



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:**

- Foundational
- Intermediate
- Advanced
- 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 Weekly Resources**

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

## Career Connections (Grades 6–8)

**SOURCE:** AVID STEM Connections

Published January 1, 2021

### AVID's Critical Reading Process

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

<b>1 ACTIVATE</b>
<p><b>Planning for Reading</b> 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><b>Selecting the Text</b> 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><b>Pre-Reading</b> 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>
<b>2 ENGAGE</b>
<p><b>Building Vocabulary</b> Understand and connect key academic and content-related vocabulary to aid in deeper comprehension of the text.</p>
<p><b>Interacting With the Text</b> 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>
<b>3 EXTEND</b>
<p><b>Extending Beyond the Text</b> 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:

Analyze “Career Connections (Grades 6–8),” part of the AVID STEM Connections series, through a Double-Entry Journal to develop an understanding of STEM-related careers using the instructional practice Says, Means, Matters.

### Learning Objective:

Students will analyze content to make inferences and generalize information related to the text.

## Essential Question:

What STEM-related career choices are possible, and how do these careers make a societal impact?

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

## Getting Started:

**Estimated Preparation Time:** 20 minutes

**Instructional Time:** 90 minutes

### Resources Needed:

- Please see the AVID 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 Weekly Teacher Resources webpage for ideas, tools, and tip sheets supporting learning and collaboration within your blended learning environment.
- Sticky notes or index cards
- Chart paper

## ACTIVATE

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

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## 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?
- How does the text fit into the overall instructional unit or overall learning experience?

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## 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.
- Engagement with this text fosters inquiry and curiosity.

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## PRE-READING

### Focused Note-Taking

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

## Give One, Get One

1. Have students brainstorm possible STEM-related careers by either drawing pictures or capturing their connections in writing.
2. Ask students to draw a line beneath the last item they wrote/drew.
3. Students will move with the list in their hand and find a partner to share one of their ideas with, taking turns so each partner has the opportunity to share.
4. Have students write down their partner's name and what was shared with them beneath the line that they drew.
5. Do multiple rounds of this so students "give" and "get" ideas from a variety of partners.

scaffolding, as the students brainstorm words, the teacher may write and read the words generated, modeling appropriate spelling and pronunciation. Encourage students to think beyond listing careers as a repeat of the previous activity. Guide students to include skills and personality traits (e.g., collaboration, problem-solving, dedication).

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, if needed.

## ENGAGE

*Build vocabulary and engage in purposeful rereads.*

## BUILDING VOCABULARY

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

- **Academic words:**
  - multifaceted (slide 2)
  - multidisciplinary (slide 2)
  - careers (slide 2)
  - STEM (slide 2)
- **Content-area words:**
  - goal (slide 10)
  - media (slide 11)
  - investigate (slide 11)
  - mentally (slide 13)

## 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:

## 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 STEM careers. For

- 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.

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## 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 one time through to identify the main idea; 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

Number the paragraphs or sections of the text as a class. Read the first two words of each paragraph or section and ask students to call out the number of the paragraph. While they call out the number, they will also number that paragraph or section in the margin of their text.

### Purposeful Reread: Double-Entry Journal

1. Have students set up their notes in the two-column notes format. The left side should be labeled “Text Evidence” and the right column “My Thinking.” Provide an example or model on chart paper or by using a tool from the “Making Thinking Visible” section within the Blended Learning Toolkit. For scaffolding, gradually release students to write with a partner and then independently.

2. Have students record visuals, quotations, words, phrases, or sentences that are important points or that connect to the Essential Question in the left column.
3. In the “My Thinking” column, have students write down words or phrases they don’t understand or have questions about.
4. Have students share their notes with a partner or small group and work together to clarify what they are not understanding. A tool from the “Sharing Learning” section of the Blended Learning Toolkit can be chosen to support this collaboration. They should add their new learning to their notes.

## EXTEND

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

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## EXTENDING BEYOND THE TEXT

*This stage uses the text to develop academic thinking skills.*

### ACADEMIC THINKING SKILLS:

- Analyze
- Evaluate
- Synthesize
- Apply

### Says, Means, Matters

*Optional: Have students narrow their options down to 3–5 careers from the text that they are most interested in thinking more about.*

1. Model the thinking behind what goes into each of the columns by filling out the example row of *Student Resource: Says, Means, Matters Template*. Some Think-Aloud talking points include the following:
  - **Says:** What does the text say? What are the key ideas or phrases that connect back to STEM careers?
  - **Means:** What does the author mean? How can this information be interpreted or used?

- **Matters:** Why does this information matter? What are the implications of this information in connection with the need for the STEM career? How will this career impact society's needs?
2. Model filling in the first row of the template with the following examples:
- **Says:** "Agricultural scientists research and investigate methods for improving food quality. They also work with farmers to suggest methods to improve their production of crops and livestock" (slide 4).
  - **Means:** An agricultural scientist helps to improve food quality, production of crops, and livestock. The author connects the job of an agricultural researcher to making improvements to society's quality of food supply.
  - **Matters:** This particular STEM job is important to society because it directly impacts personal health.
3. Ask students to work in small groups or independently to analyze the rest of the text. Students can use their notes as a resource to complete this task.
4. Ask groups to present their Says, Means, Matters statements to the class to provide a variety of models for how to approach the text.
5. Debrief the process with students so that they understand how this analysis helps the reader understand the various moves that an author makes when writing and why the author makes those choices. Encourage students to process their Says, Means, Matters notes by marking at least three points of significance to include in a summary and reflection.
6. Students should reflect on their learning and summarize their notes by answering the Essential Question.