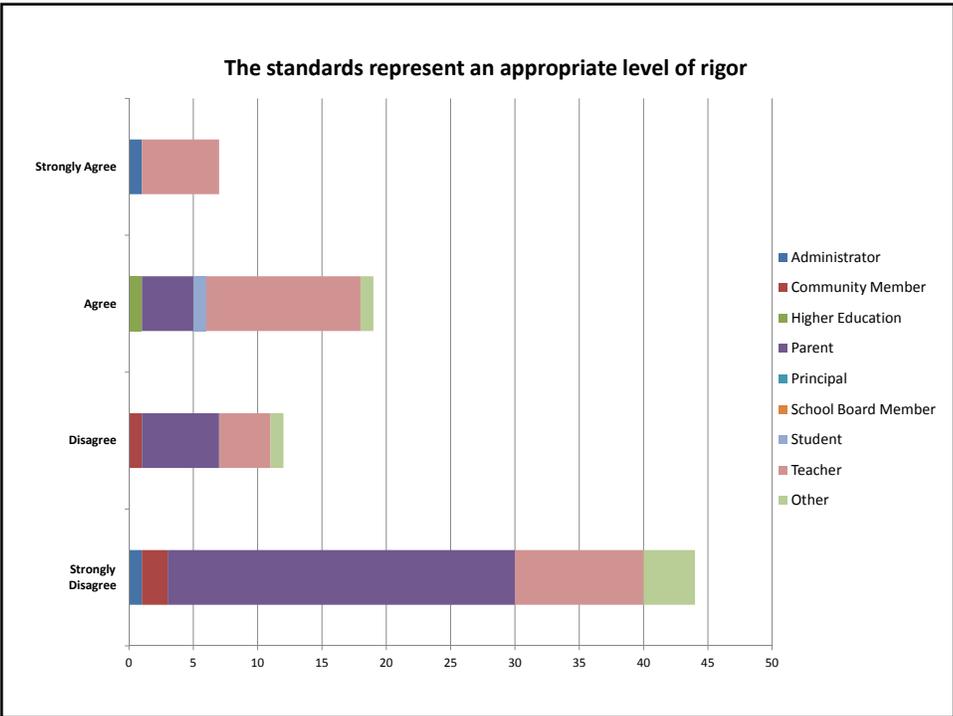
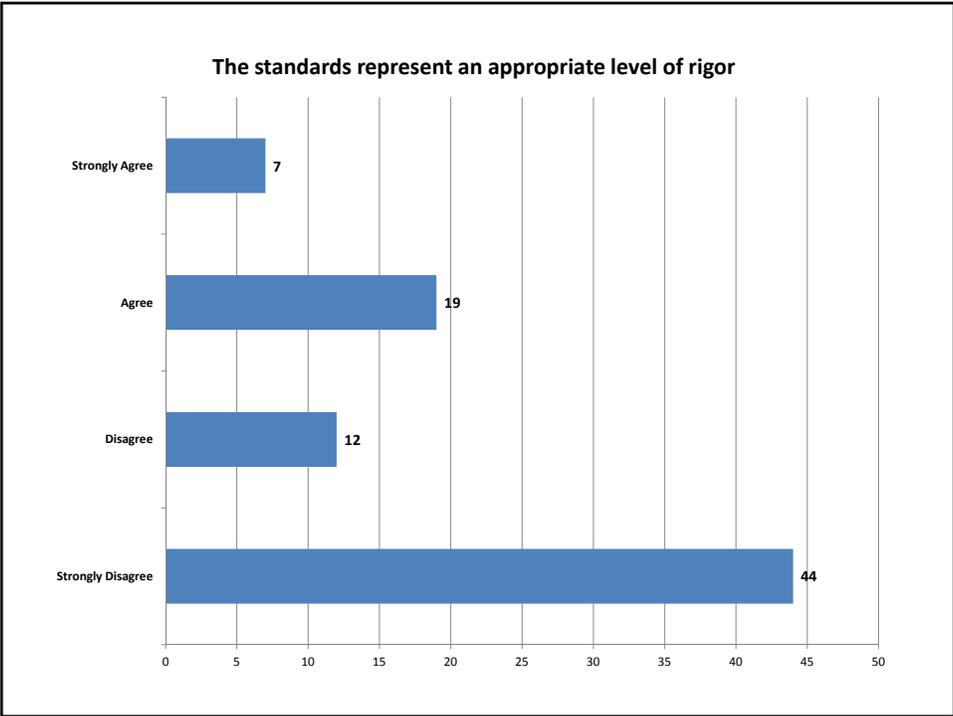


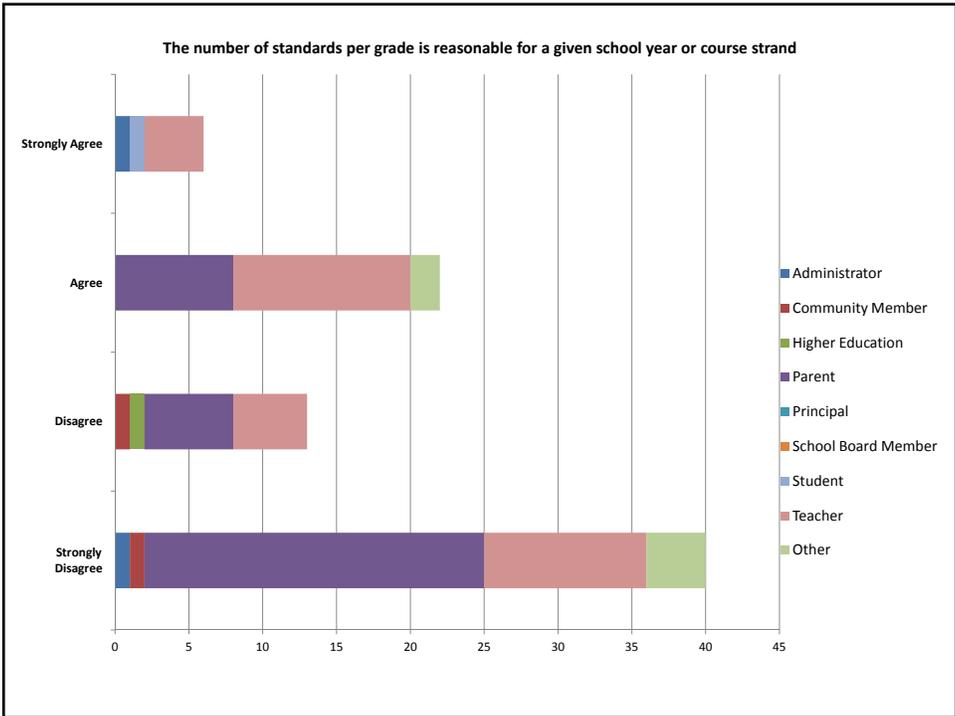
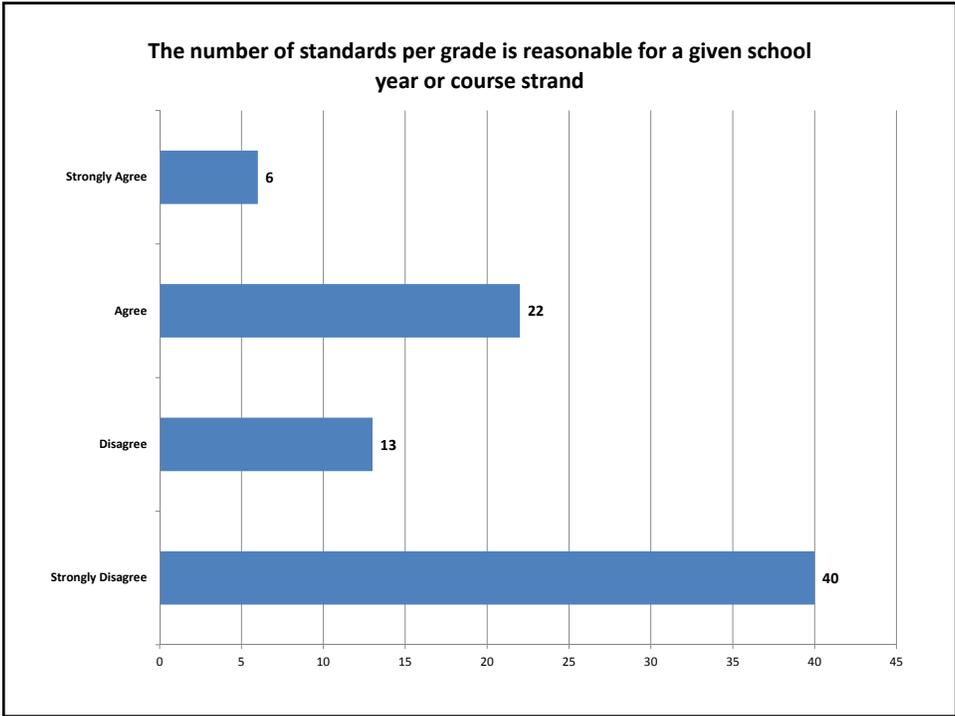
North Dakota Science Content Standards, Preliminary Draft: Public Comment Survey

