



PARAMOUNT UNIFIED SCHOOL DISTRICT

**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

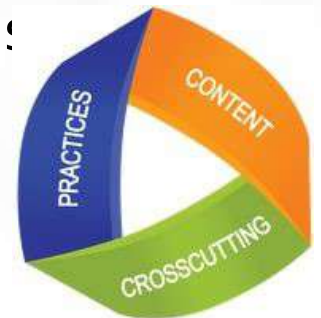
- Provide information on the Next Generation Science Standards (NGSS) and Integrated Science.
- Review the process for evaluating and recommending new science textbooks and materials for implementation in middle schools in 2019-20.



## What are the Next Generation Science Standards (NGSS)?

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

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





## 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 21<sup>st</sup> Century.
- Include critical thinking and communication skills needed for rapid advancements in science and technology.



## Middle School Science

**2017-2018**



**2018-2019**

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



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PREPARING STUDENTS FOR COLLEGE AND CAREERS

## 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.



## Next Steps

Fall 2018

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

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
<ul style="list-style-type: none"> <li>Jennifer Harnett</li> <li>Christina Wolf</li> <li>Roxanne Medina</li> </ul>	Teacher, grade 6 Teacher, grade 7 Teacher, grade 7	Alondra
<ul style="list-style-type: none"> <li>Michelle Aparicio</li> <li>Christine Bakkers</li> </ul>	SDC Teacher, grade 6 Teacher, grade 7	Hollydale
<ul style="list-style-type: none"> <li>Cara Guggino</li> <li>Kristine Turner</li> <li>Maria Gamez</li> <li>Michelle Soto</li> </ul>	Teacher, grade 6 Teacher, grade 7 SDC Teacher, grade 8 Assistant Principal	Jackson
<ul style="list-style-type: none"> <li>Iris Lee</li> <li>Celia Gonzales</li> <li>Rene Rodriguez</li> </ul>	Teacher, grade 6 Teacher, grade 7 Teacher, grade 8	Paramount Park
<ul style="list-style-type: none"> <li>Teresa Kugler</li> <li>April O'Connor</li> </ul>	Teacher, grade 7 Teacher, grade 8	Zamboni
<ul style="list-style-type: none"> <li>Shelley Monroe</li> </ul>	Teacher, grade 6	TAP
<ul style="list-style-type: none"> <li>Maggie Flores</li> </ul>	Curriculum Specialist	K-8 Ed. Services

# 2018-19 Meeting Dates and Topics

Date	Topic
<ul style="list-style-type: none"> <li>October 18</li> </ul>	<ul style="list-style-type: none"> <li>Understand role of phenomena in science learning</li> <li>Role and responsibility of committee</li> </ul>
<ul style="list-style-type: none"> <li>November 6</li> </ul>	<ul style="list-style-type: none"> <li>Revisit of instructional materials for applications for</li> </ul>
<ul style="list-style-type: none"> <li>December 11</li> </ul>	<ul style="list-style-type: none"> <li>Revisit of</li> </ul>
<ul style="list-style-type: none"> <li>January 15</li> </ul>	<ul style="list-style-type: none"> <li>Share in</li> <li>Review</li> </ul>
<ul style="list-style-type: none"> <li>February 15</li> </ul>	<ul style="list-style-type: none"> <li>Continu</li> <li>Underst</li> </ul>
<ul style="list-style-type: none"> <li>March 5</li> </ul>	<ul style="list-style-type: none"> <li>Process</li> </ul>
<ul style="list-style-type: none"> <li>March 12</li> </ul>	<ul style="list-style-type: none"> <li>Review</li> </ul>
<ul style="list-style-type: none"> <li>March 18</li> </ul>	<ul style="list-style-type: none"> <li>Review</li> </ul>
<ul style="list-style-type: none"> <li>April 9</li> </ul>	<ul style="list-style-type: none"> <li>Complete review of materials using NGSS TIME rubric criteria</li> <li>Reach consensus on textbook to recommend for adoption</li> </ul>
<ul style="list-style-type: none"> <li>May 13</li> </ul>	<ul style="list-style-type: none"> <li>Present recommendation for Board approval for adoption and use in 2019-2020</li> </ul>

Accelerate Learning  
 Discovery Education  
 Green Ninja  
 Houghton Mifflin  
 McGraw Hill  
 Impact Science  
 Pearson Education



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# NGSS: A new vision for science instruction

**Students will be doing science, not  
just learning about it**

