

AD1

Biology Adoption Committee

FEBRUARY 27, 2019

PLEASE SIT WITH YOUR ASSIGNED TEAM

- PHIL, YUSRA, MIKE
- JAKE, SUE, JOHN D, LEE
- SUZANNE, ROSE, JEREMY
- CINDI, BETH, CAROLINE

*Angie DiLoreto, Science Curriculum Developer – Facilitator

*Cindi Guyer, BHS Science teacher

*Phil Allen, IHS Science Teacher

*Beth Gatewood, IHS Science Teacher

*Lee Holt, IS Science Teacher

Jeremy Brown, NHS Science Teacher

*Rose H, student

*Yusra Obaid, OMS Advanced Learning Science Teacher

Mike Schiehser, BHS principal

*John Delpont, Special Education specialist

*Sue Kelly, English Language Learner specialist

Caroline Titan, Equity specialist

Jake Duke, STEM Developer

*Suzanne Reeve, SHS Instructional Technology Curriculum Leader

Tom Duenwald, central office director and parent

*Present

Slide 1

AD1

Diloreto, Angie (Angela D), 2/15/2019

Agenda

- ▶ Review norms, process, timeline
- ▶ “Environmental Health” unit Evaluation
- ▶ Next steps and Check-out



Connections

- ▶ Your Name
- ▶ Your school/role
- ▶ Favorite snow day or Mid-Winter Break activity

Team Norms



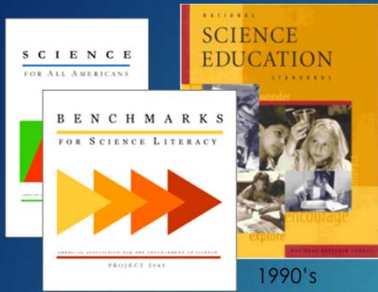
- ▶ In large group conversation: Prop card vertical when you want to speak
- ▶ In small group conversation:
 - ▶ Keep an open mind
 - ▶ Be present (limit technology use)
 - ▶ Be honest
 - ▶ Assume positive intentions
 - ▶ Listen for understanding
 - ▶ Ask questions

Consensus Process

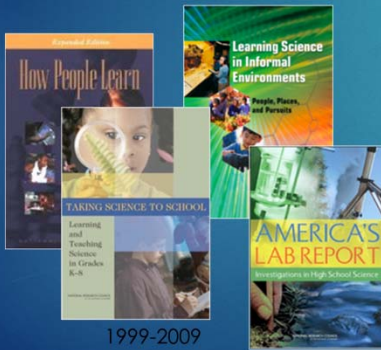


- ▶ Thumbs Up: I think it's a good decision and will advocate for it.
- ▶ Thumbs Sideways: I am comfortable with the proposal but might want to discuss some minor issues.
- ▶ Thumbs Down: I still need to discuss certain issues and suggest changes that should be made.

Important Convergence

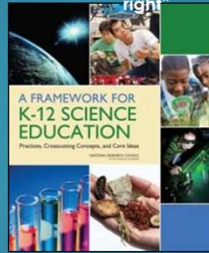


1990's



1999-2009

Step 1
"Getting the science right"




Step 2
"States developing NGSS"




The Framework & Standards were reviewed and refined by over 40,000 teachers, scientists, engineers, educational researchers, youth and other stakeholders in K-12 science ed.

Reflect on Innovations



5 Innovations of NGSS:

1. Making sense of phenomena and designing solutions to problems
 2. Three dimensional learning
 3. Building K-12 Progressions
 4. Alignment with English language arts and mathematics
 5. All standards, all students
- 

Timeline *Draft*

Date	Task
10/24/18	Begin adoption committee orientation, look at NGSS, look at evaluation docs
12/19/18	Use the unit evaluation docs to review Next Gen Storylines – <i>Why Don't Antibiotics Work Like They Used To?</i>
2/27/19	Use the unit evaluation docs to review Educurious – <i>Environmental Health</i>
3/20/19	Use the course evaluation docs to review both materials
4/24/19	Review Teacher and Student Survey Data, review Evaluation data, determine if we have enough evidence to make a recommendation

We changed the focus of the March meeting to review all of the units in the course with a course evaluation tool.

Our April meeting will review Teacher and Student Survey Data, committee data and make a recommendation.

