

Biology Adoption Committee

MAY 15, 2019

8 AM – 1 PM

- *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 (sent thumbs up vote with Angie)
- 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

Agenda

- ▶ Welcome and Check In
- ▶ Where we've been and why we're here
- ▶ Data deliberation with Implementation consideration
- ▶ Vote
- ▶ Implementation planning



Checking In

- ▶ Your Name
- ▶ Your school/role
- ▶ How are you feeling about today?



Where we've been

| 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 |
| 5/15/19 | Continue reviewing data while considering implementation, vote, implementation planning |

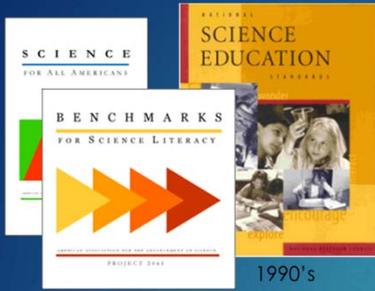
Last meeting 4/24 at the end we took a vote to see where we were at in terms of the two instructional materials: Inquiry Hub and Educurious. The consensus at that time was that most committee members were not in favor of Educurious and half the committee voted thumbs up for Inquiry Hub.

Our task today is to continue reviewing data and at the same time consider how the data informs implementation. I believe we can do a final vote this morning and then focus the remainder of the time on implementation.

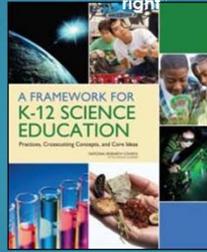
Before we look at data again, I want us to remind ourselves “why we’re here” and “what steps got us to this place”

Think for a minute and prepare a word or phrase that represents an idea that has led up to this day. (record on paper or whiteboard)

Why we're here



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.

5 Innovations of NGSS:

1. Making sense of phenomena and designing solutions to problems
2. Three dimensional learning (core ideas, practices, cross-disciplinary)
3. Building K-12 progressions in science
4. Alignment with English language arts and mathematics
5. All standards, all students

The Innovations comes from a document specifically addressing the design of instructional materials – so when we look at instructional materials, the Innovations becomes our lens for whether materials are designed for NGSS.

The reason we are looking at these two materials is because they fundamentally position students around phenomenon, the typical textbook materials may have added a phenomenon in the past four years, but it's not baked into the resources yet.

Another key shift is that students are the ones using the practices to access the disciplinary core ideas and attending to the crosscutting concepts. Materials that don't center students in the practices also were screened out.

The final critical and foundational innovation is that all standards are for all students. We need to use all the tools in our toolbox to better support the educational outcomes of all of our students, especially the students we haven't served well. This last element in particular is reflected in our district vision and mission...

BSD Vision and Mission

MISSION

To serve each and every student academically, socially, and emotionally, through a rigorous and relevant education that is innovative and individualized. As a learning community that values one another's humanity, we provide courageous support for an equitable and exceptional education for all students.

VISION

To affirm and inspire each and every student to learn and thrive as creators of their future world.

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.

When we vote, we will strive to come to consensus. Thumbs up or thumbs sideways means agreement with the proposal, thumbs down means I can't move forward until these issues are addressed

Team Norms



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

Data Sources



- ▶ Committee Evaluation using our Criteria
- ▶ Student Surveys (Data Visualization by Tableau)
 - ▶ post Antibiotics unit (student survey 1)
 - ▶ post Environmental Health unit (student survey 2)
 - ▶ Comparison between Antibiotics unit and Environmental Health unit (student survey 2)
- ▶ Pilot Teacher Surveys
 - ▶ post Antibiotics unit (teacher survey 1)
 - ▶ post Environmental Health unit (teacher survey 2)
 - ▶ Comparison between Antibiotics unit and Environmental Health unit (on teacher survey 2)
- ▶ Parent Survey – 14 AL parent responses, 3 non-AL parent responses

Committee Data

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1. Observe
 - ▶ Category 1 – Standards Alignment
 - ▶ Category 2 – Assessments
 - ▶ Category 3 – Inclusive Ed Practices
 - ▶ Category 4 – Eval Bias Content
 - ▶ Category 5 – Instructional Planning and Support
 2. Question/Wonder – Interpret
- 

Slight revision – shifted rounding to the tenths

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

Student Surveys

13

Use TABLEAU – filters

1. Observe
 - ▶ 22/23 statements
 - ▶ Comparison
2. Question/Wonder

Remember:

For the science and engineering practices
"2-3 times per week" and
"weekly" are inverted in Tableau

