



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



Dog on wheels

By National Geographic Staff

AVID's Critical Reading Process

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

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.

1 ACTIVATE

Planning for Reading

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.

Selecting the Text

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.

Pre-Reading

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.

2 ENGAGE

Building Vocabulary

Understand and connect key academic and content-related vocabulary to aid in deeper comprehension of the text.

Interacting With the Text

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.

3 EXTEND

Extending Beyond the Text

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.

Academic Task:

Examine the interactive text and two videos in “Dog on wheels,” which focuses on STEM, through a “Did You Notice?” strategy to develop a KWLA chart.

Learning Objectives:

- Students will engage with an interactive text to gain an understanding about force and how it is used in “Dog on wheels.”
- Students will engage in activities to analyze how force shows up in our everyday lives.

Essential Question:

How does force show up in our everyday lives?

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

Getting Started:

Estimated Preparation Time: 15 minutes

Instructional Time: 45–60 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.
- The “Dog on wheels” interactive text and videos from National Geographic, linked below and on the AVID Elementary matrix.
 - [Kindergarten version](#)
 - [1st and 2nd grade version](#)

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.

- What key content-related or general academic vocabulary do students need to know prior to reading the text?
- 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 provides students with the opportunity to develop disciplinary literacy through content-specific academic language development and analytical thinking.
- The length of this text lends itself to modeling how to identify and read an excerpt of a text to accomplish the reading purpose.

PRE-READING

Focused Note-Taking

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

KWLA: Part 1

1. Ask students to create four-column notes and label the columns as follows: K: Know, W: Want to Know, L: Learned, and A: Apply. For scaffolding, this can be completed in partners or small groups or as a whole-class activity with teacher modeling. For additional scaffolding, the students may draw their responses and label them with letters or words.
2. Ask students to use the K: Know column to write what they know about “force.”
3. Ask students to use the W: Want to Know column to write what they wonder about “force.”
4. Instruct students to set their KWLA aside until the end of the lesson.

ENGAGE

Build vocabulary and engage in purposeful rereads.

BUILDING VOCABULARY

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

- **Academic words:**
 - ride (p. 10)
 - fast (p. 14)
- **Content-area words:**
 - move (p. 13)
 - push (p. 12)
 - force (p. 9)

List-Group-Label

Visit “Making Thinking Visible” in the Blended Learning Toolkit for ideas and strategies for facilitating List-Group-Label.

List

1. Using chart paper or a digital whiteboard or slide have students brainstorm all the words they think relate to “force.” For scaffolding, as the students brainstorm words, the teacher may write and read the words generated, modeling appropriate spelling and pronunciation.
2. Allow for productive struggle and the opportunity for students to make mistakes.
3. Add words to the list to deepen students’ thinking.
4. Share the digital version of the brainstorm to all students through your blended learning platform, as needed.

Group

5. Divide the class into small groups. Have the groups transfer the words to index cards or sticky notes and sort the words into categories based on important relationships, or have the groups work together to sort the words into categories by color-coding the words by highlighting, circling, or underlining each word. For scaffolding, the students can create drawings to accompany their words.
6. Ask students to explain their reasoning for placing words together.
7. Groups may ask each other questions and change their groupings based on new learning.

Label

8. Invite students to suggest a category label for their groups of words. They should be able to justify the thinking behind the labels they have chosen. Prompt students to share their slide or whiteboard as a visual aide during the class discussion. To adapt this lesson, provide pre-established categories and have students categorize words, then gradually release students to categorize independently.
9. Facilitate a discussion with the whole class around the categories they have identified, including their justification for each category. Possible sentence stems are:

- I placed these words together because...
 - These words are similar because...
 - The best label for this group of words is... because...
10. After students have collaborated and discussed their list, give them an opportunity to add their new learning 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 “Dog on wheels” and view the videos on pages 11 and 14 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 reading and viewing.
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 9–14 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: Did You Notice?

1. Show students the videos on pages 11 and 14 to model how to notice details or themes about the topic. Ask students to pay attention to what is happening. Then, have them talk in pairs about the following questions:
 - a. Why did someone make this?
 - b. How is it supposed to affect the viewer?
2. View the videos on pages 11 and 14 and the interactive text “Dog on wheels” a second time and ask students to notice things they think indicate its purpose and contribute to its effect.
3. Explain that this process helps us notice the deliberate decisions made by the creators of the video, image, or nonlinguistic representation and that we can learn more about how to make an effective video or nonlinguistic text by pinpointing these things. The same is true about noticing things as we read that help us improve our own writing.

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

KWLA: Part 2

1. Ask students to retrieve the KWLA they set aside at the outset of the lesson.
2. Instruct students to use the L: Learned column and reflect what they learned about “force.”
3. For scaffolding, this may be completed in partners or small groups or as a whole-class activity with teacher modeling. For additional scaffolding, the students may draw the ideas and label them with letters or words.
Encourage students to revisit their notes as a resource for learning.
4. Ask students to use the A: Applied column and think about what they can apply from the research, especially as it relates to “force.”
Provide a sentence frame to support students’ writing such as the following: “I learned that force is _____. I see force every day when _____.”