



JROTC Instructor Protocols V1

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Admit and Exit Tickets

Purpose:

At the end of class, Cadets write/type on note cards, slips of paper or electronic device an important idea they learned, a question they have, a prediction about what will come next, or a thought about the lesson for the day. Alternatively, Cadets turn-in such a response at the start of the next day—either based on the learning from the day before or the previous night’s homework. These quick writes can be used to assess Cadets’ knowledge or to make decisions about next teaching steps or points that need clarifying. This reflection helps Cadets to focus as they enter the classroom or solidifies learning before they leave.

Procedure:

1. For 2–3 minutes at the end of class (or the start of the next one) have Cadets jot responses to the reading or lesson.
2. Keep the response options simple, e.g. “Jot down one thing you learned and one question you have.”
3. A variation is known as 3-2-1: Have Cadets write three of something, two of something, then one of something. For example, Cadets might explain three things they learned, two areas in which they are confused, and one thing about which they’d like to know more or one way the topic can be applied. The criteria for listing items are up to the needs of the Instructor and the lesson, but it’s important to make the category for three items easier than the category for listing one item.
4. Don’t let the cards become a grading burden. Glance over them for a quick assessment and to help you with planning for next learning needs. These are simply quick writes, not final drafts.
5. After studying the “deck” you might pick-out a few typical/unique/thought-provoking cards to spark discussion.
6. Cards could be typed up (maybe nameless) to share with the whole group to help with summarizing, synthesizing, or looking for important ideas. It is a good idea to let Cadets know ahead of time as they may put more effort into the write-up. When typing, go ahead and edit for spelling and grammar.



Anchor Charts: Making Thinking Visible

Purpose:

Anchor Charts build a culture of literacy in the classroom by making thinking visible: recording content, strategies, processes, cues, and guidelines during the learning process. Posting Anchor Charts keeps relevant and current learning accessible to Cadets: to remind them of prior learning, and to enable them to make connections as new learning happens. Cadets refer to the charts and use them as tools as they answer questions, expand ideas, or contribute to discussions and problem solving in class.

Materials:

- Poster or chart paper
- Dark, easily visible markers

Procedure:

1. Build Anchor Charts with Cadets to capture strategies and key ideas.
2. Let Cadets add ideas to Anchor Charts as they apply new learning, discover interesting ideas, or develop useful strategies for problem solving or skill application.
3. Also add to Anchor Charts as you debrief Cadet work time, recording important facts, useful strategies, steps in a process, or quality criteria.
4. Anchor Charts should contain only the most relevant or important information.
5. Post only those charts that reflect current learning and avoid distracting clutter—hang charts on clotheslines, or set them up in distinct areas of the room; rotate the charts that are displayed to reflect the most useful content.
6. Charts should be neat and organized, with simple icons and graphics to enhance their usefulness (avoid distracting, irrelevant details and stray marks).
7. Organization should support ease of understanding, and be varied based on purpose.
8. Charts are best in simple darker earth tones that are easily visible (dark blue, dark green, purple, black, and brown—use lighter colors for accents only).

Variations:

1. Cadets can create Anchor Charts during small-group and independent work to share with the rest of the class.



Annotating Text

Purpose:

Annotating text goes beyond underlining, highlighting, or making symbolic notations or codes on a given text. Annotation includes adding purposeful notes, key words and phrases, definitions, and connections tied to specific sections of text. Annotating text promotes Cadet interest in reading and gives learners a focused purpose for writing. It supports readers' ability to clarify and synthesize ideas, pose relevant questions, and capture analytical thinking about text. Annotation also gives Cadets a clear purpose for actively engaging with text, and is driven by the goals or learning targets of the lesson.

Through the use of collaborative annotation (annotations made by multiple individuals on the same text), learners are given the opportunity to “eavesdrop on the insights of other readers” (Wolfe & Neuwirth, 2001). Both peers and instructors can provide feedback in order to call attention to additional key ideas and details. Annotating text causes readers to process information at a deeper level, and increases their ability to recall information from the text. It helps learners comprehend difficult material and engage in what Probst (1988) describes as “dialogue with the text.”

Materials:

- Writing utensil (colored if desired)
- Optional: sticky notes
- Optional: Applications such as Notability, which allow you to annotate PDFs and electronic text

Procedure:

1. Define the purpose for annotation based on learning target(s) and goals. Some examples include:
 - Locating evidence in support of a claim
 - Identifying main idea and supporting details
 - Analyzing the validity of an argument or counterargument
 - Determining author's purpose
 - Giving an opinion, reacting, or reflecting
 - Identifying character traits/motivations
 - Summarizing and synthesizing
 - Defining key vocabulary
 - Identifying patterns and repetitions
 - Making connections/making predictions





2. Model how to annotate text:

- Select one paragraph of text from the reading, and highlight or underline key word(s) or phrase(s) related to the lesson's purpose, using the "think aloud" strategy to share with Cadets why you marked certain selections of the passage.
- Based on your "think aloud," model writing an annotated note in the margin, above underlined words and phrases, or to the side of text.

3. Practice annotating with Cadets, choosing another paragraph/section of text and reminding them of the purpose. Have them highlight, underline, or circle relevant words and phrases in the reading and add annotations. Have Cadets share what they selected and explain their annotations. Repeat over several classes or as necessary, working on gradual release toward Cadet independence.

Variation:

- Annotations can look very different while accomplishing the same purpose—engaging deeply with text—depending on the focus of the lesson and the needs and preferences of the learners.
- For an in-depth study of annotation and options for annotations, explore
- <http://learning.blogs.nytimes.com/2011/03/07/briefly-noted-practicing-useful-annotation-strategies/>

References:

- Porter-O'Donnell, C. (2004, January 1). Beyond the yellow highlighter: Teaching annotation skills to improve reading comprehension. *English Journal*, 82-89.
- Probst, R. (1988, January 1). Dialogue with a text. *English Journal*, 32-28.
- Wolfe, J., & Neuwirth, C. (2001, January 1). From the margins to the center: The future of annotation. *Journal of Business and Technical Communication*, 333-371.



Back-to-Back and Face-to-Face

Purpose:

This protocol provides a method for sharing information and gaining multiple perspectives on a topic

Procedure:

1. Find a Cadet and stand back-to-back with them. Be respectful of space.
2. Wait for the question, opinion, etc. that you will be asked to share with your fellow Cadet.
3. Think about what it is you want to share and how you might best express yourself.
4. When the Instructor says, "face-to-face", turn, face your partner, and decide who will share first if the Instructor has not indicated that a certain person should go first.
5. Listen carefully when your partner is speaking and be sure to give them eye contact.
6. When given the signal, find a new Cadet, stand back-to-back and wait for your new questions, opinion, etc.
7. This may be repeated as many rounds as needed/appropriate.



Building Background Knowledge

Purpose:

This protocol demonstrates how quickly people can become interested in a topic, build background knowledge, and use that background knowledge to become better and more informed readers of complex text. The protocol adapts easily to content in many disciplines, and the design ensures that all Cadets read, think, and contribute. The protocol is particularly useful in introducing a topic because it fosters curiosity and builds in immediate feedback about learning. When conducted and debriefed for Instructors, the protocol heightens awareness of key instructional and grouping practices.

Procedure:

1. Choose a topic and find text as described below.
2. Group Cadets: Use a grouping strategy to shift Cadets into groups of four or five.
3. Distribute materials: For each group, a set of 4 different colored markers, a piece of chart paper, texts, and loose leaf paper.
4. Share a “mystery text”: Choose a relevant short text, poem, political cartoon, photograph, song, graph, map, etc. that sparks Cadets curiosity about the topic. Display or provide copies of the text (remove the title if it gives away the topic).
5. Have Cadets write down what they think the reading is about and draw a line after thoughts are jotted down.

