Disciplinary Literacy in North Dakota Content Standards

Literacy and text are specialized across the disciplines. Each discipline has a unique way of using text to create, disseminate, and evaluate knowledge. Strategies employed by learners as they encounter disciplinary text come from the demands of the text and the purpose of the specific discipline.

The information below identifies some of the strategies for disciplinary literacy in various disciplines and aspects of the specific content standards within that discipline that refer to those strategies.

Science

Disciplinary literacy in science focuses on the following:

<table>
<thead>
<tr>
<th>Reading</th>
<th>Writing</th>
<th>Thinking</th>
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<tr>
<td>• Ask “Why?” questions.</td>
<td>• Use precise scientific vocabulary.</td>
<td>• Create questions based on curiosity.</td>
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<td>• Interpret data, charts, and illustrations.</td>
<td>• Use passive voice.</td>
<td>• Rely on prior knowledge or research.</td>
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<tr>
<td>• Understand concepts and vocabulary.</td>
<td>• Writing favors the exactness of the information.</td>
<td>• Consider new evidence or conclusion (hypothesis).</td>
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<td>• Determine the validity of sources and quality of evidence presented.</td>
<td>• Synthesize evidence and focus on methods used to gather evidence.</td>
<td>• Propose explanations.</td>
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<td>• Read closely to pay attention to details.</td>
<td>• Include phrases, bullets, graphs, or sketches.</td>
<td>• Create solutions in authentic situations.</td>
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The North Dakota Science Content Standards address disciplinary literacy with Science and Engineering Practices.

• Ask questions and define problems.
• Develop and use models.
• Plan and carry out investigations.
• Analyze and interpret data.
• Use mathematical and computational thinking.
• Construct explanations and design solutions.
• Engage in argument from evidence.
• Obtain, evaluate, and communicate information.

References:

