Science Proficiency

The Role of RISE

Utah State Board of Education

RISE Science Assessment

The Readiness, Improvement, Success, Empowerment (RISE) assessment is Utah's legislatively mandated end-of-year summative test. It helps educators evaluate their own teaching and how well students are mastering the Utah Science with Engineering Education (SEEd) standards in grades 4-10.

RISE Science Test Design:

- Test items are organized in clusters that introduce a phenomenon and include multiple related questions.
- Clusters are designed to assess students' ability to make sense of phenomena through:
  - » Science and Engineering Practices (SEPs)
  - » Crosscutting Concepts (CCCs)
  - » Disciplinary Core Ideas (DCIs)
- This structure supports deeper conceptual understanding and reflects three-dimensional learning as outlined in the SEEd standards.

Three-Dimensional Learning:

- Each SEEd standard integrates three dimensions: Science and Engineering Practices (SEPs), Crosscutting Concepts (CCCs), and Disciplinary Core Ideas (DCIs).
- Students have to do more than memorize, they must:
  - » Engage in science and engineering practices
  - » Reason with crosscutting concepts
  - » Know and be able to use the disciplinary core ideas within that standard to demonstrate proficiency.
- This approach reflects how science is taught and practiced in the real world by combining skills, concepts, and content knowledge.
- Instruction should support conceptual understanding and foster scientific thinking.

Supporting Science Instruction in Utah

Utah educators are supported in delivering effective science instruction through several resources aligned to the SEEd standards:

Instructional Support Tools:

- **Science Core Guides:** Provide detailed guidance for lesson planning and formative assessment and identify critical skills, background knowledge, and vocabulary.
  - » Support teachers, coaches, administrators, and families in understanding the intent of each standard.
- **OER Textbooks:** A reference material with content to support teachers' classroom instruction and help students make sense of science concepts. Includes questions and performance assessment ideas.

Resources

Sign up for update emails about science assessments on the Science Listserv:

- List serv: https://tinyurl.com/5xvfk3y6
- Core guides: www.schools.utah.gov/curr/science
- OER Textbooks: https://www.uen.org/oer/
- Performance Level Descriptors: https://utahrise.org/resource-list/en/science-performance-level-descriptors
- RISE Blueprints: https://utahrise.org/resources#folder=RISE_Blueprints
- Benchmark Module Directory: https://utahrise.org/resources#folder=Benchmark_Modules_Directory