Activate and share background knowledge:

6. Ask Cadets to write what they know about the topic.
7. Ask Cadets, in their small groups, to share what they know about the topic.
8. Ask Cadets to create a web or visualization of their collective knowledge/understanding of the topic on a piece of chart paper using just one of the colored markers.
9. Provide a “common text” - an article or essay on the topic that is interesting, offers a solid introduction to the topic, and provides multiple perspectives. All Cadets read this article.
10. Ask Cadets to text code the article with “N” for new information.
11. Ask Cadets to add their new knowledge to their web using a different color of marker.
12. Distribute “expert texts”: Hand out a different text on the topic to each member of the group.
13. Again, ask Cadets to text-code for new information.
14. After everyone has read, each Cadet shares new knowledge with their group and captures key points on the chart paper using the fourth color.
15. Have on hand extra texts or additional media (drawings, maps, photos, graphs, etc.) for those who finish early.
16. Return to the mystery text. Re-read/display the initial text again.
17. Ask Cadets to go back to where they had initially written about the mystery text; have Cadets note what they now think about the mystery text.
18. Debrief the experience.
19. Contrast first and second reading/showing of the mystery text: “What was it like to hear the mystery text the second time?” “What made the experience so different?”
20. Ask a general question about what the process was like to read successive articles. Did they know much about the topic before? Had they been curious about the topic? What inspired their curiosity?



Carousel Brainstorm

Purpose:

The purpose of using the carousel brainstorm protocol is to allow Cadets to share their ideas and build a common vision or vocabulary; Instructors can use this process to assess group knowledge or readiness around a variety of issues.

Procedure:

1. Before your group gathers, identify several questions or issues related to your topic, perhaps drawn from a reading that you will share later.
2. Post your questions or issues on poster paper.
3. Divide your group into smaller teams to match the number of questions you have created.
4. Give a different color of marker to each team, and have each team start at a particular question.
5. At each question, Cadets should brainstorm responses or points they want to make about the posted question.
6. After a couple of minutes with each question, signal the teams to move to the next question, until all teams have responded to all questions.
7. Conclude the activity by having each team highlight and report key points at their initial question or by having Cadets star the most important points and discussing those.
8. If it is appropriate for your topic, distribute a related reading and discuss, using the common vocabulary you have built through this process.



Catch and Release (Adapted from: www.the wordcafe.com)

Purpose:

When Cadets are working on their own, they often need clarification or pointers so they do not struggle for too long or lose focus. Catch and Release allows them to retrain their attention on the learning, and seek the answers or clarification they need for any questions that have come up during the preceding work time.

Materials:

Optional: public timer

Procedure:

1. Set a small, manageable “chunk” of work time for Cadets.
2. Circulate during the work time. Synthesize and take note of persistent questions or confusions.
3. Bring the class back together after the work time. Very briefly, answer or clarify as needed any questions Cadets have had about the work.
4. Repeat the cycle.

Variations:

- A useful ratio of work time to checks for understanding or clarifying information is 7 minutes of work time (release), followed by 2 minutes of Instructor-directed clarifications or use of quick-check strategies (catch).



Chalkboard Splash

Purpose:

This protocol, originally written up in Himmele and Himmele's *Total Participation Techniques* (2011), provides Cadets the opportunity to get a sense for the every person's response to an important question.

Procedure:

1. Craft a sentence starter, prompt, or question for which you would like all Cadets to see one another's responses. Typically, strong chalkboard splash prompts promote higher-order thinking and address the big picture of a topic.
2. As Cadets generate responses, ask them to place (or copy) them onto random or designated places on a chalkboard, whiteboard, or chart paper.
3. Once all responses are posted, ask Cadets to walk around, analyze, and jot down similarities, differences, and surprises. Use a three-column note catcher with these labels if it is helpful.
4. Ask Cadets to form small groups and share what they noticed in terms of similarities, differences, and surprises.

Ask volunteers from each small group to share with the whole group.



Chalk Talk

Purpose:

A chalk talk is a way to promote discussion and awareness of issues and perspectives—silently. A chalk talk is also an excellent way to promote awareness of patterns and problems and to ensure that all voices are heard.

Procedure:

1. Formulate an important, open-ended question that will provoke comments and responses.
2. Provide plenty of chart paper and colored pencils and arrange a good space for Cadets to write and respond. Write the question or topic in the middle of the paper in bold marker.
3. Explain the chalk talk protocol and answer any Cadet questions.
4. Set-up norms for the chalk talk: This technique only works if everyone is writing and responding throughout the designated time period. Make it clear that everyone is responsible for writing, reading other people's comments, and responding; there should be no talking; and no one should sit down until the time period is over. Opinions must be freely expressed and honored, and no personal attacks are allowed.
5. Allow 10-20 minutes for the chalk talk. As Instructor, it's helpful to walk around and read, and gently point Cadets to interesting comments. All writing and responding is done in silence.
6. Search for patterns. In pairs, Cadets should read through all the postings and search for patterns and themes (or "notice and wonder"). This part takes about 5 minutes.
7. Whole-group share: Pairs should report out patterns and themes, round-robin style, until all perceptions are shared.
8. Process debrief: What was the experience like of "talking" silently?



Cold Call

Purpose:

Cold Call serves as an engaging and challenging yet supportive way to hold Cadets accountable for answering oral questions the Instructor poses, regardless of whether a hand is raised. Cold Call requires Cadets to think and interact with the question at hand, even if they're not sure of the answer. Cold Call also promotes equity in the classroom; Cadets who normally dominate the discourse step back and allow other Cadets to demonstrate their knowledge and expertise.

Materials:

- Optional: equity sticks, name cards, or tracking chart

Procedure:

1. Name a question before identifying Cadets to answer it.
2. Call on Cadets regardless of whether they have hands raised.
3. Scaffold questions from simple to increasingly complex, probing for deeper explanations.
4. Connect thinking threads by returning to previous comments and connecting them to current ones; model this for Cadets and teach them to do it too.

Variations:

- Call on Cadets using equity sticks, name cards, or a tracking chart to ensure that all Cadets contribute.
- Pair Cold Call with No Opt Out to ensure that Cadets have full access to the correct answers to the questions asked.
- Hot Seat: Place key reflection or probing questions on random seats throughout the room. When prompted, Cadets check their seats and answer the questions. Cadets who do not have a hot seat question are asked to agree or disagree with the response and explain their thinking.

References:

Lemov, D. (2010). *Teach like a champion: 49 techniques that put Cadets on the path to college*. San Francisco, CA: Jossey-Bass.





Concentric Circles (Inner Circle/Outer Circle)

Purpose:

This protocol provides Cadets with a structure to actively engage in discussions around short text, questions, opinions, or debates on any topic with several different partners.

Procedure:

1. Desks or chairs should be arranged in two concentric circles facing each other.
2. The first pair of Cadets facing will have a specified amount of time to discuss the first question, topic, or section of a reading.
3. When the signal is given, the inside circle rotates one chair (or more) to the right or left, and the new pair moves on to the next question, topic, or section of reading.
4. The inside circle moves as many times as necessary to finish the topics.
5. The last pair should have time to sum-up the conversation and be prepared to share key points with the whole group.
6. Debrief: Share important ideas or common threads to the discussions as appropriate.
7. Variations: Cadets could define terms or prep for tests. The protocol could be used to role-play or critique.



Discussion Appointments

Purpose:

Discussion Appointments allow Cadets to have conversations with various peers about a text, question, or concept. Multiple, short discussions allow Cadets to expand and deepen their understanding. For this reason, Discussion Appointments are a particularly good protocol to use just before Cadets begin to write.

Procedure:

1. Determine the focus of the discussions. Have clear questions or prompts to provide to Cadets.
2. Determine the number and length of appointments Cadets will have.
3. Create an appointments sheet, or create a model for Cadets to replicate.
4. Explain to Cadets the purpose and logistics of the discussion appointments, and distribute (or have them create) their appointments sheet.
5. Give Cadets a brief amount of time (usually about 3 minutes) to set appointments, having them write down the name of their “appointment”. Cadets should have only one appointment per slot, and they may not turn down an invitation for an appointment if both people have the same open slot.
6. IF there are an uneven number of Cadets, or if Cadets do not have an appointment slot filled for some other reason, they should come to you to be paired up or to engage in discussion with you.



Equity Sticks

Purpose:

Equity sticks are true to their name: they ensure academic equity by allowing Instructors to physically track who they have called on or interacted with during the course of the class. This is especially useful during whole-class discussions or while working with large groups of Cadets.

