

## INSTRUCTIONAL MATERIALS RUBRIC – SCIENCE

Nevada Instructional Materials are reviewed and approved by the Nevada State Board of Education. These instructional materials do not constitute a comprehensive curriculum. Rather, they stand as starting place for collaborative content teams to develop lessons, units of instruction, aligned assignments, and common assessments that will prepare every Nevada student to be college, career, civic, and community ready.

### **Our Vision**

All students and teachers in Nevada will have access to the highest-quality instructional materials that will help improve student-learning outcomes in all content areas.

The purpose of instructional materials is to be the tools that provide students with positive learning experiences enhanced over time and to facilitate a deeper understanding of the educational content. In response, Nevada educators collaborated in order to create an instructional materials adoption process that will provide all of our students the instruments to access, examine, and provide analysis to any area of content without limitations predetermined by race, gender, ethnicity, language, exceptionality, sexual determination, or family background/ income.

### **Adoption Process**

For all content areas, the adoption process starts with vendors submitting materials for review as put forth by a Request for Information (RFI) issued by the Nevada Department of Education (NDE). The instructional materials submitted will first have an internal review conducted by NDE staff as per the RFI.

All submitted materials will be reviewed by the Nevada Instructional Materials Steering Committee (NIMSC). The NIMSC is made up of instructional materials leads from Nevada's school districts and have the charge of receiving, reviewing and making recommendations regarding the adoption of all instructional materials that drive instruction in the classroom.

### **Content Areas of Focus**

Content areas of focus are the areas of instruction on which materials received by the NIMSC will focus. The NIMSC will designate no more than two content areas of focus every school year. Content areas of focus will always concentrate on grades kindergarten through grade 12.

### **Instructional Materials Rubric Process**

The evaluation process for all instructional materials will include a material checklist complimenting a comprehensive rubric for scoring. The rubric has multiple categories for each content of review. The first category evaluates alignment to the Nevada Academic Content Standards and the overall score for category one must meet or exceed the criteria in order to continue in the review process. Additionally, category two evaluates the access and equity of a given instruction material; and, this category must also meet or exceed the criteria in the review process. If the material fails either of the first two categories, the material can be resubmitted at the next review cycle for that content area. Vendors have 30 days to provide in writing that they would be participating in the rebuttal process for their submission.

This evaluation process includes a checklist that outlines the criteria that must be evident in the material. Each category includes required elements that must be documented and supported within the columns labeled evidence and reasoning, respectively. The two documents must be used conjointly to evaluate and determine the overall score for the instructional material.

Please refer to [The Nevada Department of Education](#) for details regarding this process.

**Category 1: Aligned to NVACs for Science**

<b>Criteria</b>	<b>Exceeds = 4</b>	<b>Meets = 3</b>	<b>Developing = 2</b>	<b>Limited = 1</b>	<b>Not Present = 0</b>
<b>Science and Engineering Practices (SEPs)</b>	Instructional material is 100% aligned to the SEPs	Instructional material is 75-99% aligned to the SEPs	Instructional material is 50-74% aligned to the SEPs	Instructional material is 25-49% aligned to the SEPs	No alignment to the SEPs
<b>Disciplinary Core Ideas (DCIs)</b>	Instructional material is 100% aligned to the DCIs	Instructional material is 75-99% aligned to the DCIs	Instructional material is 50-74% aligned to the DCIs	Instructional material is 25-49% aligned to the DCIs	No alignment to the DCIs
<b>Crosscutting Concepts (CCCs)</b>	Instructional material is 100% aligned to the CCCs	Instructional material is 75-99% aligned to the CCCs	Instructional material is 50-74% aligned to the CCCs	Instructional material is 25-49% aligned to the CCCs	No alignment to the CCCs

