



Disciplinary literacy is an emphasis on the shared ways of reading, writing, speaking, and thinking within a particular content area or academic field.

CREATED IN
PARTNERSHIP
WITH



Seeking Solutions

By Simone T. Ribke

LEVEL OF DIFFICULTY:

- Emerging (K–2)
- Expanding (3–6)
- Bridging (6–8)
- ELL

FOCUS AREA:

- Career and Technical Education
- College and Career Readiness
- ELA
- Health
- Math
- Science
- Social-Emotional Learning
- Social Studies
- STEM
- Technology



AVID's
WICOR[®]
Methodology

This lesson uses the WICOR (Writing, Inquiry, Collaboration, Organization, Reading) methodology and strategies from AVID's curriculum library and is designed for a variety of learning environments.

AVID Elementary Weekly Resources

Visit the AVID Elementary Weekly matrix for links to lessons, articles, and additional resources.

AVID's Critical Reading Process

This lesson uses the three phases of the critical reading process.

1 ACTIVATE	
<p>Planning for Reading</p> <p>Establish a purpose for reading. Then, intentionally identify strategies that are needed to successfully read the text. Both content and skill development play a role in planning, as does identifying how a “content expert” would read the text.</p>	
<p>Selecting the Text</p> <p>Educators will select texts initially, with the goal being that students will eventually play a role in the selection process. To maximize the effectiveness of texts, use the suggested text-selection criteria to identify the ideal text.</p>	
<p>Pre-Reading</p> <p>Determine what work needs to be done prior to the successful reading of a text. Preview the text and connect to or build background knowledge by looking both inside and outside the text.</p>	
2 ENGAGE	
<p>Building Vocabulary</p> <p>Understand and connect key academic and content-related vocabulary to aid in deeper comprehension of the text.</p>	
<p>Interacting With the Text</p> <p>Interact with the text to process information as it is read, including numbering paragraphs or chunking texts, marking texts to isolate key information, writing in the margins, questioning, and visualizing texts. Usually, a deeper processing of a text occurs over multiple reads with varying purposes for each read.</p>	
3 EXTEND	
<p>Extending Beyond the Text</p> <p>Utilize the text to complete the assigned academic task. “Extend” strategies focus on the development of academic thinking skills such as apply, analyze, evaluate, and synthesize.</p>	

Academic Task:

Synthesize “Seeking Solutions,” written by Simone T. Ribke, through exploring think-alouds and structured dialogue to develop a one-page report.

Learning Objectives:

- Students will work collaboratively to discuss their own thinking and comprehension of the text using scripts, questions, and statements.
- Students will synthesize learning from the selection by compiling takeaways from text and text features.

Essential Question:

What are environmental scientists and how are they working to protect our resources and environments?

Focused Note-Taking: A variety of note-taking formats may be utilized throughout the stages of the critical reading process, including two-column notes. Consider using a fillable template available in the Teacher Resources section of the AVID Elementary Weekly website.

Getting Started:

Estimated Preparation Time: 20 minutes

Instructional Time: 90–120 minutes

Resources Needed:

- Please see the AVID Elementary Weekly matrix for links to the Student and Educator Resources mentioned here in a variety of formats.
- Visit the Blended Learning Toolkit on the AVID Elementary Weekly Teacher Resources webpage for ideas, tools, and tip sheets supporting learning and collaboration within your blended learning environment.
- Printed images from the interactive text or internet
- Sticky notes
- Blank paper
- Markers or colored pencils
- The “Seeking Solutions” interactive text from National Geographic, linked here and on the AVID Elementary matrix:

- [3rd Grade Interactive Text](#)
- [4th Grade Interactive Text](#)
- [5th and 6th Grade Interactive Text](#)

ACTIVATE

Establish a purpose for reading, build background knowledge, and set students up for success.

PLANNING FOR READING

Restate the academic task and identify the strategies that will be needed to successfully engage with the text. Recognize where students are in the gradual release of responsibility; decide whether this activity will be modeled with the entire class, in small groups, or with students working individually; and identify opportunities for blended learning. See the *Teacher Resources page for more information about AVID instructional methodologies and blended learning.*

Think through or have students respond to the following questions and identify how the chosen text fits within the broader context of your instructional unit so students are making connections to their prior knowledge.

- Do other texts need to be read to build background knowledge?
- What technology skills and knowledge will students need to access the text and complete the academic task?

SELECTING THE TEXT

This text meets the following features of an ideal text:

- Rigorous
 - Develops key content or academic thinking skills
 - Length is appropriate for the purpose
 - Format allows for interaction
 - Balanced perspective or multiple viewpoints
 - Culturally relevant
- This text builds reading stamina and provides the opportunity for students to reach higher and/or deeper.
 - This text provides students with the opportunity to practice the “synthesize” academic thinking skill.

- This text is formatted for text interaction, either digital or on paper, to provide students with a place to capture their thinking, questions, *a-ha!* moments, and wonderings as part of the focused note-taking process.

7. Keep the images posted in the room with the accompanying key concepts as students read and interact with the text, referring to the images when appropriate for enhancing student understanding and comprehension.

PRE-READING

Focused Note-Taking

Allow students an opportunity to set up their notes and record the Essential Question before engaging in the learning.