Materials:

Wooden sticks (e.g. tongue depressors or popsicle sticks) or cards with a Cadet's name of each.

Procedure:

1. Pose a question to the class.
2. After giving Cadets some think time, call on a Cadet for an answer. As you do so, move the equity stick from one location to another, indicating that the Cadet has participated in class that day.

Variations:

- Pair equity sticks with Cold Call by choosing a stick or card randomly for a Cadet response.
- Color in one end of the equity stick. Instead of moving the whole stick, flip the stick upside down in its container to indicate via color that the Cadet has been called on.



Final Word

Purpose:

This protocol is designed to help Cadets understand the meaning of a text, particularly to see how meaning can be constructed and supported by the ideas of others. After the presenter shares his or her thinking, interesting similarities and differences in interpretations will arise as other Cadets share their thinking without judgment or debate. The presenter listens and may then change his or her perspective, add to it or stick with original ideas without criticism. This protocol is especially helpful when people struggle to understand their reading.

Procedure:

1. Have each group select a time keeper and Instructor.
2. All Cadets may read the same text, or Cadets may read different texts on a common topic for a jigsaw effect. Text selection is a critical step.
3. Cadets read silently and text-code or fill out a recording form based on desired outcomes. They mark passages for discussion clearly so they can quickly locate them later. To promote critical thinking, design prompts for the discussion that ask Cadets to include reasons for selecting a particular passage and evidence that supports a particular point.
4. Presenter shares a designated number of passages and his or her thinking about them.
5. Each Cadet comments on what was shared in less than 1 minute each.
6. Presenter gets the Last Word, sharing how his or her thinking evolved after listening to others or re-emphasizing what was originally shared.
7. Follow steps 4-6 with each additional Cadet taking the role of presenter.
8. Debrief content. Discuss how hearing from others impacted your thinking.
9. Debrief process. What worked in our discussion? What were some challenges? How can we improve next time?



Fishbowl

Purpose:

The fishbowl is a peer-learning strategy in which some Cadets are in an outer circle and one or more are in the center. In all fishbowl activities, both those in the inner and those in the outer circles have roles to fulfill. Those in the center model a particular practice or strategy. The outer circle acts as observers and may assess the interaction of the center group. Fishbowls can be used to assess comprehension, to assess group work, to encourage constructive peer assessment, to discuss issues in the classroom, or to model specific techniques such as literature circles or Socratic Seminars.

Procedure:

1. Arrange chairs in the classroom in two concentric circles. The inner circle may be only a small group or even partners.
2. Explain the activity to the Cadets and ensure that they understand the roles they will play.
3. You may either inform those that will be on the inside ahead of time, so they can be prepared or just tell them as the activity begins. This way everyone will come better prepared.
4. The group in the inner circle interacts using a discussion protocol.
5. Those in the outer circle are silent, but given a list of specific actions to observe and note.
6. One idea is to have each Cadet in the outer circle observing one Cadet in the inner circle (you may have to double, triple, or quadruple up.) For example, tallying how many times the Cadet participates or asks a question.
7. Another way is to give each Cadet in the outer circle a list of aspects of group interaction they should observe and comment on. For example, whether the group members use names to address each other, take turns, or let everyone's voice be heard.
8. Make sure all Cadets have turns being in the inside and the outside circles at some point, though they don't all have to be in both every time you do a fishbowl activity.

Debrief:

Have inner circle members share how it felt to be inside. Outer circle members should respectfully share observations and insights. Discuss how the fishbowl could improve all group interactions and discussions.

Variation:

Each person in the outside circle can have one opportunity during the fishbowl to freeze or stop the inside Cadets. This person can then ask a question or share an insight.





Fist to Five

Purpose:

To physically show degree of agreement, readiness for tasks, or comfort with a learning target/concept. Fist-to-Five creates a clear visual for Instructors to use when checking for understanding.

Procedure:

Cadets show their thinking by holding up a fist (or placing a hand near the opposite shoulder) for disagree, or one to five fingers for higher levels of confidence or agreement.

Variations:

Thumb-Ometer (and other “-Ometers”): To show degree of agreement, readiness for tasks, or comfort with a learning target/concept, Cadets can quickly show their thinking by putting their thumbs up, to the side, or down. Get creative with other versions of “-Ometers” that allow Cadets to physically demonstrate where they are with a target



Frayer Model

The Frayer Model is a graphic organizer used for word analysis and vocabulary building. This four-square model prompts Cadets to think about and describe the meaning of a word or concept by:

This strategy stresses understanding words within the larger context of a reading selection by requiring Cadets, first, to analyze the items (definition and characteristics) and, second, to synthesize/apply this information by thinking of examples and non-examples.

Frayer Model

Definition	Characteristics
Examples	Non-examples

The Frayer Model is a large square graphic organizer divided into four quadrants by a vertical and a horizontal line. In the center of the square is a circle. The four quadrants are labeled as follows: top-left is "Definition", top-right is "Characteristics", bottom-left is "Examples", and bottom-right is "Non-examples".



Four Corners

Purpose:

Four Corners allows Cadets to reflect on and synthesize their thinking by using physical movement and visual cues. Like Take a Stand, this protocol can not only provide practice in the social dimensions of debate, but encourage Cadets to support, reflect on, and possibly change their answers based on the knowledge of their peers.

Materials:

Signs indicating the question and location of the four potential answers

Procedure:

1. Cadets form four groups based on commonalities in their responses to a question posed. For example, you might ask, “Who is a resilient character in the novel *Unbroken*?” and then designate four characters as potential responses, one for each corner of the room.
2. Once Cadets physically move to a “corner” of the room based on their answer, they discuss their thinking, and one Cadet from each group shares the group’s ideas with the whole class.
3. Cadets in other groups/corners may move to that corner if they change their thinking based on what they hear.

Variations:

The number of groups and responses need not be four: vary the number based on your purpose.



Gallery Walk / Hosted Gallery Walk

Purpose:

This protocol offers Cadets an opportunity to share information with others in a gallery setting. The protocol involves small-group collaboration, while making individuals responsible for the learning and, when hosted, the teaching.

Procedure:

1. Divide Cadets into groups—the size of group will vary with the topic and how it can be divided, size of class, age of Cadets, etc.
2. Assign each group a specific segment of the topic (example: legislative branch of government, role of a worker bee, or transportation on the river).
3. Provide each group with additional materials they need to further enhance the study that has already been introduced, probably in a large-group setting (example: government, insects, and importance of the river).
4. Allow time for group to read and discuss the new information. Using prior knowledge along with the new knowledge, have each group create a chart with key points and a visual representation that—in the hosted version—each person in the group will use to teach others in the class.
5. Be clear that each person has to understand the text and images on the poster in order to present the information effectively. Allow time for the groups to help one another focus on key components.
6. Post the work around the room or in the hallway.
7. Regroup Cadets so each new group has at least one member from the previously established groups.
8. Give specific directions at which poster each group will start and what the rotation will look like.
9. The speaker at each poster is the person(s) who participated in the creation of the poster.
10. When all groups have visited each poster, debrief. Possible debrief questions:
 - A. What was your biggest “a-ha” during the tour?
 - B. How was your learning enhanced by this method?
 - C. What role did collaboration play in your success?
 - D. Why was the individual responsibility component so important?



Give One, Get One, Move On

Directions: Think of an important idea you have learned about this topic or one that has recently been reinforced. Write it down in Box 1. Pass the sheet to another Cadet who will silently read what was written in the first box. That Cadet will add an idea in Box 2.

Do not repeat ideas that are already listed. Continue passing on the paper and adding ideas until all the boxes are filled with ideas. Return the sheet to the original owner.

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.



Go Around

Purpose:

One of the most efficient means of checking understanding, Go-Around allows Instructors to receive responses from all Cadets in a class in regard to a key formative or summative question.

Materials:

- Question(s) with very brief answers, prepared beforehand. Examples might be:
- “Share one thing that you have learned in class today.”
- “Give an example of someone who is ‘resilient.’”
- “Choose one adjective to describe how you’re feeling about the exam coming up tomorrow.”

