

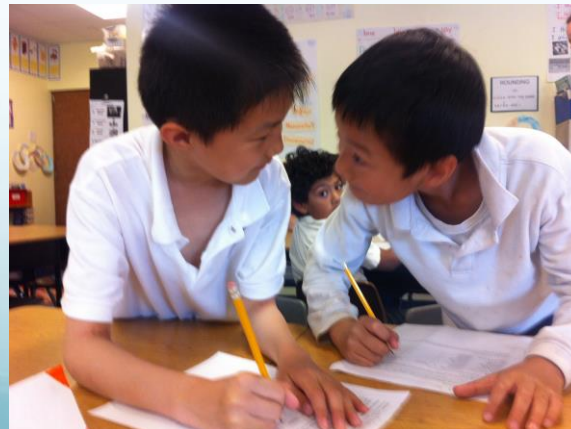
# Introduction to the NGSS

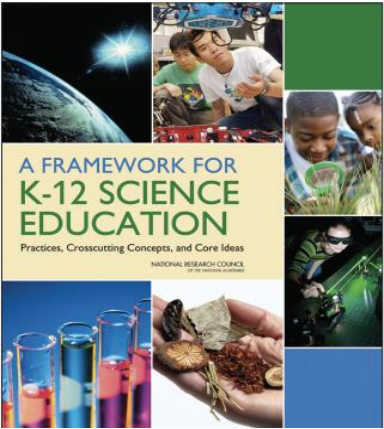
May 4, 2015

Marie Schirmer, Administrator

Jan Robertson, Science TOSA

Bob Miller, Teacher, Pine Hollow





# A Framework for K-12 Science Education

Practices, Crosscutting Concepts,  
and Core Ideas

## A New Vision for Teaching and Learning

- Science for ALL Students
- 3 Dimensional Coherent
- Learning across Grades

# Practices Change Science Education

From the science classroom as environments where students **learn about science ideas**

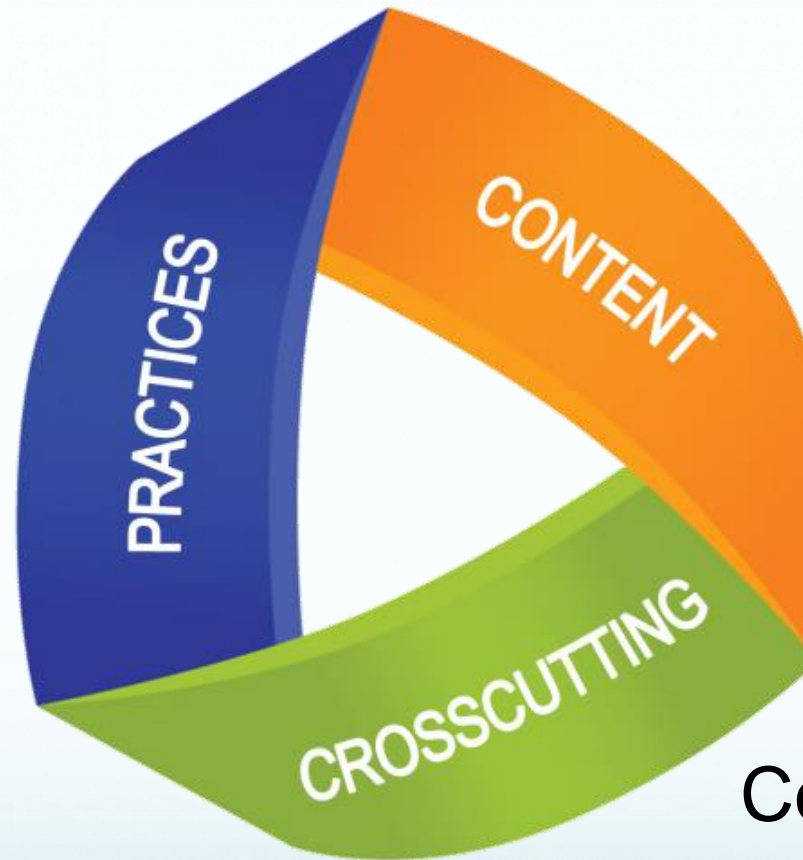


to places where students **explore, examine, and use science ideas** to explain how and why phenomena occur.



# What's in a Logo?

Science and  
Engineering



Core ideas  
in the  
discipline

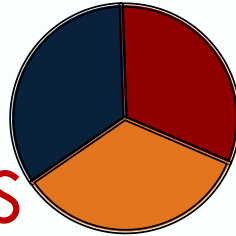
Concepts  
across  
disciplines



# New Science Standards

- CDE adopted the **Next Generation Science Standards (NGSS)** in September 2013
- Like the Common Core, the NGSS represent a huge shift in **how** science is taught and learned.
- NGSS focuses on student sense-making of the natural world.