**Materials must measure meets/exceeds in All Criteria**

**Meet/Does Not Meet**

## Category 2: Access and Equity

Exceeds = 4	Meets = 3	Developing = 2	Limited = 1	Not Present = 0
100% of grade level appropriate <b>teacher supports</b> are provided to guide teachers in making student learning relevant, ways for students to share their experiences, connections to previous experiences, draw and connect to language and culture, etc.	75-99% of grade level appropriate <b>teacher supports</b> are provided to guide teachers in making student learning relevant, ways for students to share their experiences, connections to previous experiences, draw and connect to language and culture, etc.	50-74% of grade level appropriate <b>teacher supports</b> are provided to guide teachers in making student learning relevant, ways for students to share their experiences, connections to previous experiences, draw and connect to language and culture, etc.	25-49% of grade level appropriate <b>teacher supports</b> are provided to guide teachers in making student learning relevant, ways for students to share their experiences, connections to previous experiences, draw and connect to language and culture, etc.	No grade level appropriate <b>teacher supports</b> are provided to guide teachers in making student learning relevant, ways for students to share their experiences, connections to previous experiences, draw and connect to language and culture, etc.
Instructional materials are made accessible to <b>all</b> students by providing four or more supports AND scaffolds consistently throughout (Supports include: differentiated reading material, language needs, etc., Scaffolds include: prompts, sentence frames, graphic organizers, anchor charts, etc.).	Instructional materials are made accessible to <b>all</b> students by providing at least three supports AND scaffolds consistently throughout (Supports include: differentiated reading material, language needs, etc., Scaffolds include: prompts, sentence frames, graphic organizers, anchor charts, etc.).	Instructional materials are made accessible to <b>all</b> students by providing at least two supports AND scaffolds consistently throughout (Supports include: differentiated reading material, language needs, etc., Scaffolds include: prompts, sentence frames, graphic organizers, anchor charts, etc.).	Instructional materials are made accessible to <b>all</b> students by providing only one support AND scaffold (Supports include: differentiated reading material, language needs, etc., Scaffolds include: prompts, sentence frames, graphic organizers, anchor charts, etc.).	Instructional materials are not made accessible to <b>all</b> students and no supports or scaffolds are provided. (Supports include: differentiated reading material, language needs, etc., Scaffolds include: prompts, sentence frames, graphic organizers, anchor charts, etc.).
Provides four or more diverse opportunities for students to represent, share, justify, and revise their thinking consistently throughout the material.	Provides at least three diverse opportunities for students to represent, share, justify, and revise their thinking consistently throughout the material.	Provides at least two diverse opportunities for students to represent, share, justify, and revise their thinking consistently throughout the material.	Provides at least one diverse opportunity for students to represent, share, justify, and revise their thinking consistently throughout the material.	Provides no opportunity for students to represent, share, justify, and revise their thinking consistently throughout the material.
Instructional materials provide appropriate images, text, and activities that represent the diversity of our current society in a culturally responsive manner throughout 100% of the material.	Instructional materials provide appropriate images, text, and activities, which represent the diversity of our current society in a culturally responsive manner throughout 75-99% of the material.	Instructional materials provide appropriate images, text, and activities, which represent the diversity of our current society in a culturally responsive manner throughout 50-74% of the material.	Instructional materials provide appropriate images, text, and activities, which represent the diversity of our current society in a culturally responsive manner throughout 25-49% of the material.	Instructional materials provide no appropriate images, text, and activities, which represent the diversity of our current society in a culturally responsive manner throughout the material.
Instructional materials include assurance from publishers agreeing to comply with the most current National Instructional Materials Accessibility Standard (NIMAS) specifications regarding accessible instructional materials.	N/A	N/A	N/A	N/A