Procedure:

1. Ask Cadets to respond to a standard prompt one at a time, in rapid succession around the room.
2. You may then conduct a whole-class discussion on any patterns or interesting observations you made about the answers.
3. Be sure to develop a question that is somewhat open-ended: in other words, that will require Cadets to think of an original answer, versus parroting each other.

Variations:

Go-Around can serve as a satisfying and powerful opening or closing to a lesson or work time.



Guided Practice

Purpose:

Instructors often provide Guided Practice in a lesson after Cadets grapple with a concept or a text, before releasing them to independent application. Guided Practice provides a model for how the independent work will run as well as a concrete representation of the goal of the work.

Materials:

Optional: Recording form to note which Cadets need more individual attention after Guided Practice

Procedure:

1. During Guided Practice, Cadets quickly try the task at hand in pairs or in a low-stakes environment.
2. Strategically circulate, monitoring Cadets' readiness for the task and noting Cadets who may need re-teaching or would benefit from an extension or a more challenging independent application.
3. Use an appropriate quick-check strategy to determine needs for differentiation during independent application time. Be sure to check for understanding from all Cadets before moving on from Guided Practice. Ensure that all Cadets have an opportunity to respond to questions, receive feedback, and practice alongside the Instructor until they are fluent in the content/task.

Variations:

- Break content into smaller “chunks” to scaffold understanding.
- Ask “fuzzier” questions that do not necessarily have discrete answers, and require Cadets to explain their thinking.
- Make Guided Practice a game. Games increase engagement and focus.
- Combine Guided Practice with protocols that allow Cadets to share their work during the practice session, such as Gallery Walk or Think-Pair-Share.



Human Bar Graph

Purpose:

A quick, visual, and engaging method of determining where Cadets are in relation to a learning target. Like Fist-to-Five, the Human Bar Graph asks Cadets to self-assess and share their impressions of their learning with their Instructor and peers.

Materials:

Signs or designations for the graph levels of mastery posted in the room

Procedure:

1. Identify a range of levels of understanding or mastery (e.g., beginning/developing/accomplished or confused/I'm okay/I'm rocking!) as labels for three to four adjacent lines.
2. Have Cadets then form a human bar graph by standing in the line that best represents their current level of understanding.

Variations:

- Learning Line-Ups: Identify one end of the room with a descriptor such as “Novice” or “Beginning” and the other end as
- “Expert” or “Exemplary.” Cadets place themselves on this continuum based on where they are with a learning target, skill, or task. Invite them to explain their thinking to the whole class or the people near them.



Infer the Topic

Purpose:

This protocol offers Cadets a chance to work together to uncover the heart of a larger concept before they begin to study a new topic. Cadets also get a chance to experience the ways an inference can change as they take in new information. It allows Cadets to draw on their own background knowledge and work in a fun, collaborative environment with new information from a variety of peers to uncover meaning.

Procedure:

1. Locate artifacts with and without key words/quotes related to the concept. The goal is for Cadets to infer what is happening in the image. Images can range from concrete to abstract.
2. Have Cadets select an image and record their inference about the new topic of study.
3. Cadets mingle about the room and stop when prompted, facing a partner.
4. In one minute or less, Cadets view each other's images, discuss and record a new inference about the upcoming topic of study.
5. Cadets mingle about the room again, this time with the partner they were just sharing with. When prompted, partners stop facing another set of partners.
6. All four Cadets share their artifacts and inferences, discuss further and make a new inference about what the new topic of study could be.
7. Cadets gather whole group displaying their artifact in front of them for all to see. The Instructor invites a few to share their artifacts and their inferences about the upcoming topic.
8. After a few have shared, the Instructor reveals the topic of study as well as the essential and guiding questions.

Debrief:

Ask Cadets to share a final inference about the meaning of their images and how they relate to the larger concept(s). Discuss how Cadets' inferences did or didn't change throughout this protocol. Ask Cadets to name strategies for inferring and lingering questions about the topic. Also, discuss what it was like to engage this way. Consider recording debrief notes on an anchor chart.

Variations:

1. Vary partner instructions or adapt numbers of partners or rounds.
2. To monitor understanding and support Cadets struggling to infer the artifacts' meaning, Instructors can circulate and give these Cadets a "ticket" in the form of a colored card or sticky note. At an opportune time, call a meeting of an invitational group for anyone with tickets or anyone who is struggling.



Interactive Word Wall

Purpose:

A word wall in a classroom is a powerful instructional tool to strengthen content vocabulary. A word wall is an organized collection of words (and sometimes phrases) displayed on a wall or other space in the classroom. We recommend that both academic and discipline-specific words be written on large index cards, strips of paper, or tag board so that they can be easily manipulated. For English Language Learners (ELL) consider placing an illustration, photograph, or object on or next to particular words to support Cadets' learning through the aid of visual cues.

Procedure:

The “interactive” part is critical; actively engaging with the words will support Cadet learning. There are many ways to interact with word walls; some interactions are quick and can occur on a daily basis. Other interactions can constitute an entire lesson.

Suggestions include:

1. Categorize and Classify: Have Cadets classify the terms.
2. Compare and Contrast: Create categories to compare and contrast.
3. Concept Map: Use the words to create a concept map.
4. Conceptual Model: Use the words to construct a conceptual model that represents Cadet thinking and/or scientific phenomenon.
5. Create descriptions: Use the words to describe concepts.
6. Contextualized use: Challenge the Cadets to use some or all of the words on a short answer quiz.
7. Label Diagrams: Use the words on the wall to label Cadet diagrams and illustrations.

Lesson Extension – Concept Map Approach:

One of the most common approaches to interacting with words from a word wall is the concept map, which provides Cadets with an opportunity to demonstrate and enhance their understanding of a related set of terms.

Procedure:

1. Pull cards from your word wall, or write one word/phrase per card. Use a limited number of cards, perhaps 10-15.
2. Also create cards with one-way and two-way arrows. Use the floor or magnets and a magnetic board to display the cards, and group the Cadets around the words. (Modification: Give each Cadet his or her own set of word cards.)
3. Ask a Cadet or a pair of Cadets to arrange two or three cards in a way that connects them or makes a model of the terms. Ask the Cadet(s) to explain what they are doing as they place the words.



4. Observers may ask questions once the connection or model is created.
5. Repeat with another Cadet or pair of Cadets.
6. Debrief. Possible debrief questions:
 - a. How did working with the cards help you better understand the topic?
 - b. How was your thinking similar/different from a Cadet doing the arranging?
 - c. Are there words you would add or subtract?



Jigsaw

Purpose:

This protocol allows small groups to engage in an effective, time-efficient comprehension of a longer text. Having every Cadet read every page or section may not be necessary. Cadets can divide up the text, become an expert in one section, hear oral summaries of the others, and still gain an understanding of the material.

Procedure:

1. Divide the chosen text into manageable sections.
2. Arrange Cadets into groups so there are the same number of people in each group as sections to read. Assign the sections to each Cadet.
3. Cadets read their section independently, looking for key points, new information, or answers to questions.
4. Each Cadet in turn shares his/her important points or summaries of the text.
5. Have Cadets independently write/reflect on their own understanding after the discussion.
6. Debrief: Have groups or individuals share insights and discoveries. Did the group process help Cadets gain an understanding of the whole text? What worked well for the group? Are there discussion skills the group could improve? Are there any lingering questions or misconceptions about the topic?

Example:

Reading Assignments (“Expert” groups)

- Reader #1 – pages 62-64 (The Mouth)
- Reader #2 – page 65 (The Esophagus)
- Reader #3 – page 66 (The Stomach)
- Reader #4 – pages 67-68 (The Small Intestine)

After reading, Cadets get together in topic-alike groups to compare notes and ideas. They determine importance, discuss the main idea(s), and develop a clear summary to share with others. Then, Cadets gather in their “Jigsaw” groups to share their notes and summaries. Jigsaw groups are given a task that requires the application of all pieces of information gathered from each expert.



List/Group/Label

The List/Group/Label strategy offers a simple three-step process for Cadets to organize a vocabulary list from a reading selection. This strategy stresses relationships between words and the critical thinking skills required to recognize these relationships. List/Group/Label challenges Cadets to:

- List key words (especially unclear and/or technical terms) from a reading selection.
- Group these words into logical categories based on shared features.
- Label the categories with clear descriptive titles.

