

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

LEVEL OF DIFFICULTY:

□ Emerging (PreK–K)

- \Box Emerging (1–2)
- \boxtimes Expanding (3–6)
- □ Bridging (6–8)
- 🗆 ELL

FOCUS AREA:

- \Box Career and Technical Education
- □ College and Career Readiness
- \Box ELA
- 🗆 Health
- 🗆 Math
- \Box Science
- \Box Social-Emotional Learning
- ⊠ Social Studies
- \boxtimes Stem



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. CREATED IN PARTNERSHIP WITH



Food for the Future

By Joe Levit

AVID's Critical Reading Process

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.

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.

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.



Educator Preparation

Academic Task:

Analyze "Food for the Future," written by Joe Levit, through Text-Dependent Questioning to engage in a Socratic Seminar.

Learning Objectives:

- Students will prepare to read the text by taking a stand on statements related to text content.
- Students will collaboratively craft and answer text-based questions.
- Students will apply key understandings from the text as they participate in a structured dialogue.

Essential Question:

What steps are countries taking now to ensure that our food supply is safe in the future?

Focused Note-Taking:

A variety of note-taking formats may be utilized throughout the stages of the Critical Reading Process, including three-column notes. Consider using a fillable template available in the Teacher Resources section of the AVID Elementary Weekly website.

Getting Started:

Estimated Preparation Time: 20–30 minutes

Instructional Time: 90–120 minutes

Resources Needed:

- This lesson includes blended learning strategies with various tool options. Review the entire lesson to
 determine tools and materials for your learning environment; some phases may require advance setup. 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.
 - Activate:
 - Pre-reading: Student-created three-column notes—use one of the three-column notes templates available in the Teacher Resources section, or use Educator Resource: Anticipation Guide Template
 - Engage:
 - Vocabulary: Jamboard, MS PowerPoint/Google Slides, Padlet, or an area in the classroom with large alphabetical anchors that is visible to the class
 - Interacting With the Text: The "Food for the Future" interactive text from National Geographic, linked below and on the AVID Elementary matrix; Kami, Google Docs, or another tool that will allow you to demonstrate chunking the text; and print or digital copy of *Progression of Text-Dependent Questions*
 - <u>3rd Grade Interactive Text</u>
 - <u>4th Grade Interactive Text</u>
 - <u>5th/6th Grade Interactive Text</u>

- \circ Extend:
 - Extend: Google Docs/MS Word, Padlet, or another tool to use as a backchannel for comments, questions; marked text; text-dependent questions; print or digital copy of *Academic Language Scripts*; cats and fish cards; *Observation Checklist for Socratic Seminar*; student notes; *Educator Resource: Academic Language Scripts for Socratic Seminar*
- Please see the AVID Elementary Weekly matrix for links to the Student and Educator Resources mentioned here in a variety of formats.

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 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 previously taught content and/or prior knowledge is connected to the new 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:

 \boxtimes 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
 - Academic thinking skills are necessary for comprehension of this text.
 - This text provides students with the opportunity to develop disciplinary literacy through content-specific academic language development and analytical thinking.

Instructional Steps

PRE-READING

Focused Note-Taking

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

Anticipation Guides

- 1. Have students set up three-column notes; use one of the three-column notes templates available in the Teacher Resources section or use *Educator Resource: Anticipation Guide Template*. For additional scaffolding, use teacher modeling with the whole group.
- 2. Have students write the following statements in the first column of their notes or the column titled "Statement" on the template:
 - Storing seeds for the future is a wise idea.
 - Scientists are not sure about the best way to store seeds to protect them from moisture and heat.
 - More varieties of seeds exist today than ever before.
- 3. Before reading and viewing the text and video, have students work individually or in small groups, using the second column or the column titled "Before Reading" to determine whether they agree (A) or disagree (D) with the statements and explain why.

ENGAGE

Build vocabulary and engage in purposeful rereads.

