

A decorative border consisting of a grid of small globe icons, each showing the Americas, surrounding the central text.

SAU 15 SCIENCE CURRICULUM

The SAU 15 science curriculum provides the opportunity for all K-8 students to achieve and retain scientific knowledge, understand the process of scientific inquiry, and develop appropriate habits of mind. This is a dynamic document, which can change in both depth and scope. New materials, activities, and/or instructional strategies will be added to enhance the curriculum as they become available. The science curriculum is based on the National Science Education Standards and the New Hampshire Frameworks of Science Literacy.

The science curriculum:

- Assumes that science is a basic core subject taught using a constructivist approach in an organizational, systematic manner at the appropriate developmental level.
- Invites students to experience the richness and excitement of understanding the natural world.
- Illustrates the necessity to use appropriate processes and principles in deciding what factors are important to include in generating a solution set.
- Engages in intelligent discourse over matters of technological appropriateness and supports students in becoming a scientifically, literate person.
- Focuses on what students will know and be able to do rather than a list of topics to be “covered” in a content theme.
- Focuses on student understanding, use of scientific knowledge ideas, and inquiry processes including using evidence and strategies for developing and revising an explanation and providing opportunities for scientific discussion and debate.
- Engages students in a variety of ongoing assessments to measure scientific understanding, reasoning, and well-structured knowledge.
- Supports a classroom community with cooperation, shared responsibility, and respect.



STANDARDS BASED CURRICULUM: What Does It Mean?

The standards movement shifts the focus of curriculum from the **content** and what the teacher is doing to the **learner** and what we want **each student to know and be able to do**. The SAU 15 K-8 science curriculum is aligned with the National Science Education Standards and the New Hampshire Frameworks of Science Literacy. State and local curriculum frameworks are the broadly accepted guidelines for developing and evaluating student learning. Curriculum, instruction, and assessment are all based on these standards.

A performance standard is a statement that:

- Sets specific expectations for student performance
- Defines the quality of performance
- Establishes the level of proficiency leading to high quality performance

The New Hampshire Frameworks are organized in Grade Span Expectations (K-2, 3-4, 5-6, 7-8, 9-12). SAU 15 has organized the science curriculum in Grade Level Expectations with “student friendly” language for each standard in the three content domains: Earth Space Science, Life Science, and Physical Science. Science Process Skills are a specific skill set that will help students be successful in future science experiences. Information and Computer Technology Standards have been added to meet the new ICT requirements for all students to develop digital portfolios.

The science curriculum emphasizes inquiry based, process oriented science education. Our science program promotes and values cooperative learning, hands-on activities, problem solving, data collection, data analysis, critical thinking and the utilization of interactive technologies to support scientific inquiry. Students are supported to become active, engaged learners about themselves and their world through the investigation and exploration of scientific issues of concern to the present and the future. The incorporation of rich content, balanced with a variety of inquiry and discovery activities, enable students to make real life connections to other sciences and content areas.