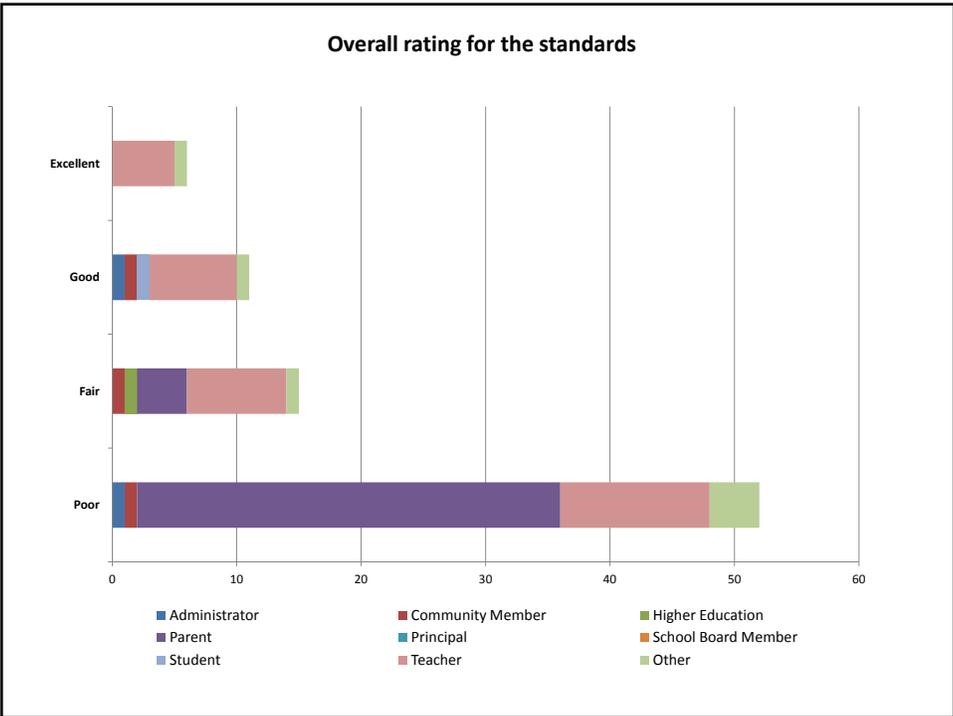
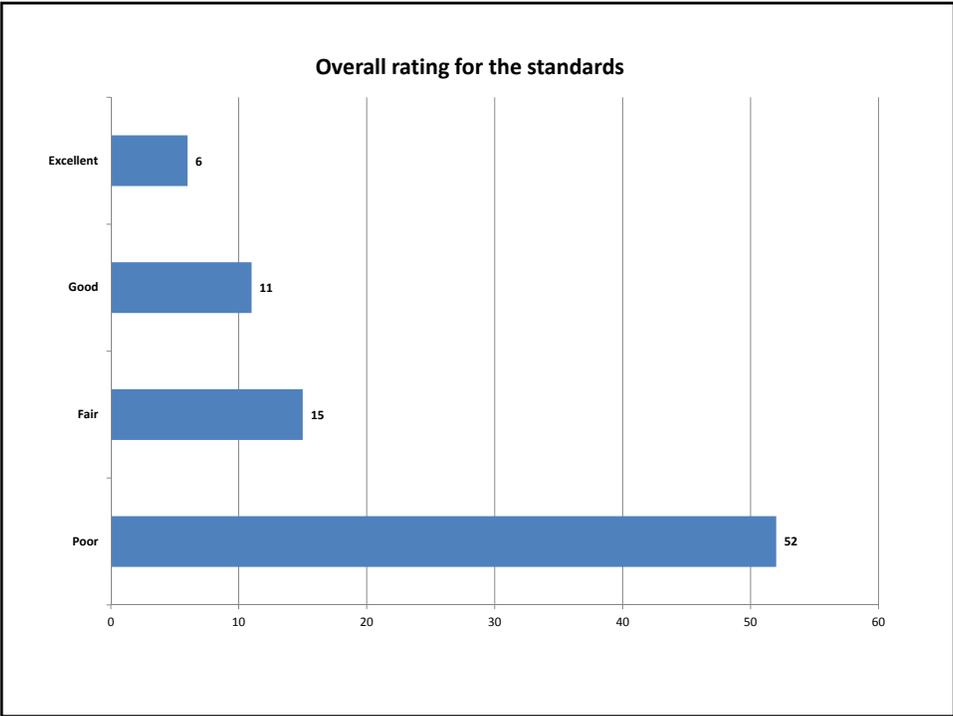
Comments through June 3, 2014











Q6 Do the standards cover everything that is important for all students to know?

Answered: 60 Skipped: 30

#	Responses	Date
1	I feel it is important for students in science to know that there are many theories of evolution.	6/2/2014 9:37 PM
2	No.	6/2/2014 3:55 PM
3	Absolutely not.	6/2/2014 12:00 PM
4	No, there is so much they should at least be introduced to before being out of high school. One thing not largely covered in these standards is nuclear processes, it's more of a side note. This is becoming more and more common in our everyday life, from food preparation to researching the universe, medical diagnosis and treatment to energy production. It has impacts on chemistry, physics, and more. This must at least be covered in the extent it is used. Another that is glazed over is the relationship between electricity, magnetism, waves, and gravity. As research has shown these are all related at a subatomic level, especially electricity and magnetism (refer to Faraday and the first motor and then generator). Not to mention the relationship between chemistry and electricity. So many relationships are glazed over and will be missed by these standards as they split ideas out and separate them from one another. The biggest missing item of all is counter argument to theories, specifically global climate change. The most accepted argument is Human caused climate change as the "major" factor, but natural causes may be the "major" factor. Many of the IPCC's findings based on poor models are included in the standards as facts but none of the contradictory findings are, such as the NIPCC's comparison of the models to empirical data. Global climate history is not covered, mostly because it is still not understood, but that is why opposing views should be introduced, yet the standards are one sided and students will have to fall on that side to meet the standard, removing the scientific process.	6/2/2014 10:57 AM
5	1. Recommended practices dominate the NGSS at the expense of essential knowledge, which should be the focus of science standards. 2. Content and skills that are above and beyond the standards (such as thermodynamics, stoichiometry, solution chemistry and nitrogen cycles) but that won't be part of the assessments will be neglected because teachers will teach to the test. 3. Several opportunities to build important links between grade- appropriate math and required science content are missed.	6/1/2014 10:33 PM
6	1. Recommended practices dominate the NGSS at the expense of essential knowledge, which should be the focus of science standards. 2. Content and skills that are above and beyond the standards (such as thermodynamics, stoichiometry, solution chemistry and nitrogen cycles) but that won't be part of the assessments will be neglected because teachers will teach to the test. 3. Several opportunities to build important links between grade- appropriate math and required science content are missed.	6/1/2014 10:12 PM
7	1. Recommended practices dominate the NGSS at the expense of essential knowledge, which should be the focus of science standards. 2. Content and skills that are above and beyond the standards (such as thermodynamics, stoichiometry, solution chemistry and nitrogen cycles) but that won't be part of the assessments will be neglected because teachers will teach to the test. 3. Several opportunities to build important links between grade- appropriate math and required science content are missed.	6/1/2014 10:09 PM
8	Absolutely not	6/1/2014 7:52 PM
9	No, students need to learn actual math and science.	6/1/2014 10:04 AM

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10	I am aware of a kindergarten teacher who claimed that the expectations of the Common Core are too demanding for a kindergarten student. And I feel the expectations of the NGSS are also too demanding. We know that children develop at various rates, so at age 5 there will be a variation of the zone of proximal development as at every age. Some might have been better assigned to the grade ahead (the talented and gifted) and some might have been better assigned to the grade behind (the remedial and special needs). That leaves a great burden on the teacher. But having to keep up with the standards day after day when some students are failing to comprehend today's assignment (frustrated), and other students are failing to see the value of school (not challenged) will be a frustration or a challenge for any teacher. I did not see anything about measuring and weighing things which might be an appropriate Kindergarten activity.	5/31/2014 9:38 PM
11	If we are going to encourage critical thinking and include climate control and humans at fault, the big bang and evolution in the standards then I suggest we should include intelligent design, creationism . all the things humans are doing to protect their natural resources. This would be what students need to develop critical thinking.	5/31/2014 2:43 PM
12	Students need to know there is more than one theory regarding the origin of life. Evolution is not the only theory.	5/31/2014 11:10 AM
13	It looks as though the K-8 grade standards are reasonable, but then the high school level takes the standards to a level that is filled with socialism, one world view. School should be just the facts and then let the kids make their own independent opinions rather than driving an agenda.	5/31/2014 10:53 AM
14	very politically biased - no mention of creationism - too much focus on global warming/climate change and evolution	5/31/2014 5:01 AM
15	No. What about creation? They teach evolution but that's not what's acceptable with our beliefs.	5/30/2014 11:23 AM
16	Please do not implement these standards. We (as parents would) like more input on standards that are implemented in North Dakota.	5/30/2014 10:43 AM
17	Out of kilter with common sense.	5/28/2014 10:49 PM
18	No	5/28/2014 10:46 PM
19	No	5/28/2014 10:42 PM
20	No	5/28/2014 10:20 PM
21	Yes	5/28/2014 1:49 PM
22	No. The standards are simply transitions to Common Core. I keep hearing that this is all local control and I am quite sure that is, at worst, deceitful, and at best, delusional.	5/28/2014 1:05 PM
23	No. Creationism is not presented as an alternative.	5/27/2014 9:07 PM
24	NO. Students DO NOT need to spend 8 minutes solving a simple math problem when they can be done in 1 minute.	5/27/2014 8:39 PM
25	No	5/27/2014 1:57 PM
26	Higher level vocabulary that will need to be unwrapped in understandable kid terms, but first I need to really read/reread what the core topic is even about.	5/26/2014 3:42 AM
27	No, absolutely not.	5/20/2014 2:55 PM
28	No	5/19/2014 9:27 PM
29	No	5/16/2014 9:02 PM
30	They are reasonable.	5/16/2014 12:06 PM
31	The students are the reason we are working on new standards and common core alignment, I would like to see a "student version" of the standards created so students would know at the beginning of a class exactly what they will be learning and should know. Often the parents are blamed when a student does not do well, so creating a document for parents (who don't teach) will have an understanding of what their child should know.	5/15/2014 1:48 PM
32	No overemphasis on global warming and evolution. Where is the hard science?	5/14/2014 8:33 AM
33	No too much time is spent teaching students that everything humans do negatively impact the earth.	5/12/2014 12:05 PM

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34	no, how about SCIENCE? The most critical need for students is to understand basic science, and we are so far from achieving that goal that I think it's a distraction to start immersing students in the extraordinary complexities of climate science.	5/11/2014 3:03 PM
35	No, they are a step backward	5/10/2014 9:27 PM
36	Yes	5/3/2014 12:16 PM
37	I might have missed it but I feel like its important to teach them about the two theories of where humans came from, evolution and creation. Although you can only believe in one, it's still important to teach the two theories even if we never find out which is actually true.	5/2/2014 9:40 AM
38	No	5/1/2014 10:12 AM
39	No. Without evaluating every level, I can't see where concepts are taught at each level. From 3rd to 5th, I don't see any continuity. The 5th grade standards seem easier than 4th grade in terms of abstract thought. Environment, agriculture, and natural resources should be covered at EVERY grade level as they are significant in our existence and how people interact with each impacts the future of our planet.	5/1/2014 4:23 AM
40	Alternative "theories" to the beginning of life need to be presented.	4/30/2014 3:40 PM
41	evolution is a theory not fact and should be taught as such	4/30/2014 12:42 PM
42	I'm not sure it could, but if we teach students to formulate questions and find and compare answers before coming to a conclusion, then we will have taught them to teach themselves. Again. I hope science teachers are taught- given PD- on how to evaluate web pages and cite sources. The standards will be hard to meet if the students are just shown how the teacher did it. Or worse..the science teacher tells students to list sources at the end without in text citations for each photo or statistic. ex- WHST.6-8.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. (MS-ESS3-1) WHST.6-8.9 Draw evidence from informational texts to support analysis, reflection, and research. (MS-ESS3-1)	4/29/2014 12:33 PM
43	Again my comments apply only to middle and high school physics. Not really. For instance there is no mention of sound in the standards PS4. Students would love to learn about and to play sounds. Geometrical optics is another important and fun topic missing from High -school in the HSPS4. However, I view the NGSS not as a curriculum standard (please check my comments on question 5 and 10) thus it does not matter. NGSS itself stresses that "the NGSS are standards or goals, not curriculum" and the NGSS allow "Instructional flexibility" (NGSS Introduction xiii-xiv) Teachers or districts can add or remove curricular content.	4/28/2014 9:03 PM
44	No...the assessment requirements are too specific.	4/28/2014 8:38 AM
45	The standards do not include any instruction on the scientific method or metric measurement. Many of the standards seem to pluck one very specific piece of information (i.e. Newton's Third Law but not the 1st or 2nd).	4/28/2014 8:37 AM
46	I see them as a great guide with required courses, but they still fail to provide recommendations for upper electives in science. I know this is not the goal for all students to know, but we have a huge pressure to still tie to the standards. I don't know how to reconcile that.	4/27/2014 3:14 PM
47	I am somewhat concerned with the standards at the high school level...there is not much there for Human Anatomy. I guess my biggest concern is what do we do with students who want to become doctors and nurses? In a typical Biology course, I just cover the basics of the human body because we offer Anatomy as an elective course.	4/27/2014 2:20 AM
48	Everything? No. K-PS3-1 Make observations to determine the effect of sunlight on Earth's surface. This sounds ok but the application is too simple. The assessment is pre-school level. The assessment and activities should be why we need sunlight for life, not just does it make something warm or cooler... K-ESS3-1.- Well written, appropriate, and connected.	4/25/2014 5:54 PM
49	Yes, I do feel these standards cover a variety of instruction that is necessary for third graders.	4/25/2014 9:54 AM
50	no	4/25/2014 7:39 AM
51	No. The students need to know that evolution is a theory. Not a proven fact.	4/24/2014 9:07 PM
52	Yes	4/24/2014 9:03 PM
53	Yes.	4/24/2014 6:11 PM

