

Hawaii State Board of Education

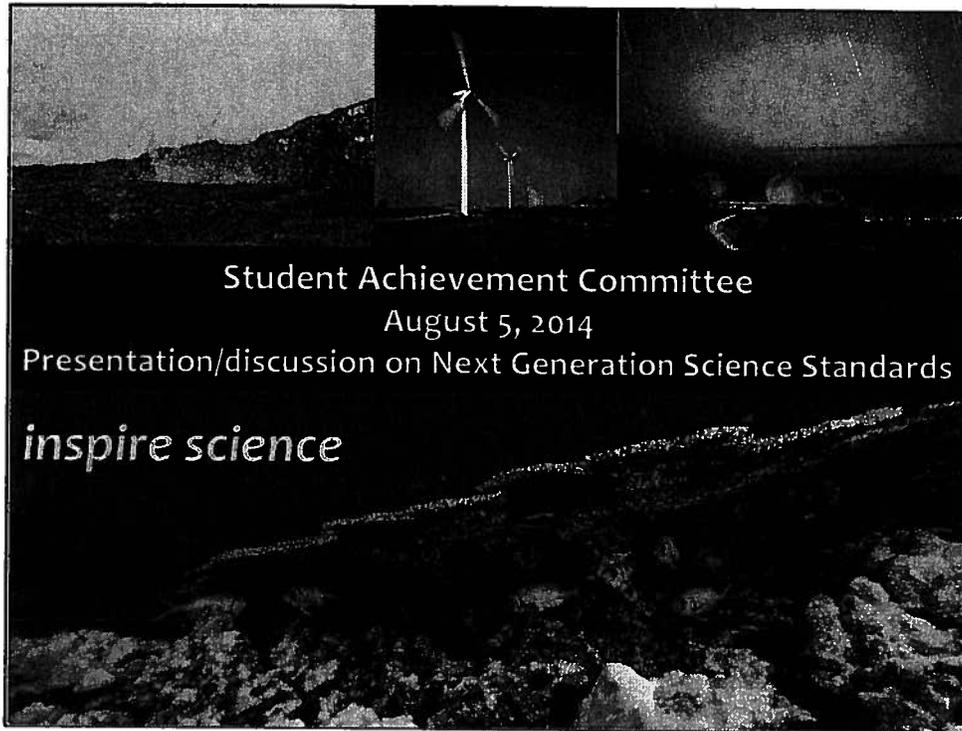
Student Achievement Committee

August 5, 2014

Presentation/discussion on Next Generation Science Standards

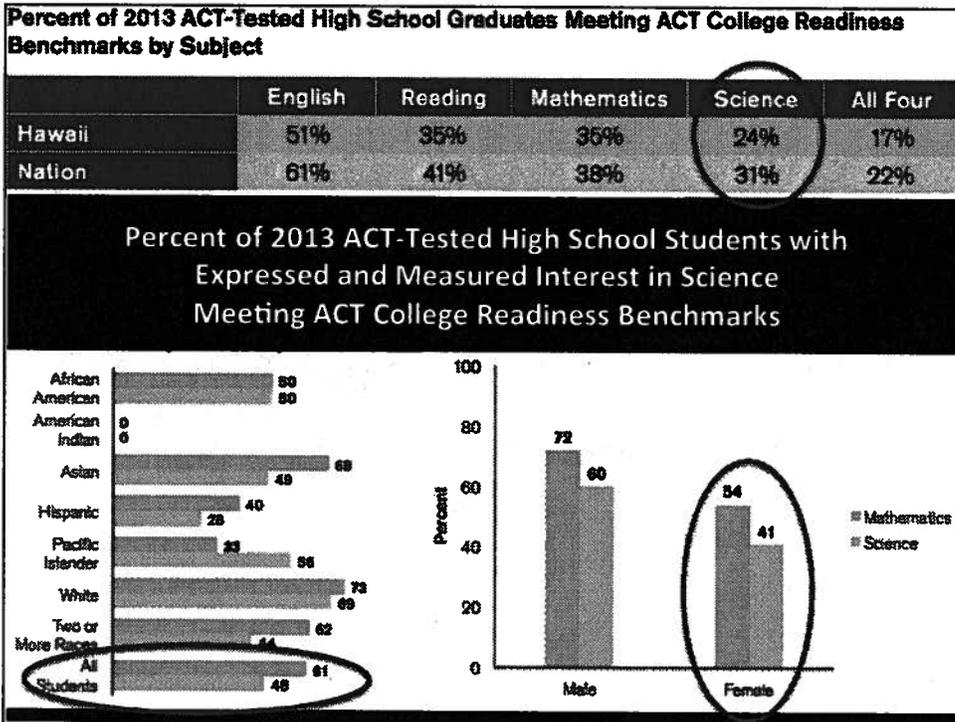
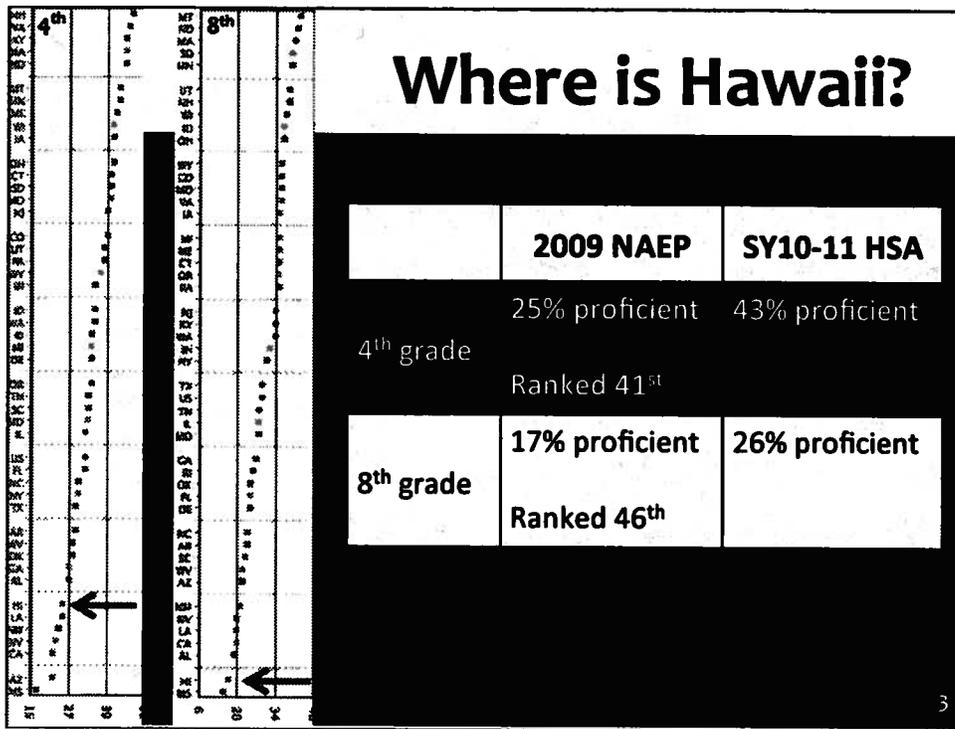
PowerPoint

