

Science Adoption Selection Process

Middle School



Board Presentation

April 27, 2022

Why are we adopting science materials?

- Students need **equitable access** to NGSS-aligned materials in order to meet the performance expectations outlined in the NGSS
- Next Generation Science Standards (NGSS) curriculum framework adopted by the state of California in Nov. 2016
- MDUSD purchased supplementary materials for some courses in 2018
- California Science Test (CAST) is a cumulative measure of student proficiency in the NGSS (taken in 5th grade, 8th grade, and once in high school)

Steps in the Materials Selection Process

- **Survey sent to publishers on approved CDE list** (K-8) requesting information regarding non-negotiables
- **Staff collected adoption information** from neighboring districts
- **Adoption committee created** - teachers could opt to be on the team, meetings held outside the work day with compensation, mostly on Zoom
- **Internal team reviewed** survey responses and sent invitation to publishers for demonstrations
- **Publishers presented** (virtually) their materials to adoption committee members
- **Materials review** - committee members, teachers, community members evaluated each vendor at Willow Creek Center using a modified version of the CA NGSS Toolkit for Instructional Materials Evaluation (TIME) tool



Steps in the Materials Selection Process



- Adoption committee discussed materials (in-person), reviewed responses, and **selected publishers to pilot**
- **Committee members were trained by the publishers** in each program
- **Committee members piloted/reviewed the three programs** and evaluated specific areas relating to the TIME tool and the programs' ability to all support students in accessing the NGSS
- **Data collected from committee members and students** via surveys about their experiences
- **Committee members met** to discuss their experiences and review data from both publishers and **voted individually for one program**
- **Staff worked with vendors to finalize quotes**

Who was involved in the middle school materials selection process?

- Committee participation was voluntary and open to all high school teachers
- Meetings were held after school, mostly on Zoom, due to COVID

Teachers

Randy Monroe - Foothill
Shauna Lim - Pleasant Hill Middle
Laura Wilson - Pleasant Hill Middle
Corrie Garner - Foothill
Greg Conlin - Riverview
Abel Vanegas - Riverview
Brian Tibbot - Oak Grove
Elisa Mendoza - Sequoia Middle
Erika Guderian - Valley View
Ian Maslen - El Dorado
Jeryl Walker - El Dorado
Julia Civitello - Riverview

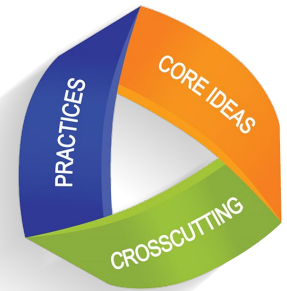
Karen Christensen - Pine Hollow
Katy Cachiotis - El Dorado
Monica Ravin - Pleasant Hill Middle
Tara Mann - Pine Hollow Middle
Devin Jackson - Foothill
Rachel Hagen - Pine Hollow

Facilitators

Sarah Bricker - Science TOSA
Megan Gerds - Curriculum Specialist



Criteria for Middle School Selection



Students Interaction with Phenomena

- Engage with phenomena as directly as possible to ask and answer questions
- Experience phenomena directly or through rich multimedia
- Facts/terminology are learned as needed while developing explanations

Provides Support for Diverse Learning Needs

- Sufficient and Appropriate
- ELL
- Learning Differences

Students Demonstration of Knowledge

- Students have ample opportunity to demonstrate their knowledge through various forms of assessment
- Assessments match the targeted learning goals
- Elicit evidence of students' use of the 3 dimensions. Makes sense of phenomena and design solutions to problems.

Teacher Usability

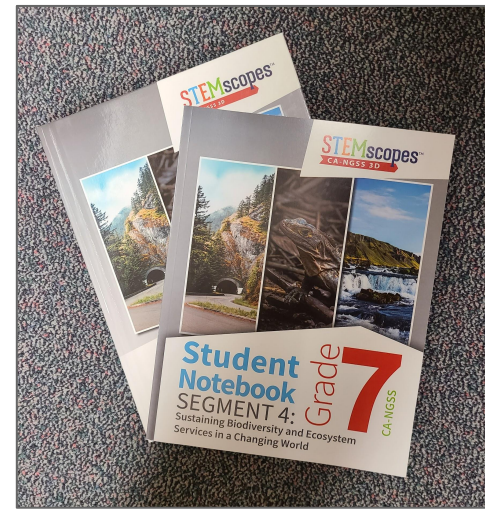
- Ease of Use
- Readability
- Materials

- Used a modified version of the TIME tool provided by the CDE

Rationale for the Middle School Decision

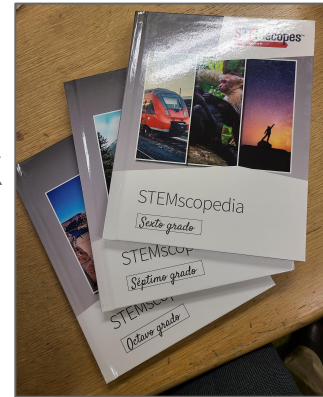
■ Middle School Science - STEMscopes

- ▷ Scopes are organized and structured via 5E method
- ▷ Labs are engaging and in-depth, many different activity options
- ▷ Online user interface is easy to use for students and teachers
- ▷ Teacher's manual was user-friendly and simple to use
- ▷ Digital assignments are editable and printable



Middle School Program Costs

- 8 year adoption
- Teacher's guides and access to online curriculum
- Student print & online materials - textbook and consumable notebook
 - ▷ Consumable notebooks sent yearly for 4 years
 - ▷ Spanish materials available as needed
 - ▷ Teachers have option to edit and print materials via our Print Shop
- Materials kits and refills as needed
- Professional Development for both the initial rollout and ongoing needs
- Total Estimated Cost for 8 years
 - ▷ Approximately \$1,721,000 (not to exceed \$1,725,000)





Board Q&A