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54	Yes, the standards are quite extensive and scaffold from one grade to the next.	4/24/2014 4:26 PM
55	I believe it is a good balance of things that need to be covered.	4/24/2014 1:24 PM
56	As I look at the standards I do feel they cover important information and skills. However saying they are skills for 6-8 rather than individual grades makes it more difficult to evaluate for 6th grade	4/24/2014 9:56 AM
57	As a parent, I would like to see more theories about how the world could have come to be. Including the creation theory Christians hold to be true. I don't like how you're implying that evolution is fact when we don't know how the world came about. I'm all for teaching evolution alongside creation and allowing each family to decide what they believe to be true because any belief about how we got here is just that: a belief.	4/24/2014 9:44 AM
58	No, students should know that there are other theories about the origins of the universe. (HS-ESS1-2) We don't need to name the other theories but I believe students should be aware that there are others.	4/23/2014 12:18 PM
59	Reading through HS-ESS1 and HS ESS2 I observed two things: that the theory of Evolution is stated as absolute fact, and that the Big Bang theory is the only theory represented. My intent in this comment is not to argue for or against any theory of the beginnings of earth and life as we know it today, but to comment that there are numerous parents, citizens, scientists, aka people in general who may believe in other theories. Since our understanding of science is constantly changing and hopefully improving, I truly believe that teachers need to always be careful in presenting widely-believed information as just that. Not as fact. While I understand that these are science standards, I would like to reference a historical event as I recall it involving similar circumstances having to do with science. When Galileo was thinking and researching different scientific ideas about the earth and space, the world around him all accepted as fact that the earth was flat. Many great minds and renowned scientists agreed that there could be no other option, and any ideas to the contrary were ridiculous and childish. In fact, many of these leaders hated and scorned any other ideas, not giving them any thought. Yet as we now know, Galileo was correct in his thought that the Earth may not be flat, and in fact could very likely be spherical. This story is to say that once again, just because something is widely believed and accepted does not make it a fact.	4/16/2014 2:46 PM
60	No. You are representing the big bang as fact and not theory. We are a God fearing people. Teachers should be able to teach about creation as well.	4/14/2014 4:48 PM

Q7 Do the standards include anything that students don't need to know?

Answered: 50 Skipped: 40

#	Responses	Date
1	Yes	6/2/2014 3:55 PM
2	The standards are full of a number of theories that are presented as fact in a very one-sided manner. Examples are global warming, climate change, sustainability, evolution, and the big bang.	6/2/2014 2:28 PM
3	Theory as fact. Theories should be introduced as such and the major opposing theory introduced as well. This is a problem throughout, if you can't introduce theories and opposing or just different theories, leave them out of the standards!	6/2/2014 10:57 AM
4	<p>1. NGSS are neither educationally objective nor religiously neutral. An atheistic or materialistic worldview is consistently affirmed throughout. This will lead to indoctrination, not education. 2. Religious questions are answered based on a doctrine or "Rule" that permits only materialistic or functionally atheistic answers. 3. Only materialistic explanations for any phenomenon addressed by science are allowed. 4. Legitimate scientific critiques of materialistic theories regarding the origins of the universe, of life, and its diversity are not presented. 5. NGSS fails to distinguish for students the various definitions of evolution, leading them to assume that the word always denotes the same thing. 6. Teaches evolution as fact starting in elementary grades. Evolution is still a theory and if it must be taught, it shouldn't be taught until later grades and as a theory not fact. 7. Underlying anti-fossil fuel themes and green agenda concepts such as the environmental activism, sustainability, social justice, population control, human-caused global warming, renewable energy, CO2 levels, and oil spills are prevalent throughout the NGSS. 8. Heavy focus on the foolish concept that all/most human actions lead to negative consequences for the earth. 9. The concept of collaboration is prevalent throughout the NGSS. This should be re-focused to teach the concept of individualism not collaboration and groupthink. Pages 34, 40, 45, 47, 49, 50, 51, 53, 71, 79, 89, 91, 97, 100, 116, 120, 124, 134 10. The focus of technologies being driven by climate, natural resources, and economic conditions is prevalent throughout the NGSS. This is just another example of pushing the green and global agenda. Pages 88, 89, 96, 105, 107 11. Remove ESS3.C in its entirety from pages 37-38. The focus on reducing human impacts on earth is nothing more than environmental propaganda. 12. Remove K-ESS3-3 in its entirety from page 38. The focus on reducing human impacts on earth is nothing more than environmental propaganda. 13. 3-LS4 on page 58 is teaching evolution as fact starting in the 3rd grade. Evolution is still a theory and if it must be taught, it shouldn't be taught until later grades and as a theory not fact. 14. 3-LS4-4 on page 58 says "Assessment does not include the greenhouse effect or climate change." This clarification shouldn't even be needed. Third graders should not be learning about the theories of climate change and the greenhouse effect. 15. 3-ESS2-1 on page 60 says "Assessment does not include climate change." This clarification shouldn't even be needed. Third graders should not be learning about the theories of climate change. 16. Remove 4-ESS3-1 in its entirety from page 69. The one-sided treatment of fossil fuels is nothing more than environmental propaganda and definitely shouldn't be taught to 4th graders. 17. Remove 5-ESS3-1 and ESS3.C in their entirety from page 78. The focus on reducing human impacts on earth is nothing more than environmental propaganda. 18. One of the middle school performance expectations of LS4 on page 83 is to "construct explanations based on evidence to support fundamental understandings of natural selection and evolution". Once again, this treats evolution as fact. Evolution is still a theory and if it must be taught, it shouldn't be taught until later grades and as a theory not fact. 19. The middle school performance expectations of ESS3 on page 85 to answer questions about "How do human activities affect Earth systems, How do we know our global climate is changing" and the sub-ideas about "human impact on Earth systems, and global climate change" are nothing more than environmental propaganda. These items should be removed from the performance expectations. 20. MS-LS4-6, LS4.B, and LS4.C on page 99 teach evolution as fact. Evolution is still a theory and if it must be taught, it shouldn't be taught until later grades and as a theory not fact. 21. Remove MS-ESS3-3 and ESS3.C in their entirety from page 105. The focus on reducing human impacts on earth is nothing more than environmental propaganda. 22. Remove MS-ESS3-4 in its entirety from page 105. The focus on overpopulation and sustainability appears to be advocating for abortion (i.e. population control). 23. Remove MS-ESS3-5 and ESS3.D in their entirety from page 105. The "emphasis is on the major role that human activities play in causing the rise in global</p>	6/1/2014 10:33 PM

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The high school performance expectations of ESS3 on page 114 of "Students understand the [...] significant environmental impacts of human activities [...] to examine and construct solutions to the many challenges facing long-term human sustainability on Earth" and the sub-ideas of "human impact on Earth systems, and global climate change" are nothing more than environmental propaganda. These should be removed from the performance expectations. 27. The high school engineering design section on page 115 paragraph 2 lists "the speed at which world population is growing" as a problem. This appears to be advocating for abortion (i.e. population control) and should be removed. 28. The high school engineering design section on page 115 paragraph 3 and paragraph 6 lists "major global problems" and "major global challenges" as things needing solutions. This focus on globalism is an un-American ideal and should be removed. 29. The high school engineering design section on page 115 paragraph 3 states that "public safety or environmental protection may be more important than cost or even functionality". This may be the most troubling statement in the entire document. It is incredibly ignorant and dangerous and should be removed. 30. The high school engineering design section on page 115 paragraph 4 requires students "to try and anticipate possible societal and environmental impacts". This is nothing more than environmental propaganda and should be removed. 31. The high school engineering design section on page 115 paragraph 5 requires that "students apply their engineering capabilities to reduce human impacts on Earth systems, and improve social and environmental cost-benefit ratios (HS-ESS3-2, HS-ESS3-4)". This is nothing more than environmental propaganda and should be removed. 32. Examples provided under HS-PS3-3 on page 120 of "wind turbines" and "solar cells" are one-sided and pushing the green agenda. These should be removed, however if these items are left as examples, then internal combustion engines, combustion turbines, steam turbines, boilers, and jet engines should also be included as examples. 33. Remove HS-LS2-7 in its entirety from page 126. The focus on reducing human impacts on earth is nothing more than environmental propaganda. 34. Remove the 2nd paragraphs of LS2.C and LS4.D from page 127. The focus on reducing human impacts on earth is nothing more than environmental propaganda. 35. Remove "and to consider social, cultural and environmental impacts" from ETS1.B on page 127. The focus on these impacts is pushing the green agenda. 36. HS-LS4-4, HS-LS4-5, LS4.B, and LS4.C on page 130 teach evolution as fact. Once again, this treats evolution as fact. Evolution is still a theory and should be taught as a theory not fact. 37. HS-LS4-5 on page 130 emphasizes "how changes to the environment such as deforestation, fishing, application of fertilizers, drought, flood, and the rate of change of the environment affect distribution or disappearance of traits in species". This emphasis should be removed as it is nothing more than environmental and anti-agriculture propaganda. 38. Remove LS4.D in its entirety from page 131. The focus on sustainability and reducing human impacts on earth is nothing more than environmental propaganda. 39. Remove "and to consider social, cultural and environmental impacts" from ETS1.B on page 131. The focus on these impacts is pushing the green agenda. 40. HS-ESS1-2 and the 3rd paragraph of ESS1.A on page 132 focuses on proving the big bang theory rather than just presenting it as a theory. This is one-sided as no other possibilities of the earth's creation (such as intelligent design) are presented. 41. Remove HS-ESS2-2 and HS-ESS2-4 in their entirety from page 134. The focus on greenhouse gases, climate change, human impacts on the environment, modeling climate change, etc. are nothing more than environmental propaganda. 42. Remove the 3rd paragraph "Changes in the atmosphere due to human activity have increased carbon dioxide concentrations and thus affect climate. (HS-ESS2-6), (HS-ESS2-4)" of ESS2.D from page 135 in its entirety. This is nothing more than environmental propaganda. 43. Remove HS-ESS3 in its entirety from pages 137-138. The focus on sustainability, human impacts on the environment, modeling climate change, etc. are nothing more than environmental propaganda. 44. Revise HS-ETS1-1 and the 2nd paragraph of ETS1.A on page 139 to remove the focus on "major global challenges". This focus on globalism is an un-American ideal and should be removed.

