



AVID Professional Learning Workshop

AVID High Engagement Teaching Strategies

Handouts

Cornell Notes



Topic/Objective:

Name:

Class/Period:

Date:

Essential Question:

Questions:

Notes:

Questions:	Notes:

What Does College and Career Readiness Mean?

No matter what postsecondary path high school graduates choose, students must develop certain essential skills to design their own futures: critical thinking, collaboration, reading, writing, and relationship building. The development of these skills is rooted in belief in self. If students believe they are capable, there is a foundational confidence to learn and a resiliency to overcome setbacks.

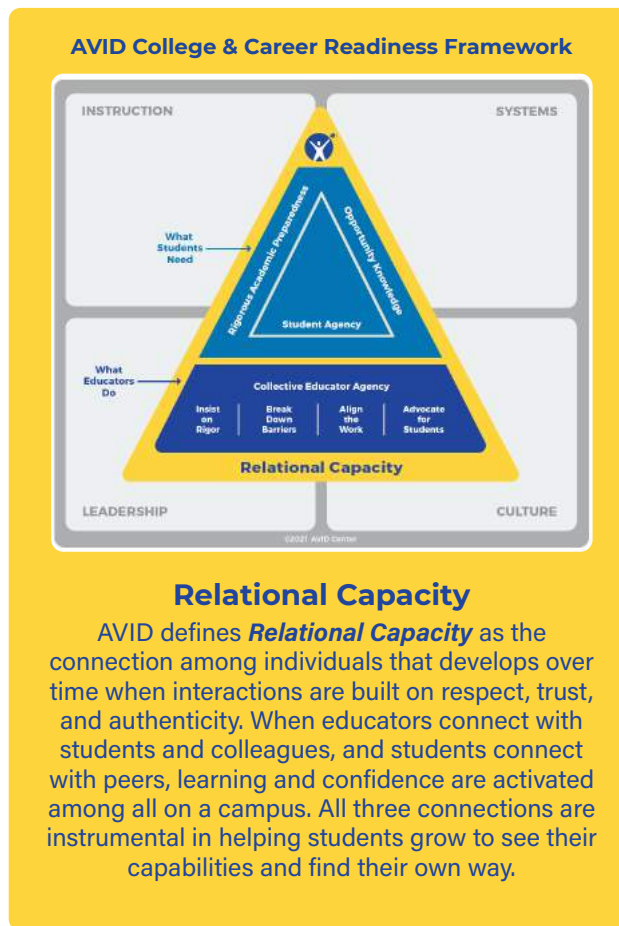
Ensure Student Success

Over four decades, we have seen that when school leaders focus on rigorous instruction, insist on access and equity for all students, align work to a common vision, and believe in students' potential, student outcomes improve. In addition to graduating more college-bound and career-ready students, schools are equipping their students with the social and emotional faculties they need for life and career success. By placing students in a learning setting that engages them in rigor with support, opportunities to explore their future pathways, and deliberate instruction in self-management and leadership, students develop the agency and skills that will serve them for life. With AVID, students excel regardless of their circumstances, socioeconomic status, ethnicity, or English proficiency.

What Students Need

AVID students receive intentional support and mentoring in three major areas that help them become confident individuals who can successfully navigate life and career:

- **Rigorous Academic Preparedness** — Students develop academic skills and can successfully complete rigorous college and career preparatory curriculum and experiences.
- **Opportunity Knowledge** — Students research opportunities, set goals, make choices that support their long-term aspirations, and successfully navigate transitions to the next level.
- **Student Agency** — Students believe in themselves and act intentionally to build relationships, persist through obstacles, and activate their academic, social, emotional, and professional knowledge and skills to reach their potential.



What Educators Do

Teachers and other adults on a school campus play an important role in student success. To bring about this transformation, educators must:

- **Insist on Rigor** — Educators provide learning experiences in which every student is challenged, engaged, and develops a greater ownership of their learning through increasingly complex levels of understanding.
- **Break Down Barriers** — Educators actively identify and work to eliminate structural and perceptual barriers that limit students' access to relevant and challenging learning opportunities.
- **Align the Work** — Educators increasingly align policies, practices, and beliefs to the shared vision of all students succeeding in college, career, and life.
- **Advocate for Students** — Educators extend social, emotional, and academic support to students and challenge policies, practices, or beliefs that limit potential.

Collective Educator Agency

AVID defines this as educators taking intentional actions based on shared beliefs and trust that, together, they can increase opportunity and measurable success for all students and each other. When Collective Educator Agency develops on a campus, the learning environment transforms into one where students are challenged, supported, and provided the tools needed to succeed.

Your Program Manager will help your school leaders discover and apply AVID tools and resources to develop your AVID College and Career Readiness System.

WICOR Description



WICOR¹ is an instructional approach involving both teachers and students, placing students at the center and empowering them to take ownership and agency of their thinking and learning. When educators create instructional experiences integrated in the rich layers of WICOR, students are actively engaged with content through productive struggle, cognitive wrestling and critical thinking to access rigorous content from a multitude of perspectives and use it

to create new innovations, challenge old ideas, and positively impact the world around them. WICOR involves intentional instructional decision-making designed to provide students opportunities to demonstrate what they know and can do with rigorous course content and build skills and behaviors that support college and career readiness. This instructional approach involves a scaffolded process of skill-building, which begins in elementary school and gradually releases to autonomous student demonstration of mastery throughout the K-12 journey. When educators are clear about WHY they are facilitating a strategy in alignment with the learning objective, then students understand why they are engaged in a specific structure and can draw upon the same strategy in a different context. The WHAT of WICOR includes the specific strategies used in each component: writing, inquiry, collaboration, organization, and reading. The HOW of WICOR is the way those strategies are implemented into the curriculum that encourages more engagement and interaction with one's own learning to promote WICOR skills.

Utilizing technology to achieve the goals of WICOR can empower student voice, choice, and growth, while assisting them in being successful in a world that is constantly evolving. It is not about the tool or device being used, but how educators can authentically integrate digital tools to differentiate instruction and increase student ownership and independence of their learning, through the use with WICOR instructional practices. The addition of digital teaching and learning in WICOR will elicit more critical thinking, collaboration, communication, and creativity, aligning with the 21st century skills needed for students to be college and career ready. Ultimately, each of these components layer upon one another thus exponentially increasing the rigor in the learning and producing students that are superbly equipped to excel in our 21st century world.

¹ This revised description includes blended digital learning.

WICOR DEFINED

WRITING

Focused Note Taking/Learning Logs
Quickwrites/Reflections Process writing
Peer evaluation
Authentic Writing

READING

Deep reading strategies
Note-taking
Graphic organisers
Vocabulary building
Summarising
Reciprocal teaching

INQUIRY

Skilled questioning techniques
Costa's level of thinking
Socratic seminars
Tutorials/CSGs
Investigations
Questions that guide research

ORGANISATION

Binders and organisational tools
Calendars, planners and agendas
Graphic organisers
A focussed note-taking system
Tutorials and study groups
Project planning and SMART goals

COLLABORATION

Socratic seminars
Tutorials/CSGs
Philosophical chairs
Group activities and projects
Peer editing groups
Service Community Projects



The Five Phases of the Focused Note-Taking Process

AVID’s focused note-taking process has five phases. It is important to note that while *applying learning* is the last phase of the process, it is essential that it inform the first phase, as the note-taking format should be shaped by the note-taking purpose. When teaching the focused note-taking process, educators need to determine how students will use their notes and set up the format appropriately. It is crucial for educators to model and invite students to engage in this thought process so that note-taking becomes a powerful and portable learning tool students can carry with them throughout their educational experience.

<p>Taking Notes</p> 	<p>Create the notes. Select a note-taking format, set up the note page, record the Essential Question, and take notes based on an information source (lecture, book, website, article, video, etc.), selecting, paraphrasing, and arranging information in a way that meets your note-taking objective.</p>
<p>Processing Notes</p> 	<p>Think about the notes. Revise notes—by underlining, highlighting, circling, chunking, questioning, adding, deleting—to identify, select, sort, organize, and classify main ideas and details. Evaluate the relative importance of information and ideas in the notes.</p>
<p>Connecting Thinking</p> 	<p>Think beyond the notes. Analyze the notes using inquiry to make connections and deepen content knowledge by asking questions and adding your own thinking to create greater understanding, identify gaps or points of confusion, and connect your new learning to what you already know.</p>
<p>Summarizing and Reflecting on Learning</p> 	<p>Think about the notes as a whole. Pull together the most important aspects of your notes and your thinking about them to craft a summary that captures the meaning and importance of the content and reflects on how the learning helps you meet the note-taking objective.</p>
<p>Applying Learning</p> 	<p>Use the notes. Save and revisit your notes as a resource or learning tool to help you apply or demonstrate what you have learned.</p>

Identifying the Note-Taking Objective

Ideally, educators should communicate an objective to students prior to every note-taking opportunity so that students will have a clear picture of why they are taking notes and what content they should view as important. The note-taking objective should help students answer the questions “Why am I taking these notes?” and “What will I be doing with these notes later?”

A good note-taking objective should relate to the overall learning objective for a lesson and should specify the function of the notes within the lesson itself.

- **Question** that students can answer using their notes. Note-taking objectives and Essential Questions should be written in language that is easily understood by students, maintaining consistent use of academic language and content-specific vocabulary.

Sample note-taking objectives and related Essential Questions for various content areas are included in the following chart. Add some of your own to the end of the chart (on the next page).

Essential Questions are objective-based, student-generated, or teacher-generated questions appropriate to a particular lesson, unit, or concept. They are used by students to guide thinking and frame note-taking and summarization in order to accomplish an assigned task.

Subject Area and Learning Task	Note-Taking Objective	Essential Question
Science – cellular respiration lab	Collect quantitative and qualitative data about what occurred during the lab to use for writing a lab report.	<i>What data can I collect to measure the occurrence of cellular respiration in a living organism at different temperatures, and what can I conclude from the data?</i>
History – examining charts about population trends in Europe from 1000–1700 CE	Make observations from the data to use in a Socratic Seminar about population trends in Europe from 1000–1700 CE and the social, economic, and political causes that explain them.	<i>What trends can I identify in the data, and how can I explain those trends using my understanding of European history during this time period?</i>
Math – geometry activity about defining triangles	Record/capture observations, patterns, and trends discovered by creating examples of triangles and non-triangles, for use when writing a rule to define the Triangle Inequality Theorem.	<i>What patterns from the data can I use to write a rule that will determine whether three given side lengths will form a triangle?</i>
English – close reading of the balcony scene from Shakespeare’s <i>Romeo and Juliet</i>	Record and reflect on examples of Shakespeare’s use of light and dark imagery to express the developing feelings of Romeo and Juliet, for use in a literary analysis essay.	<i>How does Shakespeare use light and dark imagery to convey the feelings of Romeo and Juliet?</i>
AVID Elective – career interview	Prepare a presentation to the class about the career of the person you interviewed, focusing on what the career involves and the training and skills required.	<i>What does a [name of occupation] do, what skills are required, and what would I have to do to become one?</i>

Subject Area and Learning Task	Note-Taking Objective	Essential Question
Government – lecture about checks and balances	Explain the idea of checks and balances and how it relates to the structure of the U.S. government, an important concept to understand for the unit test.	<i>How does the U.S. government's organization prevent one group or person from gaining too much power or having excessive influence?</i>
Music – video of a recent choir concert performance by the students	Make observations about the performance to provide critical feedback for the class as a whole and to set personal goals for improvement.	<i>In our most recent concert, what did we do well, what do we need to work on, and what will I do to improve for the next performance?</i>
Health – nutrition log	Analyze your intake of food and beverages for a week to develop a personal nutrition plan.	<i>How healthy is my diet, and what improvements do I need to make in my diet to meet my fitness goals?</i>
Art – baroque art video	For the upcoming exam, identify important works of southern baroque art and explain how historical factors influenced their content and style.	<i>What are the key characteristics of important works of southern baroque art, and what historical factors explain their content and style?</i>
<i>Add your own:</i>		
<i>Add your own:</i>		

Students will likely encounter instructors who do not provide a note-taking objective or Essential Question. Educators who are teaching their students the foundations of note-taking should spend some time helping students learn to identify objectives and create Essential Questions on their own. This can be done in a number of ways:

- Provide students with a note-taking objective and allow them to practice writing an Essential Question that addresses that objective.
- Prior to taking notes on a reading assignment, preview a chapter in the textbook, looking at subject headings, section divisions, visual aids, and other elements to determine what content the chapter is likely to contain. As a class, create a note-taking objective and Essential Question to guide the note-takers' efforts.
- When working with a document describing a project or large assignment and its requirements, encourage students to identify the places where note-taking will be necessary in the completion of the assignment, the purpose for each note-taking task, and the question they should focus on while taking notes.
- For a student-directed research assignment, ask students to create a note-taking objective and Essential Question during the planning phases of the project. Conference with students to provide feedback on the quality and usefulness of the students' objectives and questions.

INSTRUCTIONAL PRACTICE: Setting Up Cornell Notes: Creating the Cornell Note Format

The Cornell notes format provides space to facilitate the phases of the focused note-taking process by including a column for connecting thinking and an area for the summary reflection. Students can easily set up the format for Cornell notes on their own page—lined, unlined, or graph paper—with a ruler or by folding the paper over to make a vertical line about one-third of the way across the page. When taking notes digitally, students can use a blank Cornell notes template with a left and right column or take notes using the entire page and add questions and connections using the commenting feature, if available.

Instructional Goal

- Students will learn how to set up the format for Cornell notes.

Resource

- *Cornell Note Template* (Educator Resource)

Preparation for Instruction

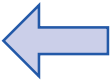
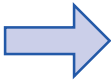
- Determine the note-taking purpose. Write an Essential Question to direct students' thinking about the topic.
- Prepare a sample note-taking page to use as a model for students when setting up the notes.

Instructional Strategies

- Discuss the note-taking purpose and the Essential Question for the notes. Ask students to write the Essential Question at the top of the note page.
- Model how to set up a page for note-taking in a journal, notebook, on loose-leaf paper, or using word processing software.
 - When taking notes on paper, students may create their own note-taking pages with sections and columns drawn with a ruler or by folding the paper.
 - When taking notes digitally, students may use a template or set up their notes using tables.
 - Project the sample note-taking page for students to use as a model as they set up their own page of notes.
- Begin note-taking, and model using a Think-Aloud or discuss with students the sort of input that should appear in each section of the notes.
- Utilize the 10–2–2 scaffold, allowing students to compare notes with a partner throughout the note-taking phase to compare notes, add information, or make necessary adjustments.