Image Tour

1. Place images from the text or a few images downloaded from the Internet in various areas of the room and number each one so they can be easily identified at a later point. Visit the “Making Our Voices Heard” section of the Blended Learning Toolkit to find digital tools for facilitating a virtual image tour. For scaffolding, this may be done as a whole-class activity with teacher modeling.
2. Have students set up two-column notes with one side labeled “image” and the other side labeled “thoughts.”
3. Break students into small groups and have each group begin at one of the images around the room.
4. For the first round, have students work with their group to study the image, identifying a key term or concept the image represents and recording their thoughts in their notes. Repeat this step until students have recorded their predictions about each of the images displayed in the room.
5. For the second round, reveal the name of the key term or concept for each image. Then have students revisit the image with this named key term or concept in mind. Ask them to think about how this key term or concept might relate to the text and record their predictions in their notes. Students will visit each image and repeat this step.
6. Debrief by having groups review their notes and share their thoughts about the images.

ENGAGE

Build vocabulary and engage in purposeful rereads.

BUILDING VOCABULARY

Vocabulary development can happen at any point in the reading process.

- **Academic words:**
 - environmental (p. 9)
 - affect (p. 9)
 - process (p. 10)
 - projects (p. 10)
- **Content-area words:**
 - dead zone (p. 9)
 - wastewater (p. 9)
 - scale (p. 10)

Key Terms Bar Chart

1. Visit the “Making Thinking Visible” section of the Blended Learning Toolkit for ideas and strategies for facilitating the key terms bar chart strategy in a blended learning environment.
2. Ask students to identify key terms as they read the article. For scaffolding, this activity may be modeled as a whole-class activity as the teacher does a read-aloud.
3. After reading, have students work with a partner to select the three most important words or concepts used in the text. They should be prepared to justify their claims.
4. Have student pairs write their key terms on sticky notes—one term per sticky note; or, for scaffolding, students may draw a visual representation of the word and write the first letter of the word.
5. Ask students to place their sticky notes on the wall or whiteboard.

6. Read the terms aloud and ask students if any terms are similar enough to be placed together.
7. Create a bar chart using the sticky notes to demonstrate which words were identified more frequently by the class.
8. Have students share out patterns or trends they recognize with the words identified. This can be done with a partner or the whole class.
9. Ask students to reflect on why the patterns or trends exist. Have them add this reflection to their notes.

INTERACTING WITH THE TEXT

Students process information during this stage.

Purposeful rereads are essential for learning.

First Read: Read for the Gist

Have students read the text “Seeking Solutions” on pages 8–10 one time through to identify the main idea, or for scaffolding teachers may conduct a read-aloud or have students use the audio function in the interactive text. This is a “pencil-down, digital-ink-free” read.

1. Pair students up with elbow partners or small groups to discuss what they got from the first read.
2. Ask students to capture the main idea that sums up the gist of the text in their notes.
3. If students are struggling to identify the main idea, ask that they identify the 5 W’s (who, what, where, when, why) and the H (how). This can be modeled, done with a partner, or done individually.

Second Read: Get Organized

Review pages 9–10 in the interactive text. As you review each page, ask students to identify key information by adding thoughts, questions, drawings, or new learning to their notes, identifying the page it came from. This can be completed individually or as a whole class with teacher modeling.

Purposeful Reread:

Think-Alouds and Structured Dialogue

1. Review *Student Resource: Think-Aloud Scripts* and *Student Resource: Academic Language Scripts* with the class.
2. Have students partner up, designating one person as Partner A and the other as Partner B. Partnering can be facilitated using a tool from the “Learning Together” section of the Blended Learning Toolkit.
3. Partner A starts the dialogue by reading the first paragraph of the text aloud, or for scaffolding the teacher may do a read-aloud. After reading, have students use *Student Resource: Think-Aloud Scripts* to begin the discussion. Use a tool from the “Making Thinking Visible” section of the Blended Learning Toolkit to support the discussion.
4. For scaffolding, the teacher may begin by introducing one of the think-aloud scripts while reading it aloud to the students and having them repeat it. The students will then use this script to begin their structured dialogue.
5. Partner B responds to Partner A using *Student Resource: Academic Language Scripts*, asking a question or making a statement.
6. Partner A then responds to Partner B using *Student Resource: Academic Language Scripts*.
7. After finishing their dialogue, each student writes a short note about their conversation in the margins of the text, or the students may draw a picture.
8. Have students repeat the process (using the above scaffolds if needed), alternating who will be reading the section of text aloud and using *Student Resource: Think-Aloud Scripts* to start the dialogue for each paragraph or chunk.
9. Students should summarize their writing in the margins in their notes and add any additional learning.

EXTEND

Reading tasks should be directly connected to what students will do with the text after they have read and understand it.

EXTENDING BEYOND THE TEXT

This stage uses the text to develop academic thinking skills.

ACADEMIC THINKING SKILLS:

- Analyze
- Evaluate
- Synthesize
- Apply

One-Page Report

1. Review *One-Pagers* section and *Student Resource: Creating a One-Pager* and determine the guidelines that students should follow in terms of design, content, and assessment.
2. Identify a tool from the “Learning Together” section of the Blended Learning Toolkit that supports collaboration.
3. Introduce the guidelines of the one-page report to students.

4. Guide students to think of images or ideas while modeling reading with a think-aloud, if it is helpful for them to hear the thinking being modeled. Develop a communal word bank using a tool from the “Making Thinking Visible” section of our Blended Learning Toolkit.
5. Provide students with the materials and time to create their reports individually, in partners, or in small groups using a tool from the “Showcasing Our Learning” section of the Blended Learning Toolkit. Students can also use their notes to complete this task.
6. After students have completed their one-page reports, ask a few students to present to the class so that everyone can see a variety of models and interpretations of the texts, or have students participate in a gallery tour, virtual or in person.
7. Debrief by asking students to reflect (either by writing or by speaking) on how this process helped them deepen their understanding of the text. For scaffolding, the following sentence starter may be used: “The one-page report helped me...”
8. Ask students to reflect on their learning by thinking through how they can use the information and how the learning has been useful; have them add these thoughts to their notes.