Steps to List/Group/Label

1. Select a main topic or concept in a reading selection.
2. Have Cadets list all words they think relate to this concept. Write Cadet responses on the chalkboard. *Note:* Since the concept is presented without a specific context, many of the Cadet suggestions will not reflect the meaning of the concept in the reading selection.
3. Divide the class into groups of 3 or 4 Cadets. Have these teams join together related terms from the larger list. Have the teams provide “evidence” for this grouping—that is, require the Cadets to articulate the common features or properties of the words collected in a group.
4. Ask the Cadet groups to suggest a descriptive title or label for the collections of related terms. These labels should reflect the rationale behind collecting the terms in a group.
5. Finally, have Cadets read the text selection carefully and then review both the general list of terms and their collections of related terms. Cadets should eliminate terms or groups that do not match the concept’s meaning in the context of the selection. New terms from the reading should be added, when appropriate. Terms should be “sharpened” and the groupings and their labels revised, when necessary.

Learn More

- Taba, H. (1967) *Instructor’s handbook for elementary social studies*. Reading, MA: Addison-Wesley.
- Lenski, Susan D., Wham, Mary Ann, & Johns, Jerry L. (1999). *Reading and learning strategies for middle and high school Cadets*. Dubuque, IA: Kendall/Hunt.



Mystery Quotes

Purpose:

This protocol offers Cadets a chance to work together to uncover the heart of meaning of a mystery quote/passage/image before they read more about it or work more deeply with inference as a critical thinking strategy. It allows Cadets to work in a fun, collaborative environment to use new information from a partner, and to draw on their own background knowledge to uncover meaning. This protocol also asks Cadets to put things in their own words, to compare text to experience, and to work with a variety of partners.

Procedure:

1. Decide on quotes, phrases, sentences or words directly from the text to copy onto strips or index cards.
2. Don't paraphrase the text. You may omit words to shorten a sentence, but don't change the words.
3. Have Cadets select a quote/passage and without revealing it to a partner, tape it on his/her back. Cadets may look for a partner who seems like just the right person for the quote, or selections can be randomly determined.
4. Cadets mingle about the room and stop when prompted, facing a partner.
5. In one minute or less, Cadets read each other's quotes and think about one hint to give the partner about his/her quote.
6. In one minute total, each Cadet shares a hint about the partner's quote.
7. Cadets mingle about the room again and stop when prompted, facing another partner.
8. Offer time to read the quote and think about a story that exemplifies or reminds you of it.
9. Each Cadet shares the story related to the partner's quote in a set timeframe.
10. Continue additional rounds as desired, offering a range of prompts right for your situation, such as "Create a metaphor or simile to describe the quote," "Give an example of the idea in the quote in action," etc.
11. Debrief: Bring the whole group together to each share a final inference about the meaning of each quote. Cadets then pick their quotes from a list of all quotes. For more support, Cadets can pick their quotes first and share how their inferences compare to the actual text. Discuss strategies for inferring, lingering questions about the activity, and discuss what it was like to engage this way. Consider recording debrief notes on an anchor chart.

Variations:

1. Cadets carry index cards with them, recording their current thinking about the essence of their quotes after each partner activity.
2. Vary partner instructions or adapt numbers of partners or rounds.



3. To monitor understanding and support Cadets struggling to infer the quotes' meaning, Instructors can circulate and give these Cadets a "ticket" in the form of a colored card or sticky note. At an opportune time, call a meeting of an invitational group for anyone with tickets or anyone who is struggling.
4. For non-readers, use images with or without key words. The goal is infer what is happening in the image on your back. Images can range from concrete to abstract. It is also possible to divide the class into readiness groups and have one group work separately with sentences while the other uses images.



No Opt Out

Purpose:

No Opt Out is a powerful method of supported accountability in a classroom. Any Cadet who answers a question is responsible for giving the correct answer in that moment. Mistakes are not ignored, punished, or cause for embarrassment, but a part of the learning territory. By being provided with the correct answer from a peer, Cadets feel challenged but safe.

Materials:

Predetermined questions to pose to Cadets

Procedure:

1. Require all Cadets to correctly answer a question posed to them (in cases when questions actually have a “correct” answer).
2. Follow up on incorrect or partial answers by questioning other Cadets until a correct answer is given by another Cadet, through either Cold Call or calling on a volunteer.
3. Return to any Cadet who gave an incorrect or partial answer. Have them give a complete and correct response, based on the correct response just given by their peer.

Variations:

- Give a Cadet a “memory cue.” “Who can tell Alisa where she can find the answer?” or “Who can tell Alex the first thing that he can do to find the answer?”
- As an extension, ask a more complex or difficult question to the same Cadet: “Good. Let’s try a hard one.”

References:

Lemov, D. (2010). *Teach like a champion: 49 techniques that put Cadets on the path to college*. San Francisco, CA: Jossey-Bass.



Peer Critique

Purpose:

This protocol can be used to offer critique and feedback in preparation for revision of work. It should be used after a draft of what will become a finished product is completed. This process will help Cadets see what is working and then ask questions and offer suggestions, leading to revision and improvement. It is important Cadets understand that the focus should be on offering feedback that is beneficial to the author/creator. Explicit modeling is necessary for this protocol to be used successfully.

Procedure:

1. Begin with the non-negotiables:
 - a. **Be Kind:** Always treat others with dignity and respect. This means we never use words that are hurtful, including sarcasm.
 - b. **Be Specific:** Focus on particular strengths and weaknesses, rather than making general comments like “It’s good” or “I like it.” Provide insight into why it is good or what, specifically, you like about it.
 - c. **Be Helpful:** The goal is to positively contribute to the individual or the group, not to simply be heard. Echoing the thoughts of others or cleverly pointing out details that are irrelevant wastes time.
 - d. **Participate:** Peer critique is a process to support each other, and your feedback is valued!
2. Have the author/designer explain their work and explain exactly what type of critique would be helpful (in other words, what questions do they have or what are they confused about that they would appreciate help with).
3. The critique audience should begin comments by focusing on something positive about the work (“warm” feedback), then move on to constructive sharing of issues or suggestions (“cool” feedback).
4. When critiquing a peer’s work, use “I” statements. For example, “I’m confused by this part,” rather than “This part makes no sense.” Remember the three important phrases:
 - a. “I notice....”
 - b. “I wonder....”
 - c. “If this were my work, I would....”
5. Use questions whenever possible. For example, “I’m curious why you chose to begin with...?”, or “Did you consider adding...?”



Presentation Quiz

Purposes:

A summative assessment of a peer's presentation lends gravitas and importance to the material, and sends the message that all contributions to learning are important and valued. It also serves as a means of anchoring Cadet accountability and engagement in the presentation.

Materials:

Short summative quiz on information shared in a peer presentation (multiple choice, one or two short responses, true/false, etc).

Procedure:

1. When peers present a project, speech, or other academic presentation, ensure that other Cadets know they are responsible for learning the information.
2. Pair Cadet presentations with short quizzes on the presentation material at the end of class.
3. Grade these as you would any other summative assessment.

Variations:

Have the Cadet presenting create and grade the quiz.



Popcorn Read

Purpose:

A popcorn read helps a group determine importance and synthesize their understanding of a text.

Procedure:

1. Select a piece of text, short or longer, fiction. Consider your purpose when choosing your text. Have Cadets highlight information that stands out to them in the text. (You may want to give them the criteria first, so they know what length of phrase they're looking for).
2. Post and discuss the criteria for a good spirit read ahead of time:
 - a. Read short phrases or words only (not sentences)
 - b. Give no commentary or opinions
 - c. Try to connect with what was just read (listen carefully to others)
 - d. Give all voices a chance
 - e. Pauses can be powerful
 - f. Repeating phrases is okay (shows where a group collectively agrees)
3. Have the group in a circle. One Cadet starts the group off by reading a word or phrase; the other Cadets search for a phrase they've underlined that matches or connects in some way with the phrase just heard. This process continues until there are no more phrases Cadets want to share aloud (until there are no more "kernels left to pop").
4. Debrief afterward:
 - a. How did underlining key point's help Cadets better understand the text?
 - b. How did it help to hear what others read aloud?
 - c. What was it like to try to connect words and phrases?



