

Iowa Core Science Standards Review Team

December 4, 2014 9:00 a.m. -- 4:00 p.m.

Science Center of Iowa
401 W. Martin Luther King Jr. Parkway
Des Moines, Iowa

Meeting Notes

Notes submitted by Susan Peterson

Attendees:

Science Team Members: John Bedward, Lyn Countryman, Matt Geraghty, Robin Habeger, Renee Harmon, Kris Kilibarda, Rob Kleinow, Lisa Krapfl, Chris Kurtt, Dean Lange, Jon Markus, Ted Neal, Jim Pifer, Abby Richenberger, Ed Saehler, Tamera Trinder, Courtney Van Wyk

Facilitators: Marian Godwin, Susan Peterson, Tina Wahlert

DE Staff Observers: Brad Niebling, Phil Wise, Yvette McCulley

Public Observers: One visitor

Notes:

The meeting convened at 9:00 a.m.

Agenda Item: Welcome, Introductions, Agenda and Review

Brad Niebling thanked the group for their time and shared that he will be the contact from the Iowa Department of Education. Questions from team members were addressed.

Phil Wise reviewed Dr. Buck's November comments and the charge to the Science Team was based on Executive Order 83. In response to a team member, Phil explained that the Department of Education website displayed the 2013 Next Generation Task Force minutes and recommendations. The current team was reminded that their recommendation for the state of Iowa's science standards will be put before the public for feedback and opinions. The team will review and make any modifications to their recommendation based upon that feedback, before presentation to the State Board.

The team reviewed the day's agenda, meeting norms, timeline for the work to be done, and rating processes to be used for the day.

Agenda Item: Discussion of Ohio Science Standards and Next Generation Science Standards

In November, team members had proposed various sets of Science Standards to be put before the group for discussion. These different sets of standards were addressed by the group, with team members voicing their opinions on the strengths and weaknesses for each set. The members voted to study Ohio Science and NGSS.

The group engaged in a discussion concerning the strengths and weaknesses of the two sets of standards with references to Iowa Core Science. Content Area Groups reported out their views of each set, with the following strengths and weaknesses being identified:

Ohio Science Standards:

Pros are as follows:

- Simple/easy to understand
- Format/usability/friendly
- Addresses misconceptions of each standard
- Grade level road map (where they have been and where they are going- embedded)
- Addresses differentiation (helpful to new teachers especially)

Cons are as follows:

- No engineering - only 1 page introduction
- Inquiry is separate - not integrated
- Cognitive Demands are not embedded (related to bullet #1)
- When a “model” is provided we run the risk of it becoming the only way. Lose local control (2 voices agree and 2 disagreed during the conversation).
- Environmental and Earth science on back-burner (it is called “advanced science”)
- Traditional/classic view - differs in this way from NGSS
- It appears to be a prettier package of current Iowa Core Standards

Next Generation Science Standards:

Pros are as follows:

- Opportunities to work with other states -- share resources
- Strong focus on engineering and it is embedded with each standard
- Tablet app is user friendly
- Performance Expectations are clearly aligned; 3- prong approach
- Conceptual - More local control
- Explicit Learning Progression
- Offers cognitive tools
- Is written in a systems view
- Characteristics of Effective Instruction are embedded
- Lays out a better way to work cross-curricular
- Gives standards but also additional pieces to allow local control
- Based on learning theory and best practice

- Amount of coverage is cut -- embedded content is appropriate for the average citizen to know
- Narrowed to 3 content pieces/courses
- Cross-curricular is included
- The standards are different, but modern

Cons are as follows:

- Online Format is cumbersome -- hard-to-read guide
- Feels piecemeal with the number of documents/pages
- No assessment pieces (Project 2061 is available but is another “piece” to find)
- Career Readiness (not front and center; not easy to identify)
- Embeds Practice but it is narrowly defined when the practice should be used
- The standards are different, but modern

After discussing the above, team members wrote proposals for recommendations to be sent for public opinion, for the large group to consider. Seven proposals were submitted for ranking. The Proposal Rating Sheets are shown below:

Proposal: To adopt the NGSS as a baseline, with further discussion of possible changes in content. Fifteen members were in strong agreement or agreement, and two members were in disagreement.

#2
NGSS w/ LOOK @ CONTENTS

Signatures

15 handwritten signatures in various colors (green, blue, red, black) are listed vertically.

Do you agree?

Fill your one dot below & sign on the right:

Strong Agreement	Agreement ⁴	Neutral	Disagreement	Strong Disagreement	Confusion ?
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Strengths & Opportunities			Concerns & Weaknesses		
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Sheet #
Date: 12-04-2014
Organization/Event: Iowa Core Science Standards Review Team

Proposal: To adopt the NGSS as written, with no changes in content and formatting. Eleven members were in strong agreement or agreement, three members were in strong disagreement, and three members were neutral.

Do you agree?

Fill your one dot below & sign on the right:

Signatures

[Handwritten signatures: KAC, MK, etc.]

Strong Agreement <i>(4)</i>	Agreement <i>(7)</i>	Neutral	Disagreement	Strong Disagreement	Confusion <i>(?)</i>
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Strengths & Opportunities

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Concerns & Weaknesses

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Sheet # Date: 12-04-2014 Organization/Event: Iowa Core Science Standards Review Team

Proposal: To adopt the NGSS as a baseline, retaining all content, but making changes in format. Three members were in agreement, ten members were in strong disagreement or disagreement, and four members were neutral.

Use NGSS Content
w/ more usable & friendly format

Signatures

[Handwritten signatures in various colors: green, blue, purple, orange, black]

Do you agree?

Fill your one dot below & sign on the right:

Strong Agreement	Agreement	Neutral	Disagreement	Strong Disagreement	Confusion
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Concerns & Weaknesses

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Proposal: To adopt the NGSS as a baseline, with further discussion of possible changes in content and formatting. Three members voted for this proposal.

#1

We propose NGSS as the baseline framework for continued discussion, to develop the Iowa science standards

Signatures

[Handwritten signatures in various colors: green, blue, red, black]

Do you agree?

Fill your one dot below & write your name on the right.

Strong Agreement ³	Agreement ⁶	Neutral	Disagreement	Strong Disagreement	Confusion [?]
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Strengths & Opportunities

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Concerns & Weaknesses

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Agenda Item: Expectations for February Meeting

By the February meeting, the Stakeholder Survey data will have been analyzed and presented to this group. This meeting will allow the Science Team Members to determine if any modifications should be made to the NGSS standards before submittal to the State of Iowa.

Agenda Item: Meeting Adjourns

The meeting was officially adjourned at 2:30 p.m.