



Next Generation Science Standards Glossary

Achieve, Inc.

National organization that spearheaded the development of the Next Generation Science Standards.

Boundary Statements

Grade level endpoints, based on available research, that provide guidance or specify the scope of a performance expectation for a particular grade level.

Code for Topic Name

An abbreviated, unique identifier that is associated with each Performance Expectation.

Cross-Cutting Concepts

Ideas or themes that provide an organizational framework for connecting knowledge from various disciplines into a coherent and scientifically-based view of the world.

Coherence

Defining characteristic of a carefully articulated curriculum. Results when logical connections are identified among standards from the same grade level/course or across standards from different grade levels/courses.

Clarification Statements

Descriptions found in the NGSS System Architecture that supply examples or shed additional light on the performance expectations.

Connection Boxes

Part of the NGSS System Architecture. Identifies science topics that share corresponding DCIs across disciplines at the same grade level, articulation of DCIs across grade levels, and links to ELA and Mathematics Common Core Standards.

Domain

The equivalent of a major content area. Includes Earth & Space Science, Life Science, Physical Science, and Engineering, Technology, and Applications of Science.

Disciplinary Core Ideas

The sum total of concepts, that when understood, enable a person to make sense of the natural and designed world.

Dimensions

Three major elements of science and engineering that when properly integrated provide students with a context for the content of science, how science knowledge is acquired and understood, and how concepts that have meaning across the disciplines connect the sciences. Engineering Design A set of systematic practices applied to derive solutions to particular human problems.

Foundation Boxes

Part of the NGSS System Architecture. Provide information that expands and explains the performance expectations in terms of the Science and Engineering Practices, Disciplinary Core Ideas, and Crosscutting Concepts.

Framework for Science Education

Precursor document that offered a vision the key science and engineering ideas and practices that all students should learn by the end of high school. Provided the conceptual foundation for developing the NGSS.

Nature of Science

The shared values, practices, and perspectives that characterize the scientific approach to understanding the natural world. Among these are a demand for explanations supported by empirical evidence that are testable.

Next Generation Science Standards

Topics and concepts that are considered to be the basic organizing principles within a particular area of science or have broad importance across disciplines.

Learning Progressions

Descriptions of how students' knowledge and skills develop over multiple years at increasing levels of depth and sophistication. Idea of learning as a developmental progression is the basis for organizing the student performance expectations.

Practices

Behaviors and understandings that scientists employ to investigate and build models and theories about the world and routines that engineers use to design and build systems.

Standards for Science & Technical Studies

Components of the English Language Art Common Core State Standards that define the skills and understandings required for students to meet the challenges of reading, writing, speaking, listening, and language across disciplines.

Student Performance Expectation

Form in which the NGSS standards are written. Each statement incorporates a Science and Engineering Practice, Crosscutting Concept, and Disciplinary Core Idea.

21st Century Knowledge and Skills

Proficiencies needed by all high school graduates to meet the rigors of college, careers, and citizenship.

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