Praise, Question, Suggest

Purpose:

This protocol can be used to offer critique and feedback in preparation for revision of work. It should be used after a draft of what will become a finished product is completed. This process will help Cadets see what is working and then ask questions and offer suggestions, leading to revision and improvement. It is important Cadets understand that the focus should be on offering feedback that is beneficial to the author/creator. Explicit modeling is necessary for this protocol to be used successfully.

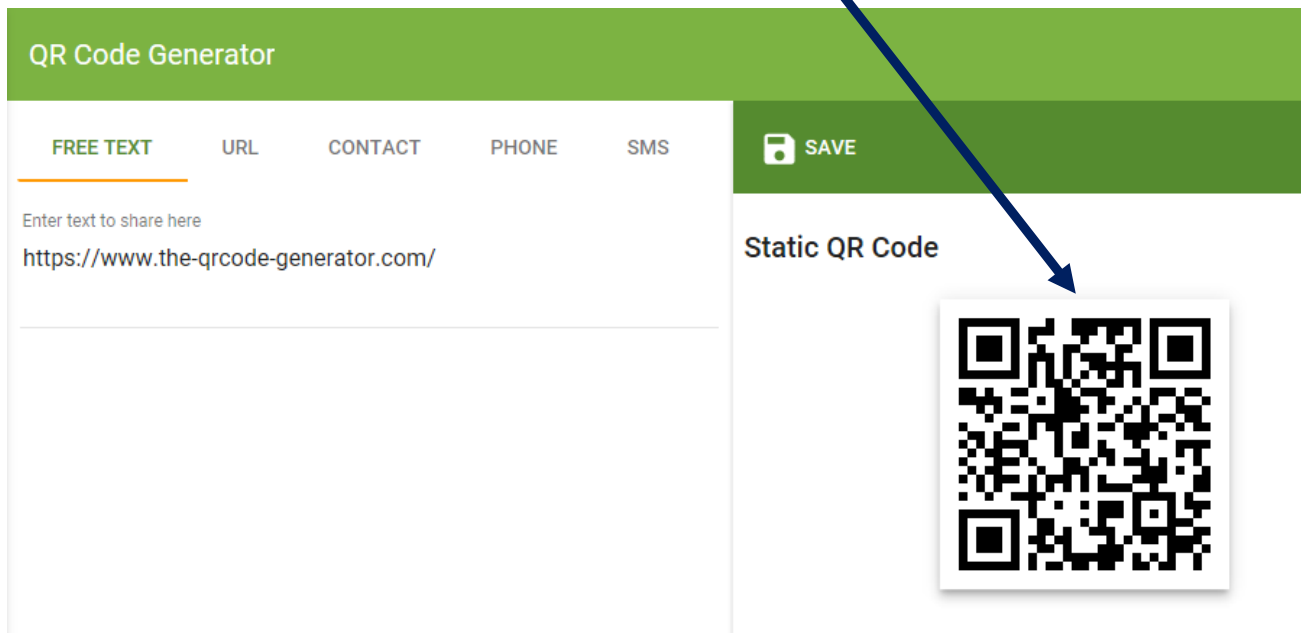
Procedure:

1. Provide product descriptors and rubrics as clear guidelines of the expectations and criteria for the piece of work that will be critiqued. If the work is written, copies for the critique group are helpful.
2. As a whole group, create or refer to a list of revision questions based on the criteria for the piece of work.
3. Model the procedure with the whole group before allowing small independent feedback groups.
4. Cadets work in groups of 2-5.
5. The first Cadet presents/reads the draft of their piece. They may ask peers to focus on a particular revision question or two that they are struggling with from the list.
6. Feedback is best written on Post-it notes and given to the creator. Peers first focus on what is praiseworthy or working well. Praise needs to be specific. Simply saying, "This is good" doesn't help the creator. Comments such as, "I notice that you used descriptive picture captions" or "You have a catchy title that makes me want to read your piece" are much more useful.
7. Next, ask questions and offer helpful suggestions. "This part is unclear. I wonder if it would be better to change the order of the steps?" or "I can't tell the setting. Maybe you could add some details that would show the reader where it is taking place?" or "I wonder if adding a graph to highlight your data would be effective?"
8. Feedback should relate to the revision questions identified by the group or presenter.
9. After each member of the group has offered feedback, the presenter discusses which suggestions they want to implement and thanks the group.
10. Others then present their work in turn and cycle through the feedback process.

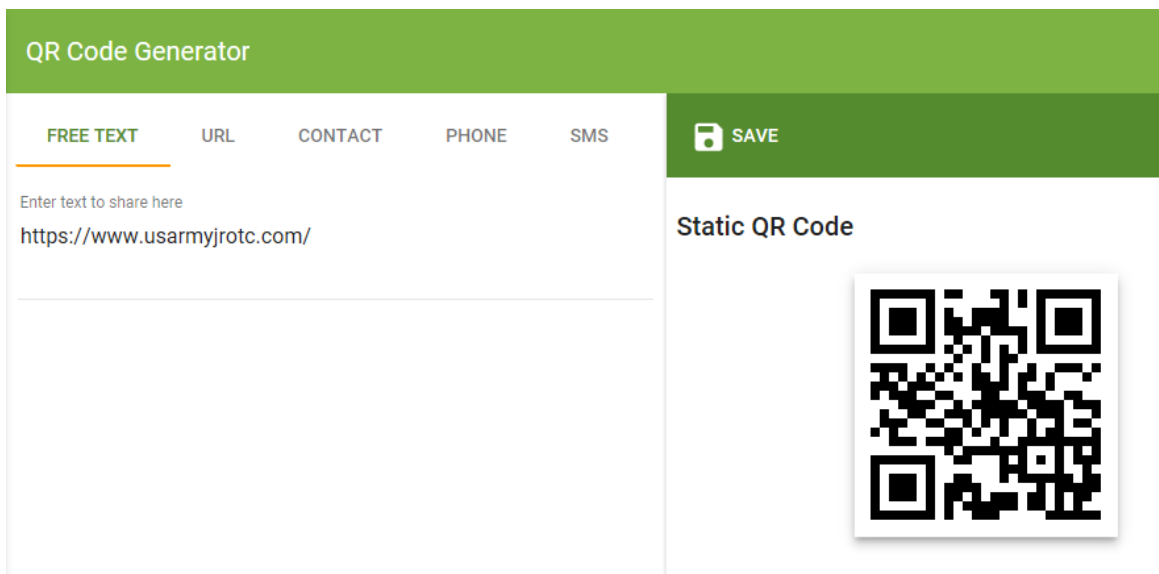


Quick Response Code Generator

1. To use QR Codes your smartphone/tablet needs a QR reader/scanner app, they can be installed for free from the Google Play Store or the App Store (Apple).
2. After downloading a QR app use it to scan the Static QR Code



3. Copy and paste the desired URL (sample - <https://www.usarmyjrotc.com/>) and the site auto-generates a QR Code for your use.



4. Use your Snipping Tool to copy or save the image. Use for inserting links into PPT, etc.



Quiz-Quiz-Trade

Purpose:

Quiz-Quiz-Trade is a vocabulary reinforcement protocol that allows Cadets to both review key vocabulary terms and definitions from their reading and get them moving and interacting with peers.

Procedure:

1. Choose 15-20 high frequency academic and/or domain specific words from class reading(s) (Note: you may want to list a word more than once or twice if it is essential to Cadets' understanding of text and/or used more frequently than other words in common texts).
2. Create vocabulary 'strips' with these words that can be folded vertically so one side of the slip shows the word, and the other side of the slip has the definition.
3. Give each Cadet one vocabulary strip.
4. Each Cadet finds a partner.
5. Partner A shows the side of the paper with the word on it to his/her partner.
6. Partner B says the definition (if they know it), or finds the word in the text and tries to determine the definition, using context clues.
7. Partner A then reads the definition aloud to confirm or correct the definition that Partner B gave.
8. Partners switch roles and repeat the steps above.
9. Partners then trade vocabulary slips and find a new partner.
10. Cadets should meet with at least 2 or more partners during this activity (5-10 minutes)
11. After completing the steps above, gather Cadets as a whole group. Make sure to review and emphasize vocabulary that you want Cadets to know and understand, since individual Cadets will not have the opportunity to see and define every key term during this activity.

