

Science

Instructional Materials Selection Process



Grades TK-8

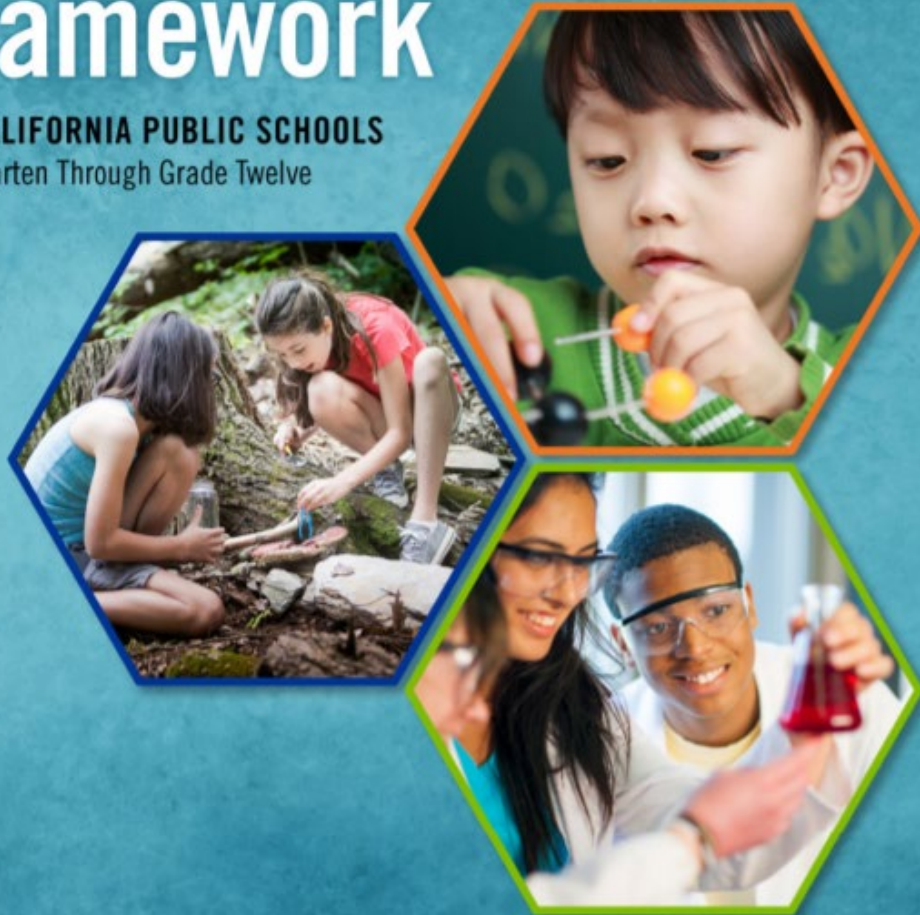
March 3, 2020

Our Considerations for Adopting Materials

Science Framework for California Public Schools

Science Framework

FOR CALIFORNIA PUBLIC SCHOOLS
Kindergarten Through Grade Twelve



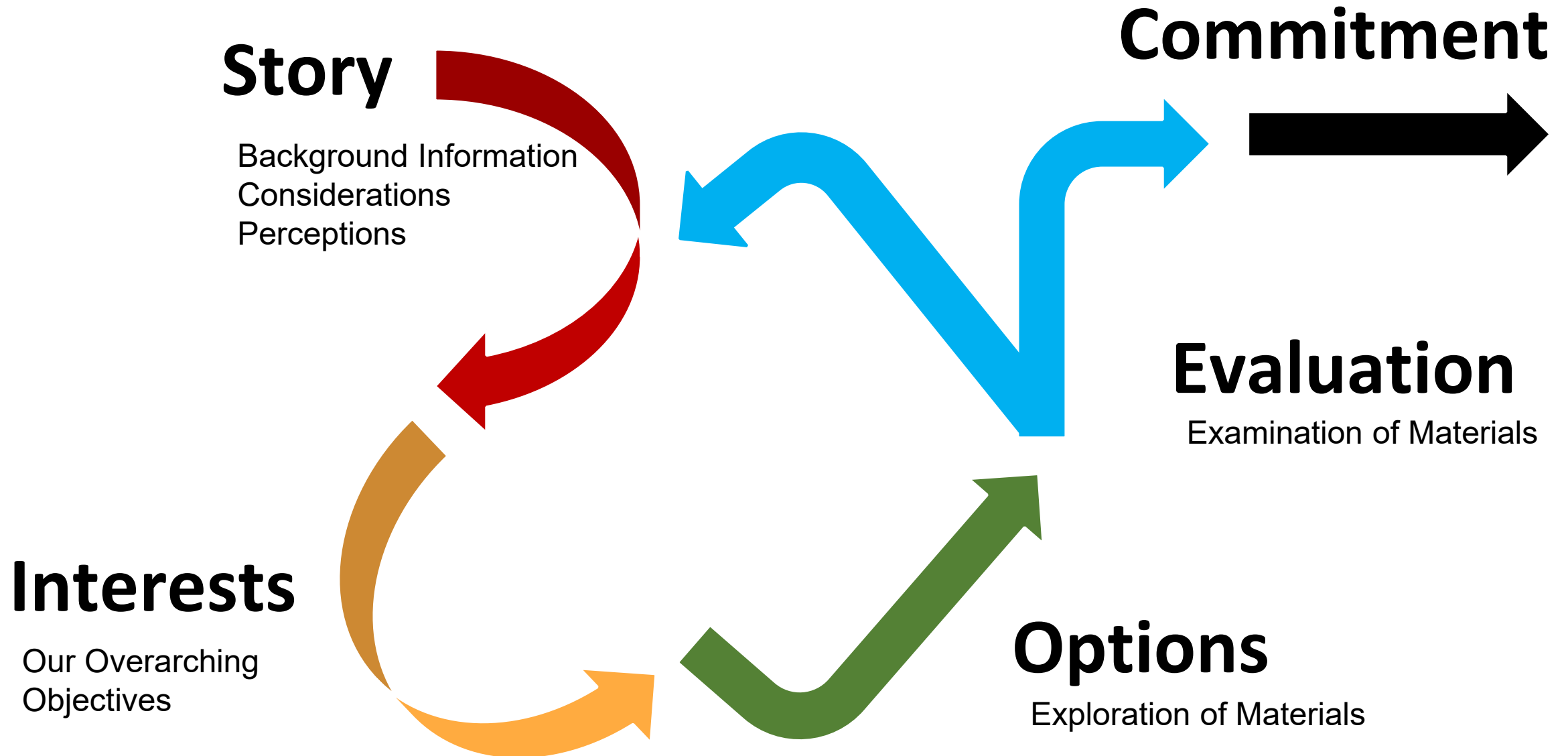
“This new Science Framework supports the goals of the California Next Generation Science Standards. This framework includes an emphasis on student inquiry. The classroom teacher serves as a facilitator to help students investigate scientific phenomena and principles of engineering through experiments and other activities that foster critical thinking. The framework provides guidance to educators on how to address the standards through the use of classroom snapshots, descriptive lesson vignettes, and examples of engineering-based projects.”

Supporting the Instructional Shifts

- *Students learning content, concepts, and skills*
- *Students learning science in real-world contexts*
- *Students making sense of science*
- *Students thinking and acting like a scientist*
- *Teachers facilitating learning*



