

# K - 5 Science Instructional Materials Recommendation

Board Presentation  
April 2024



PORTLAND  
Public Schools

# Agenda

1. Background
1. Overview of AIR Committee and Field Test Process and Results
  - a. Community Engagement
1. Recommendation

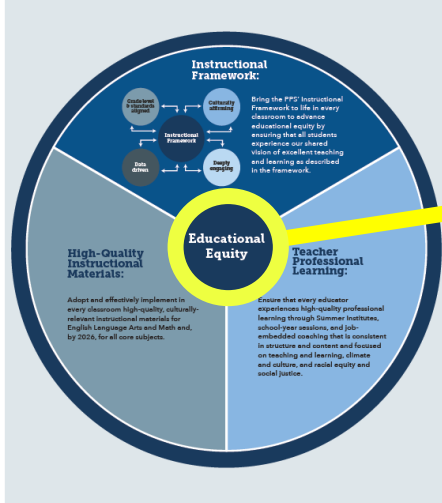
# Our Why: Educational Equity



## Our Roadmap Toward Educational Equity for All PK-12 Students

PPS is committed to providing all students with high-quality teaching and learning in every classroom, every day - instruction that helps them achieve our Graduate Portrait and closes persistent gaps in outcomes based on race.

In partnership with teachers, school leaders, and staff from across the district, we're taking several important steps to make this vision a reality for all students: collaborating around a new instructional framework that articulates a shared vision of highly effective teaching and learning, adopting new curricula to support that instruction, and offering improved professional learning experiences for teachers aligned to both.

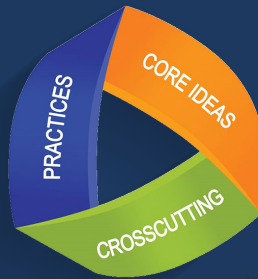


Our Why:  
Educational  
Equity

Raising the achievement of all students while (1) eliminating the gaps between the lowest and highest performing students and (2) eliminating the racial predictability and disproportionality of which student groups occupy the highest and lowest achievement categories.

# K - 12 Science Education for Every Student: The Vision

“Equity in science education requires that all students are provided with equitable opportunities to learn science and become engaged in science and engineering practices; with access to quality space, equipment, and teachers to support and motivate that learning and engagement; and adequate time spent on science. In addition, the issue of connecting to students’ interests and experiences is particularly important for broadening participation in science.” (NRC, 2012).



# Current Core K - 5 Science Materials

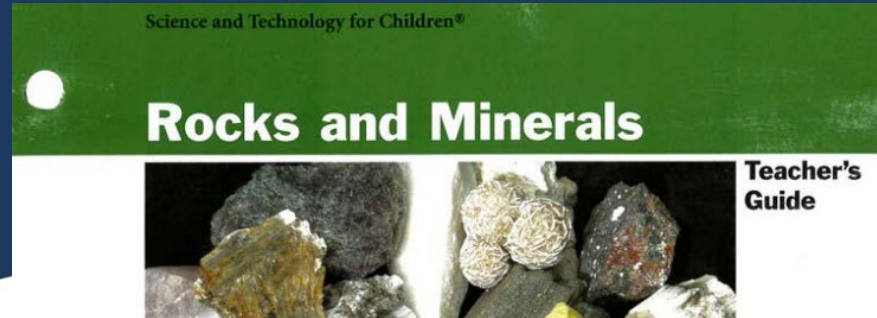
K - 5 Science in PPS is taught in rotation with Health and Social Studies during a 45 - 60 minute block of the school day. In October 2021, the Oregon Department of Education adopted updated science standards for K - 12 instruction. These are what we know as Next Generation Science Standards, common referred to as NGSS.



Our current Science instructional resources are partially standards aligned. Each grade level is assigned 3 units of study per school year. Two of the three are standards aligned. The third unit is more than 20 years old, and as such, not NGSS aligned.