**Materials must measure meets/exceeds in All Criteria**

**Meet/Does Not Meet**

**Category 3: Assessment**

<b>Exceeds = 4</b>	<b>Meets = 3</b>	<b>Developing = 2</b>	<b>Limited = 1</b>	<b>Not Present = 0</b>
A coherent assessment system that includes four or more opportunities for pre-, embedded formative, summative, and self-assessment tasks to include equitable considerations for culturally and linguistically diverse students consistently throughout the material.	A coherent assessment system that includes at least three opportunities for pre-, embedded formative, summative, and self-assessment tasks to include equitable considerations for culturally and linguistically diverse students consistently throughout the material.	A coherent assessment system that includes at least two opportunities for pre-, embedded formative, summative, and self-assessment tasks to include equitable considerations for culturally and linguistically diverse students consistently throughout the material.	A coherent assessment system that includes at least one opportunity for pre-, embedded formative, summative, and self-assessment tasks to include equitable considerations for culturally and linguistically diverse students consistently throughout the material.	Assessment system includes no opportunities for pre-, embedded formative, summative, and self-assessment tasks to include equitable considerations for culturally and linguistically diverse students consistently throughout the material.
Both formative and summative assessments use four or more task types, to include equitable considerations for culturally and linguistically diverse students consistently throughout the material.	Both formative and summative assessments use at least three task types, to include equitable considerations for culturally and linguistically diverse students consistently throughout the material.	Both formative and summative assessments use at least two task types, to include equitable considerations for culturally and linguistically diverse students consistently throughout the material.	Both formative and summative assessments use at least one task type, to include equitable considerations for culturally and linguistically diverse students consistently throughout the material.	Both formative and summative assessments do not use any task types, to include equitable considerations for culturally and linguistically diverse students consistently throughout the material.
The formative and summative assessments are aligned to 100% of the NVACS for Science.	The formative and summative assessments are aligned to 75-99% of the NVACS for Science.	The formative and summative assessments are aligned to 50-74% of the NVACS for Science.	The formative and summative assessments are aligned to 25-49% of the NVACS for Science.	The formative and summative assessments do not align to the NVACS for Science.
Both formative and summative assessments provide four or more opportunities for self, peer, and teacher feedback consistently throughout the material.	Both formative and summative assessments provide at least three opportunities for self, peer, and teacher feedback consistently throughout the material.	Both formative and summative assessments provide at least two opportunities for self, peer, and teacher feedback consistently throughout the material.	Both formative and summative assessments provide at least one opportunity for self, peer, and teacher feedback consistently throughout the material.	Formative and summative assessments do not provide opportunities for self, peer, and teacher feedback consistently throughout the material.

**TOTAL SCORE/POINTS POSSIBLE (0-16)**

- Exceeds (16 points)
- Meets (12-15 points)
- Developing (8-11)
- Limited (4-7)
- Does Not Meet (0-3)

**/16**

**Category 4: Teacher Instructional Resources which Support NVACS for Science**

<b>Exceeds = 4</b>	<b>Meets = 3</b>	<b>Developing = 2</b>	<b>Limited = 1</b>	<b>Not Present = 0</b>
Four or more language practices are consistently utilized and embedded throughout the material to support students to develop grade-appropriate, subject-specific technical language.	At least three language practices are consistently utilized and embedded throughout the material to support students to develop grade-appropriate, subject-specific technical language.	At least two language practices are consistently utilized and embedded throughout the material to support students to develop grade-appropriate, subject-specific technical language.	At least one language practices are consistently utilized and embedded throughout the material to support students to develop grade-appropriate, subject-specific technical language.	No language practices are utilized and embedded in the material to support students to develop grade-appropriate, subject-specific technical language.
Four or more teacher resources include pedagogical background information (including relevant, contemporary research) to help teachers support <b>all</b> students throughout the instructional material.	At least three teacher resources include pedagogical background information (including relevant, contemporary research) to help teachers support <b>all</b> students throughout the instructional material.	At least two teacher resources include pedagogical background information (including relevant, contemporary research) to help teachers support <b>all</b> students throughout the instructional material.	At least one teacher resource includes pedagogical background information (including relevant, contemporary research) to help teachers support <b>all</b> students throughout the instructional material.	No teacher resources include pedagogical background information (including relevant, contemporary research) to help teachers support <b>all</b> students throughout the instructional material.
Teacher resources include four or more instructional strategies, digital tools, and/or media examples to deepen student learning consistently throughout the material.	Teacher resources include at least three instructional strategies, digital tools, and/or media examples to deepen student learning consistently throughout the material.	Teacher resources include at least two instructional strategies, digital tools, and/or media examples to deepen student learning consistently throughout the material.	Teacher resources include only one instructional strategy, digital tool, and/or media example to deepen student learning consistently throughout the material.	Teacher resources do not include instructional strategies, digital tools, and/or media examples to deepen student learning.
Instructional materials are made accessible to <b>all</b> students by providing four or more supports AND scaffolds throughout the materials (Supports include: differentiated reading material, language needs, etc., Scaffolds include: prompts, sentence frames, graphic organizers, anchor charts, etc.).	Instructional materials are made accessible to <b>all</b> students by providing at least three supports AND scaffolds (Supports include: differentiated reading material, language needs, etc., Scaffolds include: prompts, sentence frames, graphic organizers, anchor charts, etc.).	Instructional materials are made accessible to <b>all</b> students by providing at least two supports AND scaffolds (Supports include: differentiated reading material, language needs, etc., Scaffolds include: prompts, sentence frames, graphic organizers, anchor charts, etc.).	Instructional materials are made accessible to <b>all</b> students by providing only one support AND scaffold (Supports include: differentiated reading material, language needs, etc., Scaffolds include: prompts, sentence frames, graphic organizers, anchor charts, etc.).	Instructional materials are not made accessible to <b>all</b> students and no supports or scaffolds are provided. (Supports include: differentiated reading material, language needs, etc., Scaffolds include: prompts, sentence frames, graphic organizers, anchor charts, etc.).