Our Considerations for Adopting Materials



K-8 Mutual Interests

IUSD Science

College and Career Readiness for ALL Students

Clear Communication for ALL Stakeholders

Equity of Access and Consistency of -- Experience for ALL Students

Engaging Science Experiences with Real World Applications for ALL Students

Instructional Needs of ALL Student Met Appropriately

Manageable and Strategic Transition to NGSS for ALL Stakeholders

Teacher and Administrator Efficacy, Readiness, and Preparedness

Growth Mindset Reinforced by Resources and Instruction

Vertical Articulation Supported by Resources

Flexibility of Resources

Sustainability of Resources

Our Considerations for Adopting Materials

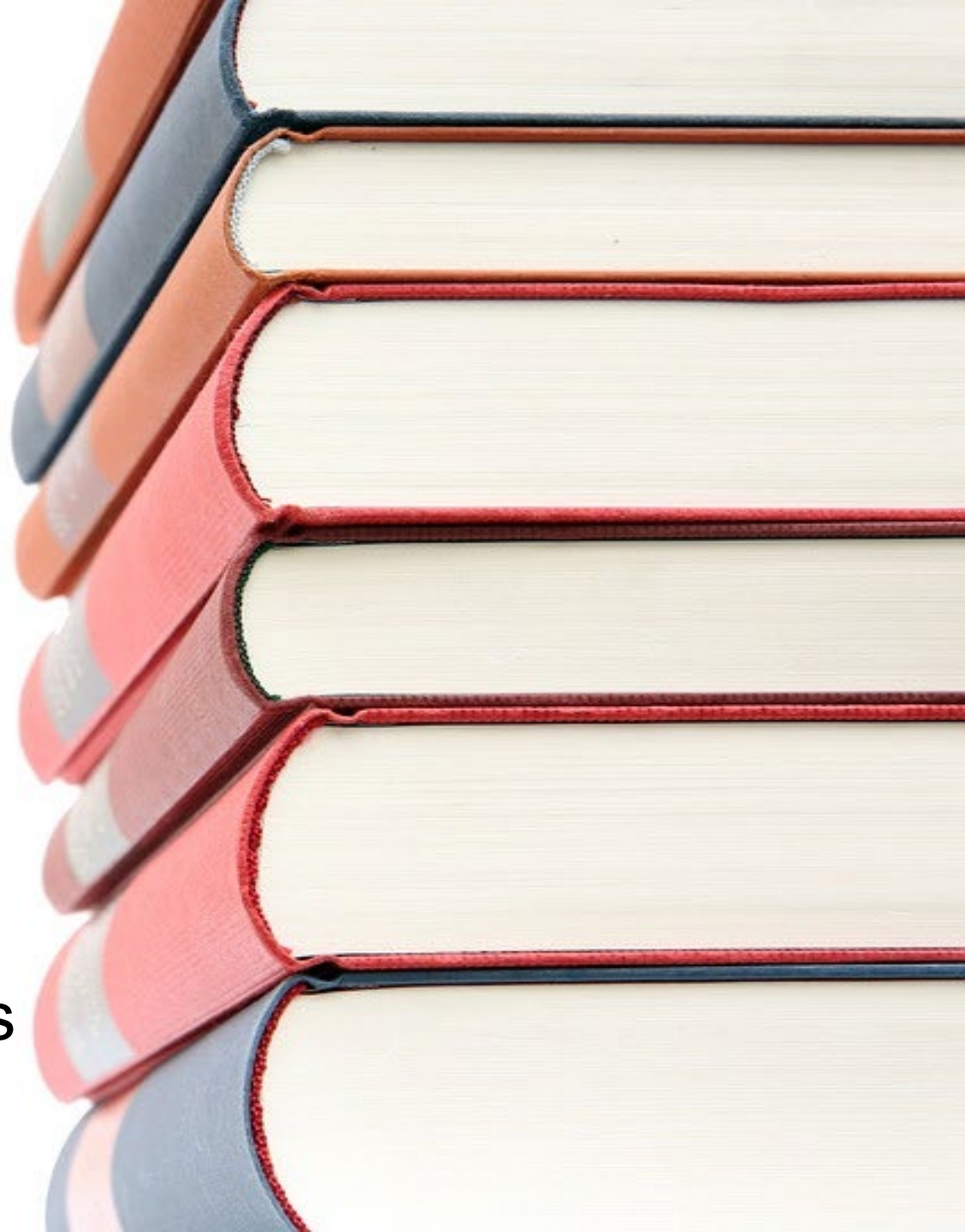
Science Adoption Toolkit

Components and Indicators	Extensive 4	Adequate 3	Inadequate 2	Limited 1
A. Presence of Phenomena/Problem The materials include p/p that <ul style="list-style-type: none"> Have the potential to drive student learning & relate across the dimensions The three dimensions are potentially sufficient and appropriate for students to figure out the phenomena or problems 	The materials include p/p that have excellent potential to drive student learning toward the targeted learning goals.	The materials include p/p that have strong potential to drive student learning toward the targeted learning goals.	The materials include p/p that have some potential to drive student learning toward the targeted learning goals.	The materials include p/p that have little potential to drive student learning toward the targeted learning goals.
Examples:	<ul style="list-style-type: none"> Investigative and anchoring phenomena are linked, mostly engaging for students, and revisited 	<ul style="list-style-type: none"> Phenomena not always (but sometimes) engaging, sometimes local & sometimes explicitly called out 	<ul style="list-style-type: none"> Examples, but not in service of sensemaking 	<ul style="list-style-type: none"> Phenomena don't cause students to wonder/ask Qs Phenomena are more like "topical" examples than actual phenomena
More of This...		Less of This...		
Phenomena/Problems are central to student learning; require the application & understanding of grade-appropriate SEPs, CCCs, & DCIs for sense-making.		Making sense of phenomena and designing solutions to problems may be used occasionally as engagement strategies but are not a central part of the learning.		
Phenomena are relevant and engaging to student learning and cause students to ask questions that they want to answer.		Topics, rather than phenomena are used to direct student learning experiences and are not necessarily designed to answer student questions.		
Students experiencing phenomena directly or through rich multimedia.		Only talking or reading about phenomena or how other scientists and engineers engaged with phenomena and problems.		
Evidence				