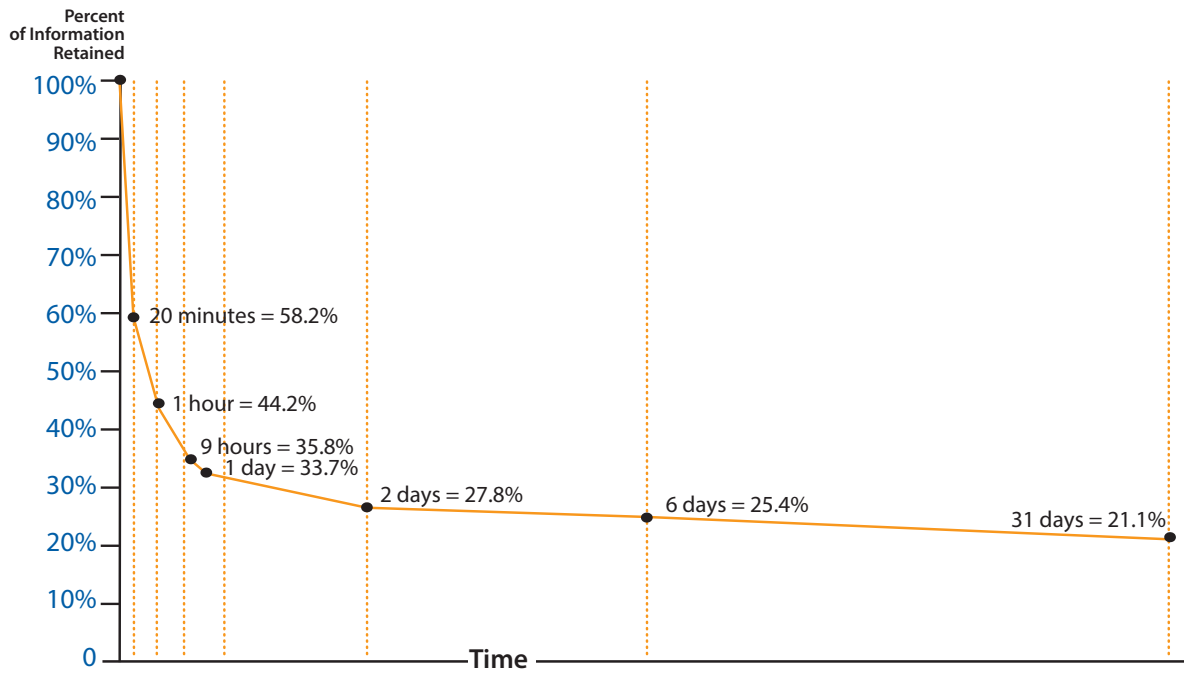
Cornell Note Template

This resource is for educators to use to teach students how to set up their paper for Cornell notes. Students should be encouraged to set up their own note-taking format rather than use pre-formatted note paper.

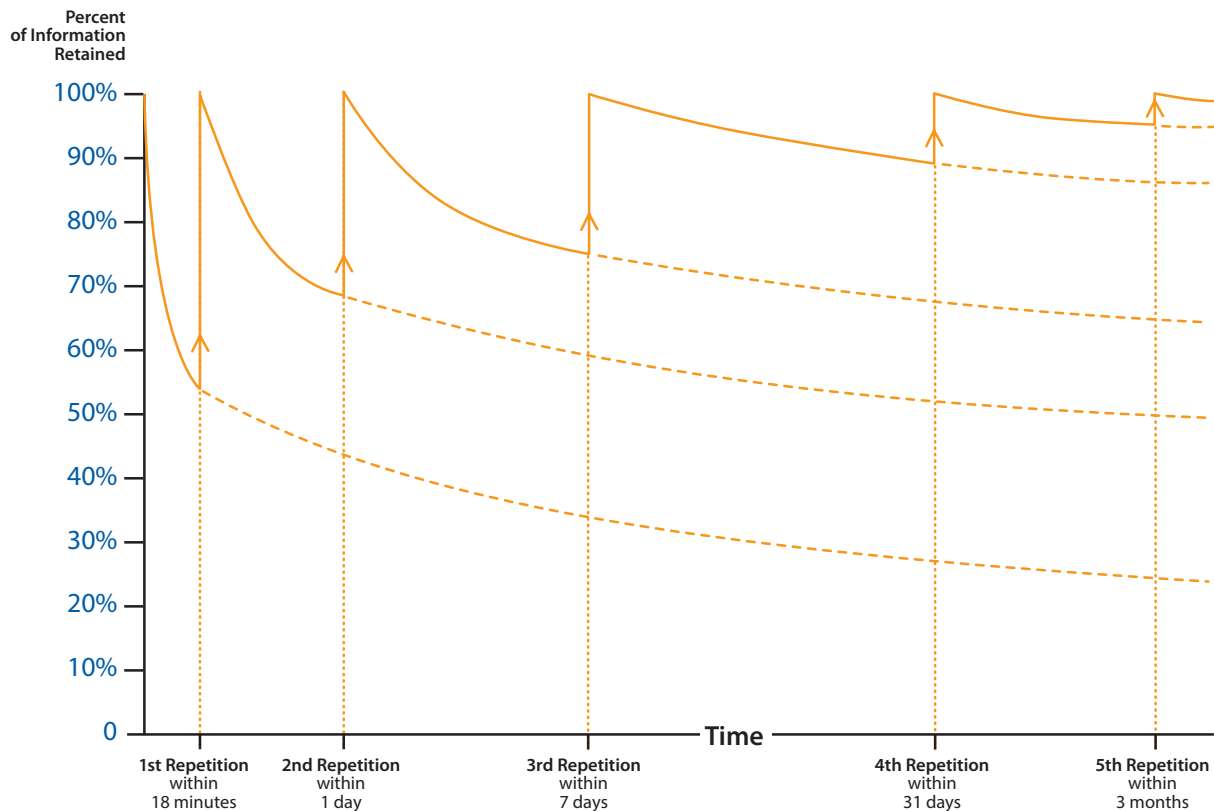
Topic:		Name:
Objective/Note-Taking Purpose:		Class/Period:
		Date:
Essential Question:		
Questions/Connections:	Notes:	
<p>Leave this space blank for adding questions and ideas in the Connecting Thinking phase.</p> <p style="text-align: center;">  About 1/3 of the page  </p>	<p>Take notes in this section using whatever method you prefer: outline, webbing, bullets, charts, diagrams, or a combination.</p> <p>Leave space for additions and revisions.</p>	
Summary Reflection:		
<p>Add a space for a summary at the end of your notes. When taking notes on paper, you might want to wait to designate this area on your paper until you finish taking the notes so you do not run out of space for note-taking.</p>		

The Rate of Forgetting

Rate of Forgetting Without Study/Repetition



Rate of Forgetting With Study/Repetition



Ebbinghaus, H. (1885). *Memory: A contribution to experimental psychology*. New York, NY: Dover.



Revising Notes

Why this is important: Teaching students to go back into their notes and update them as their understanding of the content deepens provides an opportunity for review and revision. The review-and-revision process must be intentionally taught. Because forgetting begins immediately after learning, revising should take place as soon as possible after the notes are taken. Giving students specific elements to include in revision provides learners something tangible to look for as they deepen their skills through this cognitive process.

How it works: During this step, learners will dive back into their notes to identify what is important (key ideas, terms, people, etc.) and to clarify the existing information to make the notes a useful learning tool. Relying on classmates as a primary source for filling in missing information or returning to the original source for clarification, the learner will make sure notes are complete, clear, and ready to use in the applying learning phase of note-taking. Note revision is a messy process as students add, subtract, or mark information by underlining, color-coding, crossing out, or amending. The evidence of revision serves as a visible indication of students' thinking about their learning.

Key strategies for revising notes include:

- Identifying and marking key terms or vocabulary words
- Color-coding to indicate important people, events, places, or works
- Crossing out extraneous or unimportant information
- Adding information to fill in gaps, clarify, or elaborate
- Indicating important information and points of confusion that require clarification or further explanation
- Marking most important ideas or main points
- Representing information in visual or symbolic ways to help with recall
- Annotating notes by paraphrasing large or wordy chunks of material

Student Resource: Note Revision Checklist can serve as a guide for learners to revise their own notes or to collaborate with a partner to revise.



ESSENTIAL INSTRUCTIONAL PRACTICE 2: Interactive Notebooks

Interactive Notebooks

are a learning structure that helps students organize and archive their learning, and serves as evidence of learning and a reference tool.

..... **Interactive Notebooks** were introduced to the educational world through the *History Alive! Interactive Student Notebook* publication in 1999. This valuable learning tool is now being used across academic disciplines and in multiple grade levels, including college courses. For students, Interactive Notebooks become a collection of evidence of learning, as well as a reference tool. For educators, Interactive Notebooks can be an efficient learning structure that helps students organize and archive their learning. There are many variations and formatting structures that can be included in an Interactive Notebook, allowing educators an opportunity to tailor their notebooks to relevant content and students' ability.

With Interactive Notebooks (INBs), students take greater responsibility for their learning as they more clearly connect the information from classroom notes, reading assignments, or laboratory work with the products from and application of the information. Providing students with a variety of options for processing their learning also accommodates different learning styles and creativity levels, and aids in retention of academic information. Interactive Notebooks also are a means of ongoing communication between students and teacher, and between the teacher and parents or guardians.

Instructional Goal

- Students will create “living” notebooks to be used as personal organizational tools, archives of learning, and reference tools.

Resources

- *Interactive Notebook: Left Side (Output)* (Student Resource)
- *Interactive Notebook: Right Side (Input)* (Student Resource)
- *Interactive Notebook Table of Contents* (Student Resource)
- *Interactive Notebook Score Sheet* (Student Resource)
- *Interactive Notebook 5-Point Scoring Rubric* (Student Resource)
- *Adult Input Page (Multiple Response)* (Student Resource)
- *Interactive Notebook Reflection Questions* (Educator Resource)
- *Interactive Notebook Reflection* (Student Resource)

Preparation for Instruction

- Evaluate the purpose of each lesson, strategy, chunk of instruction, or investigation and how the INB note-taking and processing will lead to an application of the learning in students' continued content work.
- Formulate and communicate the types of information that can be used as *input* (right-side information) and the types of processing strategies that can be used as *output* (left-side processing opportunities).



- Define notebook expectations while considering scaffolding support or increasing rigor based on grade level or developmental level of student population groups.
- Determine how collaboration can occur while students develop the sections of the Interactive Notebook (notes, questions, summary, reflection, charts/tables, processing strategies).
- Create a consistent plan and schedule to allow for assessment of notebooks, including students' self-reflection and peer evaluation.

Instructional Strategies

Teachers have many options to consider when using Interactive Notebooks as tools for learning. The grade level and developmental level of the students and the content area being taught will inform how the notebooks can be used. The strategies presented in this section can be modified to fit either print or digital Interactive Notebooks as well as to fit your needs and those of your students. In other words, “make it work for you.”

Paper or Digital Interactive Notebooks?

There are benefits to both paper and digital Interactive Notebooks. The chart on the next page will help you compare and evaluate the general structure of both systems and determine which system is most appropriate for your classroom. Regardless of the system being used, the teacher should set clear expectations and model for students how to organize information within the Interactive Notebooks. Specific information on setting up and using Interactive Notebooks is provided after the comparison chart.



	Paper	Digital
Type of Notebook	The most commonly used notebooks are spiral-bound or composition books. In determining the type and size to use, consider your students' developmental needs, the timeframe over which the notebook will be used (e.g., unit, grading period), and the wear-and-tear of the notebooks over the timeframe.	Students set up notebooks using cloud-based tools that allow for note-taking, word processing, or quick creative tasks.
Access	It is important to determine where students will keep their notebooks. Will they leave them in the classroom or take them home after class? For classroom storage, there must be adequate space for keeping sets of notebooks.	Set clear expectations and model for students how to organize information within the digital INBs. Also designate the location where students will save digital notebooks, so they are backed up to the Cloud. Will students have or need internet access to use the notebook inside and outside of the classroom? Will cloud software be available to students?
Input Pages	The <i>right page</i> of the notebook is the <i>input page</i> , where students will take notes (two- or three-column notes, Cornell notes) according to the purpose or the content of the lesson. The notes can be tailored to the purpose by using graphic organizers, charts, diagrams, or other structures to enhance note-taking and students' learning. For investigative learning, the procedures, materials, and set-up can be placed on the right page. To learn more, refer to <i>Student Resource: Interactive Notebook: Right Side (Input)</i> on page 31.	<i>Input pages</i> in a digital INB contain the same types of information as right-side pages in a paper notebook (e.g., notes, graphic organizers, and charts). In addition, the input pages in a digital INB can include real images, audio, video, and links to outside resources.
Output Pages	The <i>left page</i> is the <i>output page</i> , which is used by students to respond to or process the content by providing commentary, narratives, data, or other evidence of thinking and learning regarding the topic. This is the location where students can utilize the writing-to-learn options found in this chapter or the variety of processing strategies located on the <i>AVID Writing for Disciplinary Literacy</i> webpage on MyAVID. Students might paste or glue in loose pages, such as One-Pagers, articles, or flip pages. To learn more, refer to <i>Student Resource: Interactive Notebook: Left Side (Output)</i> on page 30.	<i>Output pages</i> in a digital INB allow students to process information using a wide variety of digital tools (e.g., creating multimedia such as screenshots, photos, or videos, and posting links). Some output strategies are more appropriate to complete using paper and pencil, posters, or sticky notes. These valuable learning opportunities can be easily captured with a camera or smartphone and saved in the digital INB.
Logistics	Maintaining the left and right side of the notebook for <i>output/input</i> is simple to set up and allows students to visually observe the connection between the <i>input</i> and <i>output</i> on the page. The kinesthetic nature of a paper INB makes it an excellent tool for kinesthetic learners.	Developing the <i>output</i> and <i>input</i> pages is dependent on the system used by students; screen size might make it difficult for students to see the connection between both pages. The <i>input</i> and <i>output</i> correlation may become reversed in sequence with a digital notebook (output pages following input pages) Interaction with the pages on a computer or tablet is excellent for students who are successful in working with digital learning.

Group 1

Visit the *AVID Writing for Disciplinary Literacy* webpage on MyAVID to access Interactive Notebook student samples, processing activities, and rubrics.

•••• Setting Up the Interactive Notebook

The basic elements of Interactive Notebooks, presented below, can be tailored to fit either print or digital notebooks. Each element serves a useful purpose in a notebook as it helps students organize and deepen their learning.

