
South Sound LASER Alliance

Next Generation Science Standards 101:

Part 1: Getting to Know the NGSS

Participant Handbook

Next Generation Science Standards 101

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Kirk Robbins

Teachscience4all.wordpress.com

@science_4_all



My Initial Ideas about the Next Generation Science Standards

Before Video	After Video
I know...	I know...
Questions I have...	Questions I have...

Guiding Principles of NGSS Framework

Guiding Principles	What is important to remember about this principle?
Children are born investigators	
Focus on core ideas and practices	
Understanding develops over time	
Science and engineering require both knowledge and practice	
Connecting to students' interests and experiences	
Promoting equity	

Three Shifts of the Next Generation Science Standards

- 1. From isolation to integration:** Previous state and national science standards were organized in a way that concepts, such as inquiry and the domains of science, could be taught in isolation. The Next Generation Science Standards (NGSS) combine the three dimensions of Science and Engineering Practices, Crosscutting Concepts, and the Disciplinary Core Ideas. The NGSS are taught with an integrated approach and align with the Common Core State Standards while supporting Science, Technology, Engineering and Mathematics (STEM) learning.

How might this shift affect your science instruction?

- 2. From science inquiry to science and engineering practices:** Moving from a set of activities and direct teaching of a specific method of doing science, the science and engineering practices engage students in the work of both scientists and engineers to successfully solve problems and learn about the natural world.

How might this shift affect your science instruction?

- 3. From discrete science ideas to science and engineering crosscutting concepts:** Instead of moving from one science idea to another, the crosscutting concepts provide students with a coherent progression across and between the disciplinary core ideas and grade levels as a way of developing understanding of science and engineering with relevance and real world application.

How might this shift affect your science instruction?

Final Reflections

What is one thing you learned in this session that you are excited about?

What is one thing you are worried about?

What is one question you still have?