Overall Data:

71% of All Bio Students were in the pilot
50% of Pilot Bio Students took the Evolution Survey
53% of Pilot Bio Students took the Env Health Survey

Advanced Learners – Caution Overrepresented:

16 % of all Bio students have Gifted ID
23% of Pilot Bio Students have Gifted ID
31% of Pilot Bio Evo Survey have Gifted ID
35% of Pilot Bio Env Health Survey have Gifted ID

Language Learners with ELL ID

11% of all Bio students have ELL ID
10% of Pilot Bio Students have ELL ID
5% of Pilot Bio Evo Survey have ELL ID
6% of Pilot Bio Env Health have ELL ID

Students with IEPs

7% of all Bio students have IEP
9% of bio pilot students have IEP
5% of bio pilot students have IEP and took the surveys

Pilot Teacher Survey

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PAPER

1. Observe
2. Question/Wonder – Interpret
3. Implementation elements

Caution: Watch scale in the data set

Only one first year teacher piloted

9.1% is one teacher in Evolution unit

8.3% is one teacher in Env Health unit

Teacher Data:

74% of Bio Teachers Piloted

79% of Pilot Bio Teachers did Evo Survey

86% of Pilot Bio Teachers did Env Health Survey

Additional Experiences from the Field



The committee wanted to hear from Yusra Obaid who has used multiple units of both curricula with the advanced learning students. She reported that the Educurious materials were not as strong as the Inquiry Hub materials. Both would require adaptation, but the level of sophistication of the Educurious materials was lower than Inquiry Hub. Educurious would require more supplemental materials. She felt that that materials that were needed were provided in the Inquiry Hub instructional materials if teachers really dig into the materials.

Data Protocol – Parents

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1. Observe
2. Question/Wonder/Interpret



13 parent responses from the 8th grade Advanced Learning classes

4 parent responses from the general Biology class – teachers sent out several requests for feedback to their parent groups through Synergy

Patterns Across Data Sets

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- ▶ What patterns do you see?
 - ▶ Where are there things in common?
 - ▶ Where is there greater diversity?
- ▶ Describe the outliers
 - ▶ What evidence is presented by the outliers?



Implementation Categories



- ▶ Curriculum specific adaptations
- ▶ Professional Development
- ▶ Biology MC representation
- ▶ Supports
- ▶ Extensions
- ▶ Assessments

Add elements and be realistic about how or who can do the work. There is budget capacity to do work this summer.

Proposed Year 1

Summer 2019 – Year 1 teachers

- ▶ Deep Dive time in June (collaborative get to know the materials time) – 75 hours
- ▶ Summer work (OneNote, pacing, adaptations, assessment) – 200 hours
- ▶ August Bio Institute (Aug 21-23 – depending on PD calendar) – 231 hours
- ▶ Two teachers to Denver for unit training (Evolution) – June 10-13 or Aug 6-9

2019-20 School Year – Year 1 teachers

- ▶ 2019-20 – two release days for Year 1 teachers
- ▶ Additional PD subject to bargaining (e.g. Wednesday biology PD series for teacher choice PD)
- ▶ Teacher Leadership Role(s) to support implementation, documentation and additional adaptations
- ▶ Smaller Bio Team meet regularly for adaptation work

Proposed Year 2



Summer 2020 – All teachers

- ▶ Deep Dive time in June
- ▶ Some teachers to Denver for facilitator training
- ▶ More Summer work
- ▶ August Bio Institute (4 days)

2020-2021 School Year – All teachers

- ▶ Two release days
- ▶ Additional PD subject to bargaining (e.g. Wednesday biology PD series for teacher choice PD)
- ▶ Teacher Leadership Role(s) to support implementation, documentation and additional adaptations
- ▶ Smaller Bio Team meet regularly for adaptation work

Do we have enough information to
make a decision?



Yes – 8 thumbs up, 1 thumbs to the side

Next Steps

- ▶ Recommendation to the Instructional Materials Committee (IMC)
- ▶ The IMC is charged with evaluating how well we followed the adoption process and how we came to a decision.
- ▶ Upon approval by the IMC, goes to school board

Recommendations and associated processes will be presented to the Instructional Materials Committee (IMC) – on May 23.

The IMC is charged with evaluating how well we followed the adoption process and how we came to a decision.

If you're interested in co-presenting with me, please let me know.

Once the IMC approves, it goes to the school board. Typically, it is on the consent agenda with other IMC approved curriculum adoptions.