- **Page Numbering:** If using paper Interactive Notebooks, have students number the front and back of each page of the notebook in a consistent location, typically at the bottom outer corners of each page.
- **Table of Contents:** In its most basic form, a table-of-contents page includes the topic of study and the page number of the notes and student processing. However, the table-of-contents page can be customized to serve multiple purposes, as well as become the location for evidence of student reflection and metacognition. Some table-of-contents options to consider include:
 - **Columns and Page Numbers:** Create a four-column chart like the one shown in *Student Resource: Interactive Notebook Table of Contents* on page 32. Label the left side “Output Contents” and the right side “Input Contents.” This separation of sides will allow students to precisely name the notes and thinking processes used on each page and record the corresponding page numbers.
 - **Dialectical Journal Format:** By having students set up a format within the table of contents (or on a separate page) that allows for two-sided conversation, the educator is creating a system of communication and record keeping of skills the student needs to improve upon to advance toward mastery. This also communicates to students that mastery of a skill or understanding of a topic is a progression that takes time.
 - **Classroom Table of Contents:** Maintaining an updated weekly display (chart paper, whiteboard, or shared digital workspace) of the topics covered each day will help students keep their tables of contents current and will aid students who have been absent.
- **Reference Pages:** You may want to have students leave a few pages blank at the beginning and end of the notebooks as common reference pages for your class.
 - **Classroom Information:** This information may include such items as class objectives or expectations, laboratory safety protocols, or formula charts.
 - **INB Grading Rubric:** A rubric within the INB makes students aware of the expectations for their grades. (Refer to *Student Resource: Interactive Notebook 5-Point Scoring Rubric* on page 34.)
 - **Score Sheet:** Having a specific location for recording scores on the lessons, units, or chapters will provide students and families with current assessment information. At the end of the grading period, this strategy should eliminate confusion about earned notebook scores. *Student Resource: Interactive Notebook Score Sheet* (page 33) illustrates the type of information that might be included on a score sheet.

- **Vocabulary List or Glossary:** Many teachers like to have students use blank pages in the back of the notebook to create class or personal vocabulary lists and definitions.
- **Adult Input Page:** A multiple-response adult input page can be inserted onto the inside back cover of the notebook. (Refer to *Student Resource: Adult Input Page {Multiple Response}* on page 35.)
- **Digital INB Links:** Digital INBs allow for content to be easily organized, searched, and linked. The table of contents can link to input and output pages. The vocabulary lists can be created and shared online, and linked to the table of contents or to specific lessons.

Group 2

Communicating Expectations

- **Students:** Be prepared with a rubric or other evaluation measurement tool to clearly and fairly communicate to students the expectations regarding content, formatting, style, and organization.
- **Parents and Family:** An adult input page provides a place for the parent/guardian or other adult to review and comment on a student's work. The adult will be able to see the progression of learning happening in the classroom, and the level of participation or completion of the task, by their child. In addition to the multiple-response adult input page referenced above, a single-response form that allows for more in-depth responses can be found on the *AVID Writing for Disciplinary Literacy* webpage on MyAVID. Either type of adult input page can be accessed and completed digitally for students who are using digital INBs.

Personalizing

When students personalize their Interactive Notebooks, they are more likely to value them and less likely to misplace them—this instills a pride of ownership. There are many ways students can personalize their notebooks to reflect their unique personalities and learning styles. Consider having students include one or more of the following:

- **Goal Setting:** Designate an area of the notebooks where students can develop short- and long-term goals, both academic and personal, and indicate plans to achieve them. These goals should be revisited regularly so students can track their progress.
- **Destination College:** Have students design a page about the college or university of their dreams. Design elements to consider could include school colors, mascot, motto, and/or majors offered. Students might also add print information or digital links related to entrance requirements to inform their short-term and long-term goals as they map their personal path to college.
- **Cover Page or Title Page:** Allow students to design their individualized covers or title pages in a nonlinguistic way to show course topics in a graffiti-style approach. The instructor can define any common elements to be included.
- **Other Options:** The notebooks can be further personalized with options such as personality phrases, learning style, drawing of a successful student, class mission statement, and growth mindset statements.

Group 3 **Note-Taking**

Students' notes are typically recorded on the right page, or the input page, of an Interactive Notebook. Chapter 3: Focused Note-Taking provides thorough information about note-taking structures and strategies.

Essential Questions are objective-based, student-generated or teacher-generated questions appropriate to a particular lesson, unit, or concept, used by students to guide thinking and frame note-taking and summarization in order to accomplish an assigned task.

- **Essential Question:** Each lesson included in the Interactive Notebook should have an overarching question to provide context for the learning represented through the lesson. The question is also an accountability measure to help educators ensure that they are covering their grade-level or course standards. The Essential Question can be rewritten from educational standards into student-friendly language, depending on the grade level or course, as long as crucial academic language and content-specific language are maintained in the rewriting of the standard.
- **Structure of Notes:** The note-taking format may take the form of two- or three-column notes, Cornell notes, or more structured formats such as graphic organizers, flowcharts, or tables. The type and length of content (e.g., discussion, video, laboratory investigation, mathematical problem analysis, or vocabulary study) should determine the most appropriate note-taking format.
- **Inserted Notes or Articles:** Assignment pages, guided notes, or text articles may sometimes be used instead of having students write their notes. In a digital notebook, these types of resources can be linked, inserted, or copy-pasted directly into the notebook. For paper notebooks, these pages can be folded as a flip page and glued or taped into the notebooks. (Tape or glue prevents the snags that staples may cause for inserted pages.) Be judicious about which materials students add to their notebooks, as too many items will make the notebooks bulky and hard to handle.

Interacting With the Notes

- **Thinking About the Notes:**
 - Encourage students to color-code different aspects of their notes as visual memory aids (Stencel, 1998). You may also want to create a consistent system that students can follow. For example, use one color of highlighter for important vocabulary, and another color for main ideas.
 - Suggest that students create diagrams or nonlinguistic representations within the notes as visual reminders or connections to the content.
- **Writing Questions:**
 - Review Costa's Levels of Thinking with students as a reminder to create higher-level questions (Levels 2 and 3) that require thinking at the processing or application levels, as well as Level 1 questions that require identification of main ideas or concepts.
 - Direct students to write questions in the left-most column of their notes about the content. The questions may be study questions they can use later to direct them to specific content, or they may be authentic questions they have about the content ("I wonder..." questions).

Group 4

• **Collaboration:**

- Collaboration with peers is a valuable learning tool for students and provides a safe environment for them to discuss their learning and to revise and extend the learning. It can be used effectively on any section of note-taking for the Interactive Notebook, whether paper or digital.
- Allow students to review, revise, and refine their notes in a partner Pair–Share to determine completeness of the information. During the collaboration, they can add to their notes (perhaps in a different color), correct or delete incorrect information, identify main ideas and details, or connect ideas with arrows or lines.
- Students can also collaborate on the question writing, processing opportunities, and summaries, as well as on laboratory analysis and conclusions for scientific investigations.

Summarizing Content and Writing Reflections

• **Summary:**

- The summary for notes, which is typically recorded on the right page of the Interactive Notebook, should capture the meaning and importance of the content. It should also answer the Essential Question or focusing question that guides the note-taking.
- For research and investigations, the summary is in the form of data analysis and conclusions from the investigation. These summaries should include identification of the Claim, Evidence, and Reasoning (CER). For more information on CER, refer to the *Essential Instructional Practice 5: Questioning* (pages 48–50) in this chapter.

Reflection involves purposeful processing that is reliant upon thinking, reasoning, and examining one’s own thoughts, feelings, and experiences.

• **Reflection:**

- A reflection is a personal statement that focuses on critical thinking and mental processing of learning. It connects to prior learning and future application of the content.
- The type of information requested in a reflection should be tailored to the subject area or age/grade level of the students. After a lesson, unit, or grading period, students can reflect on their learning based on the questions or prompts established by the instructor. See *Educator Resource: Interactive Notebook Reflection Questions* on page 36 and *Student Resource: Interactive Notebook Reflection* on page 37.

Processing Content

- Using the Interactive Notebook, the learning from a lesson or strategy is integrated and processed on the left page as *output*. The various processing options typically require a nonlinguistic representation of the content and an explanation of how the image explains and describes the content. These opportunities help students recall and think critically about the content information. Refer to *Instructional Practice: Nonlinguistic Representations* (pages 66–67) in this chapter for additional information on graphic summaries of content.

- The processing strategies can be modified for use with any student population, as needed. The level of the products will depend on the skills and education backgrounds of the students.
- Encourage students to use multiple colors for processing information as prompts to memory.

Group 5 **Assessment of Interactive Notebooks**

Student Interactive Notebooks provide educators with opportunities for informal and formal assessments of students' engagement in their learning. Because all work is maintained in the Interactive Notebooks, the instructor can see how students are improving, and can provide targeted feedback to help students strengthen their skill sets.

- **Informal Assessment:** “Walk-by” checks for completion can be done by commenting on, initialing, or stamping specific pages on a daily or weekly basis. During these informal reviews, you can note positive comments or ask questions on the pages. Allowing students to use their notebooks for open-note quizzes is another method of informal assessment.
- **Formal Assessment:** It is most appropriate for formal assessments to be based on rubrics with which students are familiar. The rubric may specify categories and scores for specific content, the format of the notebook, or holistically evaluate the notebook based on completion and the degree to which expectations have been met.
 - Sample assessment rubrics are available on the *AVID Writing for Disciplinary Literacy* webpage on MyAVID.
 - A benefit of having students use digital notebooks is that instructors have access to students' work at all times. This allows for greater frequency and quality of feedback.
- **Self-Assessment:** Students can self-assess through a reflection response on the critical thinking and mental processing of their learning in a unit or chapter or on selected elements of the notebook. Students can choose several of the lessons or processing strategies that represent their best work or deepest learning, and a lesson or concept that was problematic for them, and then respond to provided reflection questions. *Educator Resource: Interactive Notebook Reflection Questions* (page 36) provides example questions.

Educator Master Notebook

- A master Interactive Notebook, print or digital, kept by the instructor (or tutor or responsible student) can provide increased access and support for students. The purposes of keeping a master notebook include record keeping of daily learning strategies, a tool to give students who were absent an opportunity to catch up on missed learning or assignments, and a visual model to demonstrate expectations for all students.
- Consider keeping a notebook for each subject, or each class, to aid with organization. You may also choose to color-code notebooks based on the subject or class (e.g., all science notebooks are green, or different colors for different classes).

Interactive Notebook: Left Side (*Output*)

The left page demonstrates your understanding of the information on the right page. On the left page, you will interact with the information in creative, unique, and individual ways. The left side incorporates and reflects how you learn as well as what you learn.

What goes on the left side?

Output goes on the left side. These are products that demonstrate understanding of the topic or content. Some examples of output include:

- Brainstorming
- Concept maps
- Riddles
- Illustrations
- Cartoons
- Poetry or songs
- Metaphors and analogies
- Compare-and-contrast diagrams
- Data and graphs you generate
- Analysis writing
- Reflection writing
- Quickwrites
- Four-square analogies
- Mnemonics
- Flowcharts
- Graphic organizers
- Writing prompts
- Other creative avenues for processing information

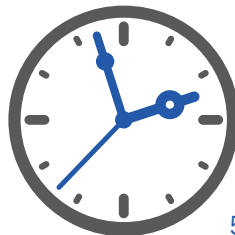
Things to Know About the Left Side



- Left sides have *even-numbered* pages. Every left page gets used for processing information from the corresponding right page.
- Always use multiple colors for the diagrams and nonlinguistic representations. This helps the brain organize, learn, and remember information.
- Nonlinguistic representations of the right-side learning should include an explanation of the representation.
- Homework problems can be left-side items (but they do not take the place of processing your notes!).

Clock Choices for Left-Side Processing

11. Create a graph about the topic.
10. Create a Venn diagram to compare/contrast information.
9. Write and solve problems using the information.
8. Create an analogy and an illustration.
7. Write a letter about the topic to your grandmother.
6. Write a haiku poem about the topic.
12. Make an illustration depicting and explaining the topic.
1. Paraphrase information in one sentence.
2. Create a bookmark for this topic.
3. Write original lyrics for a song related to the topic.
4. Write four “What if...?” questions about the topic.
5. Create vocabulary cards for the five most essential terms.



Interactive Notebook: Right Side (*Input*)

Interactive Notebooks will be used in class daily to help you learn and remember important concepts. The right-side notebook page contains the information you put into the notebook and the information you need to learn—the *input*.

What goes on the right side?

Input goes on the right side. Input is the information you are supposed to learn. Some examples of input include the following:

- Notes from a lecture or guest speaker
- Text of other source
- Vocabulary words
- Video and film notes
- Procedures
- Questions and answers
- Sample problems
- Graphic organizers
- Diagrams
- Observations

Things to Know About the Right Side






- Right sides have *odd-numbered* pages. Always start the page with the date, title, and Essential Question at the top of the page.
- The right page is for recording information from classwork or an assignment. Choose the note-taking format that works best for the type of content you will record.
- Use highlighting and color to make important information stand out.
- Study questions and “I wonder...” questions are written in the left column when using Cornell notes.
- Using common abbreviations and symbols makes note-taking easier.
- Summaries of the information should be written at the bottom of each page of notes.

Costa’s Levels of Thinking

Level 3	Apply Judge	Evaluate Predict	Hypothesize Speculate	Imagine
Level 2	Analyze Infer	Compare Sequence	Contrast Synthesize	Group
Level 1	Define Name	Describe Observe	Identify Recite	List Scan

The Three Phases of the Critical Reading Process

AVID’s critical reading process has three phases, with some phases containing multiple components. It is important to note that vocabulary building happens throughout the entire critical reading process and does not have to be tied to any one particular phase, even though it is included in the “engage” phase within this book. When teaching the critical reading process, educators should use the reading purpose to guide the process and help in the selection of strategies at each phase. It is also crucial that educators model strategies for students throughout the entire critical reading process and follow the gradual release of responsibility model until students can confidently use the critical reading process independently.

<p>Activate</p> 	<p>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.</p> <p>Selecting the Text. Select the texts, or portions of texts, that will be read. 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. 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>
<p>Engage</p> 	<p>Building Vocabulary. Understand and connect key academic and content-related vocabulary to aid in deeper comprehension of the text. While this is included within the “engage” portion of the critical reading process, vocabulary building can happen at any point.</p> <p>Interacting With the Text. Interact with the text to process information as it is read. This is done by 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>
<p>Extend</p> 	<p>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.</p>

Marking Argument: *Numbering Paragraphs and Circling Key Terms*

The following excerpt offers sample markings and brief descriptions of those markings. Notice the reading purpose for the excerpt. Without a reading purpose, young readers—especially those new to this strategy—will not know what to circle.

READING PURPOSE:

Number the paragraphs and circle key terms in the text.



