



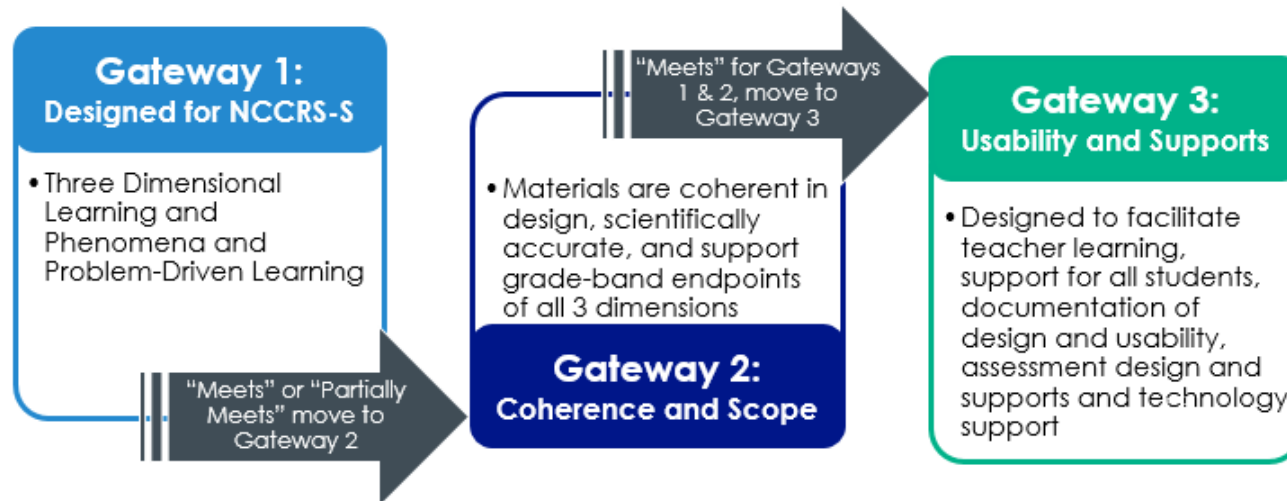
Because materials matter for all Nebraska students.

Content-area standards provide a framework for ensuring quality teaching and learning. Recent revisions and updates to Nebraska content standards, per Nebraska Revised Statute 79-760.01, require a number of key shifts that are essential to fulfilling the vision of Nebraska's College and Career Readiness (CCR) Standards for Science. For K-12 science instruction in Nebraska, the shifts are:

- 3-Dimensional Teaching and Learning**--Apply science content knowledge through three-dimensional learning,
- Integrated Science**--Connect ideas across science domains by explaining natural phenomena and designing solutions to real-world challenges,
- Interdisciplinary Connections**—Use overlapping skills to investigate, evaluate, and reason scientifically across disciplines.

These instructional shifts are also a part of the Quality Instructional Materials Review Tools from EdReports.org. EdReports.org developed its tools to provide educators, shareholders, and leaders with independent and useful information about the quality of instructional materials (whether digital, traditional textbook, or blended) for those who will be using them in classrooms. Expert educators use the tool to evaluate full sets of instructional materials in science against non-negotiable criteria.

The tools have three major gateways to guide the evaluation process. Reviewers apply the three gateways sequentially to ensure EdReports.org communicates to the field the extent to which materials are aligned and usable by educators. Along with the Quality Instructional Materials Review Tool, the Science Evidence Guides provide educator reviewers with guidance to identify, collect, calibrate, and report on the extent to which instructional materials are designed for the standards and support the instructional shifts. Materials that meet or partially meet the expectations for Gateway 1 (**design**) move to Gateway 2 (**coherence and scope**). Only those materials that meet the expectations for both Gateway 1 and Gateway 2 move to Gateway 3 (**usability and supports**).

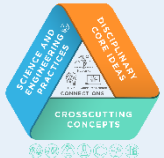


Because the Nebraska College and Career Ready Standards for Science and the EdReports.org tool share the sequence and emphasis on both the standards and the instructional shifts in science, the reports provide a strong starting point for Nebraska districts, schools, and educators to use as a part of their materials selection process for K-12 Science. Since EdReports.org produces reports for use in all states, there may be aspects of individual state standards or local district requirements that are not captured by EdReports.org.

