



# Science Education in Nebraska

## PURPOSE

Science is a systematic sense-making process, aimed at figuring out the physical and natural world through observation and investigation.

Scientists:

- look closely, question deeply, think critically, and connect related data and phenomena to identify patterns
- pay attention to our place as humans in a complex ecosystem defined by physical laws
- look for new evidence and constantly revise and critically evaluate claims, theories, and worldviews

As the community of Nebraska educators, it is our responsibility to invite all students to explore the rich nature of science within inclusive and culturally responsive classrooms, and prepare scientifically literate citizens ready to understand, engage, and transform the world.

## VISION

All Nebraska students use scientific literacy to engage in civic-minded decision making as they demonstrate readiness for college, career, and lifelong learning.

Pre-K to grade 12 students:

- gather, analyze, and communicate information from multiple sources (including data from their own investigations)
- make connections between learning and their lives, passions, and postsecondary interests
- engage in authentic and relevant learning experiences that cultivate curiosity
- make sense of phenomena
- design creative and well-researched solutions to local and global problems

## MISSION

Nebraska high school graduates will enter their profession or higher education having benefited from access to meaningful and dedicated opportunities to learn and practice the three dimensions of science education. Students will draw from the integrated nature of science as well as their prior knowledge to engage with high-quality instruction and materials at the right level, time, and intensity that include daily opportunities to:

- develop explanations, arguments, and models
- identify problems, ask questions, and design solutions
- revise thinking based on multiple sources of evidence and intentional data analysis
- high expectations for learning and achievement, established and carefully monitored through an embedded 3-D system of assessment as part of an ongoing cycle of instruction