Don't Compromise the Safety of Biotech Drugs

By Bryan A. Liang

- 1 The comparison is worth keeping in mind as the debate heats up over “follow-on” biologics. Biologics are today’s most advanced medicines, fully tested biotechnology protein drugs that provide targeted therapy to victims of cancer and other diseases. Follow-on biologics are the second or subsequent versions, but they are not identical.
- 2 U.S. spending on them reflects the importance of these drugs in medicine’s arsenal. Biologics represent the fast-growing sector in the medicines market, with more than \$30 billion spent each year. Indeed, the top five drugs in terms of Medicare expenditures administered in physicians’ offices are biologics.

Liang is executive director of the Institute of Health Law Studies, California Western School of Law, and co-director of San Diego Center for Patient Safety at the University of California, San Diego’s School of Medicine. LA TIMES-WASHINGTON POST--04-29-08 1252ET

In this passage, Bryan Liang introduces “Biologics” and “follow-on biologics.” The reader circled these terms because they are repeated and defined.

Marking the Text: *Additional Ways to Isolate Key Information*

As students learn how to read and mark texts with greater proficiency, they will develop the need to expand their thinking about what to mark and how to mark it. As reading and writing assignments become more sophisticated, they will need to read a text for various purposes. The three original marks—numbering, circling, and underlining—may not offer enough flexibility for students who are reading for various purposes. For this reason, students should learn a few additional markings that will help them differentiate between one type of information and another. There are three new marks to consider:

[Bracket] information when underlining has been used for another purpose.

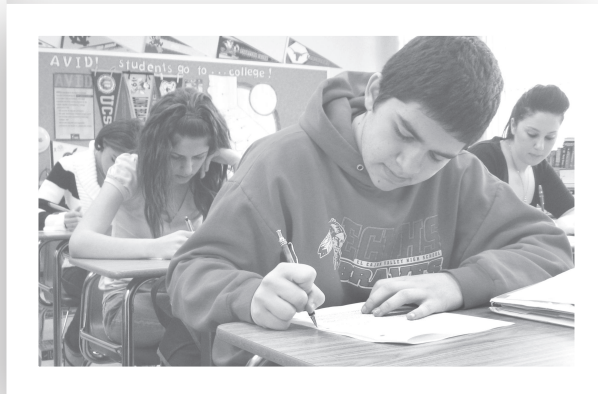
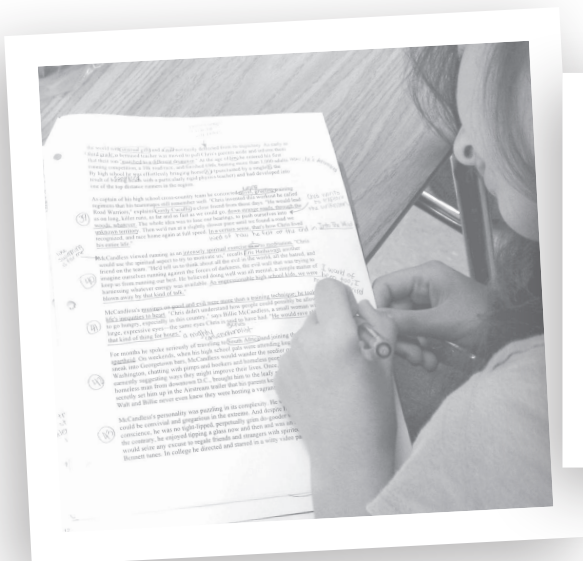
Students should use brackets to isolate relevant information that has not already been underlined. In fictional texts, students might underline descriptions of characters and bracket figurative language. While reading arguments, students might underline claims and bracket evidence. And in science, students might underline definitions and bracket data.

Write labels in the margins | claim

Writing labels in the margins is a strategy used by readers who mark the text and write in the margins. Labels are often double underlined so that they stand out from other marginalia (i.e. notes, comments, analysis, or drawings). When writing labels in the margins, draw a vertical line along the edge of the text in order to isolate the section of text being labeled. Readers will also use labels when charting the macrostructure of the text or when keeping track of shifts—places in the text where the author takes readers in a new direction or presents a new focus.

Box words when circling has been used for another purpose.

Sometimes readers need to keep track of two different types of words or ideas. For example, a reader might choose to circle key terms and keep track of an author's use of descriptive language. Having two distinct marks will make it easier to reference the material later.



Marking the Text

Deepening Understanding of Marking the Text

- Remind students that active reading becomes increasingly important as texts become more difficult. “Marking the Text” is a literacy skill that is used in high school and in college. It is a strategy designed to help readers gain greater comprehension of challenging texts.
- Increase opportunities for students to talk about marking the text. Students should discuss their markings as often as possible.
- Provide time for rehearsal; students must have time to practice this skill.
- Create opportunities for students to read and mark a variety of different texts. Reading assignments should vary in length, sophistication, and purpose.
- Ask students to share their markings with the entire class. You can have them stand at the front of the room and talk about one or two paragraphs or you can have them place their texts under a document camera and have them discuss their markings. This activity builds confidence and validates the work happening in the classroom.
- Call on volunteers to lead a marking the text exercise. Using either an overhead projector or a document camera, have one student at a time mark a section of the text while the rest of the students in the class watch and mark their texts.
- Collect texts that have been marked and write comments in the margins, explaining to the students what they are doing well and pointing to places in the text that they have overlooked or misunderstood.
- As students master this skill, they will need less guidance. Provide a reading purpose, but do not provide specific directions on how to mark the text. Eventually, students will need to learn how to effectively mark the text based on a given prompt provided by the teacher. Once students have completed the reading, ask questions such as: How should you (or did you) mark this text? What did you circle/underline? Why did you make this decision?

4.2: Costa's Levels of Thinking: Level 1

Student Objective

Students will identify and formulate questions at Level 1 of Costa's Levels of Thinking.

Overview

Costa's Levels of Thinking offer a framework for inquiry. This framework helps students ask thought-provoking questions about academic content, make connections among concepts, and deepen understanding of the content. Students' application of the Levels of Thinking is supported by an incremental approach to evaluating and using the levels.

Materials/Set-Up

- Handouts:
 - 4.2a: Costa's and Bloom's Levels of Thinking: Comparison Chart
 - 4.2b: Costa's Levels of Thinking: Vocabulary
- Teacher Resource:
 - 4.2c: Costa's Level 1: Quiz Game
- In advance of the activity, complete the following:
 - Become familiar with Costa's and Bloom's Levels of Thinking: Comparison Chart, as well as Costa's Levels of Thinking: Vocabulary. AVID primarily promotes Costa's three levels, instead of Bloom's six, because of the greater simplicity and ease of use that they afford students.

Instructional Steps

1. Discuss with students the benefits of deep thinking and posing/responding to questions using information, which may include: developing increasingly independent learning, rather than reliance on provided information; becoming stronger critical readers and thinkers; processing information and constructing knowledge; and making inferences, recognizing different viewpoints, and forming individual conclusions.
2. Introduce students to Costa's Levels of Thinking through Costa's and Bloom's Levels of Thinking: Comparison Chart and Costa's Levels of Thinking: Vocabulary, and then briefly describe the differences in thinking between the levels. Emphasize that the words associated with each level are the tasks that the brain is doing (i.e., intellectual function) at each Level of Thinking.
3. Guide students in writing questions about Level 1 intellectual functions through a quick quiz game.

Quickwrite is a fluency activity where students write non-stop for two to five minutes on a specific topic that they are studying. The purpose of focused writing is for students to find out what they know about a topic, to explore new ideas, and to find out what they need to learn about a topic.

Example: “Before we start our lesson today, compose a quickwrite to the following prompt: What people in my life are encouraging me to go to college, and how are they supporting me in being college-ready?”

4. Using Costa’s Level 1: Quiz Game as a guide, prepare a grid of responses for which students will write corresponding Level 1 questions. Display only the first example phrase: “New York.”
5. Show students how the game is played by working through the first example where “New York” is the answer; they are to write the question to which the phrase “New York” would be the answer.
6. Ask students to work quickly with a partner to use the Costa’s chart to locate the vocabulary terms that identify the intellectual functions associated with their questions. Examples include the following:
 - Where is the Statue of Liberty? (*locate*)
 - What is the largest city in the United States? (*recall, identify, or recognize*)
7. As you discuss this activity with students, identify Costa’s terms as academic vocabulary, as well as intellectual functions. Briefly discuss the necessity of understanding the meaning of academic vocabulary terms in addition to terms related to specific content material.
8. Have students debrief the activity in the form of a journal entry, **quickwrite**, or Think–Pair–Share.

➔ Extension

- To increase rigor, use content words and phrases related to the vital concepts of the topic of study.
- To increase scaffolding:
 - Review the Level 1 terms in order to be sure that students understand what is meant by each term.
 - Introduce only the broad description of Costa’s Levels of Thinking (e.g., gathering/recall) and have students work in small groups to determine the definition and level of four or five terms from across Costa’s Levels of Thinking. Have groups share out their definition and the level that they assigned to each of the terms. Group the terms by level on a whiteboard. Lead a class discussion on the degree of thinking required for each Level of Thinking as you adjust any inaccurate definitions or wrongly categorized terms as provided by groups.

Costa's and Bloom's Levels of Thinking: Comparison Chart

LEVEL	COSTA'S	BLOOM'S	VOCABULARY WORDS LEVELS OF THINKING		
Higher Order Thinking Skills HOTS	(OUTPUT) Applying Information: Applying and evaluating actions, solutions and connections made in order to predict	Creating: <i>Can the students:</i> <ul style="list-style-type: none"> • Create/generate new ideas, products or points of view • Combine ideas/thoughts to develop an innovative idea, solution or way of thinking 	Assemble Build Construct Create Design	Develop Devise Formulate Imagine Invent	Make Plan Produce Write
		Evaluating: <i>Can the students:</i> <ul style="list-style-type: none"> • Justify a stand or decision • Judge the value of an idea, item or technique by creating and applying standards/criteria 	Appraise Argue Check Critique Defend Detect	Forecast Generalize Hypothesize If/Then Judge Predict	Select Speculate Support Test Value Value
	(PROCESSING) Processing Information: Making sense out of information; processing the information gathered by making connections and creating relationships	Analyzing: <i>Can the students:</i> <ul style="list-style-type: none"> • Distinguish between the different parts • Explore and understand relationships between the components/parts 	Attribute Classify Compare Contrast Criticize Deconstruct	Differentiate Discriminate Distinguish Examine Experiment Infer	Integrate Organize Outline Question Sort Structure
Lower Order Thinking Skills LOTS	(INPUT) Gathering Information: Identifying and recalling information	Understanding: <i>Can the students:</i> <ul style="list-style-type: none"> • Explain ideas or concepts • Understand information provided 	Classify Complete Describe Discuss	Explain Identify Locate Paraphrase	Recognize Report Select Translate
		Remembering: <i>Can the students:</i> <ul style="list-style-type: none"> • Recall or remember the information • Recognize specific information 	Define Duplicate List	Memorize Recall Repeat	Reproduce State

Adapted from Comparison by Andrew Churches at <http://edorigami.wikispaces.com> and http://ww2.odu.edu/educ/roverbau/Bloom/blooms_taxonomy.htm

Daws, T., & Schiro, P (2012). *AVID tutorial guide: Creating rigorous tutorials to increase student achievement in academic classes*. San Diego, CA: AVID Press.

Costa's Levels of Thinking: Vocabulary

LEVEL 1				
Remember	Define Repeat Name	List State Describe	Recall Memorize Label	Match Identify Record
Show Understanding	Give examples Restate Discuss Express	Rewrite Recognize Explain Report	Review Locate Find Paraphrase	Tell Extend Summarize Generalize
LEVEL 2				
Use Understanding	Dramatize Practice Operate Imply Apply	Use Compute Schedule Relate Illustrate	Translate Change Pretend Discover Solve	Interpret Prepare Demonstrate Infer
Examine	Diagram Distinguish Compare Contrast Divide	Question Inventory Categorize Outline Debate	Analyze Differentiate Select Separate Point out	Criticize Experiment Break down Discriminate
Create	Compose Design Propose Combine Construct	Draw Arrange Suppose Formulate Organize	Plan Compile Revise Write Devise	Modify Assemble Prepare Generate
LEVEL 3				
Decide	Judge Value Predict Rate	Justify Decide Measure Choose	Assess Select Estimate Conclude	Summarize
Supportive Evidence	Prove your answer. Support your answer.	Give reasons for your answer.	Explain your answer. Why or why not?	Why do you feel that way?

Donohue, J., & Gill, T. (2009). *The write path I: Mathematics*. San Diego, CA: AVID Press.

Costa's Level 1: Quiz Game

Questioning, by individual students or in classroom groups, is a vital part of students' interaction with content material. Learning to think by means of questioning can be a challenge to students; thus, it is important to intentionally teach question writing and scaffold students' learning.

The intellectual functions represented in Costa's Level 1 require students to gather or recall information. The grid below contains examples of words and phrases that can be used to provide a game-like atmosphere in learning about Level 1 thinking.

Example Words and Phrases

Answer Word/Phrase	Example Question	Intellectual Functions
New York	What is the Statue of Liberty?	Locate
Superman	What superhero is "faster than a speeding bullet?"	Identify
Bread, milk, and eggs	What are common breakfast foods in the United States?	List and give examples
3-D objects with 6 equal faces	What is a cube?	Recognize, describe, and define
Texting	What is the most common modern way to communicate with friends?	Identify and state
Noon	What is the usual time for lunch?	Recognize
72	What is the product of 9 times 8?	Memorize
Distance divided by time	How do you calculate speed?	Describe and explain

Valdez, S., Carter, M., & Rodgers, J. (2013). *The write path English language arts: Informing ourselves and others through writing and speaking*. San Diego, CA: AVID Press.

4.3: Costa's Levels of Thinking: Levels 2 and 3

Student Objective

Students will assess and formulate questions at Levels 2 and 3 of Costa's Levels of Thinking.

Overview

It is essential for students to learn to think critically and engage in inquiry or questioning at higher levels of cognition. As students become increasingly skilled in inquiry, they begin to not only think about the surface-level information (*gathering and recalling*), but also about the deeper applications and connections that exist (*processing and applying information*). Each Level of Thinking is necessary for full understanding of academic concepts.

Materials/Set-Up

- Handout:
 - 4.3a: Content Area Levels 1, 2, and 3 Questions
- Teacher Resource:
 - 4.3b: Predicting Levels of Intellectual Function
- In advance of the activity, complete the following:
 - Familiarize students with the intellectual functions and vocabulary of Costa's Levels of Thinking.
 - To provide additional practice for students in writing questions at all Levels of Thinking, prepare questions for your content area similar to the ones on Content Area Levels 1, 2, and 3 Questions. Predicting Levels of Intellectual Function can also be used as a guide in the creation and organization of these questions.

