

Moving Georgia's Standards Forward

Jeremy Peacock President Elect

My Background



- Public School Graduate
- Professional Environmental Scientist
- High School Biology Teacher
- Doctorate in Science Education
- RESA Science Content Specialist
- Active in GSTA & the National Science Teachers Association



Our Organization



- "excellent science teaching for the students of Georgia"
 - Connect
 - Inform
 - Advocate
- 1100 K-16 & Informal Science Educators and Leaders
- 12 Districts Statewide



Georgia's STEM Economy



- 11 of Georgia's "Key Industries" are STEM Industries¹
- Georgia Companies Face Major Challenges in Hiring Our Graduates
- 2008-2018 Job Growth²
 - **STEM:** 17%
 - Others: 9.8%

²Source: US Department of Commerce

http://www.esa.doc.gov/sites/default/files/reports/ documents/stemfinalviulv14 1.pdf



































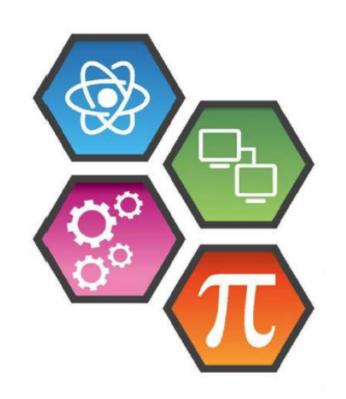
¹Source: Georgia Department of **Economic Development**

http://www.georgia.org/industries/

STEM Education Goals



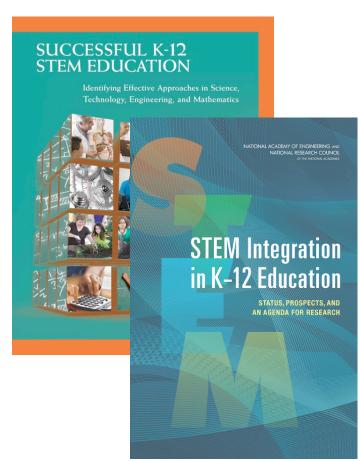
- "Lead the way in STEM fields"
 - Dr. Susan Andrews, Deputy Superintendent, GaDOE
- Rigorous Preparation for ALL Students
- Allow Student to Access STEM Careers
 - Technicians, Coders,Scientists, Engineers, etc.



STEM Curricula Should...



- Be Rigorous³
- Be Articulated K-12³
- Be Aligned Across Disciplines³
- Focus on Core Concepts in Each Discipline³
- Give Science Equal Importance Relative to Reading & Mathematics³
- Explicitly Integrate STEM Disciplines⁴



Sources: National Research Council

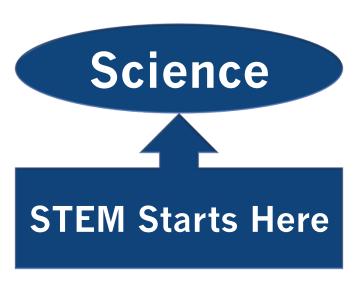
3http://www.nap.edu/catalog.php?record_id=13158

4http://www.nap.edu/catalog.php?record_id=18612

Setting the Standard for STEM in Georgia



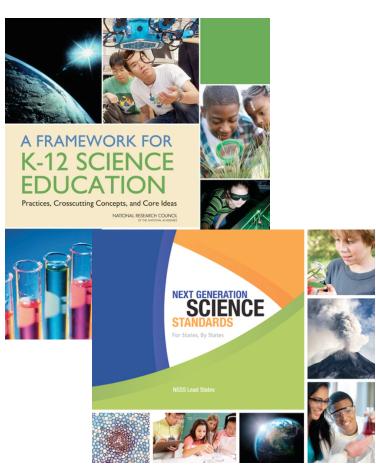
- Rigorous & Accessible
- Nationally & Globally Competitive
- Value Educators' & Other Stakeholders' Voices
- Build on Research, Practice, and Collaboration
- Support Effective Instruction for ALL Students
- Build & Reinforce Across Disciplines



New Directions for the Science GPS



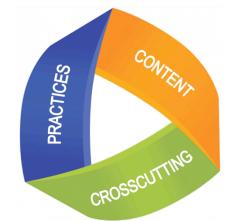
- Current Science
- Current Research on Science Learning
- College & CareerReadiness
- Foundation for Excellent STEM Education
 - Math & ELA Connections
 - Integration of Engineering

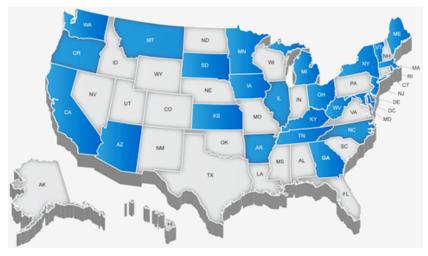


Georgia's Leading Role in STEM Education



- Lead State in NGSS Development
- Georgia Teachers
 - Life Science Writing Team
 - Contributed to Every Draft
 - Providing Professional Learning & Support
- Process Already in Place for Review & Revision of Outdated GPS

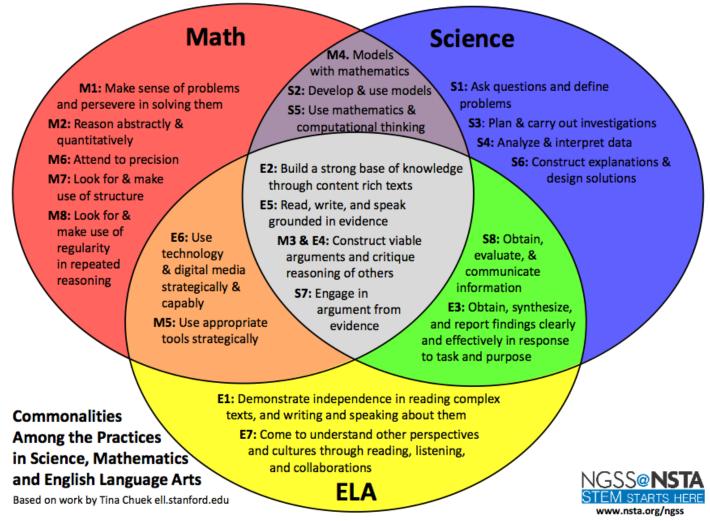




Next Generation Science Standards Lead States Source: http://nextgenscience.org/lead-state-partners

Mutually Supportive Standards





Source: http://nstahosted.org/pdfs/ngss/PracticesVennDiagram.pdf

Moving Forward to Support Georgia Students



- Maintain Rigor of CCGPS in Math & ELA/Literacy
- Revise Science GPS to Align to the Framework & NGSS
- Support Teachers
 - Resources
 - Collaboration
 - Professional Learning
- Prepare Georgia Students for Our Present & Future Economy





Thank you.