**TOTAL SCORE/POINTS POSSIBLE (0-16)**

- Exceeds (16 points)
- Meets (12-15 points)
- Developing (8-11)
- Limited (4-7)
- Does Not Meet (0-3)

## Category 1: Designed for NVACS for Science

Criteria	Evidence	Reasoning
<p>1. Material supports <b>all</b> students in building understanding of AND using grade-level Science and Engineering Practices (SEPs) of the NVACS for Science that are deliberately selected to aid student sense-making of phenomena, student's scientific questions, and/or designing of solutions</p> <ul style="list-style-type: none"><li>❑ Students engage in using the SEPs (including hands-on experiences) throughout the material and not only after information was provided.</li><li>❑ Students engage in a sufficient number of SEP elements throughout each unit/topic in the material.</li><li>❑ Students engage in building upon and/or using each SEP for a sufficient amount of time (as needed based on the elemental levels of the SEP at grade-level) throughout the instructional materials.</li><li>❑ Students engage in building upon and/or using each SEP for a sufficient amount of time (as needed based on the elemental levels of the SEP at grade-level) throughout the instructional materials.</li><li>❑ The SEPs that are claimed by the material match the evidence of SEP development and use by the students found within the material.</li><li>❑ The main intent of the SEP elements with which students are engaging in service of student sense-making of phenomena, scientific questions, and/or designing solutions to problems.</li></ul>		

Criteria	Evidence	Reasoning
<p>2. Material supports <b>all</b> students in building understanding of AND using grade-level Disciplinary Core Ideas (DCIs) of the NVACS for Science that are deliberately selected to aid student sense-making of phenomena, student’s scientific questions, and/or designing of solutions.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Science content, whether in print or digital, is accurate and current.</li> <li><input type="checkbox"/> Grade-appropriate based on progressions.</li> <li><input type="checkbox"/> Majority of material is focused on supporting students in using grade-level DCIs based on the elemental levels.</li> <li><input type="checkbox"/> The material gives/provides a limited amount of science content (material) which is extraneous to the grade-level DCIs.</li> <li><input type="checkbox"/> If engineering is a learning focus, it must be integrated with developing additional disciplinary core ideas from physical, life, and/or earth and space sciences.</li> </ul>		
<p>3. Material supports <b>all</b> students in building understanding of AND using grade-level Crosscutting Concepts (CCCs) of the NVACS for Science that are deliberately selected to aid student sense-making of phenomena, student’s scientific questions, and/or designing of solutions.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Students engage in using the CCCs throughout the material as a lens or language framework to explain and communicate their thinking and understanding.</li> <li><input type="checkbox"/> Students engage in a sufficient</li> </ul>		

Criteria	Evidence	Reasoning
<p>number of CCC elements throughout each unit/topic in the material.</p> <ul style="list-style-type: none"> <li>❑ Students engage in building upon and/or using each CCC for a sufficient amount of time (as needed based on the elemental levels of the CCC at grade-level) throughout the instructional materials.</li> <li>❑ The CCCs that are claimed by the material match the evidence of CCC development and use by the students found within the material.</li> <li>❑ The main intent of the CCC elements with which students are engaging in service of student sense-making of phenomena, scientific questions, and/or designing solutions to problems.</li> </ul>		
<p>4. The material supports all students within and throughout each unit/topic as they engage in the integrated use of practices, disciplinary core ideas, and crosscutting concepts together to make sense of real-world phenomena, their scientific questions, and/or to design solutions to problems. (This is both phenomena and three-dimensional sense-making)</p> <ul style="list-style-type: none"> <li>❑ <b>All</b> students are figuring out, not just being presented with, phenomena, problems, or scientific questions.</li> <li>❑ Phenomena, problems, and/or scientific questions found throughout the material are made explicitly relevant and age appropriate (more than bookends for a topic) for <b>all</b> students.</li> <li>❑ Phenomena, problems, and/or scientific questions are authentic and experienced first-hand.</li> <li>❑ Phenomena, problems, and/or scientific questions require three-</li> </ul>		