Instructional Steps

1. Form groups of two or three students to identify the level of the teacher-created questions.
2. Ask various students or groups to state and give reasons for their answers. Remind students that the wording of the question does not necessarily include the term written on Costa's Levels of Thinking: Vocabulary. The *action* and *thinking* represented in the question determines the processing level.
3. Discuss with students the importance of questioning at higher levels of thinking and engaging in inquiry to more fully understand academic content material, media information, world events, and even themselves. Point out that understanding of content material requires all levels of intellectual functioning (i.e., academic thinking processes).

.....

4. On the Content Area Levels 1, 2, and 3 Questions handout, have students label their familiarity and understanding of each Level 2 and 3 term using the following symbols or symbols of your choosing. As necessary, review the terms:

- ★ “I understand what the term means.”
- ~ “I think I know what the term means.”
- ☹ “I don’t know this term.”

5. Ask student groups to peer review each other’s questions from the Content Area Levels 1, 2, and 3 Questions handout. Have students revise their questions, as needed, in different colors of pen.

➔ Extension

- To increase rigor, provide small groups of students with an example of short content material, such as a text, poem, graph, chart, or video, and ask them to apply their knowledge by writing a Level 1, Level 2, and Level 3 question about the materials.
- To increase scaffolding:
 - If students have already worked through the Focused Observations and Inquiry activity, ask them to label the level of each question. For each Level 1 question, have them write a Level 2 or Level 3 question.
 - Have students work with partners to develop questions for their content area Cornell notes and identify the level and intellectual function of each question. You can also read a short story or fairy tale and have student groups develop questions.

Handout 4.3a

Content Area Levels 1, 2, and 3 Questions

Directions: Complete the table below by writing questions at the stated level in each blank. The first set has been completed as an example.

Topic	Level One <i>(complete, count, match, name, define, observe, recite, describe, list, identify, recall)</i>	Level Two <i>(analyze, categorize, explain, classify, compare, contrast, infer, organize, sequence)</i>	Level Three <i>(imagine, plan, evaluate, judge, predict, extrapolate, invent, speculate, generalize)</i>
Science	Name the elements that make up water.	What characteristics of hydrogen and oxygen enable them to bond so readily?	How might the Earth's vegetation and climate be different if the water molecule was nonpolar?
Math	What is the definition of a trapezoid?		
ELA	What is a metaphor?		
Social Studies	Recite the Preamble to the Constitution.		
Science		How are the systems of a car like those of a cell?	
Math		Arrange the following numbers in order from smallest to largest: $\frac{1}{2}$, 0.8, 35%.	
ELA		Analyze the character's intentions in the scene.	
Social Studies		Explain how involvement in war impacts the economy.	
Science			Make a plan to complete your science fair project.
Math			What must be true about a set of data in which the median is larger than the mean?
ELA			Imagine that you were in the character's position, how would you react?
Social Studies			Predict the population of the U.S. in 2050 if it continues to grow as it has for the past 10 years.

Adapted from: Breedlove, B. "Write Corresponding Higher- and Lower-Level Questions." AVID Region 9, California.

Costa's Levels of Thinking: Math

LEVEL 1	LEVEL 2	LEVEL 3
<ul style="list-style-type: none"> • What information is provided? • What are you being asked to find? • What formula would you use in this problem? • What does _____ mean? • What is the formula for...? • List the.... • Name the.... • Where did...? • What is...? • When did...? • Explain the concept of.... • Give me an example of.... • Describe in your own words what _____ means. • What mathematical concepts does this problem connect to? • Draw a diagram of.... • Illustrate how _____ works. 	<ul style="list-style-type: none"> • What additional information is needed to solve this problem? • Can you see other relationships that will help you find this information? • How can you put your data in graphic form? • What occurs when...? • Does it make sense to...? • Compare and contrast _____ to _____. • What was important about...? • What prior research/formulas support your conclusions? • How else could you account for...? • Explain how you calculate.... • What equation can you write to solve the word problem? 	<ul style="list-style-type: none"> • Predict what will happen to _____ as _____ is changed. • Using a math principle, how can we find...? • Describe the events that might occur if.... • Design a scenario for.... • Pretend you are.... • What would the world be like if...? • How can you tell if your answer is reasonable? • What would happen to _____ if _____ (variable) were increased/decreased? • How would repeated trials affect your data? • What significance is this formula to the subject you're learning? • What type of evidence is most compelling to you?

Daws, T., & Schiro, P. (2012). *AVID tutorial guide: Creating rigorous tutorials to increase student achievement in academic classes*. San Diego, CA: AVID Press.

Costa's Levels of Thinking: English

LEVEL 1	LEVEL 2	LEVEL 3
<ul style="list-style-type: none"> • What information is provided? • Locate in the story where.... • When did the event take place? • Point to the.... • List the.... • Name the.... • Where did...? • What is...? • Who was/were...? • Illustrate the part of the story that.... • Make a map of.... • What is the origin of the word _____? • What events led to...? 	<ul style="list-style-type: none"> • What would happen to you if...? • Would you have done the same thing as...? • What occurs when...? • Compare and contrast _____ to _____. • What other ways could _____ be interpreted? • What is the main idea of the story (event)? • What information supports your explanation? • What was the message in this piece (event)? • Give me an example of.... • Describe in your own words what _____ means. • What does _____ suggest about _____'s character? • What lines of the poem express the poet's feelings about _____? • What is the author trying to prove? • What evidence does he/she present? 	<ul style="list-style-type: none"> • Design a _____ to show.... • Predict what will happen to _____ as _____ is changed. • Write a new ending to the story (event).... • Describe the events that might occur if.... • Add something new on your own that was not in the story.... • Pretend you are.... • What would the world be like if...? • Pretend you are a character in the story. Rewrite the episode from your point of view. • What do you think will happen to _____? Why? • What is most compelling to you in this _____? Why? • Could this story have really happened? Why or why not? • If you were there, would you...? • How would you solve this problem in your life?

Daws, T., & Schiro, P (2012). *AVID tutorial guide: Creating rigorous tutorials to increase student achievement in academic classes*. San Diego, CA: AVID Press.

Costa's Levels of Thinking: Science

LEVEL 1	LEVEL 2	LEVEL 3
<ul style="list-style-type: none"> • What information is provided? • What are you being asked to find? • What formula would you use in this problem? • What does _____ mean? • What is the formula for...? • List the.... • Name the.... • Where did...? • What is...? • When did...? • Describe in your own words what _____ means. • What science concepts does this problem connect to? • Draw a diagram of.... • Illustrate how _____ works. 	<ul style="list-style-type: none"> • What additional information is needed to solve this problem? • Can you see other relationships that will help you find this information? • How can you put your data in graphic form? • How would you change your procedures to get better results? • What method would you use to...? • Compare and contrast _____ to _____. • Which errors most affected your results? • What were some sources of variability? • How do your conclusions support your hypothesis? • What prior research/formulas support your conclusions? • How else could you account for...? • Explain the concept of.... • Give me an example of.... 	<ul style="list-style-type: none"> • Design a lab to show.... • Predict what will happen to _____ as _____ is changed. • Using a science principle, how can we find.... • Describe the events that might occur if.... • Design a scenario for.... • Pretend you are.... • What would the world be like if...? • What would happen to _____ if _____ (variable) were increased/decreased? • How would repeated trials affect your data? • What significance is this experiment to the subject you're learning? • What type of evidence is most compelling to you? • Do you feel _____ experiment is ethical? • Are your results biased?

Daws, T., & Schiro, P. (2012). *AVID tutorial guide: Creating rigorous tutorials to increase student achievement in academic classes*. San Diego, CA: AVID Press.

Costa's Levels of Thinking: Social Studies

LEVEL 1	LEVEL 2	LEVEL 3
<ul style="list-style-type: none"> • What information is provided? • What are you being asked to find? • When did the event take place? • Point to the.... • List the.... • Name the.... • Where did...? • What is...? • Who was/were...? • Make a map of.... 	<ul style="list-style-type: none"> • What would happen to you if...? • Can you see other relationships that will help you find this information? • Would you have done the same thing as...? • What occurs when...? • If you were there, would you...? • How would you solve this problem in your life? • Compare and contrast _____ to _____. • What other ways could _____ be interpreted? • What things would you have used to...? • What is the main idea in this piece (event)? • What information supports your explanation? • What was the message in this event? • Explain the concept of.... • Give me an example of.... 	<ul style="list-style-type: none"> • Design a _____ to show.... • Predict what will happen to _____ as _____ is changed. • What would it be like to live...? • Write a new ending to the event. • Describe the events that might occur if.... • Pretend you are.... • What would the world be like if...? • How can you tell if your analysis is reasonable? • What do you think will happen to _____? Why? • What significance is this event in the global perspective? • What is most compelling to you in this _____? Why? • Do you feel _____ is ethical? Why or why not?

Daws, T., & Schiro, P. (2012). *AVID tutorial guide: Creating rigorous tutorials to increase student achievement in academic classes*. San Diego, CA: AVID Press.

Promoting Rigor Through Higher Level Prompts

VERBS		TEACHER PROMPTS <i>(Note the actual VERB need not be in the prompt)</i>
LEVEL 1 – INPUT (GATHER/RECALL)	COUNT	How many apps are on your phone?
	COMPLETE	The primary element for life on Earth is _____.
	DEFINE	What is a mineral?
	DESCRIBE	What does the city look like in the winter?
	IDENTIFY	Label the parts of the cell.
	LIST	What are the prime numbers in this set? (1, 3, 4, 6, 7, 16, 17, 20, 21, 23)
	MATCH	Which sentence best describes this equation?
	NAME	Find the name of the river that separates Haiti from the Dominican Republic.
	OBSERVE	Watch the fish in the tanks and record your observations.
	RECALL	Write down what the weather was like last August.
RECITE	What is the first line of the US Constitution?	
SCAN	Look at the schedule and determine how often buses run.	
SELECT	Which of these words cannot be both a noun and verb?	
LEVEL 2 – PROCESS	ANALYZE	Determine the additional information you will need to solve this problem.
	COMPARE	How are fish and amphibians similar?
	CONTRAST	Culturally, how were the 60s and 80s different?
	DISTINGUISH	Describe the features that might make you think this building was designed by Frank Lloyd Wright.
	EXPERIMENT	What are some ways you might test your idea?
	EXPLAIN	How has the smartphone changed our society?
	GROUP	How might you separate these 15 minerals into groups?
	MAKE ANALOGIES	How are the systems of a car like that of a cell?
	ORGANIZE	Rearrange this information so it is more easily accessed.
	SEQUENCE	Arrange the following events from earliest to most recent.
LEVEL 3 – OUTPUT (APPLY)	APPLY	How does surface tension help a water skipper stay afloat?
	EVALUATE	Decide if the Giant Mudskipper is a fish or amphibian.
	FORECAST	It is a “La Niña” year; would you expect it to be wetter or dryer than usual? Why?
	GENERALIZE	Describe the risks for all small companies starting with very little capital.
	HYPOTHESIZE	What will happen to this marshmallow if we put it in a vacuum chamber?
	IMAGINE	What would communication be like if there was no sound?
	JUDGE	Is the Constitution or the Bill of Rights more important for our democracy? Why?
	MODEL	Build a model of a plant cell.
	PREDICT	Considering what you know about macro-economics, what might happen to US economy if the euro suddenly decreased in value?
	SPECULATE	All copper, halite, and diamond have suddenly disappeared. How will this impact our environment physically and socially?

1.6 Sentence Frames

Student Objective

Students will increase usage of academic language in both discussion and writing across subject areas.

Overview

A frame is a sentence with words removed to provide a language or writing support for students. This structure provides a framework for students to use in explaining their thinking. Usually the sentence frame consists of a subject and predicate. Sentence frames give students an opportunity to access the concepts and engage in the classroom conversation. Giving students part of the language or structure of a sentence allows them to focus on the concept, not the language. A sentence frame helps students see what an answer might look like and use the new content vocabulary in a meaningful way. Frames are helpful for all students, especially English language learners and others acquiring new academic language.

Materials/Set-Up

- Teacher Resource:
 - 1.6a: Sentence Frame Examples
- Sentence frames, prepared in advance to support lesson design and displayed on chart paper or sentence strips

Instructional Steps

- To use this strategy, set up a frame for students' writing that fits the lesson.
- Start a sentence and leave a blank line for students to finish the sentence. The blanks can be placed in the middle or at the end of sentences.
- The blanks can require the student to fill in one word or more than one word. Some sentence frames begin with a question, and the frame helps the student answer the question.
- Model the use of sentence frames, including the new content vocabulary presented in the lesson.
- Facilitate practice with partners or in small groups, using the sentence frame in conversation first.
- During the rest of the lesson, integrate this practice.
- At the end of the instruction, students should use the sentence frames to independently write about their learning.

To adapt this lesson for primary classes:

- Use sentence frames to scaffold students' thinking during partner or small-group discussions.
- Use differentiation of sentences to support growth in content vocabulary and sentence/thinking complexity.
- Copy sentence frames on large writing strips or cards to support students in explaining their thinking within their journals or learning logs.
- Provide sentence frames as part of an independent writing activity center.

Extension

- To increase rigor, vary the complexity and cognitive level needed to fill in the sentence frames. The video, "Using Sentence Frames to Jumpstart Writing" (<https://www.teachingchannel.org/videos/jumpstart-student-writing>), demonstrates sentence frames being used inside of a social studies classroom.



Sentence Frame Examples

Math

- There are _____ parts shaded and _____ equal parts.
- My number is _____. It has _____ tens and _____ ones.
- You can make my number by adding _____ + _____ = _____.

Description

- My animal is a _____. It has _____.
- Animals need _____, _____, _____, and _____ to live.
- The _____ is a kind of _____ that _____.
- Both _____ and _____ can be classified as _____ because _____.
- _____, _____, and _____ all have _____.

Compare-Contrast

- _____ and _____ are alike because they both _____.
- _____ and _____ are different because _____.
- We know this because on page ___ it says _____, and on page ___ it says _____.

Cause-Effect

- If _____, then _____.
- The effect of _____ is _____.
- One reason _____ happened is that _____.
- The result of _____ can be explained by _____.

Sequence

- First, _____, then _____, and finally, _____.
- At the beginning, _____, and by the end, _____.
- The final result was that _____ because _____.

Classification (from simple to more complex)

- _____ goes with _____.
- _____ does not go with _____.
- I would put _____ with _____ because _____.
- I think _____ belongs in the same category as _____ because _____.

Problem-Solution

- The problem of _____ can be solved by _____.

Persuasion (from simple to more complex)

- I think that _____.
- My position is _____.
- My point of view is that _____.
- I believe that _____.
- In my opinion, _____.
- I would like to lead you to believe that _____.
- I will try to convince you that _____.
- It is my belief that _____, and you should believe _____.