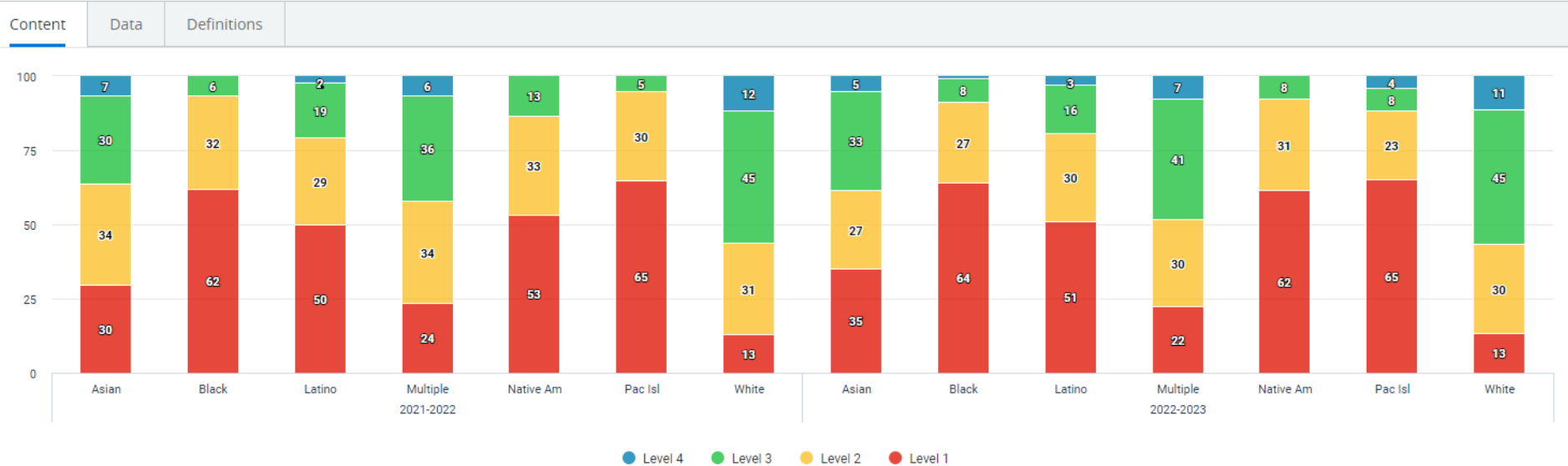


| Grade 3   |
|---|
| Rotation 1: 3LS- <a href="#">The Buzz About Survival</a>    |
| Rotation 2: 3ES - Rocks and Minerals*                       |
| Rotation 3: 3PS - <a href="#">Forces &amp; Interactions</a> |



# 5th Grade Science OSAS Data

State Achievement by Race: Next Gen Science [All Years]



# Timeline Overview

Feb. - Mar. 2023

Professional Learning  
and Evaluation Tool  
Consensus

Initial Materials  
Evaluation

Apr. - May 2023

Vendor Presentations

May 2023

Field Test Vendors  
Selected

- Amplify
- TWIG
- Carolina  
Smithsonian

Aug. '23 - Feb. '24

K-5 Science Field Test

- Professional Learning
- Evaluations
- Community Engagement
- Final AIR committee Meeting

April 2024

Materials  
Recommendation to  
School Board

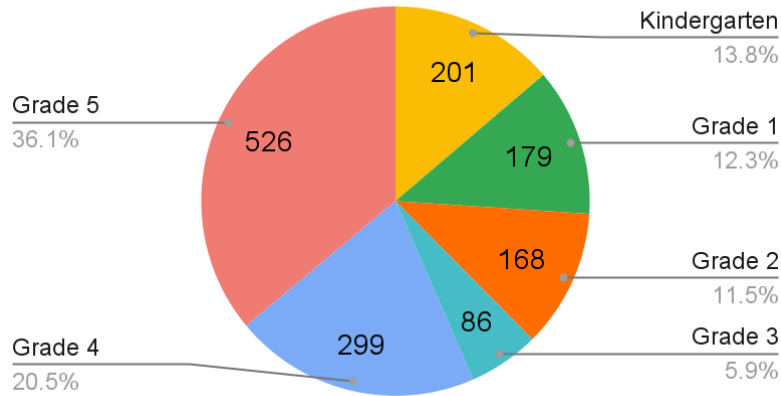
# K - 5 Science Field Test Participation

| Participating Schools (34)<br>*DLI (8)   |   | Number of Educators/Grade Level/Program   |
|--|---|---|
| Access<br>*Ainsworth<br>Astor<br>*Atkinson<br>*Beach<br>Beverly Cleary<br>Bridger Creative Science<br>Buckman<br>Chapman<br>Creston<br>Faubion<br>Forest Park<br>Glencoe<br>Hayhurst<br>Irvington<br>Laurelhurst | Lewis<br>Llewellyn<br>Marysville<br>Peninsula<br>*Richmond<br>Rieke<br>*Rigler<br>*Rose City Park<br>Sabin<br>*Scott<br>Skyline<br>Stephenson<br>Vernon<br>Vestal<br>Whitman<br>Winterhaven<br>*Woodstock | Kindergarten - 8<br>First Grade - 6<br>Second Grade - 7<br>Third Grade - 4*<br>Fourth Grade - 12*<br>Fifth Grade - 20*<br>SPED - 1<br>DLI - 9<br><br>*includes 3-4 or 4-5 split |