Criteria	Evidence	Reasoning
<p>dimensional meaning making to “figure out”.</p> <ul style="list-style-type: none"> <li>❑ <b>All students</b> have opportunities for three-dimensional sense making of phenomena, problems, and/or scientific questions.</li> </ul> <p>Examples look like:</p> <ul style="list-style-type: none"> <li>❑ Material supports students in generating questions and connecting prior experiences related to the phenomenon or problem AND these student questions are used to motivate sense-making and/or problem solving.</li> <li>❑ Material focus is on supporting students in making sense of phenomena and/or designing solutions to problems.</li> </ul>		
<p>5. The material provides a coherent assessment system, which provides assessment opportunities for all students to generate evidence that reveals multi-dimensional understanding and receive feedback from teachers/peers.</p> <ul style="list-style-type: none"> <li>❑ Assessment opportunities are equitable both culturally and linguistically.</li> <li>❑ Assessment opportunities measure student understanding in two or more dimensions.</li> <li>❑ Instructional materials use a variety of measures and provide multiple assessment opportunities so that students can demonstrate their understanding of the same learning goals in a variety of ways.</li> <li>❑ Teacher guidance is provided to help interpret student understanding and progress toward learning targets.</li> <li>❑ Assessment opportunities generate</li> </ul>		

<b>Criteria</b>	<b>Evidence</b>	<b>Reasoning</b>
evidence, which could be used for student feedback, in all three dimensions, which is greater than correct or incorrect.		

## Category 2: Access and Equity

Criteria	Evidence	Reasoning
1. Grade level appropriate <b>teacher supports</b> are provided to guide teachers in making student learning relevant, ways for students to share their experiences, connections to previous experiences, etc.		
2. Provides diverse opportunities for students to represent, share, justify, and revise their thinking with equity of voice consistently throughout the material.		
3. Instructional materials provide appropriate images, text, and activities, which represent the diversity of our current society in a culturally responsive manner throughout the material.		
4. Instructional materials include assurance from publishers agreeing to comply with the most current National Instructional Materials Accessibility Standard (NIMAS) specifications regarding accessible instructional materials.		

### Category 3: Assessment

Criteria	Evidence	Reasoning
1. Coherent assessment system that includes multiple opportunities for pre-, embedded formative, summative, and self-assessment tasks to include equitable considerations for culturally and linguistically diverse students throughout a unit/topic and across the material.		
2. Both formative and summative assessments use a variety of task types, to include equitable considerations for culturally and linguistically diverse students, which occur multiple times.		
3. Instructional materials (including formative and summative assessments) are designed to elicit direct, observable evidence to the NVACs for Science from <b>all</b> students.		
4. Both formative and summative assessment materials provide explicit support (e.g., sample responses, rubrics, scoring guidelines, etc.) to provide multiple opportunities for self, peer, and teacher feedback.		

## Category 4: Teacher Instructional Resources which Support NVACS for Science

Criteria	Evidence	Reasoning
1. Coherent supports to show how each content theme interrelates throughout the material.		
2. Instructional materials provide support for students to develop grade-appropriate, subject-specific specialized language <b>in context</b> through classroom discourse. (Language practices are utilized and embedded within instruction and subject-specific specialized language is embedded in the instruction sequence with supports.)		
3. Teacher resources include pedagogical background information (including relevant, contemporary research) to help teachers support <b>all</b> students throughout the instructional material.		
4. Teacher resources include a variety of instructional strategies, digital tools, and media to deepen student learning.		
5. Instructional materials are made accessible to <b>all</b> students by providing appropriate supports AND scaffolds (Supports include: differentiated reading material, language needs, etc., Scaffolds include: prompts, sentence frames, graphic organizers, anchor charts, etc.).		

**Reviewers' Comments:**

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