More Ideas

- I disagree with _____ because _____.
- I agree with _____ because _____.
- My question is _____ because _____.
- This surprises me because _____.
- My theory is _____ because _____.
- My claim is _____ because _____.

Socratic Seminar

Socratic Seminar is a structured activity designed to engage students in deep thinking. The Greek philosopher Socrates believed that encouraging students to think for themselves was more important than filling their heads with the “right” answers. The Socratic method of teaching is a form of inquiry-based discourse focused on questioning to spur critical thinking and drive ideation. It is through exploration, dialogue, considering new perspectives, and constant questioning that students develop their critical thinking and problem-solving skills. Through Socratic Seminars, students develop confidence in articulating their ideas to others while providing supporting evidence with reasoned thinking.

Metacognitive Skills

Socratic Seminars offer more educational purpose than practicing academic dialogue alone. Socratic Seminars provide teachers with opportunities to explore the metacognitive skills that academically successful students employ. In addition to practicing their academic dialoguing abilities, students will become more effective communicators as they learn to differentiate between social and academic language, as well as hone their listening and non-verbal communication techniques. As students develop these abilities, they gain confidence in more advanced levels of inquiry and improve their ability to analyze complex problems.

Prerequisites

If students are to feel safe in expressing their thoughts and opinions without the fear of being judged or ridiculed, it is important to recognize that they need opportunities and guidance to rise to a certain comfort level with their classmates. It is recommended that Socratic Seminars—regardless of configuration—be attempted only after students have successfully built a positive sense of community, with at least Stage 2 relational capacity. Debriefing the Socratic Seminar, and varying the style, will provide opportunities for deepening and broadening the Socratic Seminar experience. With these points in mind, Socratic Seminars are powerful avenues for students’ personal growth.

4.10: Socratic Seminar: Classic Style

Student Objective

Students will develop a deeper understanding of complex ideas through rigorous and thoughtful dialogue.

Overview

Socratic Seminar: Classic Style is a structured, collaborative dialogue, focusing on a common text or resource, which students have analyzed and toward which they have prepared questions to spur the discussion. This strategy provides a format for students to practice skills in critical thinking, reading, and inquiry, as they participate in the inquiry-based dialogue.

Materials/Set-Up

- Handouts:
 - 4.10a: Dialogue vs. Debate for Socratic Seminar
 - 4.10b: The Role and Responsibilities of the Socratic Seminar Participant
 - 4.10c: Rules of Engagement for Socratic Seminar
 - 4.10d: Academic Language Scripts for Socratic Seminar
- Teacher Resources:
 - 4.10e: The Elements of Socratic Seminar
 - 4.10f: Text Selection for Socratic Seminar
 - 4.10g: Sample Class Arrangements for Socratic Seminar
 - 4.10h: Tips for Socratic Seminars
- In advance of the activity, complete the following:
 - Provide students with a text to read and prepare for prior to the Socratic Seminar.
 - Refer to Text Selection for Socratic Seminar for a list of potential sources of seminar texts.

The critical reading process is to plan, build vocabulary, pre-read, interact with the text, and extend beyond the text. Strategies to support these steps include tracking vocabulary, numbering the paragraphs, marking the text, and writing in the margins.

Example: “Before we read this text, let’s number the paragraphs. Now, I’d like you to read only the title, first paragraph, and last paragraph, and then write a one-paragraph prediction about what this text covers.”

Instructional Steps

1. Discuss the purpose and format of the Socratic Seminar activity with students (see Teacher Resources noted in Materials/Set-Up, above).
2. Utilizing Sample Class Arrangements for Socratic Seminar, choose the class arrangement or seminar variation that you will use and review the arrangement with students.
3. Using Dialogue vs. Debate for Socratic Seminar, guide students to an understanding of the difference between these two discourse styles.
4. Review the “Before the Seminar” section of The Role and Responsibilities of the Socratic Seminar Participant.
5. Instruct students to read or study the subject or prompt, incorporating the appropriate **critical reading process strategies**, such as marking the text, pausing to connect ideas, writing in the margins, taking Cornell notes, or analyzing visuals.

Whip-Around is a strategy used to activate prior knowledge and quickly process information. With students in small groups of four or five, present a question or discussion prompt. Going around the group sequentially, each student then comments on the question or discussion prompt.

Example: "In your groups, do a Whip-Around about the importance of making positive introductions and first impressions. You will have three minutes, and each student needs to contribute at least one response."

6. Remind students to complete the following:
 - Understand the purpose for reading, following the reading prompt, if provided.
 - Preview the text or subject, thinking about any teacher- or student-provided background information, to determine the structure of the text and identify possible biases.
7. Have students generate at least two open-ended, higher level questions—Costa’s Levels 2 or 3—that will help them probe deeper into the meaning of the text and the author’s intention.
8. Remind students of the four essential elements of Socratic Seminar, which are described in Elements of Socratic Seminar.
9. Review the “During the Seminar” section of The Role and Responsibilities of the Socratic Seminar Participant and the Rules of Engagement for Socratic Seminar. Include your directions on what to do when the dialogue moves into debate.
10. Review the Rubric for Socratic Seminar (which follows in the Socratic Seminar: Debriefing activity) or another assessment tool of your choice, so students know how their participation will ultimately be assessed.
11. Instruct students to review the Academic Language Scripts for Socratic Seminar handout and have it available to use during the seminar.
12. Ask students to arrange their chairs into a circle. They should be able to see everyone without having to lean forward or backward. Students should also have all of their necessary materials for participating in the Seminar—marked text, questions, pen and paper for taking notes—with them.
13. Determine the opening question for the dialogue using one of the methods below:
 - The Seminar leader, who can also be seated in the circle, poses an opening question relating to the text in order to initiate the dialogue.
 - Each student in the circle reads one of his/her questions. After listening carefully, the Seminar leader or the students can select one as the starting question to open the conversation.
14. Begin the dialogue with participants responding to the opening question. The dialogue continues as group members ask clarifying questions or offer responses. Consistently require students to build upon the comments and analysis of others.
15. Continue the Socratic Seminar in this manner until all of the questions have been explored or time has drawn to a close.
16. Consider conducting a **Whip-Around** so that each student can provide a closing thought or rhetorical question that summarizes their thinking.
17. The final step of the Socratic Seminar is to debrief and reflect upon the process. Refer to Socratic Seminar: Debriefing for more information on this step.

→ Extension

- To increase rigor:
 - Base the Seminar on a more complex text.
 - Use multiple text sources related to the content. Then, have students analyze how the authors shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts.
 - At natural breaks in the dialogue, direct students to connect the themes of the Socratic Seminar with deeper content ideas, cross-curricular areas, or personal experience.
 - Provide students with more autonomy for structuring and leading the Socratic Seminar.
 - Use student leaders to moderate smaller groups of Socratic Seminars, and then run several simultaneous Seminars, either on one text or on several differing texts, that have a common theme or subject.
- To increase scaffolding:
 - Read the text aloud together and lead the class through the marking the text or writing in the margins critical reading process strategies prior to the Seminar.
 - Reiterate, model, and encourage specific skills necessary for conducting effective dialogue.
 - Provide students with copies of Seminar handouts to read as homework assignments: Rules of Engagement for Socratic Seminar, The Role and Responsibilities of the Socratic Seminar Participant, and Academic Language Scripts for Socratic Seminar.
 - Select shorter texts or quotes in which students can closely observe key words or lines. Comparing and contrasting two shorter paragraphs works well.
 - Develop teacher questions to use as models, and then develop questions together as a class.
 - Conduct mini-Seminars, where small groups practice the skills for conducting effective dialogue. Consider having one student observe and take notes on each group's performance and help debrief when finished.
 - When time is limited for a Seminar, use the Whip-Around brainstorming strategy to allow all students to respond to a prompt.

-
- To integrate technology:
 - When using a text that is topical, have students post facets of their Seminar discussion in the comments section of news websites using a teacher-created identity.
 - Create a “backchannel chat” for the outside circle, using TodaysMeet or a similar website. With the backchannel, outer-circle participants can comment upon the Seminar proceedings while one member of the inner circle monitors the chat and gives voice to their questions at appropriate times.
 - Using Skype or Google Hangouts, run a collaborative, multi-site Socratic Seminar with inter-city, state, or national “flight crews,” made up of pilots and co-pilots.
 - Capture the Seminar on video and post on a limited-access YouTube or Vimeo account to serve as a source of critical review for the class as a whole, absent students, or younger grades.
 - Have select students, acting as observers, use a class Twitter account to post tweets of the discussion. After the Seminar concludes, debrief how well the tweets capture the essence of the discussion.
 - Set up a videoconference Socratic Seminar with another class, from another school if possible.
 - Extend the discussion to a web-based medium, such as a blog or discussion forum, and continue the dialogue with deeper insights and links to a wider array of online sources.

Dialogue vs. Debate for Socratic Seminar

The best Socratic Seminars are those in which something new and unexpected is discovered. This happens when the Socratic Seminar is approached as a collective search for information or exploration of ideas through dialogue, rather than a defense of opinions through debate.

Dialogue	Debate
Dialogue is collaborative, with multiple sides working toward a shared understanding.	Debate is oppositional, with two opposing sides trying to prove each other wrong.
In dialogue, one listens to understand, to make meaning, and to find common ground.	In debate, one listens to find flaws, to spot differences, and to counter arguments.
Dialogue broadens, and possibly changes, a participant's point of view.	Debate affirms a participant's point of view.
Dialogue thrives on an open-minded attitude and openness to being wrong and to changing.	Debate fosters a close-minded attitude and a determination to be right and defends assumptions as truth.
In dialogue, one submits one's best thinking, expecting that other people's reflections will help improve it, rather than threaten it.	In debate, one submits one's best thinking and defends it against challenges to show that it is right.
Dialogue calls for temporarily suspending one's beliefs.	Debate calls for investing wholeheartedly in one's beliefs.
In dialogue, one searches for strengths in all positions.	In debate, one searches for weaknesses in opposing positions.
Dialogue respects all of the other participants and seeks not to alienate or offend.	Debate rebuts contrary positions and may belittle or deprecate other participants.
Dialogue assumes that many people have pieces of answers and that cooperation can lead to workable solutions.	Debate assumes that someone already has a single right answer.
Dialogue remains open-ended.	Debate demands a conclusion and a winner.

The Role and Responsibilities of the Socratic Seminar Participant

Before the Seminar

- Read the text or consider the artifact/prompt carefully.
- Use highlighters to mark crucial portions of the text.
- Make notes in the margins.
- Look for places where the author is stating his or her views, arguing for them, or raising questions.
- Write Level 2 or 3 questions (Costa's Levels of Thinking).
- Make connections between parts of the text by using your margin notes.
- Think about what you have read and how you understand it.
- Make connections between the ideas in the text and what you know from your life experiences.

During the Seminar

- Be prepared to participate; the quality of the seminar is diminished when participants speak without preparation, or do not participate at all.
- When appropriate, refer to the text; a seminar is not a test of memory.
- Ask for clarification when you are confused.
- Take turns speaking instead of raising hands.
- Listen carefully and actively to other participants.
- Speak clearly so all can hear you.
- Address other participants, not the seminar leader.
- Discuss the ideas of the text, not each other's opinions.
- Show respect for differing ideas, thoughts, and values.
- Give evidence and examples to support your responses.
- Help fellow participants clarify questions and responses.
- Keep your mind open to new ideas and possibilities.

After the Seminar

- Reflect on your participation as an individual and the group as a whole.
- Discuss with your group parts of the seminar you think went well and which skills you and your fellow participants still need to improve.
- Use writing to think about both the process and the content of the seminar.
- Be prepared to help set goals for improvement in the next seminar.

Custer, H., Donohue, J., Hale, L., Hall, C., Hiatt, E., Kroesch, G., Krohn, B., Malik, S., Muhammad, F., Quijano, V., Shapiro, D., & Valdez, S. (2011). *AVID postsecondary strategies for success: A guide for faculty and student affairs professionals*. San Diego, CA: AVID Press.

Rules of Engagement for Socratic Seminar

- Be prepared to participate and ask good questions. The quality of the Socratic Seminar is diminished when participants speak without preparation.
- Show respect for differing ideas, thoughts, and values—no put-downs or sarcasm.
- Allow each speaker enough time to begin and finish his or her thoughts—don't interrupt.
- Involve others in the discussion, and ask them to elaborate on their responses.
- Build on what others say—ask questions to probe deeper, clarify, paraphrase, add to, and synthesize a variety of different views in your own summary.
- Use your best active listening skills—nod, make eye contact, lean forward, provide feedback, and listen carefully to others.
- Participate openly and keep your mind open to new ideas and possibilities.
- Refer to the text often, and give evidence and examples to support your response. Discuss the ideas of the text, not each other's opinions or personal experiences.
- Take notes about important points that you want to remember or new questions that you want to ask.

Boldway, S., Carter, M., Compton, R., Gutierrez, S., Mullen, M., & Valdez, S. (2012). *The write path English language arts: Exploring texts with strategic reading*. San Diego, CA: AVID Press.

Academic Language Scripts for Socratic Seminar

Clarifying

- Could you repeat that?
- Could you give us an example of that?
- I have a question about that: ...?
- Could you please explain what _____ means?
- Would you mind repeating that?
- I'm not sure I understood that. Could you please give us another example?
- Would you mind going over the instructions for us again?
- So, do you mean...?
- What did you mean when you said...?
- Are you sure that...?
- I think what _____ is trying to say is....
- Let me see if I understand you. Do you mean _____ or _____?
- Thank you for your comment. Can you cite for us where in the text you found your information?

Probing for Higher Level Thinking

- What examples do you have of...?
- Where in the text can we find...?
- I understand..., but I wonder about....
- How does this idea connect to...?
- If _____ is true, then...?
- What would happen if _____?
- Do you agree or disagree with his/her statement? Why?
- What is another way to look at it?
- How are _____ and _____ similar?
- Why is _____ important?

Building on What Others Say

- I agree with what _____ said because....
- You bring up an interesting point, and I also think....
- That's an interesting idea. I wonder...? I think... Do you think...?
- I thought about that also and I'm wondering why...?
- I hadn't thought of that before. You make me wonder if...? Do you think...?
- _____ said that... I agree and also think....
- Based on the ideas from _____, _____ and _____, it seems like we all think that....

Valdez, S., Carter, M., & Rodgers, J. (2013). *The write path English language arts: Informing ourselves and others through writing and speaking*. San Diego, CA: AVID Press.

Academic Language Scripts for Socratic Seminar

Expressing an Opinion

- I think/believe/predict/imagine that... What do you think?
- In my opinion....
- It seems to me that....
- Not everyone will agree with me, but....

Interrupting

- Excuse me, but... (I don't understand.)
- Sorry for interrupting, but... (I missed what you said.)
- May I interrupt for a moment?
- May I add something here?

