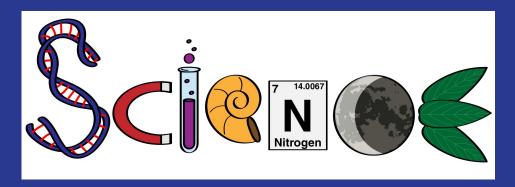


# Science Adoption

LCSD School Board Presentation March 12, 2024



# LCSD Science Curriculum Adoption Team



- 4 Specialists (ELD and Behavior, Special Education, Technology, and Mentor)
- 1 Representative from the Confederated
   Tribes of the Siletz Indians
- 1 Representative from HMSC
- 7 Secondary Science Teachers
- Teachers from all four areas and secondary buildings served on the adoption committee.

**Committee Members:** Aaron Belloni, Ben Ewing, Colton Blaser, Nat Richman, Ale Turnbull, Sara Pursel, Peter Herrmann, Jerry Guthrie, Janice Venture, Natalia Aguilar, Mary Crawford-Roberts, Laura Blair, Tracy Crews, Peter Hatch

### **Identification of Priorities**



- Review of district mission and vision
- LCSD Science Program Review
- Discussion around need for cultural awareness in curriculum

### **Evaluation Criteria**

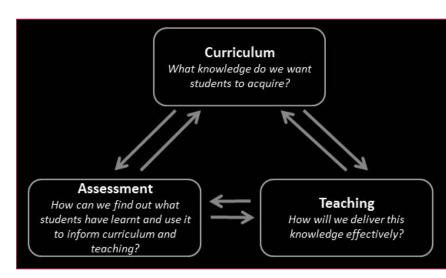
|                 | Science (2024-2031)   |        |
|-----------------|---|--------|
|                 | Overall Rating  |        |
| Publisher:      | CONTRACTOR OF THE PROPERTY OF |        |
| Title:          |   |        |
| ublishing Date: |   |        |
| Category        | ▼   |        |
| Review Date:    |   |        |
|                 | Legal Requirements  |        |
|                 | Part 1: Oregon Science Baseline Criteria  | Rating |
|                 | Criterion 1.1 Alignment to Three-Dimensional (3D) Learning  | 2.8    |
|                 | Criterion 1.2 Science Phenomena & Engineering Design-Based Engagement   |        |
|                 | Criterion 1.3 Learning Progressions & Coherent Storylines   |        |
|                 | Part 2: Equitable Student Engagement and Cultural Pedagogy Criteria   | Rating |
|                 | Criterion 2.1 Engagement & Motivation   |        |
|                 | Criterion 2.2 Culturally Responsive Instructional Support   |        |
|                 | Part 3: Technical Usability Criteria  | Rating |
|                 | Criterion 3.1 Supports for Teachers   |        |
|                 | Criterion 3.2 Supports for Students   |        |
|                 | Criterion 3.3 Digital Learning Design Elements*   |        |
|                 | Part 4: Assessment Criteria   | Rating |
|                 | Criterion 4.1 Formative Assessment Process  |        |
|                 | Criterion 4.2 Performance Assessments   |        |
|                 | Criterion 4.3 Integrated Assessment System*   |        |
|                 | Overall Rating  | 11     |
|                 | *This criterion is not required. Quality indicators are provided for evaluation if digital  |        |

- Review of ODE provided rubric
- Agreement of priority standards
- Review and rating of scores for individual curricula

## What curricula to pilot? Wanted to pilot 3 for MS & HS

Using ODE Instructional Materials Evaluation Tool (IMET):

- Step 1 Removed curricula not approved
- <u>Step 2</u> Reviewed priority criteria on IMET Tool
  - 2.1 Engagement and Motivation
  - 2.2 Culturally Responsive Instructional Support
  - 3.2 Supports for Students
  - 3.3 Digital Learning Design Elements
- Step 3 Revisited any "1" scores on our lower priority IMET standards
  - o **3.1** Supports for Teachers
  - 4.2 Performance Assessments
    - Resulted in keeping Stile and Twig in the mix (both received a "1" in one assessment standard)



# Step 2 - Piloting & Data Collection

- December 2023 through February 2024
  - each curriculum piloted in classrooms
- Teacher & Student feedback collected



#### Science Curriculum Evaluation Tool

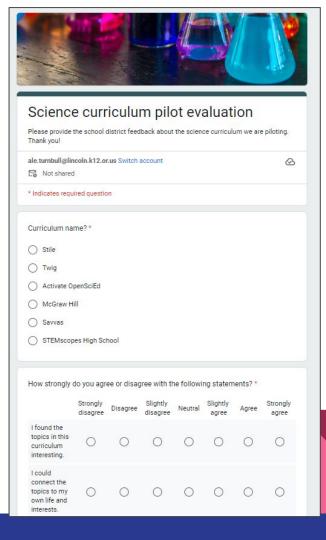
| Evaluator: |                      |
|------------|----------------------|
|            |                      |
| Program:   | Lesson/Unit Piloted: |

As you pilot each curriculum, fill in the following organizer to keep track of your thoughts. Use a separate page for each program you pilot. Make sure you provide feedback on <u>both</u> of the following sections:

- · Overall evaluation
- Priority criteria make sure to review the linked IMET tool to see what is included in the criterion

Feel free to note any questions you have for the publisher and provide feedback on the "Other criteria" if you wish.

| Overall Ev   | aluation                   |
|--|----------------------------|
| What went well?  | What needs to be improved? |
| Priority C   | Criteria                   |
| Criterion  | Comments                   |
| 2.1: Engagement and Motivation                               |                            |
| 2.2: Culturally Responsive Instructional Support             |                            |
| 3.2: Support for Students                                    |                            |
| 3.3: Digital Learning Design Elements                        |                            |
| Questions for the publisher:                                 |                            |
| Other Cr   | riteria                    |
| Criterion  | Comments                   |
| 1.2: Science Phenomena & Engineering Design-Based Engagement |                            |