Sample Vocabulary Strips:	
Bar Scale	A scale line on a map used to measure actual ground distances by converting distances on a map
Elevation	Height above sea level or the earth's surface
Legend	An explanatory description on a chart, map, or other illustration
Orient	To align or position oneself (or a map) in relationship to one's surroundings
Terrain	An area of land with particular natural features



Rank-Talk-Write

Purpose:

This protocol, adapted from “Pause, Star, Rank” in Himmele and Himmele’s *Total Participation Techniques* (2011), allows Cadets to actively review their notes about new concepts as well as analyze and discuss the importance of key ideas they identify.

Procedure:

1. During or after reading a text, Cadets independently write a summary sentence for each key idea or concept they identify.
2. Cadets then rank the summary sentences in order of importance (“1” next to most important, “2” and “3” next to the second and third most important summaries of each concept.)
3. In groups, Cadets share out the concepts they ranked, explaining why they ranked each concept as they did in terms of importance.
4. Each group determines which one concept they think is most important, and discusses the best summary statement for that idea or concept.
5. A scribe from the group writes the summary statement of the idea or concept on a white board, piece of chart paper, or large blank page.
6. Small groups share their idea summary statement with the large group.



Red Light, Green Light

Purpose:

Red Light, Green Light, and other related strategies, help Cadets and Instructors visualize Cadet comfort level or readiness in relation to a learning target using objects, colors, locations, or shared metaphors. Instructors can then adjust their instruction accordingly.

Materials:

Popsicle sticks, cards, or poker chips in three colors (red, yellow, green)

Procedure:

1. Cadets have red, yellow, and green objects accessible (e.g., popsicle sticks, poker chips, cards).
2. When prompted to reflect on a learning target or readiness for a task, Cadets place the color on their desk that describes their comfort level or readiness (red: stuck or not ready; yellow: need support soon; green: ready to start).
3. Instructors target their support for the reds first, then move to yellows and greens.
4. Cadets change their colors as needed to describe their status.

Variations:

- **Table Tags:** Place paper signs or table tents in three areas with colors, symbols, or descriptors that indicate possible Cadet levels of understanding or readiness for a task or target. Cadets sit in the area that best describes them, moving to a new area when relevant.
- **Glass, Bugs, Mud:** After Cadets try a task or review a learning target or assignment, they identify their understanding or readiness for application using the windshield metaphor for clear vision (glass: totally clear; bugs: a little fuzzy; mud: I can barely see).



Round Table Discussion

Purpose:

This protocol offers Cadets a chance to consider parts of the text before they actually read it. It encourages active participation and attentive listening with a chance to get up and move around the classroom. It allows Cadets to predict what they think will happen in the text as they make inferences, see causal relationships, compare and contrast, practice sequencing, and draw on prior knowledge.

Procedure:

1. Decide on phrases, sentences or words directly from the text to copy onto strips or index cards.
2. Don't paraphrase the text. You may omit words to shorten a sentence, but don't change the words.
3. Have Cadets organized into groups of four or five.
4. Hand out strips or cards with phrases from the text; two (or more) Cadets will have the same phrases.
5. Each Cadet independently reads their phrase and makes a prediction about what this article could be about. Then, write a quick statement on prediction graphic.
6. Next Cadets mingle around the room, reading to each other and discussing possible predictions.
7. Return to the small groups and, as groups, write a prediction starting with "We think this article will be about..., because...." Also, list questions they have.
8. Now, read the selection. Cadets read independently or as a group, highlighting information that confirms or changes their predictions.
9. Write a statement on the second part of the recording form about revised predictions. Also continue to list lingering questions.
10. Debrief: Share-out thoughts from groups. How did their predictions differ from the text? What lingering questions do they have? What was it like to engage in reading in this way?



Say Something

Purpose:

Say Something is a paired reading strategy developed by Egawa and Harste (2001) for constructing meaning from text-based information. Through structured exchanges, group members develop relationships between new information and what they already know or believe. This thinking out loud, supported by attentive listening, enhances individual and shared understandings. The time frame for this strategy is intentionally brief. It is effective to post a public timer displaying the full time allotment, so partners can determine how long to converse, and how quickly to move on to the next reading.

Procedure:

1. Identify the text and the stopping points, or have partners look over a piece of text and decide together how far they will read silently before stopping to *say something*.
2. Describe the nature of the interactions, explaining that the something might be a question, a brief summary, a key point, an interesting idea or a new connection. (To focus the paired interactions, or to stimulate a specific type of thinking, the Instructor may want to provide a stem for completion. For example, “a question that comes to mind when I read this is...” Use the same stem, or provide variation for each stopping point.)
3. Model. Provide one or two examples of appropriate *say somethings*. These should be succinct, thoughtful, and related to the text.
4. Have Cadets begin reading the text.
5. Once each partner has reached the chosen stopping point, both partners exchange comments, or *say something*.
6. Partners continue the process until the selection is completed.
7. After a designated amount of time, engage the whole group in a discussion of the text.



Semantic Webbing

Semantic Webbing builds a side-by-side graphical representation of Cadets' knowledge and perspectives about the key themes of a reading selection before and after the reading experience. Semantic Webs achieve three goals:

- “Reviving” or “reactivating” Cadets’ prior knowledge and experience,
- Helping Cadets organize both their prior knowledge and new information confronted in reading, and
- Allowing Cadets to discover relationships between their prior and new knowledge.

Semantic Webbing takes two forms: divergent webbing and convergent webbing.

Steps to Divergent Webbing

1. Write a key word or phrase from a reading selection on the chalkboard.
2. Have Cadets think of as many words as they know that relate to this key idea. Write these words to the side on the chalkboard.
3. Ask Cadets to group these words into logical categories and label each category with a descriptive title.
4. Encourage Cadets to discuss/debate the choice of the category for each word. Write the Cadets' conclusions (the categories and their component words) on the chalkboard.
5. Finally, have the Cadets read the text selection and repeat the process above. After reading, have Cadets add new words and categories related to the key idea.

Steps to Convergent Webbing

1. Identify several themes in a reading selection. Write each theme at the top of a column on the chalkboard.
2. Ask Cadets to share their prior knowledge on each of these themes. Write brief summary statements on this information beneath the appropriate category.
3. Encourage Cadets to make predictions about how the text will handle the stated themes. Stress the context of the document (time frame, author's background, subject matter, etc.) as the criteria for making these predictions.
4. Discuss the predictions and have the class decide which are best. Write these predictions under the appropriate category on the chalkboard.
5. Have Cadets read the selection. Record any new information (beyond prior knowledge) Cadets gained from reading. Encourage the group to evaluate the accuracy of their predictions.
6. Require Cadets to revise the information recorded on the chalkboard based on their reading experience.

Learn More

Maddux, C. D., Johnson, D. L., & Willis, J. W. Educational computing: Learning with tomorrow's technologies. (Boston: Allyn & Bacon, 1997).



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Socratic Seminar

Purpose:

Socratic Seminars promote thinking, meaning making, and the ability to debate, use evidence, and build on one another's thinking. When well designed and implemented, the seminar provides an active role for every Cadet, engages Cadets in complex thinking about rich content, and teaches Cadets discussion skills. One format for the seminar is as follows:

Procedure:

1. The Instructor selects a significant piece of text or collection of short texts related to the current focus of study. This may be an excerpt from a book or an article from a magazine, journal, or newspaper. It might also be a poem, short story, or personal memoir. The text needs to be rich with possibilities for diverse points of view.
2. The Instructor develops an open-ended, provocative question as the starting point for the seminar discussion. The question should be worded to elicit differing perspectives and complex thinking. Cadets may also generate questions to discuss.
3. Cadets prepare for the seminar by reading the chosen piece of text in an active manner that helps them build background knowledge for participation in the discussion. The completion of the pre-seminar task is the Cadet's "ticket" to participate in the seminar. The pre-seminar assignment could easily incorporate work on reading strategies. For example, Cadets might be asked to read the article in advance and to "text code" by underlining important information, putting question marks by segments they wonder about, and exclamation points next to parts that surprise them.
4. Once the seminar begins, all Cadets should be involved and should make sure others in the group are drawn into the discussion.
5. The seminar leader begins the discussion with the open-ended question designed to provoke inquiry and diverse perspectives. Inner circle Cadets may choose to move to a different question if the group agrees, or the Instructor may pose follow-up questions.
6. The discussion proceeds until the seminar leader calls time. At that time, the group debriefs their process; if using a fishbowl (see below), the outer circle members give their feedback sheets to the inner group Cadets.
7. If using a fishbowl, the seminar leader may allow Cadets in the outer circle to add comments or questions they thought of while the discussion was in progress.