Committee Evaluation Categories



1. Standards Alignment
 - ▶ Storyline/Phenomenon/Solve Relevant Problems
 - ▶ Integration of Three Dimensions
2. Assessment
3. Inclusive Educational Practices
4. Evaluation of Bias Content
5. Instructional Planning and Support

Scoring Training

4 Superior Evidence	3 Strong Evidence	2 Moderate Evidence	1 Minimal Evidence	0 No Evidence
Strong representation	Consistent	Present in a few places	Inferred but not explicitly stated	Not present
Clear connections and through-line	Many places	Appropriate opportunities	Saying criteria there but not really in depth	
Relevant	Where relevant, deeply attended to	Present but not elaborated	Shallow	
Explicitly described	Clear throughout			

*Be sure to describe evidence location(s) on Evaluation document

EVIDENCE in the Instructional Materials

Superior evidence – rarely achieved, best example of this component

Strong evidence

Moderate evidence

Minimal evidence

No evidence – not present, or not found

Describe evidence location on

Evaluation document

OneNote Overview

The screenshot shows a OneNote page titled 'BIOLOGY MC Environmental Health'. The page is organized into sections and a page list. Annotations highlight key features:

- Section:** Points to the 'Teacher Overview' tab.
- Section Group:** Points to the 'Teacher Resources by Module' tab.
- Pages:** Points to the list of pages on the right, including 'Environmental Health Navigation', 'Unit Overview', 'Learning Standards', 'Major Reading and Writing Task', 'Road Map', 'Planning Notes', 'Academic Vocabulary', 'Materials Master List', 'Phyto Photo Credits', 'Supporting Student Literacy in Science', 'Vocabulary Support Page', 'Vocabulary Page Teacher Guide', 'SQPRS for Science', 'Reciprocal Reading Strategy', and 'Cornell Notes'.

Module Number	Central Questions	Module Description
Module 1	<ul style="list-style-type: none"> What previous interest and hobbies do you have related to science and the environment? Insert your Launch Activity here What do you already know, and what would you like to learn about toxins in your environment? 	In this module s Environmental
Module 2	<ul style="list-style-type: none"> Which toxins are common in the environment? Where do many environmental toxins come from? How do humans contribute to toxins in the environment? 	Your students w their phytoreme activities expose
Module 3	<ul style="list-style-type: none"> How do toxins affect organisms, including humans, in the environment? How do toxins move through the food web? How does toxicity differ for organisms at lower and higher trophic levels? 	In this module, ' After your stude to investigate th they move thro webs around th

We built the Environmental Health Resources on OneNote for teachers to use.

The screenshot shows a digital resource page titled "Env H Overview". At the top, there is a navigation bar with "Env H" on the left and "Overview" on the right. A green arrow labeled "Overview Nav" points to the "Overview" text. Below the navigation bar, there is a header area with "BIOLOGY MC", "Environmental Health Pilot 2019", and "Teacher Overview". A sidebar on the right contains a list of resources, including "Environmental Health Navigation", "Unit Overview", "Learning Standards", "Major Reading and Writing Task", "Road Map", "Planning Notes", "Academic Vocabulary", "Materials Master List", "Phyto Photo Credits", "Supporting Student Literacy in Science", "Vocabulary Support Page", and "Vocabulary Teacher Guide". A green arrow labeled "Pages in this" points to the "Vocabulary Support Page" and "Vocabulary Teacher Guide" items. A table in the main content area lists "Module Number", "Central Questions", and "Module Description". A green arrow labeled "Hyperlinks to Sections" points to the "Module 1" link in the "Module Number" column.

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This oriented the committee to where they could find access to the materials.

Env Health

Module = Lesson

BIOLOGY MC
Teacher Resources by Module 5

Module 1 Module 2 Module 3 Module 4 Module 5 Module 6 Module 7 Module 8 Module 9 Module 10

Module Overview

Wednesday, November 14, 2018 12:11 PM

Module 3: Bioaccumulation and Biomagnification

How do toxins affect organisms, including humans, in the environment?
How do toxins move through the food web?
How does toxicity differ for organisms at lower and higher trophic levels?

Module Description
In this module, your students will research how various metals can act as toxins in an ecosystem. After your students conduct background research on these toxins, they will conduct a field study to investigate the quality of their local water supply. Lastly, they will learn how toxins change as they move through food webs, and will research well-known cases of how toxins impacted food webs around the world.

Module Overview
Learning Standards
Lesson 3 Planning Notes
Lesson 3.1
Lesson 3.2
Resources
Lesson 3 Environment Chemicals Slides
Assignment 3.1 Chemical Case Studies Document
Assignment 3.2 Bioaccumulation Case Studies Research
Lead Case Study Orange
Lead Case Study Green
Lead Case Study Blue
Copper Case Study Orange
Copper Case Study Green

Module GIST

Hyperlinks

Elaborations

Protocol

- ▶ Every team evaluates Standards Alignment during the first hour
- ▶ Check in with questions as needed
- ▶ Teams evaluate different categories (see Work Teams)
- ▶ Group check in at 4:55
- ▶ Feedback on sticky notes
 - ▶ Plus
 - ▶ Delta
 - ▶ Questions

Resources

- ▶ Use the Links to Resources page in OneNote
- ▶ Angie has some paper copies
- ▶ Glossary Link: <http://bit.ly/BSDBioGloss>

Feedback

+

What worked for you today?

△

What would you change?

Questions?

Next Steps

- ▶ Meet again March 20 to review comprehensive programs