5

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6/1/2014 10:12 PM

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The high school performance expectations of ESS3 on page 114 of "Students understand the [...] significant environmental impacts of human activities [...] to examine and construct solutions to the many challenges facing long-term human sustainability on Earth" and the sub-ideas of "human impact on Earth systems, and global climate change" are nothing more than environmental propaganda. These should be removed from the performance expectations. 27. The high school engineering design section on page 115 paragraph 2 lists "the speed at which world population is growing" as a problem. This appears to be advocating for abortion (i.e. population control) and should be removed. 28. The high school engineering design section on page 115 paragraph 3 and paragraph 6 lists "major global problems" and "major global challenges" as things needing solutions. This focus on globalism is an un-American ideal and should be removed. 29. The high school engineering design section on page 115 paragraph 3 states that "public safety or environmental protection may be more important than cost or even functionality". This may be the most troubling statement in the entire document. It is incredibly ignorant and dangerous and should be removed. 30. The high school engineering design section on page 115 paragraph 4 requires students "to try and anticipate possible societal and environmental impacts". This is nothing more than environmental propaganda and should be removed. 31. The high school engineering design section on page 115 paragraph 5 requires that "students apply their engineering capabilities to reduce human impacts on Earth systems, and improve social and environmental cost-benefit ratios (HS-ESS3-2, HS-ESS3-4)". This is nothing more than environmental propaganda and should be removed. 32. Examples provided under HS-

PS3-3 on page 120 of "wind turbines" and "solar cells" are one-sided and pushing the green agenda. These should be removed, however if these items are left as examples, then internal combustion engines, combustion turbines, steam turbines, boilers, and jet engines should also be included as examples. 33. Remove HS-LS2-7 in its entirety from page 126. The focus on reducing human impacts on earth is nothing more than environmental propaganda. 34. Remove the 2nd paragraphs of LS2.C and LS4.D from page 127. The focus on reducing human impacts on earth is nothing more than environmental propaganda. 35. Remove "and to consider social, cultural and environmental impacts" from ETS1.B on page 127. The focus on these impacts is pushing the green agenda. 36. HS-LS4-4, HS-LS4-5, LS4.B, and LS4.C on page 130 teach evolution as fact. Once again, this treats evolution as fact. Evolution is still a theory and should be taught as a theory not fact. 37. HS-LS4-5 on page 130 emphasizes "how changes to the environment such as deforestation, fishing, application of fertilizers, drought, flood, and the rate of change of the environment affect distribution or disappearance of traits in species". This emphasis should be removed as it is nothing more than environmental and anti-agriculture propaganda. 38. Remove LS4.D in its entirety from page 131. The focus on sustainability and reducing human impacts on earth is nothing more than environmental propaganda. 39. Remove "and to consider social, cultural and environmental impacts" from ETS1.B on page 131. The focus on these impacts is pushing the green agenda. 40. HS-ESS1-2 and the 3rd paragraph of ESS1.A on page 132 focuses on proving the big bang theory rather than just presenting it as a theory. This is one-sided as no other possibilities of the earth's creation (such as intelligent design) are presented. 41. Remove HS-ESS2-2 and HS-ESS2-4 in their entirety from page 134. The focus on greenhouse gases, climate change, human impacts on the environment, modeling climate change, etc. are nothing more than environmental propaganda. 42. Remove the 3rd paragraph "Changes in the atmosphere due to human activity have increased carbon dioxide concentrations and thus affect climate. (HS-ESS2- 6),(HS-ESS2-4)" of ESS2.D from page 135 in its entirety. This is nothing more than environmental propaganda. 43. Remove HS-ESS3 in its entirety from pages 137-138. The focus on sustainability, human impacts on the environment, modeling climate change, etc. are nothing more than environmental propaganda. 44. Revise HS-ETS1-1 and the 2nd paragraph of ETS1.A on page 139 to remove the focus on "major global challenges". This focus on globalism is an un-American ideal and should be removed.

6

1. NGSS are neither educationally objective nor religiously neutral. An atheistic or materialistic worldview is consistently affirmed throughout. This will lead to indoctrination, not education. 2. Religious questions are answered based on a doctrine or "Rule" that permits only materialistic or functionally atheistic answers. 3. Only materialistic explanations for any phenomenon addressed by science are allowed. 4. Legitimate scientific critiques of materialistic theories regarding the origins of the universe, of life, and its diversity are not presented. 5. NGSS fails to distinguish for students the various definitions of evolution, leading them to assume that the word always denotes the same thing. 6. Teaches evolution as fact starting in elementary grades. Evolution is still a theory and if it must be taught, it shouldn't be taught until later grades and as a theory not fact. 7. Underlying anti-fossil fuel themes and green agenda concepts such as the environmental activism, sustainability, social justice, population control, human-caused global warming, renewable energy, CO2 levels, and oil spills are prevalent throughout the NGSS. 8. Heavy focus on the foolish concept that all/most human actions lead to negative consequences for the earth. 9. The concept of collaboration is prevalent throughout the NGSS. This should be re-focused to teach the concept of individualism not collaboration and groupthink. Pages 34, 40, 45, 47, 49, 50, 51, 53, 71, 79, 89, 91, 97, 100, 116, 120, 124, 134 10. The focus of technologies being driven by climate, natural resources, and economic conditions is prevalent throughout the NGSS. This is just another example of pushing the green and global agenda. Pages 88, 89, 96, 105, 107 11. Remove ESS3.C in its entirety from pages 37-38. The focus on reducing human impacts on earth is nothing more than environmental propaganda. 12. Remove K-ESS3-3 in its entirety from page 38. The focus on reducing human impacts on earth is nothing more than environmental propaganda. 13. 3-LS4 on page 58 is teaching evolution as fact starting in the 3rd grade. Evolution is still a theory and if it must be taught, it shouldn't be taught until later grades and as a theory not fact. 14. 3-LS4-4 on page 58 says "Assessment does not include the greenhouse effect or climate change." This clarification shouldn't even be needed. Third graders should not be learning about the theories of climate change and the greenhouse effect. 15. 3-ESS2-1 on page 60 says "Assessment does not include climate change." This clarification shouldn't even be needed. Third graders should not be learning about the theories of climate change. 16. Remove 4-ESS3-1 in its entirety from page 69. The one-sided treatment of fossil fuels is nothing more than environmental propaganda and definitely shouldn't be taught to 4th graders. 17. Remove 5-ESS3-1 and ESS3.C in their entirety from page 78. The focus on reducing human impacts on earth is nothing more than environmental propaganda. 18. One of the middle school performance expectations of LS4 on page 83 is to "construct explanations based on evidence to support fundamental understandings of natural selection and evolution". Once again, this treats evolution as fact. Evolution is still a theory and if it must be taught, it shouldn't be taught until later grades and as a theory not fact. 19. The middle

6/1/2014 10:09 PM

school performance expectations of ESS3 on page 85 to answer questions about “How do human activities affect Earth systems, How do we know our global climate is changing” and the sub-ideas about “human impact on Earth systems, and global climate change” are nothing more than environmental propaganda. These items should be removed from the performance expectations.

20. MS-LS4-6, LS4.B, and LS4.C on page 99 teach evolution as fact. Evolution is still a theory and if it must be taught, it shouldn't be taught until later grades and as a theory not fact.

21. Remove MS-ESS3-3 and ESS3.C in their entirety from page 105. The focus on reducing human impacts on earth is nothing more than environmental propaganda.

22. Remove MS-ESS3-4 in its entirety from page 105. The focus on overpopulation and sustainability appears to be advocating for abortion (i.e. population control).

23. Remove MS-ESS3-5 and ESS3.D in their entirety from page 105. The “emphasis is on the major role that human activities play in causing the rise in global temperatures”. This is nothing more than environmental propaganda.

24. Some of the high school performance expectations of LS4 on page 112 are to “construct explanations for the processes of natural selection and evolution and communicate how multiple lines of evidence support these explanations” and to “evaluate evidence of the conditions that may result in new species and understand the role of genetic variation in natural selection”. Once again, this treats evolution as fact. Evolution is still a theory and should be taught as a theory not fact.

25. The high school performance expectation of ESS2 on page 113 of having “a major emphasis on the mechanisms and implications of climate change” is nothing more than environmental propaganda. This should be removed from the performance expectations.

26. The high school performance expectations of ESS3 on page 114 of “Students understand the [...] significant environmental impacts of human activities [...] to examine and construct solutions to the many challenges facing long-term human sustainability on Earth” and the sub-ideas of “human impact on Earth systems, and global climate change” are nothing more than environmental propaganda. These should be removed from the performance expectations.

27. The high school engineering design section on page 115 paragraph 2 lists “the speed at which world population is growing” as a problem. This appears to be advocating for abortion (i.e. population control) and should be removed.

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29. The high school engineering design section on page 115 paragraph 3 states that “public safety or environmental protection may be more important than cost or even functionality”. This may be the most troubling statement in the entire document. It is incredibly ignorant and dangerous and should be removed.

30. The high school engineering design section on page 115 paragraph 4 requires students “to try and anticipate possible societal and environmental impacts”. This is nothing more than environmental propaganda and should be removed.

31. The high school engineering design section on page 115 paragraph 5 requires that “students apply their engineering capabilities to reduce human impacts on Earth systems, and improve social and environmental cost-benefit ratios (HS-ESS3-2, HS-ESS3-4)”. This is nothing more than environmental propaganda and should be removed.

32. Examples provided under HS-PS3-3 on page 120 of “wind turbines” and “solar cells” are one-sided and pushing the green agenda. These should be removed, however if these items are left as examples, then internal combustion engines, combustion turbines, steam turbines, boilers, and jet engines should also be included as examples.

33. Remove HS-LS2-7 in its entirety from page 126. The focus on reducing human impacts on earth is nothing more than environmental propaganda.

34. Remove the 2nd paragraphs of LS2.C and LS4.D from page 127. The focus on reducing human impacts on earth is nothing more than environmental propaganda.

35. Remove “and to consider social, cultural and environmental impacts” from ETS1.B on page 127. The focus on these impacts is pushing the green agenda.

36. HS-LS4-4, HS-LS4-5, LS4.B, and LS4.C on page 130 teach evolution as fact. Once again, this treats evolution as fact. Evolution is still a theory and should be taught as a theory not fact.

37. HS-LS4-5 on page 130 emphasizes “how changes to the environment such as deforestation, fishing, application of fertilizers, drought, flood, and the rate of change of the environment affect distribution or disappearance of traits in species”. This emphasis should be removed as it is nothing more than environmental and anti-agriculture propaganda.

