Science Adoption Selection Processes

Elementary Schools

Board Presentation

April 13, 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 some Engineering is Elementary kits as supplementary materials
- 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 (in-person!) materials review responses and **selected two publishers to pilot**
- **Committee members were trained by the publishers** in each program
- **Committee members piloted both programs** evaluating 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 from both publishers and **voted individually for one program**
- **Staff worked with vendors to finalize quotes**

Who was involved in the elementary materials selection process?

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

Teachers

Tracy Bartlett - Strandwood
Deanne Giffin - Bancroft
Iñaki Reta Moreno - Ygnacio Elem.
June Kirske - El Monte
Leda Tully - Meadow Homes
Megan Busker - Westwood
Rachel Proctor - Walnut Acres
Rhonda Galanter - Valle Verde
Nicole Garcia - Shore Acres
Marisa Lujan - Ayers
Alison Wilkey - Rio Vista
Jamie Bohannan - Fair Oaks
Virginia Alexanian - Westwood
Wendy Townlin - Sun Terrace
Alicia Sanchez - Hidden Valley
Joanie Cuneo - TOSA (did not vote)
Cristina Columbram Marques - Ygnacio Valley Elem.
Erika Austen - Valhalla
Gerald Hewitt - Sunrise
Gordon Miller - Shore Acres
Henar Requejo Martinez - Holbrook
Julie Kennedy - El Monte
Kathleen Hoffmann - Strandwood
Kimberly Chamberlain - El Monte
Kristen Thompson - Fair Oaks
Mariteresa Arenson - Walnut Acres
Bryan McShane - Ayers
Frith O'Steen - Walnut Acres
Andrea Ramirez - Sequoia Elem

Facilitators

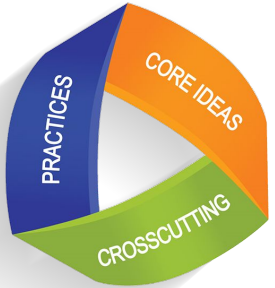
Mandi Smith - Science TOSA
Megan Gerdts - Curriculum Specialist

Criteria for Elementary Selection

- Used a **modified version of the CA NGSS Toolkit for Instructional Materials Evaluation (TIME) tool** provided by the CA Dept. of Education

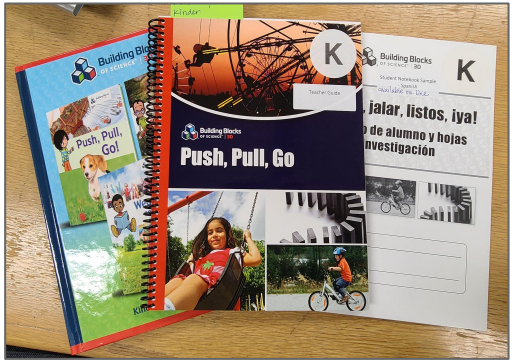
Criteria	What students are doing
Uses Phenomena • Engage with phenomena as directly as possible to ask and answer questions • Experience phenomena directly or through rich multimedia	☐ Investigating (hands-on) ☐ Writing/Reading ☐ Discussing ☐ Watching a video ☐ Watching the teacher do a demonstration ☐ Doing a simulation
Student Centered Investigations • Students make sense of phenomena through hands-on investigations and asking/answering questions • Facts/terminology are learned as needed while developing explanations	☐ Investigating (hands-on) ☐ Writing/Reading ☐ Discussing ☐ Watching a video ☐ Watching the teacher do a demonstration ☐ Doing a simulation
Provides Support for Diverse Learning Needs Sufficient and Appropriate • DL and ELL • Learning Differences	

Assessment Evidence	☐ Formative ☐ Summative ☐ Discussion ☐ Performance Task ☐ Multiple Choice ☐ Other _____
Teacher Usability • Ease of Use • Readability • Materials	☐ On-line and print are equivalent ☐ Online experience is comparable to in class experience. ☐ Front Matter is helpful provides needed background knowledge ☐ Links to google classroom easily ☐ Text is editable /read aloud option ☐ Tech support for teachers in real time (IRT) ☐ Spanish and English materials are equivalent
Materials Kits	☐ Provided materials kit was adequate to teach the lesson. ☐ Materials support student learning. ☐ Materials are necessary to teach lesson; materials are not an unnecessary add on

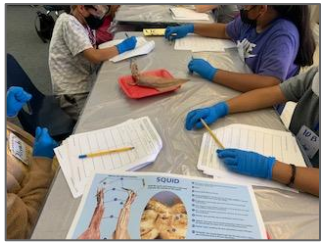


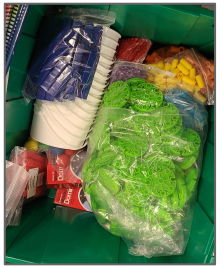
Rationale for the Elementary Decision

- **Carolina Biological** is the publisher that the committee is recommending we adopt
- Engaging investigations that easily held student interest in a long-lasting way
- NGSS was very accessible for all learners and the curriculum connected together well
- Diverse learners were engaged with the number of hands-on activities
- Teacher guide and online collaboration platform is easy to use and investigation prep videos for teachers were well-done and helpful



Elementary Program Cost





- 8 year adoption
- Teacher's guides, Basecamp platform access
- Student print & online materials - textbook and consumable notebook
  - Consumable notebooks refurbished yearly
- Hands-on base materials kits
  - Vouchers provided for refurbishment of consumables yearly
- Professional Development for both the initial rollout and ongoing needs for the length of the adoption
- Total Estimated Cost for TK-5 science materials for 8 years
  - $4,123,969.66 (includes shipping and tax)

Board Q&A