# **Step 3 - Curriculum Selection**

- Reconvened pilot teachers
- Reviewed priority criteria
- Reviewed each Curriculum
   Evaluation Tool submitted by pilot teachers
- Analyzed student data and feedback
- Made final decision on selected curriculum



### Middle School - Curricula Piloted

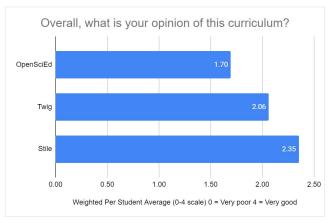
# **Stile Education S**

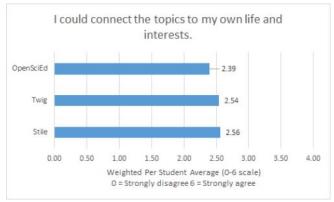


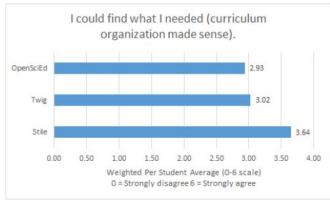
**OpenSciEd with Activate Learning** 



### Middle School - Student Data







# Middle School Curriculum Request Upon Evaluation

- The process led the team to recommend Stile Education for adoption
  - Most apt resource to meet the needs of all learners and staff
  - Ability to update throughout the next 6-years
  - Multiple languages available
  - Media rich
  - US headquarters in Portland



# Middle School Request to the Board

Core Materials Adoption Cost: \$155,000

### **Adoption of Stile Includes**

- Student Digital Licenses 6 years
- 2. Stile-X workbooks, per unit, per grade
- Two Digital Teacher Stile Licenses per building, per grade
- 4. Lab Kits: per unit, per grade
- 5. Professional Development





# High School - Curricula Piloted

**McGraw Hill** 



**SAVVAS** 



**Accelerate Learning** 

AccelerateLEARNING



## High School Student Feedback - McGraw Hill

### **Chemistry:**

"Hard to understand what the questions are asking. I understand that they want a specific answer. The questions are worded so that lots of things would work but it is unclear what they are looking for."



<u>Positive:</u> Format was easy to follow and visuals were helpful.

**Negative:** Instructions were overblown and difficult to figure out what was supposed to be present.

<u>Teacher Perspective:</u> in general, students find the Reading Essentials helpful but these are only available for Biology and not other subjects.

### **High School Student Feedback - SAVVAS**

#### **Chemistry**

#### **Positive:**

- Not too cluttered
- Good analogy that helps me understand concepts.
- Highlights important information well.
- Colors are easy on the eyes and not over/underwhelming lead me to the right information
- Motion lines which are actually really nice and make collision reactions make sense
- Walk through labs with pictures to show individual steps.
- Has a molecular view of some reactions as well.
- Table of contents shows specific parts of the chapter rather than just the broad subject.

#### Negative:

- Some Graphs don't have lines or unit values to help understand them better.(still get the point across)
- Flimsy pages (hard cover available)
- Lots of reused photos.

#### **Biology**

<u>Positive:</u> "I did what I thought it was asking." "I think I get it."

<u>Negative:</u> "I don't understand what this is saying" "Pictures would be helpful."

Teacher perspective: the assignment required students to apply their learning to a new situation and there were multiple ways to interpret the directions. Teacher prompting allowed students to interpret questions better.



# High School Student Feedback - Accelerate Learning

### **Chemistry:**



#### **Positive:**

"I think the multiple choice questions were good because it made it less complicated."

### Negative:

"The questions were mediocre because they didn't explain them thoroughly enough, for example, they did not explain the meaning behind the words they were asking."

"The questions were okay. I would've liked the multiple choice to be more difficult."

### **Biology**

<u>Positive:</u> "This is easy." "I know exactly what to do." "I've used things like this in middle school."

Negative: "Why is this talking about Shakespeare?" "I don't understand what Shakespeare has to do with Biology." "This is boring."

Teacher perspective: questions did not activate student higher level thinking, but the tie in to their English class was a great conversation starter. Students may have a bias from seeing similar materials in middle school and some reacted negatively due to the format.

# High School Curriculum Request Upon Evaluation

- The process led the team to recommend SAVVAS for adoption
  - Most robust materials both online and in print including detailed Teacher's Edition
  - Differentiated materials including labs plus suggested activities for diverse learners
  - More opportunities for students to bring in individual experiences than other options
  - Workbook options could benefit all learners
  - More Spanish and other language options
  - Visually appealing for students
  - Lab kits for some subjects

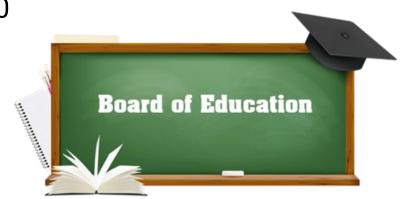


# **LCSD Request to the Board**

Core Materials Adoption Cost: \$157,000

### Adoption of Savvas Includes

- 1. Student Digital Licenses 6 years
- Classroom sets of texts (including some Spanish Biology texts)
- 3. Two Teacher's Editions per building, per grade
- One Digital Teacher License per building, per grade
- 5. Initial Lab Kits for Chemistry
- 6. Professional Development





# **Next Steps for Adoption**

- Materials Preview Period (texts) for community feedback
- Science Cadre meet and align scope and sequence and resource integration
- Provide ongoing professional development for staff in use of materials and resources