38. Remove LS4.D in its entirety from page 131. The focus on sustainability and reducing human impacts on earth is nothing more than environmental propaganda.

39. Remove “and to consider social, cultural and environmental impacts” from ETS1.B on page 131. The focus on these impacts is pushing the green agenda.

40. HS-ESS1-2 and the 3rd paragraph of ESS1.A on page 132 focuses on proving the big bang theory rather than just presenting it as a theory. This is one-sided as no other possibilities of the earth's creation (such as intelligent design) are presented.

41. Remove HS-ESS2-2 and HS-ESS2-4 in their entirety from page 134. The focus on greenhouse gases, climate change, human impacts on the environment, modeling climate change, etc. are nothing more than environmental propaganda.

42. Remove the 3rd paragraph “Changes in the atmosphere due to human activity have increased carbon dioxide concentrations and thus affect climate. (HS-ESS2-6),(HS-ESS2-4)” of ESS2.D from page 135 in its entirety. This is nothing more than environmental propaganda.

43. Remove HS-ESS3 in its entirety from pages 137-138. The focus on sustainability, human impacts on the environment, modeling climate change, etc. are nothing

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	more than environmental propaganda. 44. Revise HS-ETS1-1 and the 2nd paragraph of ETS1.A on page 139 to remove the focus on "major global challenges". This focus on globalism is an un-American ideal and should be removed.	
7	Absolutely	6/1/2014 7:52 PM
8	Yes, sex education, books about Barack Obama, and global warming.	6/1/2014 10:04 AM
9	Greater effort should be focused on learning to share and play games that would teach cooperation and environmental conservation. K-ESS2-1 Earth's Systems (Meteorology) and K-ESS3-3 Earth and Human Activity (Human Geography) Learning to communicate solutions for world problems when they are still learning to have an understanding about themselves. The standards are premature.	5/31/2014 9:38 PM
10	presenting climate change is unnecessary and one-sided.	5/31/2014 4:32 PM
11	Entirely to many standards covering climate change and humans contributing. I believe this is political agenda, which has not been proven. If it needs to be talked about in schools and debated there is room since it is only the floor and not the ceiling. I like truth and all sides, it appears to be very one sided, leading kid how to think. We need to teach all sides to develop critical thinking.	5/31/2014 2:43 PM
12	The under tone of earth is great and humans are bad is not necessary. We need to critically look at FACTS and not just assumptions when teaching our children. We need to provide both sides of things and not try to control their minds in thinking one way. Our state will lose it's ability to change the dialogue if we accept these standards.	5/31/2014 10:53 AM
13	Global warming?! Not necessary since it's not proven.	5/30/2014 11:23 AM
14	Yes - teaching about evolution without any regard of creation, and teaching about global warming as a scientific fact when it is not proven as a scientific fact	5/30/2014 10:43 AM
15	Global Warming	5/29/2014 5:33 PM
16	Not that I am aware of.	5/28/2014 10:49 PM
17	Yes	5/28/2014 10:46 PM
18	Yes	5/28/2014 10:42 PM
19	Yes	5/28/2014 10:20 PM
20	Politically correct social issues do not belong in a critical thinking society.	5/28/2014 7:03 PM
21	Plenty! The science fields are full of plenty of things to learn that are actual facts and not simply theories. If students want to add sciences that focus on certain fields, then let them choose that for themselves.	5/28/2014 1:05 PM
22	Global warming presented as fact.	5/27/2014 9:07 PM
23	Yep. They ask inappropriate questions of the students like "are your parents divorced?" "If so, would you rather live with the other parent?" "Have you been sexually abused?" -- at a FIRST GRADE LEVEL! INAPPROPRIATE!	5/27/2014 8:39 PM
24	Yes	5/27/2014 3:28 PM
25	yes- global warming???	5/27/2014 1:57 PM
26	Yes	5/27/2014 1:42 PM
27	no	5/26/2014 3:42 AM
28	Yes.	5/20/2014 2:55 PM
29	Yes	5/16/2014 9:02 PM
30	They are reasonable.	5/16/2014 12:06 PM
31	Giving eamples such as recycling glass, which uses more resources to do than it does to produce more glass.	5/12/2014 12:05 PM
32	Yes, the "facts" that humans cause the climate to change.	5/10/2014 9:27 PM
33	No	5/3/2014 12:16 PM
34	No	5/2/2014 9:40 AM

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35	Yes	5/1/2014 10:12 AM
36	Presenting evolution as a fact is something the students don't need to know.	4/30/2014 3:40 PM
37	evolution is a theory not fact and should be taught as such	4/30/2014 12:42 PM
38	Nothing jumped out at me that was unimportant, but I only looked at the middle school	4/29/2014 12:33 PM
39	See above. HS PS4 are particularly too ambitious and it is not clear how to implement them. These are good goals perhaps, but would requires a lot of work.	4/28/2014 9:03 PM
40	No	4/28/2014 8:38 AM
41	Many standards require a large base of background knowledge. Using standards based grading is difficult when several weeks of pre-instruction is needed before reaching instruction of the standard because so few grades are taken until the end of the unit.	4/28/2014 8:37 AM
42	I think they are a great resource for the required courses.	4/27/2014 3:14 PM
43	No	4/27/2014 2:20 AM
44	K-PS3-2 Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.* Why is this a standard? Most children instinctively know this. A better standard would be to describe what would happen without the sun's warmth or with too much sun.	4/25/2014 5:54 PM
45	yes	4/25/2014 7:39 AM
46	No	4/24/2014 9:03 PM
47	Not really. There are always some pieces that might not be as important, but are still worth learning at least once.	4/24/2014 6:11 PM
48	No, students need to be exposed to a wide variety of subjects and topics.	4/24/2014 4:26 PM
49	I don't have a problem with good science that is proven, and am not opposed to unproven theories being taught as that - theories. But presenting the theory of evolution and origin of species as fact is disappointing to me. Teach the theories, but call them that. There is still much debate and many problems with this theory that have yet to meet scientific criteria to be called factual data.	4/24/2014 1:24 PM
50	Since Science is not my field of study I feel that I can't evaluate whether some thing shouldn't be included	4/24/2014 9:56 AM

Q8 Are there redundancies in the content?

Answered: 33 Skipped: 57

#	Responses	Date
1	Yes, but redundancy is needed to keep certain ideas fresh, like a review.	6/2/2014 10:57 AM
2	Yes, global warming and sex education.	6/1/2014 10:04 AM
3	Kindergarten students should be taught to listen and observe nature as well as how to be confident in speaking and playing. The daily lesson plan and assessments will necessarily be age inappropriate and the slow students experience frustration and the fast students will experience boredom necessitating the teacher to spend a disproportionate amount of time helping the slow students. The fast students will be ignored.	5/31/2014 9:38 PM
4	I have covered that Climate change and humans at the fault is Pushed to the maximum.....	5/31/2014 2:43 PM
5	YES, it is filled with redundancies of the same agenda....earth good, humans bad.	5/31/2014 10:53 AM
6	YES! LOTS.	5/28/2014 10:49 PM
7	Yes	5/28/2014 10:46 PM
8	Yes	5/28/2014 10:20 PM
9	No	5/28/2014 1:49 PM
10	Yes.	5/28/2014 1:05 PM
11	Obviously. You DON'T need to draw shapes and squares to solve a NUMBER problem!	5/27/2014 8:39 PM
12	Yes	5/27/2014 1:42 PM
13	I reviewed 2/3/4 grade standards and did not really find repetitions.	5/26/2014 3:42 AM
14	I just reviewed the content, so until I actually used the standards I would not know for sure if changes should be made. It may take a school year with "input" from educators to make sure everything's just right.	5/15/2014 1:48 PM
15	There appears to be a theme, that humans are overly dependent on technology. In some lesson plans it explains technology and human advancement is a bad thing because it uses natural resources. Then others seems to push for the acceptance of technology.	5/12/2014 12:05 PM
16	Global warming	5/11/2014 3:03 PM
17	Yes, in several places, rather than covering a broad spectrum of scientific information.	5/10/2014 9:27 PM
18	No	5/3/2014 12:16 PM
19	Not that I saw	5/2/2014 9:40 AM
20	perhaps	5/1/2014 10:12 AM
21	Since no flow was observed from grade to grade, I don't see how there could be redundancy. Rather, content appears segmented with no attention to students making connections by building on prior knowledge.	5/1/2014 4:23 AM
22	Some cross over, but that's good.	4/29/2014 12:33 PM
23	HSPS2 Disciplinary Core Ideas PS3.A: p. 23 reappears on p.25	4/28/2014 9:03 PM
24	Little	4/28/2014 8:38 AM
25	I did not notice anything outside of general scientific method.	4/27/2014 3:14 PM
26	No	4/27/2014 2:20 AM
27	Not in Kindergarten.	4/25/2014 5:54 PM
28	actually this is the one positive	4/25/2014 7:39 AM

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29	Evolution is a theory not a fact and should be taught as a theory.	4/24/2014 9:07 PM
30	No	4/24/2014 9:03 PM
31	No. I think the standards were well thought out.	4/24/2014 6:11 PM
32	No, the progression from grade to grade just builds on the prior knowledge from the previous year.	4/24/2014 4:26 PM
33	Some redundancy is good, but I didn't see anything that was unnecessary.	4/24/2014 1:24 PM

Q9 Are any of the standards confusing? If so, please list those standards and explain why the standard is confusing.