# Next Generation Science Standards



2011



2012



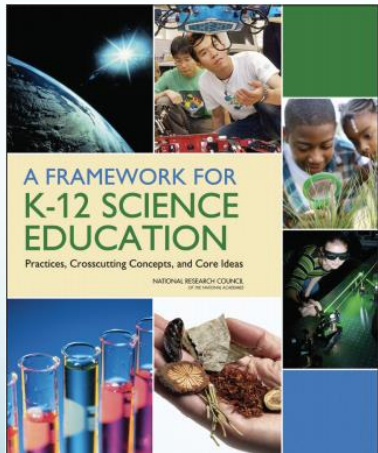
2013



2014

Design Phase

Awareness Phase



**Step 1: Vision  
for Science**



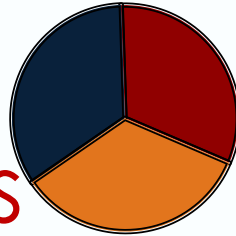
**Step 2: Develop  
NGSS**

CA  
Adoption  
of NGSS

Begin CA  
Science  
Framework

Middle School  
Sequence  
Options  
Announced

# Next Generation Science Standards



2014-  
2015



2015-2016



2016-  
2017



2017-2018

## Awareness Phase

**Initial systems  
planning**  
**Establish  
collaborations**

## Transition Phase

**CA Framework  
approved Jan  
2016**  
**Needs  
assessment**  
**Build  
foundational  
resources, PD**  
**Expand  
collaborations**

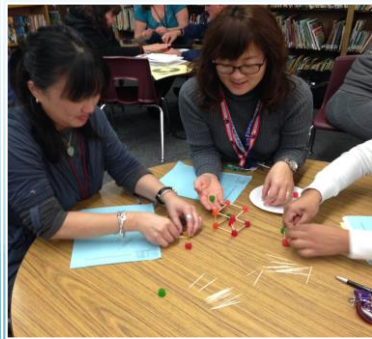
## Implementation Phase

**Expand Professional  
Learning support**  
**Align curriculum,  
instruction, assessments**



# MDUSD NGSS Roll Out Committee

- Volunteer representatives from each site k-12 and community
- 3 year membership
- Building Leadership and Capacity  
Articulation/Community/Team Building
- Receiving and presenting NGSS PD
- Create 3-5 year Strategic Plan





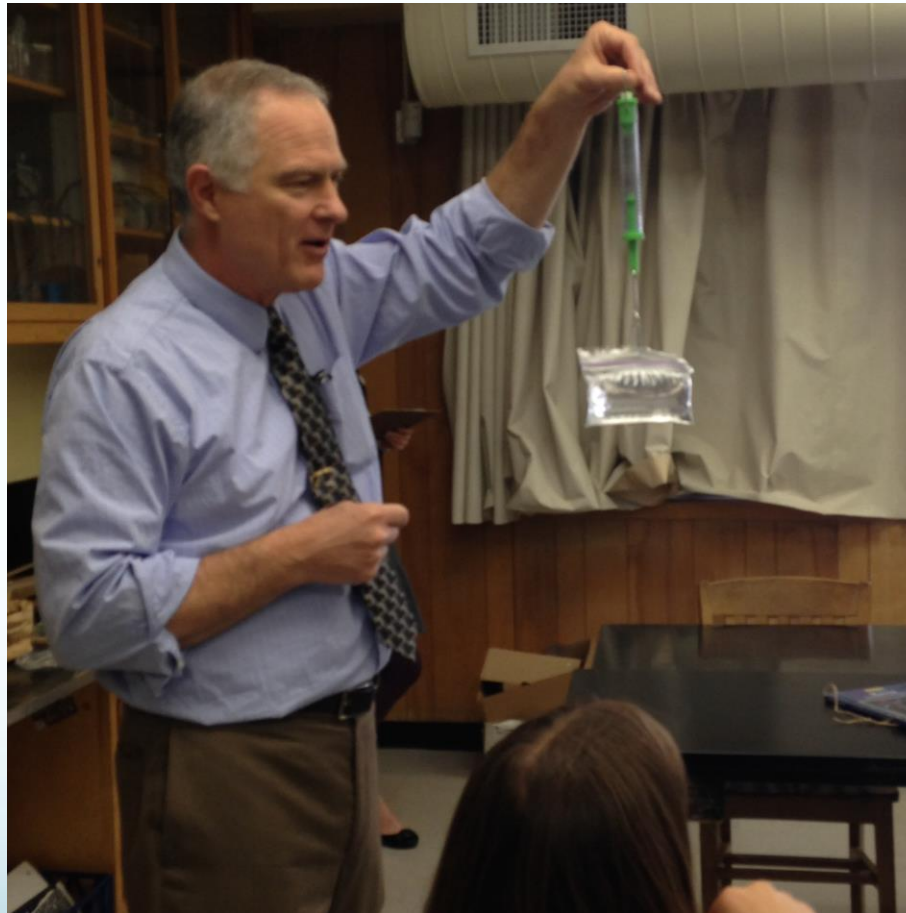
# MDUSD Science Vision Statement (draft)

- Mt Diablo Unified School District will ensure that all students are provided with a rich science curriculum which embodies the core ideas of science and bridges science and engineering to guide all students as they become responsible global citizens.
- The curriculum will provide tools and critical thinking skills necessary to enable life-long learning and to better adapt to the ever-changing world.

# Partners

- Contra Costa County Office of Education
- Alameda County Office of Education, Integrated Middle School Science (IMSS)
- California State University East Bay
- University of California at Berkeley
- Gateways
- Project Lead the Way
- CDE

# Pine Hollow Middle School



# Learn by Doing