BUILDING VOCABULARY

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

Academic Words:

- global (p. 11)
- diversity (p. 11)
- decline (p. 11)
- civil (p. 13)

Content-Area Words:

- vault (p. 11)
- agriculture (p. 11)

Word Walls

- In advance, set up a Jamboard, PowerPoint slides, Padlet, or area in the classroom that is visible to the class with either large alphabetical anchors or a subject-specific display for each topic. In groups, have students write the vocabulary words listed above on the selected tool. For additional scaffolding, use teacher modeling with the whole group.
- 2. Students may add picture cues, either from media resources or drawn onto the cards.
- 3. After discussing word meanings, have students write the definition of the word on another space.
- 4. Display the words within the designated area.
- 5. Point out the words and definitions as a resource during the lesson.

- 6. Revisit the word wall after reading the text, and have students revise their definitions as needed, adding their new learning to their notes.
- 7. Encourage and celebrate students who use the vocabulary words when speaking in class discussions.

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 "Food for the Future" on pages 10 through 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.

Purposeful Reread: Get Organized

Review pages 10–14 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.

Text-Dependent Questioning

- 1. In advance, upload the text to Kami, Google Docs, or another tool that will allow you to demonstrate chunking the text.
- Assign students into reading pairs, who will work together to deconstruct the text and craft questions for another reading pair to answer and discuss. Provide groups with a copy of *Educator Resource: Progression of Text-Dependent Questions*. Consider the gradual release of responsibility when deconstructing the text to craft questions—for example, whole-class modeling, guided practice, etc.
- 3. Assign each reading pair two or three categories of questions to craft for another reading team. Each group can be assigned the same categories, or groups can be assigned different categories.
- 4. Chunk the text with the class so that each reading group crafts questions for specific areas of the text.
- 5. Model the process of creating a question with the first chunk of the text, ensuring that students understand why that question was crafted.
- 6. Have student pairs add their questions to the selected digital tool or use sticky notes labeled with the corresponding paragraph or section number.
- 7. After each pair of students has completed their sets of questions, they will trade or digitally share their notes with another group.
- 8. Each pair will read the text one more time before answering the questions provided to them by another group.
- 9. As a class, identify the best questions and bring them to a Socratic Seminar as part of extending beyond the text.
- 10. Give students time to reflect on their learning so far and prepare for the Socratic Seminar in their notes.

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

Socratic Seminar

- 1. Discuss the purpose and format of the Socratic Seminar with students. In advance, set up a space in Google Docs, MS Word, Padlet, or another tool to use as a backchannel for comments, questions, and sharing resources. Refer to the <u>Socratic Seminar core strategy webpage</u> for additional instructional guides.
- 2. Have students bring the questions they developed while engaging in the Text-Dependent Questioning strategy during the "interact" phase of the reading process, or for scaffolding the teacher may begin with the Essential Question: "What steps are countries taking now to ensure that our food supply is safe in the future?"
- 3. Provide students with academic language scripts to use during the Socratic Seminar (see *Educator Resource: Academic Language Scripts for Socratic Seminar*).
- 4. Share, or co-create with students, a word bank for the Socratic Seminar.
- 5. Arrange students into the type of Socratic Seminar they will be engaging in (one large seminar, inner/outer circle, pilot/co-pilot, or simultaneous) with the word bank visible, or use a strategy to help facilitate discussion. Consider using *Educator Resource: Cats and Fish Cards* to help get the students arranged. The sentence stems on one side of the cards can be used to support the discussion.
- 6. Students should bring the necessary materials for participating in the Socratic Seminar with them: their marked text, questions, their cat or fish cards, *Student Resource: Observation Checklist for Socratic Seminar,* and note-taking implements.
- 7. Have students zip around the circle, reading one of their questions, or for scaffolding the teacher may begin with the Essential Question. The group selects an opening question and begins their discussion.
- 8. The discussion continues as group members ask clarifying questions or offer responses, with students building upon the comments and analysis of others using their academic language scripts.
- 9. Pause periodically for pilot/co-pilot discussion or for students to switch roles.
- 10. End the Socratic Seminar with an oral or written debrief and reflection upon the process. Students should add this written reflection and summary to their notes.