Answered: 44 Skipped: 46

#	Responses	Date
1	2-ESS2-3. "Obtain information to identify ..." Strange start to the simple standard of knowing water can be a liquid or solid. 3-ESS3-1 4-PS3-2 4-LS1-1	6/2/2014 3:55 PM
2	Yes, all of them! Confusing in that it is written so structurally, as if the sciences are not changing fields, removing necessary relationships from one to another. As one theory gathers evidence and other do not the direction can change. New findings adds subjects or removes old ones. This rigid structure is not appropriate for the subjects. Although Crosscutting concepts provides a way to relate to other subjects it is very difficult to map out.	6/2/2014 10:57 AM
3	1. Many viewpoints are one-sided and unsupported by facts. 2. Controversial issues (such as climate change, renewable energy and sustainability) are not presented objectively. 3. NGSS are one-sided in that they disproportionately focus on negative effects of human interaction with the environment.	6/1/2014 10:33 PM
4	1. Many viewpoints are one-sided and unsupported by facts. 2. Controversial issues (such as climate change, renewable energy and sustainability) are not presented objectively. 3. NGSS are one-sided in that they disproportionately focus on negative effects of human interaction with the environment.	6/1/2014 10:12 PM
5	1. Many viewpoints are one-sided and unsupported by facts. 2. Controversial issues (such as climate change, renewable energy and sustainability) are not presented objectively. 3. NGSS are one-sided in that they disproportionately focus on negative effects of human interaction with the environment.	6/1/2014 10:09 PM
6	No, as a history teacher I see this as just like Germany 1933. Indoctrinating the students to be good little citizens. No actual education whatsoever.	6/1/2014 10:04 AM
7	I think at the Kindergarten level, we can teach them to conserve water, learn to pick up litter and only take pictures in national parks, basic things like that. We should not be teaching Meteorology K-ESS3-2 at this level. Also, Biology and Zoology K-ESS3-1 is for an advanced grade level. I think Kindergarten would do well to keep with learning about how to enjoy pets and zoo animals, I also think that debate K-ESS2-2 is an advanced pre-frontal function not developed adequately at this level.	5/31/2014 9:38 PM
8	HS -ETS1-1 ,HS-ESS3-3,HS-ESS3-4,HS-ESS3-5,HS-ESS3-6HS-ESS2-S,HS-ESS2-4,HS-ESS2-5,HS-ESS2-6,HS-ESS1-1,HS-ESS1-2,HS-LS4-4,HS-LSA-3,HS-LSA-2,HS-LS4-1,HLSLA-5,HS-LS4-6,MS-ESS3-4,MS-ESS3-5,K-PS3-1K-PS3-2,K-ESS2-2,K-ESS3-3, I would like them clarified completely. are they based on fact as science should be..	5/31/2014 2:43 PM
9	Why are we trying to describe climate change as the fault of humans? We need to look at the HISTORY of our world and make much better choices on how we discuss the changes in climate. We went from global cooling to global warming to climate change. HISTORY does not lie but we do not know what the future has in store....the weather forecast can change in minutes and yet you are willing to teach our children that we can forecast into the future on what we are doing today. Really? That is not teaching facts, that is teaching an agenda.	5/31/2014 10:53 AM
10	Yes. Math... does NOT make sense on logical thinking!	5/28/2014 10:49 PM
11	Yes All Of Them	5/28/2014 10:46 PM
12	Yes	5/28/2014 10:42 PM
13	Yes	5/28/2014 10:20 PM
14	You have to put some work and thought into these standards but the way they have been designed and color coded has helped.	5/28/2014 1:49 PM

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15	What is confusing is the continual attempt to label "Common Core" with other terminology and expect the public to be satisfied.	5/28/2014 1:05 PM
16	Not allowing the students to stack the numbers to add and subtract is confusing. THIS IS UNACCEPTABLE. And we as ND parents will NOT allow this to continue. Not to mention common core math takes a simple 2 step division problem and drags it out into 108 steps. I am sick and tired of people pushing the program saying "Common core makes it easier for the students to do the math in their head." Let me ask you this – What's easier to do in your head??? 2 steps? OR 108?!!	5/27/2014 8:39 PM
17	The standards are biased and not entirely accurate.	5/27/2014 1:42 PM
18	Some...the wording is very professional and high tech. The red explanations were helpful.	5/26/2014 3:42 AM
19	Yes, many are confusing.	5/20/2014 2:55 PM
20	Math..... it's impossible to figure out.	5/19/2014 9:27 PM
21	The engineering standards need clarification statements.	5/16/2014 12:06 PM
22	I am not a science teacher, but the standards were easy to understand.	5/15/2014 1:48 PM
23	Yes, but I didn't keep a list.	5/10/2014 9:27 PM
24	The wording is more difficult for students to understand. What exactly should they know?	5/6/2014 9:55 AM
25	No	5/3/2014 12:16 PM
26	No	5/2/2014 9:40 AM
27	most of them	5/1/2014 10:12 AM
28	They are ALL confusing.	5/1/2014 4:23 AM
29	evolution is a theory not fact and should be taught as such	4/30/2014 12:42 PM
30	none confused me	4/29/2014 12:33 PM
31	HS PS2: (HSPS p.5 last paragraph) Though Newton's third law is introduced in MSPS2, in HSPS2 Newton's second law is singled out from the Newton's three laws of motion. Then, as if independently, conservation of momentum is referred to. All three laws are necessary to understand motion and the concept of equilibrium. Conservation of momentum follows from the second law. But to explain conservation of momentum understanding of the third law is also required. The third law needs to be revisited at HS level.	4/28/2014 9:03 PM
32	Almost all of the standards are confusing. Standards	4/28/2014 8:38 AM
33	Language of the standards is NOT student friendly. I can't envision posting these in my classroom because they would be very unclear to middle school students.	4/28/2014 8:37 AM
34	Nope. The recommended activities and limitations to levels was very helpful.	4/27/2014 3:14 PM
35	No	4/27/2014 2:20 AM
36	K-ESS2-2. What is the connection for this? Habitat? I would think where do they live and how do their bodies and actions fit the habitat would be more appropriate. The standard seems reversed. It should be how do animals fit their environment instead of how do animals change the environment.	4/25/2014 5:54 PM
37	When we were trying to prepare lessons for next year and because these standards are fairly new it is hard to find specific lessons that are appropriate for third graders. It would be nice if there was more curriculum available that matched these standards.	4/25/2014 9:54 AM
38	yes	4/25/2014 7:39 AM
39	No	4/24/2014 9:03 PM
40	The one issue is that wording could be more parent and teacher friendly. It is nice when you can simply read a standard and understand what it is saying.	4/24/2014 6:11 PM
41	No	4/24/2014 4:26 PM
42	Not in my opinion.	4/24/2014 1:24 PM
43	I can read and understand the standards	4/24/2014 9:56 AM

44	<p>HS-LS4-1 is confusing to students. The standard wants to treat evolution as fact but it fails to extrapolate back to the origins of life. I believe this is confusing to students because if you're going to tell me that we all have common ancestors, what was the original ancestor? Don't get me wrong, I'm glad the standard doesn't go all the way back to the first life forms but I feel like this is cowardly. "We know we can't defend the idea that life emerged from non-life, so we won't put it in the standards. However, we will still infer that evolution is true and we all have common ancestors. HS-LS4-A tells students that the fossil record supports evolution. This is absolutely not true. Even paleontologists who believe in evolution have stopped saying that the fossil record supports it. We now know that it does not.</p>	4/23/2014 12:18 PM
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Q10 Does the introduction help you understand or interpret the document?

Answered: 43 Skipped: 47

#	Responses	Date
1	Yes, a little. But it is strange that this is one of 11 survey questions on 140 pages of material that stands to change the shape of our children's futures. How about a survey question about whether the content of the standards is offensive or contrary to my family's beliefs? Or how about a survey question about whether the standards are developmentally appropriate?	6/2/2014 3:55 PM
2	Yes, it explained a lot on how it was created, structured and the purpose, and how to read it. Unfortunately I do not agree with much on any of those except the purpose. I agree that students in the US, and more locally ND, need to have more to interest them in science and engineering, but that is where my agreement with these standards end. I do not believe they will accomplish that, in fact I think it will do the opposite.	6/2/2014 10:57 AM
3	1. Change the name of the standards to "Common Core Science Standards" since that's what they really are. Numerous references are made throughout the document to the NGSS being "aligned" to the Common Core State Standards. 2. Paragraph 2 on page 8 states that the NGSS "are arranged in a coherent manner across disciplines and grades to provide all students an internationally benchmarked science education." Please cite independent peer reviewed scientific research to back up the claim that the NGSS are internationally benchmarked. 3. Remove "major societal and environmental challenges" from Appendix I on page 23. Engineering is about much more than just these things. This is just another example of pushing the green and global agenda.	6/1/2014 10:33 PM
4	1. Change the name of the standards to "Common Core Science Standards" since that's what they really are. Numerous references are made throughout the document to the NGSS being "aligned" to the Common Core State Standards. 2. Paragraph 2 on page 8 states that the NGSS "are arranged in a coherent manner across disciplines and grades to provide all students an internationally benchmarked science education." Please cite independent peer reviewed scientific research to back up the claim that the NGSS are internationally benchmarked. 3. Remove "major societal and environmental challenges" from Appendix I on page 23. Engineering is about much more than just these things. This is just another example of pushing the green and global agenda.	6/1/2014 10:12 PM
5	1. Change the name of the standards to "Common Core Science Standards" since that's what they really are. Numerous references are made throughout the document to the NGSS being "aligned" to the Common Core State Standards. 2. Paragraph 2 on page 8 states that the NGSS "are arranged in a coherent manner across disciplines and grades to provide all students an internationally benchmarked science education." Please cite independent peer reviewed scientific research to back up the claim that the NGSS are internationally benchmarked. 3. Remove "major societal and environmental challenges" from Appendix I on page 23. Engineering is about much more than just these things. This is just another example of pushing the green and global agenda.	6/1/2014 10:09 PM
6	No.	6/1/2014 10:04 AM
7	Too much science for a kindergarten student. There should not be any testing at Kindergarten level. There is enough oversight by the parents, teachers, administrators. I would suggest the the primary factor in passing from Kindergarten to first grade is up to the teacher in discussion with interested others. I do not feel there should be any standardized testing until after grade 8. They should not necessarily be required to pass a test that test things that are likely not in their zone of proximal development. It has been very helpful to learn about Vygotsky's zone of proximal development.	5/31/2014 9:38 PM
8	typical	5/31/2014 2:43 PM
9	Yes.	5/31/2014 10:53 AM
10	NO	5/28/2014 10:49 PM
11	No	5/28/2014 10:46 PM
12	No	5/28/2014 10:42 PM
13	Not really	5/28/2014 10:20 PM

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14	Yes.	5/28/2014 1:49 PM
15	No; it comes across as a persuasive speech, using terminology that attempts to lead one to believe all students, no matter their learning style or aptitude or career path choice, must and will learn the same things, the same ways.	5/28/2014 1:05 PM
16	Nope.	5/27/2014 8:39 PM
17	yes	5/27/2014 1:57 PM
18	No	5/27/2014 1:42 PM
19	sort of	5/26/2014 3:42 AM
20	Yes.	5/16/2014 12:06 PM
21	The introduction was very helpful. It should not be overlooked.	5/15/2014 1:48 PM
22	No it doesn't.	5/12/2014 12:05 PM
23	Not really. It is high-sounding rhetoric, but empty of content.	5/10/2014 9:27 PM
24	Yes	5/3/2014 12:16 PM
25	Yes	5/2/2014 9:40 AM
26	no	5/1/2014 10:12 AM
27	The introduction sounds like a college syllabus. It is not user friendly. It is a disjointed puzzle like the rest of the document.	5/1/2014 4:23 AM
28	Yes, it helped.	4/29/2014 12:33 PM
29	First, it needs to be clear what the standards are for. As we heard during the NDSTA spring meeting (February 21-22, 2014, VCSU) these standards, as they stand, are for a guide for assessment for students learning outcomes. Districts are responsible for developing their curriculum details. Some guidance on how strictly to follow NGSS should be given in the final standards, where currently it is left to discretion of the individual teachers or the districts. It should be clearly stated where there are specifics that teachers are required to follow, and which will be checked in the assessments.	4/28/2014 9:03 PM
30	To some degree.	4/28/2014 8:38 AM
31	yes, excellent idea to give a summary of the standards and expectations	4/27/2014 6:50 PM
32	If anything, I think it helps me to get my head to the right level of perspective. The danger is that the standards can be too nebulous or they got misinterpreted as a guideline for curriculum. The intro puts things in proper perspective.	4/27/2014 3:14 PM
33	Yes	4/27/2014 2:20 AM
34	Well, yes, it summarizes nicely, but the statement: "influence of engineering, technology, and science on society and the natural world are called out as organizing concepts for these disciplinary core ideas." - This does not say to me this is about science. Science is about the scientific method, questioning and discovering. This says, "How does everything affect me..."	4/25/2014 5:54 PM
35	Yes	4/25/2014 9:54 AM
36	no	4/25/2014 7:39 AM
37	Yes	4/24/2014 9:07 PM
38	Yes, I also appreciate the spiral of content knowledge.	4/24/2014 9:03 PM
39	Yes.	4/24/2014 6:11 PM
40	This helps clarify the document.	4/24/2014 4:26 PM
41	yes.	4/24/2014 1:24 PM
42	ok	4/24/2014 9:56 AM
43	Yes.	4/16/2014 2:46 PM