Gateway 1: Designed for NGSS

Criterion 1: Materials are designed for three-dimensional learning and assessment.

Nebraska Notes: Materials consistently integrate the three dimensions to support meaningful student sense-making and are designed to elicit observable evidence **of** student learning (summative) and **for** student learning (formative) for all three dimensions.



** NCCRS-S indicators reflect the three dimensions of science learning outlined in A Framework for K-12 Science Education, which is consistent with the NGSS model. The indicators included in this section and throughout EdReports reviews reflect the vision of science education in Nebraska.*

Criterion 2: Materials leverage science phenomena and engineering problems in the context of driving learning and student performance.

Nebraska Notes: Phenomena and/or problems are connected to the grade-level DCIs, are presented to students as directly as possible, and leverage students' prior knowledge and experiences. Phenomena and/or problems are embedded within and across multiple lessons allowing students to use and build knowledge in all three dimensions.



**Designing for Nebraska connections is the responsibility of local educators.*

Gateway 2: Coherence and Scope

Criterion 1: Materials are coherent in design, scientifically accurate, and support grade-band endpoints of all three dimensions.

Nebraska Notes: Materials are designed with an intentional sequence that makes sense from the student perspective and present tasks that increase in sophistication. The materials are scientifically accurate, are limited to scientific content as described in the grade-level standards, and incorporate all grade-level DCIs, SEPs, CCCs, and connections to Nature of Science and Engineering.



EdReports reviews for middle school evaluate the 6-8 **grade-band. NCCRS-S for middle school are specific to **grade-level**. Alignment to the individual grade levels will be necessary.*

Gateway 3: Usability and Supports

Criterion 1: Materials are designed to support teachers not only in using the materials, but also in understanding the expectations of the standards.

Nebraska Notes: Materials include background information to help teachers support students and provide guidance that supports teachers in planning effective learning experiences using research-based strategies that engage students in figuring out phenomena and finding solutions to problems.

Criterion 2: Materials are designed to support all students in learning.

Nebraska Notes: Materials are designed to leverage diverse cultural and social backgrounds and provide multiple access points for students at varying ability levels and backgrounds. Materials provide appropriate support, accommodations, and/or modifications to support active participation for all students. The materials include opportunities for students to share their thinking and apply their understanding in a variety of ways and within varied groups.



**Citizen Science is supported when materials are designed for active participation for all students and opportunities for scientific discourse and consensus building are included.*

Criterion 3: Materials are designed to be usable and also support teachers in using the materials and understanding how the materials are designed.

Nebraska Notes: Materials provide a rationale for the sequence of units, document standards alignment, embed safety guidelines, document alignment to Math and ELA standards, and include a comprehensive materials list. Materials contain strategies for informing students, parents, or caregivers about the science program and suggestions for how they can help support student progress and achievement and the grade-level materials are feasible for one school year.

Criterion 4: Materials are designed to assess students and support the interpretation of the assessment results.

Nebraska Notes: Assessments include a variety of modalities and measures to monitor individual student progress over time. Opportunities and guidance for oral/and or written peer and teacher feedback and self-reflection are included along with guidance for scoring and interpreting the range of student understanding for relevant DCIs, SEPs, and CCCs. Assessments are accessible to diverse learners regardless of gender identification, language, learning exceptionality, race/ethnicity, or socioeconomic status.

Criterion 5: Materials are designed to include and support the use of digital technologies.

Nebraska Notes: Materials integrate digital technology and interactive tools (data collection tools, simulations, modeling), when appropriate, in ways that support student engagement in the three dimensions of science. Digital materials are web-based and compatible with multiple Internet browsers. In addition, materials are “platform neutral,” are compatible with multiple operating systems, and allow the use of tablets and mobile devices. Materials include opportunities to assess three-dimensional learning using digital technology and can be customized for individual learners.



Key Terms Used throughout Review Rubric and Reports

- **Indicator** Specific item that reviewers look for in materials.
- **Criterion** Combination of all of the individual indicators for a single focus area.
- **Gateway** Organizing feature of the evaluation rubric that combines criteria and prioritizes order for sequential review.
- **Usability** Degree to which materials are consistent with effective practices for use and design, teacher planning and learning, assessment, and differentiated instruction.