



K-12 Science in SoWashCo Schools

TLS Board update, March 2, 2023

Dr. Tia Clasen

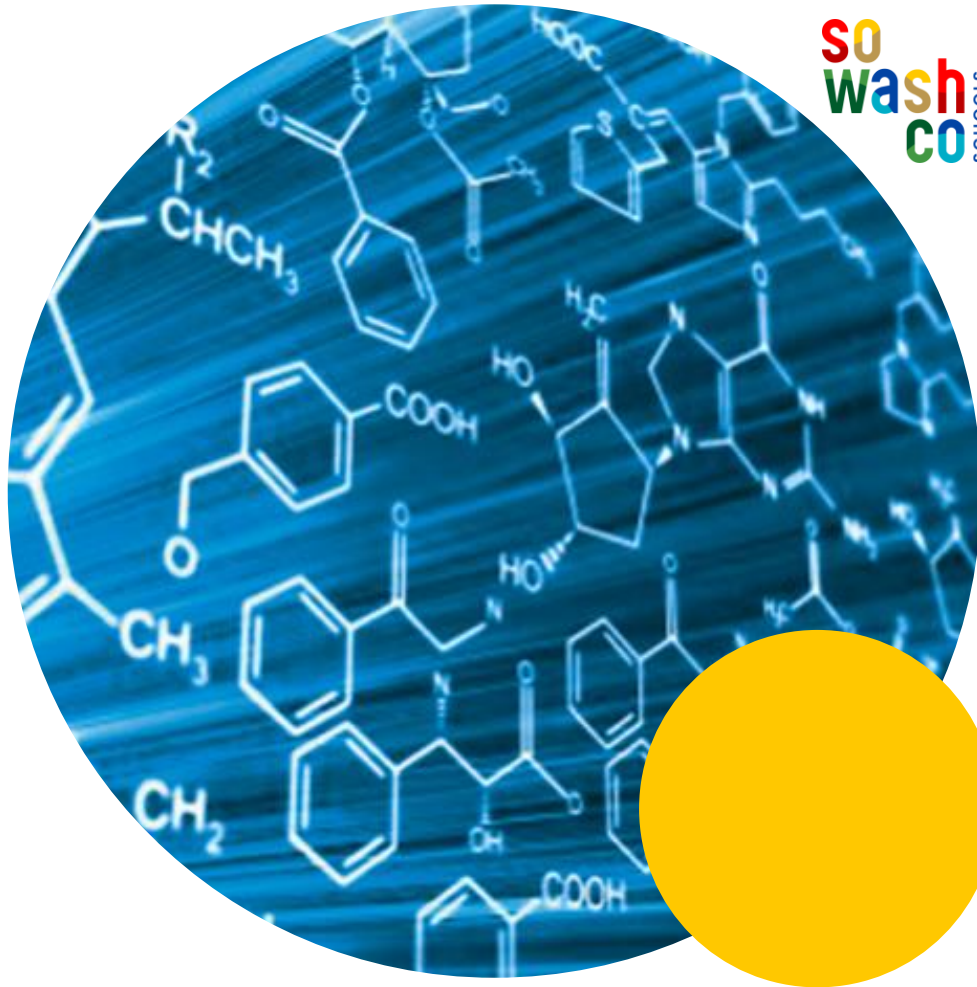
Arthur Williams

Ian Bronson



Overview

- Context for **K-12** Science
- Objectives of the Standards and Instruction Review Cycle (SIRC) teams
- Composition of the SIRC teams
- Summary of each team's work
- What is happening now?
- Implementation timelines
- Questions



Context for K-12 Science

- New Standards adopted in 2019
- Put into rule September 2021
- Science MCA IV goes into effect for SY 2024 - 2025



Context for K – 12 Science

Disciplinary Core Ideas



**Earth and Space
Science**



**Life Science
or Biology**



**Physical Science
(Chemistry or
Physics)**



**Engineering &
Technology**

Context for K – 12 Science

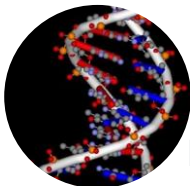
Science & Engineering Practices



Asking Questions



Mathematical Thinking



Developing Models



Planning Investigations



Constructing Explanations



Argument from Evidence



Analyzing Data



Evaluating & Communicating

Context for K – 12 Science

Crosscutting Concepts

- Patterns
- Cause & Effect
- Scale, Proportion, & Quantity
- Systems and Models
- Structure & Function
- Stability & Change
- Energy & Matter: Flow, Cycles, & Conservation



K-12 SIRC Team Objectives



- Review the shifts in Science Instruction
- Develop an understanding of the 2019 MN State Science Standards
- Select a resource that addresses the needs of our students *and* appropriately meets the 2019 Science Standards and Pedagogy
- Develop a new course for Earth and Space Science (Grades 6 & 9)
- Develop a new Physical Science course (Grade 8)




K-12 SIRC Teams

K-5 Science

- Met from April 7 - early-June
- 26 members
- Representation from all grade levels, EL, SPED, and administration
- A majority of the 16 elementary school sites were represented

K-12 SIRC Teams

6-8 Science

- Meeting this year from October - May
 - 11 members
 - Representation from all grade levels, and administrators
 - All four middle schools represented
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K-12 SIRC Teams

9-12 Science

- Meeting from early-November to May
- 18 members
- Representation from all 4 core science content areas and administration
- 4 of 5 high schools represented

Work Accomplished & What's Happening Now



K-5 Science

- Reviewed, in depth, three curricula resources for K-5 science
- **Adoption of Discovery Education (DE) for *this* school year**
- Draft developed for 3rd grade teams' scope and sequence
- Professional development a few times this year from DE
- Gaining momentum and understanding with DE



Work Accomplished & What's Happening Now



6-8 Science

- Explored the New Standards and shifts in instruction for Grades 6-8 science
- **Adoption of Discovery Education (DE) for *this* school year**
- 6 + 2 meetings this school year (4 + 1 completed)
- Developed a draft of the scope and sequence for 6th grade
- Aligning instruction with DE in 6th grade
- Developing a scope and sequence for grades 7 and 8
- Learning more about how to effectively use DE
- Creating more uniformity across the district



Work Accomplished & What's Happening Now



9-12 Science

- Meeting 6 + 1 times during the year (3 meetings completed)
- Explored the New Standards and shifts in instruction
- Reviewed rubrics, and are reviewing multiple curricular resources
- Will chose a curricular resource for Earth and Space Science (ESS), Biology, Chemistry, and Physics
- Learning targets drafted and in review
- Recommendation to adopt curricular resources
- 9th grade team will build a scope and sequence for ESS

K-12 Science Implementation



K-5 Science

- *THIS* year, 3rd grade completes a “soft” adoption
- 4th and 5th join *next* year, in preparation for the MCA IV in 2024-25
- Two years from now K-5 will fully adopt Discovery Education

6-8 Science

- *THIS* year, 6th grade completes a “soft” adoption
- 7th to join *next* year
- Two years from now 8th will join, prior to the MCA IV in 2024-25

9-12 Science

- Next year Earth and Space Science, introduced in 9th grade
- Biology will adopt the new standards in 2024-25 (MCA IV)
- Chemistry and Physics will follow in 2025-26

Questions?