Q11 Other comments:

Answered: 44 Skipped: 46

#	Responses	Date
1	The standards seem to include an unbalanced view of topics like evolution and global warming. They do not represent the values of North Dakota. Also they lack some of the math that is in the sciences. The former science standards in ND in the lower grades made much more sense in asking the students to do things at their developmental ability.	6/2/2014 3:55 PM
2	The negative one-sided treatment of agriculture and fossil fuels is a self-defeating approach to educating North Dakota's children. North Dakota's economy and future is very dependent on these industries and it is very concerning to see that they will be treated so negatively in the public schools.	6/2/2014 2:28 PM
3	Who can we approach or contact about having our voice heard on this topic?	6/2/2014 12:00 PM
4	I wish I would have known about this earlier, it was not publicly known as most other parents I talked to had no idea this was on the table and will probably find out when implemented. There was no public notification in the news or other sources, and now we will have our children subject to something that makes no sense. The reason for this standard is to generate more interest, but a standard will not do that, teachers will. There are many efforts already for that, I think the state should give more support to those efforts and not implement a one size fits all nationally generated standard. One example would be the Energy Curriculum currently being created by the Great Plains Energy Corridor at BSC, others are the teachers conferences provided by industries throughout the state and accredited. We always talk about "rigor", but that is not the issue. If we just needed to be more rigorous then require more homework, which is a bad idea. The standards will not generate interest or improved performance, but stifle creativity and the scientific process.	6/2/2014 10:57 AM
5	1. Fordham Institute graded the NGSS "C". 2. The federal government through federal agencies such as the EPA was heavily involved in developing the NGSS. 3. Anti-fossil fuel themes are particularly concerning for North Dakota since such a large portion of the state's economy is dependent on the energy industry which is primarily fossil-fuel based. 4. Focus on federal and international regulation instead of freedom and enterprise. 5. The comment submittal tool is cumbersome to use and there is no confirmation copy of the comments when you click submit. It just says thank you so I'm not sure whether all my comments went through or not. 6. The comment submittal deadline is too soon. The committee has been reviewing these for nearly a year but the public comment period is only 5 weeks?	6/1/2014 10:33 PM
6	1. Fordham Institute graded the NGSS "C". 2. The federal government through federal agencies such as the EPA was heavily involved in developing the NGSS. 3. Anti-fossil fuel themes are particularly concerning for North Dakota since such a large portion of the state's economy is dependent on the energy industry which is primarily fossil-fuel based. 4. Focus on federal and international regulation instead of freedom and enterprise.	6/1/2014 10:12 PM
7	1. Fordham Institute graded the NGSS "C". 2. The federal government through federal agencies such as the EPA was heavily involved in developing the NGSS. 3. Anti-fossil fuel themes are particularly concerning for North Dakota since such a large portion of the state's economy is dependent on the energy industry which is primarily fossil-fuel based. 4. Focus on federal and international regulation instead of freedom and enterprise.	6/1/2014 10:09 PM
8	I understand that the design of Common Core and NGSS is that teachers will be teaching the same thing on any particular day so that those who move can expect the very same curricula wherever they move. So much for school choice, wherever you go you only have one choice: Common Core and NGSS Considering that the NGSS are copyright. That leaves me with two choices: accept it as written or reject. If Kindergarten students have a bad year, I predict they are off to a poor education. If NGSS are not Kindergarten friendly, I think we should reject NGSS aka North Dakota Science Content Standards.	5/31/2014 9:38 PM
9	I would like ND say No to more of these common standards. We are a Prosperous Nation based on Capitalism lets do our on thing.	5/31/2014 2:43 PM

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10	I do not believe that we should adopt these science standards. Our State has plenty of teachers and professors that can come up with standards that are not driven down by the federal government. We need to look at the BIG pictures and see that the standards will produce a national curriculum. How can it not? The books, tests, and assessments will all be driven by someone, something, other than our state and local school districts. I think it is time that we use the 4 C's creativity, collaboration, critical thinking and common sense to think this through as a whole and not just fix our eyes on the standards. All of the standards will become so intertwined that there will be no way to get out if we want to. We will become a slave to these standards and all that it becomes...now and into the future. I believe we have enough great minds in our state to come up with standards that are not prepared and handed to us in a package as the "answer" to our children's science education.	5/31/2014 10:53 AM
11	let's develop our own standards - not the copyrighted standards	5/31/2014 5:01 AM
12	Please do not implement these science standards. Get parents involved and let's keep our school curriculum at a local level. No more direction from the national government - these are not their children - and we don't want their influence in our ND schools.	5/30/2014 11:23 AM
13	These new science standards and Common Core are being somewhat "forced" on us with very little transparency. If we question them, then we are deemed as not wanting high standards for our children. We were able to voice our concerns at an open forum at the Chamber of Commerce in March 2014 but our concerns were not taken seriously with any concerted effort to truly understand or listen to us. Our concerns are real and we take our children's education very seriously which is why we have decided to Homeschool our children in the fall of 2014. We are disappointed in the direction of our education system in North Dakota. Please listen - let's have an open discussion and address the real concerns we have as parents since these are OUR children. Thank you.	5/30/2014 10:43 AM
14	PLEASE do not implement these!	5/29/2014 5:33 PM
15	AS A CITIZEN OF "THIS COUNTRY".....AND A RETIRED RESIDENT OF BISMARCK.....PARENT OF FOUR GROWN CHILDREN....AND NOW GRANDCHILDREN....THE COMMON CORE PROGRAM IS THE IMPLANTATION OF "SOCIALISM" INTO OUR SCHOOLS AND THE GOVERNMENT CONTROLLING "OUR CHILDREN'S MINDS AND LIVES". THIS "WILL LEAD" TO THE DESTRUCTION OF "OUR UNITED STATES OF AMERICAN".	5/29/2014 3:13 PM
16	Please do not lower our standards by excepting these. ND is a wealthy state and we do not need to be bought out and run by the feds. Common Core is an effort to regionalize, replace local government with boards of federally appointment bureaucrats. This will end the freedom parents have to choose neighborhoods with good schools because tax funds will be distributed equal. There will be no escape in home schooling or private education due to national testing. Students will be subject to education mandates implemented by the Federal Government. Let us wake up like the states that already have - Virginia, Georgia, Indiana, Utah, SC and others have started efforts to "nix" it. Think of your children and your grandchildren. They are our future.	5/29/2014 1:03 AM
17	Sounds like propaganda! Do NOT like it.	5/28/2014 10:49 PM
18	As a concerned parent. I strong reject Common Core standards. This has not been a transparent discussion. At a bare minimum, this process needs to slow down to allow time for open and thorough discussion. The current process gives me the feeling the proponents want to hurry this into the system through the back door because they know it cannot stand on its own and gain support from a well informed voter base. North Dakotans are better than this.	5/28/2014 7:03 PM
19	parents and teachers can run education better than a top down approach from the federal government	5/28/2014 4:50 PM
20	It is suggested that teaching k-2 and grades 5-6 that "engineering and design" should be taught. Why not focus on these primary things: reading, writing, math. From that foundation, add logic. When reading this proposal, it appears that starting in kindergarten, public schools are molding students to a basic form of technology careers, that the assumption is public schools must turn up technology people to fill the future work force. The many references to "climate change" and "big bang theory" and no reference (that I could find) to any other theories in the higher grades sciences tells me there is no room for debate. The purpose of public education is to educate children to read, write, and be proficient in math. History, geography, language and science can be learned best when kids can first be proficient in the basics. The push to turn out children to be capable workers is not the "job" of DPI; it is their job to educate. Yes, technology is every where and students should know something about it, but it should be utilized to help in their education, not produce workers.	5/28/2014 1:05 PM

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21	I haven't read the standards, but I want to encourage you to make them as rigorous as possible. Please don't cave to political pressure on subjects like evolution, the origins of the universe and climate change. Teach kids real, true science- the kind scientists support, not religious pseudo-science.	5/27/2014 10:53 PM
22	DROP COMMON CORE FROM NORTH DAKOTA SCHOOLS. NORTH DAKOTA PARENTS ARE AGAINST IT AND SEVERAL OTHER STATES ARE WORKING TO WITHDRAW FROM COMMON CORE AS WELL. GO BACK TO THE PREVIOUS STANDARDS WE HAD BEFORE COMMON CORE.	5/27/2014 8:39 PM
23	ND does not need and should not take part in any type of "national" standards. ND, also, should not use any portion of the standards to create our own standards...which technically can't be done anyways, since the national standards are copyrighted and may only be used as a whole. Do our children a service and do NOT allow these standards into our great state.	5/27/2014 3:28 PM
24	very poor, global warming etc.. How does this benefit STEM education? IT DOESN'T	5/27/2014 1:57 PM
25	The change to the education system is a complete joke. Education needs to be left up to the teachers and the parents. The government has no right to intervene in the education system. Numerous studies have shown a steady decline in education and test scores the longer the government is involved. The implementation of the Common Core is outrageous! The teaching is difficult, my students hate it, I am seeing them more stressed and confused than ever before! We need to make education fun and interesting to our students. The nonstop memorize, regurgitate, and test is ridiculous!! I am seeing more and more families pulling from public school to homeschool because of how bad the schools and education is getting. The government needs to back off and let the parents and teachers take over the children's education instead!!!!!!!!!!	5/27/2014 1:42 PM
26	There is a huge difference between intended curriculum and enacted curriculum. The standards look good and our state has created an attractive document. But, as a teacher and parent I am more concerned about how North Dakota will ensure that educators across the state are covering the standards. From my observation and after putting my own kids through high school and college some teachers have too much autonomy. Administrators look at lesson plans only to see if they are filled in. They don't oversee what is actually enacted in the classroom. I believe there should be statewide teacher coaches.	5/15/2014 1:48 PM
27	I absolutely disagree with the content that has been included that is opinion and not fact. It gives a poor example of how science should be used.	5/14/2014 8:33 AM
28	There is a huge amount of room in these science lessons to push a doom and gloom outlook onto our children. Teaching them to feel bad for consuming natural resources, and that if it wasn't for humans the earth would be much better off. Children are scared into thinking that any minute the ice caps will melt and all the cute furry animals in the world will perish because they were selfish enough to be born as a evil over consuming human. I don't want my children unable to sleep a night because they are too worried about the affects of their carbon footprint on the planet.	5/12/2014 12:05 PM
29	No more of this nonsense, ND has done fine before, no more taking the easy way out. No to these standards.	5/11/2014 3:03 PM
30	It would be a sad day in North Dakota if the state accepts these standards	5/10/2014 9:27 PM
31	I disagree with the data mining that goes along with common core. There is no privacy anymore of our kids. I strongly oppose the standards of common core that do not allow individuals to excel. The standards only hurt kids with disabilities, as they are expected to "achieve" the same results as all the other kids. I strongly oppose the subtle propaganda that these standards impose on my kids. If these standards are so great why are so many states bailing off of this sinking ship. Please consider the future of our great state's children and stop trying to push and implement common core. The money the state received by the federal government isn't worth our kid's future. Please come to your senses and see that this will only set our kids backwards, not move them forward as all the lies describe. I count my kids lucky, they are already in high school, and can think for themselves, can see when they are being lied to, and have enough self esteem to voice their opposition to be used as part of a failed federal experiment.	5/7/2014 7:15 AM
32	In my 27 years of teaching, with a present focus on teaching all science sections at the 4th grade level, I have never seen a document so disjointed. Are educators actually writing these standards? They appear to be written by individuals who do not understand developmental levels of 3-5 elementary learners. The standards are too difficult and have no connection to each level. It saddens me greatly to think that these standards could actually be adopted. My recommendation? Start over.	5/1/2014 4:23 AM