Lauren Kaupp
Specialist for Science and STEM
lauren_kaupp@notes.k12.hi.us
808.305.9710



Why science?

- Science and STEM are an economic imperative and Hawaii must prepare students for careers in the fields of Science, Technology, Engineering and Math
- Science and STEM literacy are important for ALL citizens in Hawaii
 - Food security
 - Natural disaster preparedness
 - Solar, wind, geothermal power
 - Endangered species and conservation





How do we build on our science and STEM successes to prepare **ALL** students for college, career, and community?



NGSS Review

Disciplinary Core Ideas
What?

A FRAMEWORK FOR K-12 SCIENCE EDUCATION
Practices, Crosscutting Concepts, and Core Ideas
NATIONAL RESEARCH COUNCIL ON SCIENCE AND EDUCATION

Practices of Science and Engineering
How?

Crosscutting Concepts
Big Ideas

Image from: <http://www.pt.stu.edu.tw/tmchal/Biomechanics/BMmaterial/BMcollagen.htm>



NGSS Update: National

- NGSS has been adopted by 12 states + Washington, DC
- Momentum continues with **deliberate** pacing
- Resources continue to be developed for curriculum, instruction, and assessment
- Continued wide support by science educators, scientists, museums and science centers, STEM businesses



NGSS Update: Hawaii

*“Wisely and slow, they stumble that run fast.”
William Shakespeare, Romeo and Juliet*

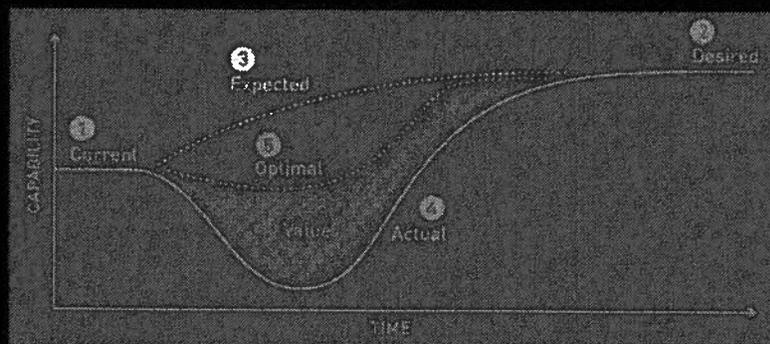


Image adapted from: http://www.aecbytes.com/illustrations/viewpoint/2012/issue_65_images/fig1.html



NGSS: LAUnCH!

Phases

P lanning	<i>Preparation and communication</i>
L earning and A wareness	<i>Focus on Framework, scientific inquiry, and engineering design.</i>
U nderstanding	<i>Integrating the three dimensions</i>
C lassroom Transitions	<i>Implementing new standards</i>
H igh Gear	<i>Full implementation, with NGSS-based assessment</i>

9



NGSS: LAUnCH!



Strands

C ommunication and C ollaboration	<i>Conveying information internally and externally; working with stakeholder groups</i>
P rofessional Development	<i>Creating and providing multiple modes of PD</i>
C lassroom Instruction	<i>Supporting student success, progressing from framework and processes to performance expectations</i>
L earning Progressions and I nstructional Materials	<i>Identifying and developing course progressions and model curricular materials</i>
A ssessment and Data C ollection	<i>Transitioning summative assessments from HCPS III to NGSS and developing model formative assessments</i>
P olicy	<i>Identifying and supporting shifts relative to NGSS</i>



“What the future holds in store for individual human beings, the nation, and the world depends largely on the wisdom with which humans use science and technology.” - Science For All Americans (AAAS)

Lauren Kaupp
Science Educational Specialist
Phone: 305.9710
lauren_kaupp@notes.k12.hi.us



<http://www.nextgenscience.org>