How are the NGSS different?

- Students are engaged in each of the three dimensions:
  1. Science and Engineering Practices
  2. Crosscutting Concepts
  3. Disciplinary Core Ideas.

- Written as performance expectations.
- Science concepts in the NGSS build coherently from K–12.
- NGSS Focus on deeper understanding of content as well as application of content.
- Science and Engineering are integrated in the NGSS, from K–12.
- Designed to prepare students for college, career, and citizenship.
- NGSS and Common Core State Standards (English Language Arts and Mathematics) are aligned.

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Overview
(from the NGSS website)

- “Through a collaborative, state-led process, new K–12 science standards were developed that are rich in content and practice and arranged in a coherent manner across disciplines and grades to provide all students an internationally benchmarked science education. The Next Generation Science Standards are based on the Framework for K–12 Science Education developed by the National Research Council. The NGSS were completed in April 2013.

- Why Next Generation Science Standards (NGSS)?
- More than 15 years since state science education standards’ guiding documents were developed. Since that time, many advances have occurred in the fields of science and science education, as well as in the innovation-driven economy.
- The U.S. has too few students entering STEM majors and careers at every level—from those with relevant postsecondary certificates to PhD’s. We need new science standards that stimulate and build interest in STEM.
- Implementing improved K–12 science standards will better prepare high school graduates for the rigors of college and careers.

California Implementation Timeline

- September 2013 SBE adopted NGSS as new California Science Standards
- January 2016 Framework and Evaluation Criteria for Instructional Materials
- 2016 Science Assessments aligned with NGSS
- 2018 Instructional Materials Adoption

FCUSD Plan

- NGSS Implementation Teams have been established:
  - To begin course alignment with NGSS
  - Design model lessons that integrate content, practices and crosscutting ideas.

NGSS Resources

- NGSS Website
- A Framework for K–12 Science Education
- California Department of Education NGSS FAQ
  - [http://www.cde.ca.gov/pd/ca/sc/ngssfaq.asp](http://www.cde.ca.gov/pd/ca/sc/ngssfaq.asp)