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33	Concerning your changing the treatment of evolution as "fact" rather than "theory", I oppose. I am not opposed to teaching evolution as theory, but would like consideration of the belief of "creation" as well. think it is good science to look at all of the ideas and teach children how to think. Promoting evolution as a fact when the evidence cannot be proven scientifically is not good science. I would ask you to consider other views of the beginning of life.	4/30/2014 3:40 PM
34	evolution is a theory not fact and should be taught as such	4/30/2014 12:42 PM
35	As a Christian parent, I believe that we were created by a loving God, in His image. My concerns are regarding the teaching of evolution. I understand that there are those who believe in the theory of evolution. I'm just asking the public schools to please not teach evolution as a fact, but rather as the theory that it is. I'd also ask that schools would give equal consideration to those of us who believe in creationism and return to teaching creation as an alternate theory.	4/30/2014 8:58 AM
36	If the document is mostly line-by-line copy of national NGSS standards then it is important to highlight the ND additions/deletions from the original document: Which parts are unique to the ND standards, i.e., which parts are not in original national NGSS.	4/28/2014 9:03 PM
37	I think that having young students especially in grades k-2 give explanations will be quite difficult. Critical thinking questions for the young children will be difficult.	4/27/2014 6:50 PM
38	A much-improved draft and product. Very intuitive and very helpful. I don't see too many people left wondering what is meant by the wording or intent. Well done, people!	4/27/2014 3:14 PM
39	It is a violation of the 10th Amendment to the Constitution of the United States of America to have a Washington mandate for education.	4/25/2014 7:39 AM
40	We don't mind our kids learning evolution in their public school, but it should be taught as a theory as it is not a fact. Thank u!	4/24/2014 9:07 PM
41	yes	4/24/2014 9:56 AM
42	I am an engineering graduate from NDSU and have a great respect for science and the science community. The fact is there is no theory that meets the scientific method for the origin of creation and humans. Evolution and Big Bang are theories. Intelligent Design is a theory. Biblical creation is a theory. I firmly believe that several sides to this discussion must be presented to our children. It is a wrong approach for the future of our children to present evolution as fact or big bang as the only theory to explain the origins of the universe. All of these theories start with some assumptions.	4/23/2014 2:42 PM
43	I'm not asking for much. I'm NOT asking for Creationism or Intelligent Design to be inserted into the standards. I'm not asking for the Big Bang Theory to be removed. I'm simply asking the committee to acknowledge that there are other theories about the origins of the universe. I believe that a commentary line can be added that will encourage an open discussion in our classrooms. The commentary could read, ""Because the origins of the universe is one of the great mysteries of life, there are many theories that people believe in." Our poor students who don't believe in the Big Bang theory have endured enough persecution and bullying. All I'm asking for is an open discussion. Recently, when Bill Nye debated Ken Ham in a public forum, Bill Nye (a famous evolutionist) stated that the origin of life and our universe was "a great mystery." I have a new found respect for him to admit it. Now I'm asking for the committee to recognize that when it comes to our origins we don't have all the answers, so we should teach our children that we do. Thank you for your consideration.	4/23/2014 12:18 PM
44	Thank you for reading my comments, I hope that you will see them for what they are and not dismiss them if they are different from what you think.	4/16/2014 2:46 PM



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May 29, 2014

Greg Gallagher
Assessment Director
Department of Public Instruction
600 East Boulevard
Bismarck, ND 58505

RE: Department of Public Instruction's proposed new state science content standards.

Dear Mr. Gallagher,

The Lignite Energy Council appreciates this opportunity to submit comments on the Department of Public Instruction's proposed science standards. The LEC is a regional, non-profit organization whose primary mission is to enhance, preserve, and protect the development and use of lignite coal as an affordable and reliable energy source. The LEC's membership includes: 1) producers of lignite coal who have an ownership interest in and who mine lignite; 2) users of lignite who operate lignite-fired electric generating plants and the nation's only commercial-scale "synfuels" plant that converts lignite into pipeline-quality natural gas; and 3) suppliers of goods and services to the lignite coal industry. The LEC is submitting these comments out of concern that some of the content as proposed will result in inaccurate and misleading education with respect to the environmental impacts of lignite production and power generation.

As a general matter, the LEC strongly supports and encourages science education as a core part of a K-12 curriculum. The LEC has a long history of providing fact-based energy instruction opportunities for education professionals. One example is through an annual continued education seminar sponsored by the LEC and accredited by North Dakota State University, the University of North Dakota, and Minot State University. The seminar has hosted more than 3,000 teachers over 28 years and provides educators with the information and educational material they need to teach their students about how lignite is mined and used to produce electricity for homes, farms, and businesses in the Upper Midwest.

Building upon this legacy, the LEC has partnered with the North Dakota Petroleum Council to hold an "Energy Tour" for college professors and administrators in August. The two-day event will give college professors from the University of North Dakota and North Dakota State University plus college presidents from Minot, Bismarck and Wahpeton a chance to hear from experts about how

Lignite Coal: America's Abundant Energy Resource
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energy, economics and the environment are intertwined. Additionally, they will tour energy facilities such as an oil rig, coal mine, power plant and oil refinery.

The LEC and other North Dakota energy industry representatives are also working in conjunction with entities such as the Department of Public Instruction, State Historical Society and North Dakota institutions of higher education on a North Dakota Studies Energy Curriculum project. The project includes the development of an energy curriculum for 4th and 8th grade students to include relevant information about North Dakota's robust energy resources. Content and online modules will provide more educated citizens and contributors to North Dakota's future workforce.

An important principle of science is that the study of our natural world remains largely composed of theories in pursuit of proof. As such, it is important that subject matter being presented to students as part of the science curriculum should not be used to teach "standards" in the absence of hard facts to support the conclusion drawn by the standard. For example, the explanation behind MS-ESS3-5 (p. 105) asserts that the "[e]mphasis is on the major role that human activities play in causing the rise in global temperatures." It is concerning that the proposed standards would utilize a term as subjective as "major" when the extent of the role of human activity on the atmosphere remains subject to great debate. Similar assertions are made in MS-ESS3.D, HS-ESS2.D, and elsewhere throughout the document.

As evidence of this uncertainty, the most recent report from the Intergovernmental Panel on Climate Change raises new questions concerning the level of increase in temperatures associated with increased carbon dioxide emissions, otherwise known as "climate sensitivity." The IPCC's report states that "[i]n contrast to AR4, no best estimate for [Effective Climate Sensitivity] is given because of a lack of agreement on the best estimate across lines of evidence and studies and an improved understanding of the uncertainties in estimates based on the observed warming," and that "[i]n estimates based on the observed warming the most likely value is sensitive to observational and model uncertainties, internal climate variability and to assumptions about the prior distribution of [Effective Climate Sensitivity]."¹ Case in point, the IPCC report further states that even as global greenhouse gas emissions during the last decade "were the highest in human history,"² the "rate of warming over the past 15 years is smaller than the rate calculated since 1951."³

The LEC agrees with the statement made under HS-ESS3 Crosscutting Concepts: "Empirical evidence is required to differentiate between the cause and correlation and make claims about specific causes and effects." However, many of the current theories of climate science rely on models that have yet to be verified through empirical data. As such, the LEC would recommend that the final standards further link this caveat to the Disciplinary Core Ideas pertaining to the impacts of human activity on global climate.

The Disciplinary Core Idea (DCI) presented under HS-ETS1-A states that "[h]umanity faces major global challenges today, such as the need for supplies of clean water and food or for energy sources that minimize pollution, which can be addressed through engineering." The LEC supports this principle but would recommend that the DCI be further clarified that engineering and technology have and continue to minimize pollution from existing energy sources such that coal-fired power and environmental stewardship are not mutually exclusive. For example, despite increasing the use of coal

¹ https://www.ipcc.ch/report/ar5/wg1/docs/review/WG1AR5_SubstantiveEditsList_All_Final.pdf

² http://report.mitigation2014.org/drafts/final-draft-postplenary/ipcc_wg3_ar5_final-draft_postplenary_chapter5.pdf

³ <http://www.climatechange2013.org/images/uploads/plattner15paris.pdf>

for stable, baseload electricity by over 180 percent over the past 40 years, emissions of criteria pollutants such as sulfur dioxide and nitrogen oxide have decreased by 80 percent⁴. The LEC also recommends that this DCI acknowledges the societal advantages and dramatic increase in the overall standard of living that are made possible by reliable and affordable access to energy and electricity, particularly as technology continues to advance.

In conclusion, the proposed standards seek to cover a multitude of complex scientific concepts. The LEC strongly believes that a comprehensive and fact-based science curriculum is essential for K-12 students. Overall, the proposed standards largely provide the foundation for such. However, the LEC respectfully requests that any final standards be revised to more accurately ensure that theory is not presented as fact, and that the standards provide the flexibility for students to draw their own conclusions or beliefs based on sound science.

Again, the LEC has long history of working with educators to provide information and data on power generation as well as associated environmental impacts and mitigation. Thank you for your attention to these comments and please do not hesitate to use the LEC as a resource as you move forward with the proposed standards.

Sincerely,

LIGNITE ENERGY COUNCIL

A handwritten signature in black ink that reads "Jason Bohrer". The signature is written in a cursive style with a long horizontal stroke at the end.

Jason Bohrer
President & CEO

⁴ <http://www.instituteforenergyresearch.org/pdf/the-facts-about-air-quality-and-coal-fired-power-plants-final.pdf>