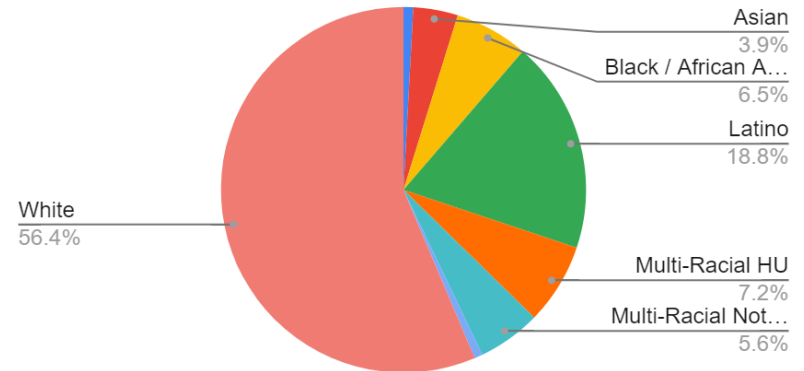


# Students Included in the Field Test

## K - 5 Science Field Test Grade Level



## K - 5 Science Field Test Student Demographics



# Overall Data (live link)

|   | Amplify   | Carolina Smithsonian                             | TWIG Science                                 |                                       |   | Amplify   | Carolina Smithsonian | TWIG Science |
|---|---|--|--|---------------------------------------|---|---|----------------------|--------------|
| <b>Field Test Data</b>  |   |  |  |                                       | <a href="#">K-5 Science Family Night Data</a> | % reflects the number of participants that ranked the |                      |              |
|   | <a href="#">Amplify Lesson Observation Data</a> | <a href="#">Carolina Lesson Observation Data</a> | <a href="#">TWIG Lesson Observation Data</a> |                                       |   |   |                      |              |
| Lesson Observations   |   |  |  | Expectations & Anticipation           |   | 84%   | 60%                  | 44%          |
|   |   |  |  | Content Relevance                     |   | 57%   | 79%                  | 53%          |
| Scored Student Artifacts  | <a href="#">Amplify Student Artifacts</a>       | <a href="#">Carolina Student Artifacts</a>       | <a href="#">TWIG Student Artifacts</a>       | Engagement Potential                  |   | 81%   | 66%                  | 33%          |
|   |   |  |  | Communications & Support Expectations |   | 57%   | 79%                  | 53%          |
| Educator Evaluation Results (overall)   | <a href="#">Amplify Summary Data</a>            | <a href="#">Carolina Summary Data</a>            | <a href="#">TWIG Summary Data</a>            |                                       |   |   |                      |              |
| Part 1 (Oregon Baseline Criteria)   | 2.76  | 2.48   | 2.22   |                                       |   |   |                      |              |
| Part 2 (Equitable Student Engagement and Cultural Pedagogy Criteria)                  | 2.58  | 2.11   | 2.01   |                                       |   |   |                      |              |
| Part 3 (Technical Usability Criteria)   | 2.60  | 2.19   | 2.07   |                                       |   |   |                      |              |
| Part 4 (Assessment Criteria)  | 2.68  | 2.18   | 2.13   |                                       |   |   |                      |              |
| <a href="#">Field Test Educator Final recommendation</a> (weighted average - 5, 3, 1) | 21.44   | 17.44  | 14.11  |                                       |   |   |                      |              |
| <b>Overall respondents: (Submitted/Expected)</b>                                      | 19/24   | 19/27  | 16/23  |                                       |   |   |                      |              |

# AIR Committee Elevator Speech

The **recommendation** being delivered to Kristina Howard, Interim Chief Academic Officer regarding the K-5 Science adoption is Amplify Science Instructional Materials. This recommendation was made after extensive research into 12 different curricula. The Advisors on Instructional Resources Committee and Field Test Educators recommend Amplify for its strong instructional practices, student discourse, alignment to NGSS instruction and scaffolds for our students receiving special education services and Multi- language learners. We are excited for the future of Science in Portland Public Schools and are committed to the successful implementation of Amplify and the anticipated success of our students.

## March 2024

- Recommendation considered and confirmed by Kristina Howard
- Science Curriculum approved by board

## April - May 2024

- Finalize Contract & Order Curriculum
- Ongoing communication with school based staff on PDs & Implementation
- Communicate Pacing Guides, Scope & Sequence and Master Schedule Guidance

## June & August 2024 Initial Teacher Training

## Sept 2024- June 2027

- Ongoing support to ensure integrity of implementation

**Thank you for your time and commitment to PPS students!**

If you have any questions please contact:

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