Disagreeing

- I don't really agree with you because....
- I see it another way. I think....
- My idea is slightly different from yours. I believe that... I think that....
- I have a different interpretation than you....

Inviting Others into the Dialogue

- Does anyone agree/disagree?
- What gaps do you see in my reasoning?
- What different conclusions do you have?
- _____ (name), what do you think?
- I wonder what _____ thinks?
- Who has another idea/question/interpretation?
- _____ (name), what did you understand about what _____ said?
- We haven't heard from many people in the group. Could someone new offer an idea or question?

Offering a Suggestion/Redirecting the Seminar

- We can't seem to find the connection to the text. Could you point out what and where that connection is?
- We all want to remember that our goal is a flow of questions and comments and ideas to be shared, rather than a debate to be won. How could your comment be rephrased to reflect our goal?
- Maybe you/we could....
- Here's something we/you might try:
- What if we... ?
- We seem to be having a debate instead of a dialogue, can we....
- Who has another perspective to offer that will help us re-focus the conversation?
- Let's look at page _____ and see what we think about....

Valdez, S., Carter, M., & Rodgers, J. (2013). *The write path English language arts: Informing ourselves and others through writing and speaking*. San Diego, CA: AVID Press.

The Elements of Socratic Seminar

A productive, engaging Socratic Seminar consists of four interdependent elements: (1) the text, (2) the questions raised, (3) the Socratic Seminar leader, and (4) the participants. A closer look at each of these elements will help explain the unique characteristics of a Socratic Seminar.

The Text

Socratic Seminar texts are chosen for their richness in ideas, issues, and values, in addition to their ability to stimulate extended, thoughtful dialogue. A Socratic Seminar text can be drawn from readings in literature, history, science, math, health, or philosophy; the “text” may also be drawn from music, works of art, photography, video, or other media. A good text raises important questions in the participants’ minds—questions to which there are no right or wrong answers. At the end of a successful Socratic Seminar, participants can often leave with more questions than they brought.

The Questions

A Socratic Seminar opens with a question either posed by the leader or solicited from participants as they acquire more Seminar experience. A strong opening question has no right answer; instead, it reflects a genuine curiosity on the part of the questioner. A good opening question leads participants back to the text as they speculate, evaluate, define, and clarify the issues involved. Responses to the opening question often generate new questions from the leader and participants, inevitably inspiring more responses. In this way, the line of inquiry during a Socratic Seminar evolves on the spot, rather than being pre-determined by the leader.

The Leader

In a Socratic Seminar, the leader can play a dual role as facilitator and participant. The Seminar leader consciously demonstrates a thoughtful exploration of the ideas in the text by keeping the discussion focused on the text, asking follow-up questions, helping participants clarify their positions when the discussion becomes confused, and involving reluctant participants while restraining their more vocal peers.

As a Seminar participant, the leader actively engages in the group’s exploration of the text. To do this effectively, the leader must know the text well enough to anticipate various interpretations and recognize important possibilities in each. The leader must also exercise patience in allowing participants’ understandings to evolve as the discussion develops. The leader must also be willing to help participants explore non-traditional insights and unexpected interpretations.

Determining the Seminar leader is a scaffolded process. When students are new to Socratic Seminar, the teacher serves as the leader, marshaling students through the dialogue process. Explicitly modeling the responsibilities of the leader, the teacher then moves toward selecting a student who has demonstrated a familiarity with and understanding of what it means to lead a Seminar, as well as having demonstrated the applicable skills necessary to manage his or her peers. When the majority of the class have been selected as leader at one time or another and have shown the capabilities of facilitating a productive Seminar, the position of leader is randomly chosen. This constitutes the pinnacle of Socratic Seminar leader selection.

The Participants

Socratic Seminar participants share the responsibility with the leader for the quality of the Seminar. Rewarding Seminars occur when participants process the text closely in advance, listen actively to the discussion, share their ideas and questions in response to the ideas and questions of others, and search for evidence in the text to support their ideas or their peers' ideas. Participants acquire effective Seminar behaviors through participating in Seminars and reflecting on them afterward. After each Seminar, the lead and participants discuss the experience and identify ways of improving the Seminar process. Before each new Seminar, the leader also offers coaching and practice in specific habits of mind that improve reading, listening, thinking, and **discussing**. Eventually, when participants realize that the leader is not looking for the "right" answer, but is instead encouraging them to think out loud and to openly exchange ideas, they discover the excitement of exploring important issues through shared inquiry. This excitement creates willing participants eager to examine ideas in a rigorous, thoughtful manner.

ELL Integration: The leader should also encourage all students to use tools, such as academic language scripts, in order to help students frame how they will verbally share information.

Valdez, S., Carter, M., & Rodgers, J. (2013). *The write path English language arts: Informing ourselves and others through writing and speaking*. San Diego, CA: AVID Press.

Text Selection for Socratic Seminar

Socratic Seminar focuses on deep discussion around a central text, so it is important that rich texts, complex enough to invite multiple interpretations and require negotiation to arrive at meaning, are chosen. Consider the following list of sources to help you think about your text selection:

All Content Areas – Print Texts

- Philosophical treatises
- Song lyrics
- Essays
- Articles (e.g., journals, magazines, current events, AVID Weekly, etc.)
- Editorials
- Political cartoons
- Policies (e.g., government, business, health, public)
- Workplace documents (e.g., contracts, instructions, manuals, etc.)
- Communication/public relations documents (e.g., flyers, posters, propaganda, etc.)

All Content Areas – Non-Print Texts

- Photographs
- Art pieces
- Video clips

Mathematics

- Mathematical proofs
- Mathematical word problems
- Logic “arguments”
- Critical thinking puzzles
- Graphical information and/or data

Science

- Experimental designs or protocols
- Court/legal cases
- Professional organization bulletins (e.g., FDA, CDC, WHO, etc.)
- Medical practice guidelines
- Codes of ethics
- Environmental issues (e.g., policies, current event articles, journal articles, etc.)
- Primary source documents (e.g., Newton’s laws, works of Galileo or Pythagoras, etc.)
- Articles from the web (e.g., sciencenews.org, nature.com, etc.)

Boldway, S., Carter, M., Compton, R., Gutierrez, S., Mullen, M., & Valdez, S. (2012). *The write path English language arts: Exploring texts with strategic reading*. San Diego, CA: AVID Press.

Text Selection for Socratic Seminar

Physical Education/Health

- Codes of ethics
- Professional organization bulletins (e.g., FDA, CDC, WHO, etc.)
- Medical practice guidelines
- Nutrition labels
- Fitness guidelines
- Dietary recommendations
- Weight-loss program descriptions
- “Playbook”—game strategies

Social Sciences

- Primary or secondary source documents
- Historical speeches (written or oral)
- Laws
- Edicts
- Treaties
- Historical Literature
- Legislative bills
- Court/legal cases

Language Arts

- Primary or secondary source documents
- Historical speeches (written or oral)
- Poems
- Short stories
- Excerpts from novels
- Plays
- Biographies/autobiographies

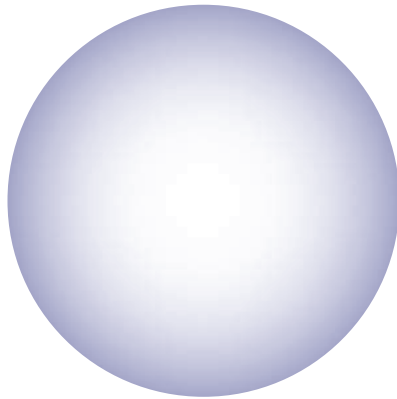
Visual and Performing Arts

- Performance (e.g., dance, play, monologue, musical, etc.)
- Art pieces
- Scripts
- Scores
- Art history texts
- Artist biographies/autobiographies
- Photographs
- Director, choreographer, conductor, animator notes (background information about the creative process)

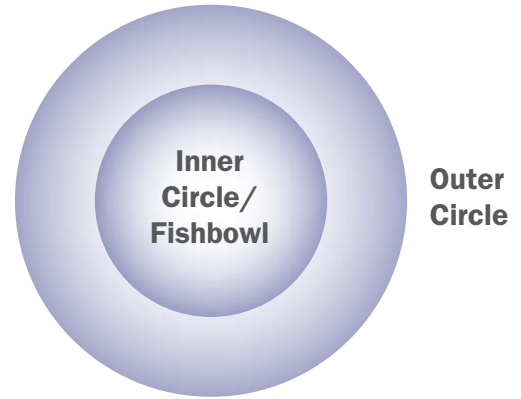
Boldway, S., Carter, M., Compton, R., Gutierrez, S., Mullen, M., & Valdez, S. (2012). *The write path English language arts: Exploring texts with strategic reading*. San Diego, CA: AVID Press.

Sample Class Arrangements for Socratic Seminar

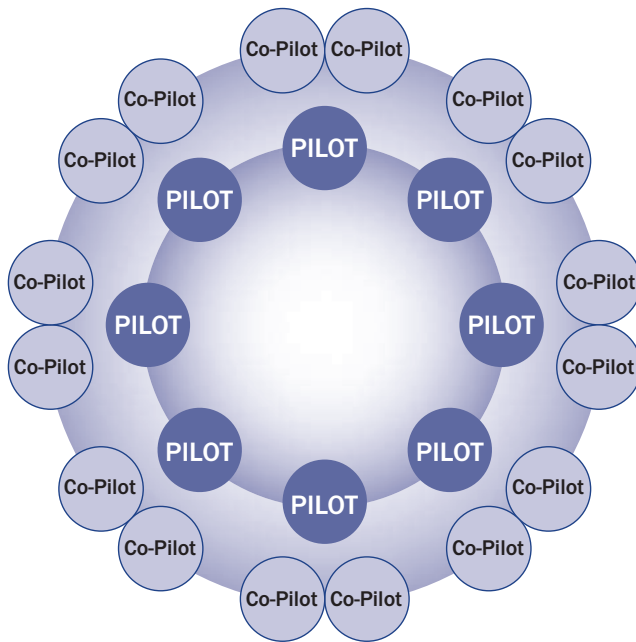
One Large Seminar



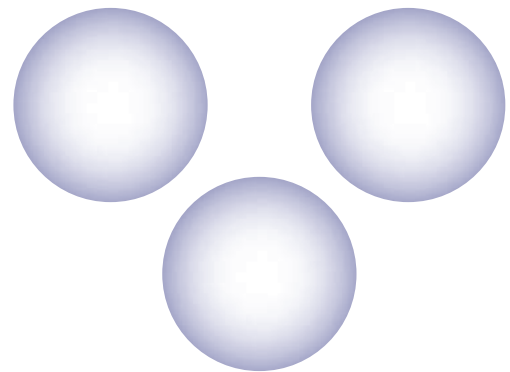
Inner/Outer Circle or Fishbowl



Triad Seminars



Simultaneous



Valdez, S., Carter, M., & Rodgers, J. (2013). *The write path English language arts: Informing ourselves and others through writing and speaking*. San Diego, CA: AVID Press.

Tips for Socratic Seminar

The points listed below are suggestions to enhance the Socratic Seminar process for both teachers and students, and to provide additional ideas to consider before, during, and after the discussion.

Teachers

- Be prepared with a higher level starter question in case the group questions do not meet the overall goal for the discussion.
- Don't try long texts or long Seminars at first; build gradually.
- Take notes during the Seminar (e.g., evaluate students, chronicle main ideas discussed) and use the notes during the debrief to help coach individual students and to help students set goals for the next Seminar.
- Note when one conversation thread has runs its course and introduce a new line of inquiry.
- Never neglect the debrief. Feedback is vital if the group is going to grow with each Seminar. Request specific, non-judgmental comments to help improve future Seminars.
- Over time, use a variety of print and non-print texts: arguments, proofs, fiction, essays, poetry, quotations, artwork, editorial cartoons, multimedia, etc.

Leaders (Student or Teacher Seminar Leaders)

- Your task is not to make participants “cover” the topic, but to help them use their minds well.
- Read the text in advance and take ample notes to have a deep understanding.
- Focus the group on the opening question as quickly as possible.
- Allow for “think time.” Participants need time to think and process information and ideas.
- Model thoughtful behavior. Ask clarifying and probing questions if others seem stuck or are not asking for evidence, reasoning, or connections back to the text.
- Rephrase a question if participants seem confused by it—or ask another participant to rephrase it.
- Don't let sloppy thinking or gross misinterpretations go unexamined. Ask participants to offer textual support for their thinking, or to consider what _____ would say about their interpretation.
- Pay attention to what is *not* being discussed. If there is a perspective that is not being represented, introduce it.
- Guide participants to discuss their differences and work through conflicts respectfully.
- Involve reluctant participants while restraining more vocal members.
- Avoid making eye contact with participants if they continually talk to you rather than the group.
- Do not dominate the discussion or withdraw entirely; you are a participant, too.

Adapted from Boldway, S., Carter, M., Compton, R., Gutierrez, S., Mullen, M., & Valdez, S. (2012). *The write path English language arts: Exploring texts with strategic reading*. San Diego, CA: AVID Press.

Observation Checklist for Socratic Seminar

Directions: Each time your partner does one of the following, put a check in the box.

Your Name: _____ **Partner's Name:** _____

Speaks in the discussion.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Makes eye contact with other speakers or as she/he speaks.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Refers to the text	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Asks a new or follow-up question.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Responds to another speaker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paraphrases and adds to another speaker's ideas.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Encourages another participant to speak.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interrupts another speaker.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Engages in side conversation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dominates the conversation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

After Discussion:

What is the most interesting thing your partner said?

After Discussion:

What would you like to have said in the discussion?

4.12: Socratic Seminar: Triad Formation (Pilot/Co-Pilot)



Student Objective

Students will incorporate thoughts from their peer support group and share those thoughts.

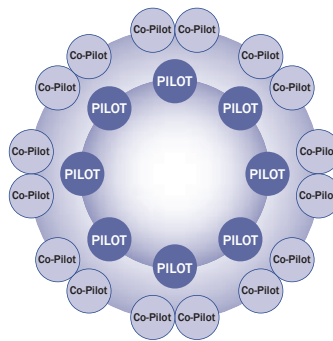
Overview

The Triad (Pilot/Co-Pilot) model of Socratic Seminar is one of the most advantageous formats to employ when the goal of the lesson is to maximize both inquiry and collaboration among all classroom students. Similar in structure to the Inner/Outer Circle variation, the Triad model allows for greater interaction and mobility between the outer circle of students and those in the inner circle.

