

GREAT THINGS ARE HAPPENING IN PARAMOUNT SCHOOLS

Middle School NGSS Science Textbook Adoption Process



Board Of Education Meeting April 8, 2019

Dr. Ruth Pérez, Superintendent
Deborah Stark, Assistant Superintendent, Educational Services
Kelly Morales, Facilitator of Instructional Improvement



Purpose of Presentation

- Provide information on the Next Generation Science Standards (NGSS) and Integrated Science.
- Review the process for evaluating and recommending new science textbooks and materials for implementation in middle schools in 2019-20.



What are the Next Generation Science Standards (NGSS)?

Integration of 3-dimensional learning that addresses understanding and application:

- Science and Engineering Practices: Behaviors for investigating and building knowledge.
- 2. Disciplinary Core Ideas: Key concepts specific to the course content.
- Crosscutting Concepts: Concepts that link various science domains.



PREPARING STUDENTS FOR COLLEGE AND CAREERS

Why the Next Generation Science Standards (NGSS)?

- Address the science expectations of high performing countries to ensure students can complete in the global economy.
- Prepare students to pursue careers in science and engineering-related fields in the 21st Century.
- Include critical thinking and communication skills needed for rapid advancements in science and technology.



PREPARING STUDENTS FOR COLLEGE AND CAREERS



Middle School Science

2017-2018



- Professional development for science teachers
- Science Lead Teacher monthly meetings
- Integrated and Discipline Specific course models discussions
- CA Science Test (CAST) field tested in 8th grade

- Professional development for science teachers
- Science Lead Teacher monthly meetings
- Preparation for Integrated Science in grades 6-8
- State-approved textbooks reviewed by committee
- CAST is operational in 8th grade



NGSS Course Models for 6-8 Science

Discipline-Specific

Grade 6 Earth and Space Science

Grade 7 Life Science

Grade 8 Physical Science

Integrated

Grade 6 Integrated

Grade 7 Integrated

Grade 8 Integrated



What are the Benefits of the Integrated Course Model?

- Standards are based around unifying ideas and are bundled according to natural connections rather than being limited by disciplinary boundaries.
- Teachers can address real-world phenomena, ask questions and seek answers to questions as they connect across disciplines.
- A Science Expert Panel concluded that the integrated model is most effective for optimizing student learning of NGSS in middle school.



PREPARING STUDENTS FOR COLLEGE AND CAREERS

Fall 2018

Communicate course model plan to all science lead teachers, science teachers, and principals

Next Steps

Spring 2019

Select and recommend textbooks that align to the integrated course model

Summer 2019

Provide professional development to prepare teachers to transition from a discipline-specific model to an integrated model

Develop
supplemental
curriculum to
support content
knowledge gaps for
students

Middle School Science Textbook Adoption Committee

Member	Assignment	School
Jennifer HarnettChristina WolfRoxanne Medina	Teacher, grade 6 Teacher, grade 7 Teacher, grade 7	Alondra
Michelle AparicioChristine Bakkers	SDC Teacher, grade 6 Teacher, grade 7	Hollydale
Cara GugginoKristine TurnerMaria GamezMichelle Soto	Teacher, grade 6 Teacher, grade 7 SDC Teacher, grade 8 Assistant Principal	Jackson
Iris LeeCelia GonzalesRene Rodriguez	Teacher, grade 6 Teacher, grade 7 Teacher, grade 8	Paramount Park
Teresa KuglerApril O'Connor	Teacher, grade 7 Teacher, grade 8	Zamboni
Shelley Monroe	Teacher, grade 6	TAP
Maggie Flores	Curriculum Specialist	K-8 Ed. Services

2018-19 Meeting Dates and Topics

Date	Topic	
• October 18	 Understand role of phenomena in science learning Role and responsibility of committee 	
November 6	 Revisit of instruct Accelerate Learning 	
• December 11	 Revisit Discovery Education 	
• January 15	 Share ir Review Fair Fair	
• February 15	 Continut Underst Houghton Mifflin McGraw Hill cepts 	
• March 5	 Process Impact Science materials 	
March 12	 Review Pearson Education 	
• March 18	■ Review eria	
• April 9	 Complete review of materials using NGSS TIME rubric criteria Reach consensus on textbook to recommend for adoption 	
• May 13	 Present recommendation for Board approval for adoption and use in 2019-2020 	



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NGSS: A new vision for science instruction