- Presence of Phenomena/ Problem
- Presence of Three Dimensions
- Equitable Learning Opportunities
- IUSD Mutual Interests

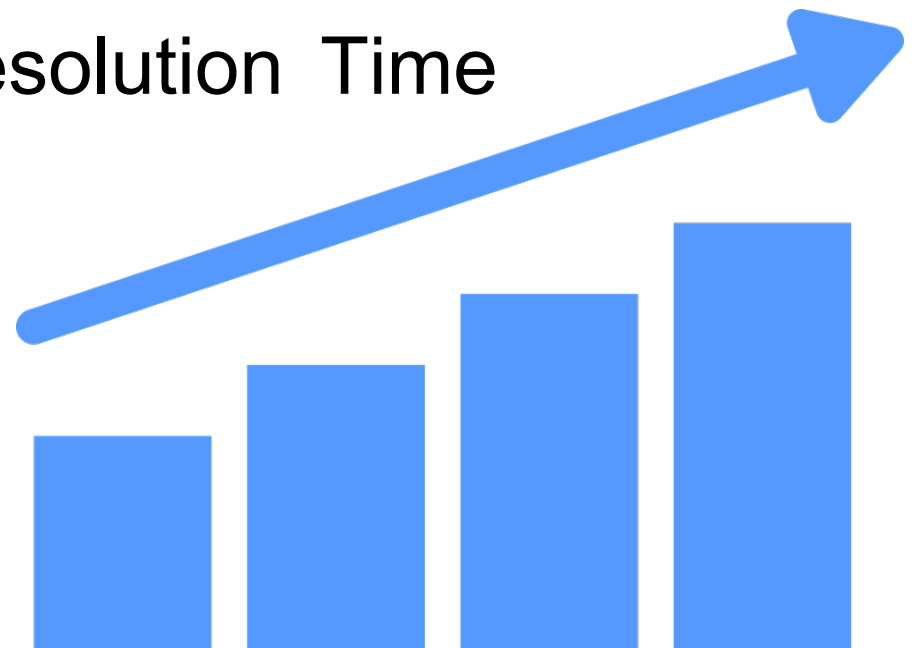
Reviewing the Pilot Process

- Steering Committee
- Selection Committee
- Piloting Teacher Trainings
- Classroom Visits
- Debrief Meetings
- Parent Events
- Teacher, Parent, & Student Surveys
- Deliberation and Decision Day



Data Review for Recommendation

- Parents, Teachers, and Student Surveys
- Phase 1 and 2 debrief notes and scores
- Helpdesk Data: Response and Resolution Time
- Evidence of Student Learning



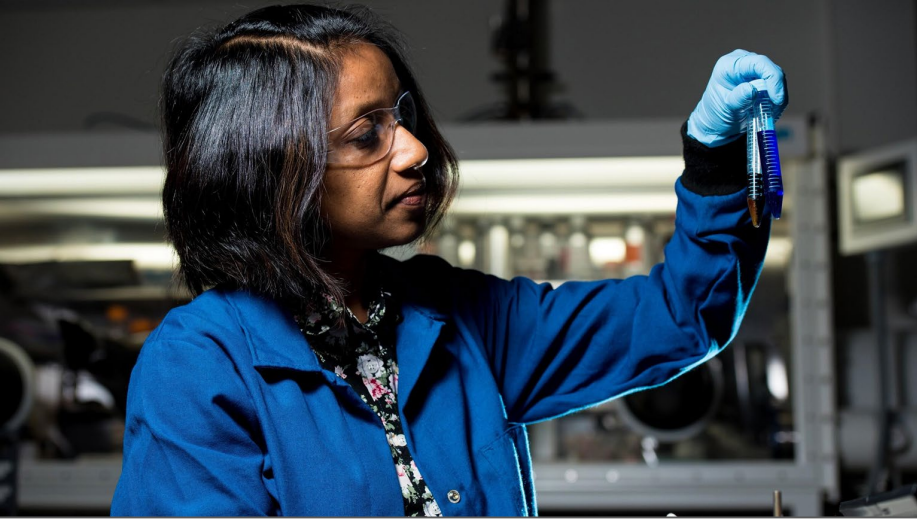
Recommended HSS Instructional Materials

TK-Grade 6

Twig

Grades 7-8
(and Grade 6 at K-8s)

STEMscopes



Thank you

Questions