Materials/Set-Up

- Handouts:
 - Socratic Seminar: Classic Style Handouts
- In advance of the activity, complete the following:
 - Set up the classroom to accommodate the following configuration:

Triad Seminars



Instructional Steps

1. Follow the same text selection, norms, and pre-work steps as Socratic Seminar: Classic Style, including having students write appropriately leveled questions about the text.
2. Divide students into thirds and arrange the seats so that one-third of the students sit in the inner circle (as the “pilots”).
3. Set two chairs behind each pilot’s chair (for the “co-pilots”). If the total number of students does not divide evenly into thirds, arrange the chairs accordingly so that a few pilots only have one co-pilot each, instead of two.

ELL Integration: Provide students with the opportunity to rehearse their responses before sharing with the entire class.

4. Review elements of the text and the prompt with the class.
5. Once students are seated, instruct the pilots to discuss the questions that they created about the text with their co-pilots. If Socratic Seminars are a new experience for the students, consider using a teacher-created prompt to bolster this initial discussion.
6. Allow about one minute for each “flight crew”—pilot and co-pilots working together—to share their thoughts about the questions.
7. Beginning with a volunteer, conduct a Whip-Around, having each pilot in the circle share a question that they had discussed with their flight crew.
8. Once each pilot has shared a question, determine the opening question and allow the Seminar to develop its initial dialogue. The outer ring of co-pilots does not openly contribute to the discussion occurring in the inner circle. However, encourage co-pilots to take notes or write down points that they wish to mention at the first available opportunity.
9. At appropriate times—about every five to seven minutes—announce a “stop-over,” and pause the discussion.
10. **Allow the pilots to turn to their co-pilots once again to quickly gather input and reactions regarding the inner-circle discussion.** At this point, allow co-pilots the opportunity to relieve their pilots, if they so desire, and assume the inner-circle seat.
11. Continue the Socratic Seminar, allowing for connections so that co-pilots can continue to contribute to the discussion until the dialogue comes to a close.
12. For the final leg of their “journey,” conduct a Whip-Around, allowing each pilot one final statement or rhetorical question that sums up their flight crew’s thinking.

➔ Extension

- To increase rigor, increase scaffolding, and integrate technology, see the “Extension” section of Socratic Seminar: Classic Style.
- To increase scaffolding:
 - Allow pilots and co-pilots to switch roles at their own determined times.
 - Allow co-pilots to contribute ideas to the inner circle during the dialogue by writing their ideas on sticky notes and passing them to their pilots.
 - Have the pilots rotate two spots during a stop-over, for a new flight crew and a different perspective.
- To integrate technology, allow co-pilots to text directly to their pilots, using cell phones.

4.13: Socratic Seminar: Debriefing

Student Objective

Students will reflect on the Socratic Seminar process, their experience participating in the Socratic Seminar, and the personal and group skills used in the activity.

Overview

Spending time after a Socratic Seminar to critique, debrief, and evaluate the process is critical. The reflections allow for growth of skills necessary to achieve quality Seminars and high levels of thinking. As students analyze their personal experience in the Seminar, they can identify areas of strength and areas for improvement for future Seminars. Moving beyond simple restatement of the concepts discussed during the Seminar, the debrief is an opportune time to encourage students to reflect verbally and in writing upon their overall participation, self-assessing not just how well they followed the rules of engagement, but thinking about their academic language, non-verbal communication, use of rhetoric, and recognition of the skills and qualities that their peers bring to the classroom.

Materials/Set-Up

- Handout:
 - 4.13a: Socratic Seminar Rubric

Instructional Steps

1. To conduct a verbal debrief:
 - Upon completion of the Socratic Seminar, facilitate a small-group or class discussion strictly over the content of the dialogue.
 - Continue to explore the other realms of the Seminar: metacognition, style, and process.
 - Tie everything together by discussing relationships and connections between the themes and concepts of the Seminar and deep content ideas, cross-curricular areas, and personal experience.
2. To conduct a rubric debrief:
 - Use the Socratic Seminar Rubric as an evaluation tool for student self-evaluation of participation or for observers to evaluate other participants.
3. To conduct a written debrief:
 - Have students compose a written debrief, summarizing their learning from the Seminar and making conceptual connections between the themes of the Seminar and deeper content ideas, cross-curricular areas, or personal experience.

➔ Extension

- To increase rigor, refer to Analyzing the Flow of Dialogue in a Socratic Seminar for methods of processing the Seminar dynamic, such as mapping the patterns of dialogue and scripting the conversation. Analysis of the information from this activity can help students set participation and dialogue goals for the next Seminar.
- To integrate technology, use Poll Everywhere, Nearpod, or another feedback tool for audience voting.

Rubric for Socratic Seminar

This rubric can be used by students to self-evaluate their participation in a seminar or by observers to evaluate a particular participant. This rubric breaks down some of the skills involved in seminars. They may help participants to identify particular areas of strength and areas for improvement.

	Advanced	Satisfactory	Developing	Unsatisfactory
Questioning	<ul style="list-style-type: none"> • Has prepared several higher level questions based on the text • Asks several higher level questions during the seminar 	<ul style="list-style-type: none"> • Has prepared questions, mostly lower level • Asks some questions during seminar 	<ul style="list-style-type: none"> • Has very few questions, if any • Asks very few questions, if any 	<ul style="list-style-type: none"> • Has not prepared questions • Does not ask questions
Speaking	<ul style="list-style-type: none"> • Moves the conversation forward • Speaks to all participants • Thinks before answering • Refers directly to the text • Makes connections to other speakers • Considers all opinions • Offers insightful contributions 	<ul style="list-style-type: none"> • Comments often, but does not lead others • Addresses only the teacher • Refers to text, but not to subtle points • Responds to questions • Considers some opinions • Offers interesting ideas, not necessarily connected 	<ul style="list-style-type: none"> • Emphasizes only own ideas • Addresses only the teacher • Tends toward debate, not dialogue • Ideas do not always connect • Comments neglect details of text 	<ul style="list-style-type: none"> • Disruptive, argumentative • Mumbles or is silent • Makes no connection to previous comments
Listening	<ul style="list-style-type: none"> • Demonstrates effective listening skills (making eye contact, nodding, taking notes) • Writes down thoughts and questions • Builds on others' comments • Asks for clarification when needed 	<ul style="list-style-type: none"> • May have some eye contact with speaker • Takes some notes • Ignores others' comments 	<ul style="list-style-type: none"> • Rarely demonstrates effective listening skills (making eye contact, nodding, taking notes) • Loses track of conversation • Judges others' ideas 	<ul style="list-style-type: none"> • No effective listening skills demonstrated • Attempts to dominate • Interrupts speakers in middle of sentence • Repeats same ideas
Reading	<ul style="list-style-type: none"> • Identifies/highlights key words and phrases • Has notes of main ideas 	<ul style="list-style-type: none"> • Identifies/highlights some key words and phrases • Has some notes 	<ul style="list-style-type: none"> • No highlighting • Skims the text • Very few notes, if any 	<ul style="list-style-type: none"> • Unprepared, unfamiliar with text

Solomon, B., Bugno, T., Kelly, M., Risi, R., Serret-Lopez, C., & Sundly, J. (2011). *The student success path*. San Diego, CA: AVID Press.

4.14: Analyzing the Flow of Dialogue in a Socratic Seminar

Student Objective

Students will receive and respond to quantitative and qualitative information for the Socratic Seminar dialogue.

Overview

Tracking the flow, sequence, and content of dialogue in a Socratic Seminar can provide information to both teachers and students on the quantity and quality of student involvement in a Seminar. This can also help individual students and the entire class set goals for future Seminars.

Materials/Set-Up

- Handout:
 - 4.14a: Tracking Form for Socratic Seminar

Instructional Steps

1. The following are guidelines for mapping the flow of dialogue:
 - Assign a student to keep track of the flow—or order—of dialogue, utilizing the Tracking Form for Socratic Seminar, which can then be displayed afterward on a document camera.
 - Instruct the student to draw small circles within the larger provided circle for each participating student.
 - As dialogue begins, have the student draw a line from the first speaker (who asks the opening question) to the second speaker, to the third speaker, and so on, continuing to draw lines throughout the whole Seminar. Different marks and letters can be placed next to each smaller circle, depending upon the student's contribution to the discussion: a question mark if a question was asked, an exclamation point for an ah-ha moment, the letter "S" for a statement, the letter "X" for an explanation, and the letter "R" if the text was referenced.
 - If the Seminar pauses or new speakers enter the speaking circle, have the student change pen colors so that lines will denote any influential difference, no matter how slight, due to the personnel change.

-
- At the end of the Seminar, display the dialogue map and allow the class to analyze the map and make observations. They should look for patterns and inferences in the flow of the discussion: Who had the most lines? Who had the least lines? Were there indications of multiple dialogues between the same two people?

2. The following are guidelines for scripting the dialogue:

- Appoint several students to track and record what is actually said during the Socratic Seminar discussion. These can be students in the outside circle (with the Fishbowl or Triad variations) or select students who aren't participating in a Socratic Seminar: Classic Style. Each scribe can script the dialogue of one or two students.
- At the Seminar's end, display the scripted dialogues or have the scribes read them to the class.
- Conduct a class discussion on quality of the dialogue.

→ Extension

- To increase rigor, after the discussion, ask students to set whole-class goals and personal goals for the next Seminar, based on their analysis of the flow of the current Seminar.

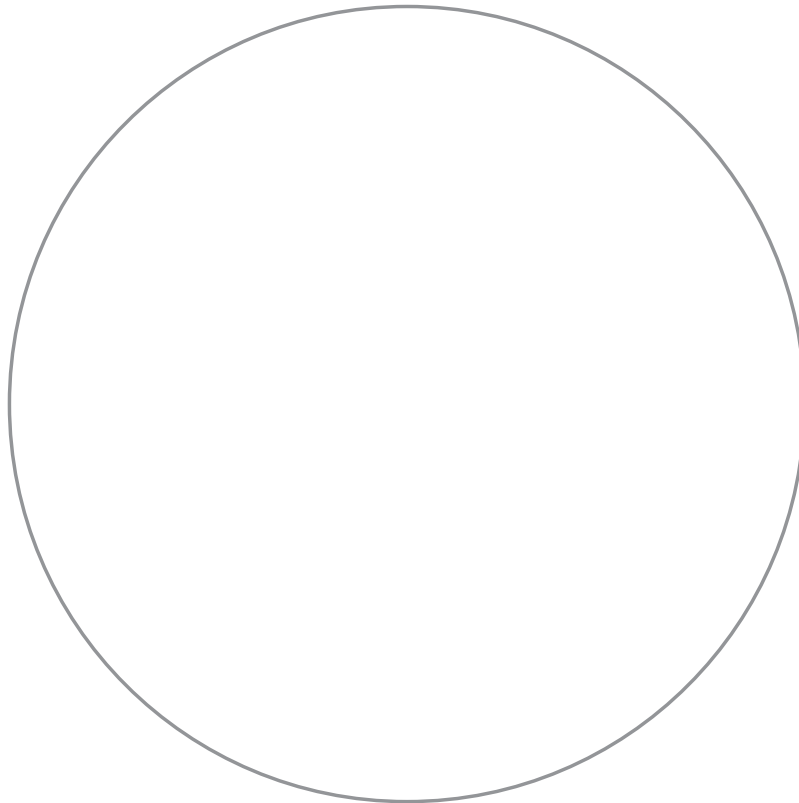


Tracking Form for Socratic Seminar

Teacher/Grade Level:		Date:	
Focus Area for Scripting:		Leader:	

Scripting Key:

?: asked a question **!**: ah-ha **S**: statement **X**: explanation **R**: referenced the text



Post-Assessment for Teachers

This post-assessment is intended to assist teachers in assessing their current level of supporting inquiry after incorporating concepts and activities from this chapter.

On a 1–5 scale—with 5 being the highest level—rate your current ability to complete the following:

Objective	Rating	Explanation and Evidence of Rating
<p>Use effective questioning techniques in the classroom to promote students' critical thinking or higher order thinking skills.</p> <p><i>Consider:</i></p> <ul style="list-style-type: none"> • <i>What activities do you use to teach inquiry/thinking skills?</i> • <i>How might you incorporate more thinking and questioning processes?</i> 		
<p>Create a classroom culture that nurtures thinking and inquiry.</p> <p><i>Consider:</i></p> <ul style="list-style-type: none"> • <i>How do students view themselves as learners—as active or passive participants?</i> • <i>Do students feel safe asking questions and responding during thought-provoking discourse?</i> 		
<p>Engage students in using Costa's Levels of Thinking to think more deeply and broadly.</p> <p><i>Consider:</i></p> <ul style="list-style-type: none"> • <i>What scaffolds are in place to teach higher level thinking skills to students?</i> • <i>Do students understand how thinking at higher levels promotes deep learning?</i> 		
<p>Teach students to identify and employ the strategies and skills of successful learners.</p> <p><i>Consider:</i></p> <ul style="list-style-type: none"> • <i>Do students frequently participate in inquiry-based, structured debates and dialogues?</i> • <i>How are students taught academic skills, such as active listening, self-reflection, and structured discourse?</i> 		



Weaving WICOR into Lesson Design



Choose the content for the lesson (cell respiration, order of operations, the foundations of Islam, methods of characterization), and outline how writing, inquiry, collaboration, organization, and reading will be woven into the instructional steps in order to increase engagement, ownership of learning, and rigor.

Standard(s)/Objective(s):	
Essential Question:	
Digital Resources/Materials:	
AVID Core Strategies Included:	

	W Writing	I Inquiry	C Collaboration	O Organization	R Reading
	<i>How will students use writing as a tool of learning?</i>	<i>What questions will I ask? How will I facilitate students asking questions and encourage higher-level thinking?</i>	<i>How will I facilitate student collaboration?</i>	<i>How is organization part of the lesson? What tools will students use to ensure organization?</i>	<i>What will students read? What strategies will I use to facilitate critical reading?</i>
What strategies will students use?					
What will students do/produce?					

Instructional Steps:

Script the steps the students will take to engage in the learning. W, I, C, O, and R may be included in any order. The goal is to be intentional with instructional moves and strategies to propel the progression of learning.

- ❖
- ❖
- ❖
- ❖
- ❖
- ❖
- ❖
- ❖

WICOR Lesson Plan Tool

Standard(s)/Objectives: _____

Essential Question: _____

Materials: _____

AVID Method	Strategies	Students will produce...
<p>W Writing</p> <p><i>How will students use writing as a tool of learning?</i></p>		
<p>I Inquiry</p> <p><i>What questions will I ask? How will I facilitate students asking questions and encourage higher-level thinking?</i></p>		
<p>C Collaboration</p> <p><i>How will I facilitate student collaboration?</i></p>		
<p>O Organisation</p> <p><i>How is organisation part of the lesson? What tools will students use to ensure organisation?</i></p>		
<p>R Reading</p> <p><i>What will students read? What strategies will I use to facilitate critical reading?</i></p>		