Criteria:

Cadets...

- A. **Respect** other Cadets; value others' contributions.
- B. Are **active** listeners. Build upon one another's ideas by referring to them when it is your turn to talk.
- C. Stay **focused** on the topic.
- D. Make **specific** references to the text. Use examples from the text to explain your point.
- E. Give their input. Ensure that you **participate**.
- F. **Ask** questions. As needed, ask clarifying questions to ensure that you understand the points others are trying to make, and ask probing questions which push the conversation further and deeper when appropriate.

Sample Checklist of Specific Look-Fors:

Did the Cadet...	Consistently	Occasionally	No	Notes/Comments
Respond to other Cadets' comments in a respectful way?				
Listen attentively without interruption?				
Use eye contact with peers?				
Exhibit preparation for the seminar?				
Reference the text to support response?				
Participate in the discussion?				
Ask clarifying and/or probing questions				

Option: Using a Fishbowl:

When it is time for the seminar, Cadets are divided into two groups if there are enough people to warrant using a fishbowl approach. One group forms the inner circle (the "fish") that will be discussing the text. The other group forms the outer circle that will give feedback on content, contributions, and/or group skills. (Note: "Fishbowls" may be used with other instructional practices such as peer critiques, literature circles, or group work. If the number of Cadets in the seminar is small, a fishbowl does not need to be used.) Each Cadet in the outer circle is asked to observe one of the Cadets in the inner circle. Criteria or a rubric for the observations should be developed by/shared with Cadets in advance.



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Take a Stand

Purpose:

Cadets articulate and reflect on their opinions about controversial questions.

Procedure:

1. Post two signs at either end of an imaginary line that goes across the classroom. At one end of the line, post “Strongly Agree.” At the other end, post “Strongly Disagree.”
2. Tell Cadets that today they will be using the Take a Stand protocol, which will allow them to share and explain their opinions. After they hear a statement, they will move to a place on an imaginary line that best reflects their beliefs.
3. Explain the steps of the protocol:
 - a. The facilitator will make a statement and then Cadets will move, depending on whether they agree or disagree with that statement, to a place on the imaginary line that goes across the room. Point out that one side of the room is labeled “Strongly Disagree” and the other side labeled “Strongly Agree,” and this means that the middle of the line is undecided.
 - b. After the facilitator makes a statement, she will pause for Cadets to think and then ask all Cadets to move to the place on the imaginary line that best reflects their opinions.
 - c. The facilitator will ask Cadets to share and justify their opinions, making sure to hear from people on different parts of the line.
 - d. If a Cadet hears an opinion that changes his mind, he can move quietly to a different part of the line.
4. Model how the protocol will work. Make a statement (such as, “Chocolate ice cream is delicious) and show Cadets how you would move to reflect your opinion. The modeling helps Cadets internalize how to use the invisible line.
5. As you use the protocol, repeat each statement twice. Note that you can have Cadets stand up or sit down in their places.



Teammates Consult

Purpose:

This protocol promotes small group discussion and collaborative thinking before Cadets commit to answering questions individually.

Procedure:

1. Cadets sit facing each other in triads.
2. A cup is placed in the center of each team's work space. Cadets begin by placing their pencils/pens in the cup.
3. The Instructor reads the first question and says: "Teammates, consult."
4. With the pencils still in the cup, Cadets reread the appropriate section of text and take turns sharing their ideas and answers to the question. Cadets discuss the answers and then come to consensus on the answer to the question.
5. After 3–5 minutes of discussion (decide how much time is needed based on the complexity of the question and your observations while circulating), the Instructor says: "Teammates, write."
6. At this point, all Cadets remove their pencils from the cup and write the answer to the question in their own words on their own paper.
7. When the Cadets are finished recording their answers, the steps are repeated with the remaining questions.



Think-Pair-Share

Purpose:

This protocol ensures that all Cadets simultaneously engage with a text or topic. It allows Cadets to recognize, (commit to paper), and speak their own ideas before considering the ideas of others.

Procedure:

1. Cadets are given a short and specific timeframe (1-2 minutes) to **think** or **ink** (write) freely to briefly process their understanding/opinion of a text selection, discussion question, or topic.
2. Cadets then share their thinking or writing with a peer for another short and specific timeframe (e.g. 1 minute each).
3. Finally, the facilitator leads a whole-class sharing of thoughts, often charting the diverse thinking and patterns in Cadet ideas. This helps both Cadets and the facilitator assess understanding and clarify ideas.



Tracking Progress

Purpose:

Tracking progress allows Cadets to see their cumulative and collaborative efforts toward mastery of a learning target. This visual representation not only stimulates self-reflection but points to the social and accountable nature of the work. All Cadets work together toward the goal.

Materials:

Poster or individual charts of learning targets and levels of proficiency

Procedure:

1. Instructors post a chart on the wall or distribute individual charts displaying learning targets and levels of proficiency.
2. Cadets indicate their self-assessed level of proficiency by drawing a dot or making a mark on the chart, usually multiple times.
3. Cadets can use different-colored dots, ink stamps, or markers and dates to indicate progress over time.

Variations:

Sticky Bars: Create a chart that describes levels of understanding, progress, or mastery. Have Cadets write their names or use an identifying symbol on a sticky note and place their notes on the appropriate place on the chart.



Turn and Talk

Purpose:

Turn and Talk is one of the easiest, quickest, and most efficient means of creating collaboration among Cadets. It can be used practically at anytime, anywhere, in a lesson in any content area.

Materials:

None

Procedure:

1. When prompted, Cadets turn to a shoulder buddy or neighbor.
2. In a set amount of time, Cadets share their ideas about a prompt or question posed by the Instructor or other Cadets.
3. Depending on the goals of the lesson and the nature of the Turn and Talk, Cadets may share some key ideas from their paired discussions with the whole class.

Variations:

Cadets can use a written version of Turn and Talk, brainstorming their answers on paper very briefly and sharing them aloud, or switching papers.



Vote With Your Feet

Purpose:

This protocol is used to encourage all Cadets to respond to a question with multiple options for the answer, while at the same time providing an opportunity for movement in the lesson.

Procedure:

1. Prepare by providing each answer option in writing in each of the areas Cadets may opt to stand in.
2. As a whole group, give Cadets a question.
3. Allocate answer options to different parts of the room, for example in each corner.
4. Invite Cadets to select an answer and to go and stand in that area of the room to show which answer they are selecting.
5. Cold call Cadets to ask why they made that selection.
6. Give Cadets an opportunity to change their mind and move to another answer.
7. Debrief as a whole group about the different options and why Cadets selected the option they did.



White Boards

Purpose:

White boards allow for collective, instantaneous sharing of information or answers to academic questions, and for an assessment of whether knowledge has been retained and learned correctly, both individually and in the class as a whole. White boards are engaging and interactive, and work especially well for vocabulary- and math-based questions.

Materials:

- Small white boards, one for each Cadet
- Dry erase marker, one for each Cadet
- Dry eraser or dry eraser cloth, one for each Cadet

Procedures:

1. Cadets have small white boards at their desks or tables.
2. Cadets are given a question to answer. They write their ideas/thinking/answers down individually on the white board.
3. Cadets hold up their boards for Instructor or peer scanning.

Variations:

Technology such as “clickers” can serve the same purpose as white boards.



Word Sorts

Purpose:

Word Sorts allow Cadets to find common roots, spellings, and phonemes; to use their background knowledge to sort words and set a purpose for reading; or to reflect on their learning after reading (Johns & Berglund, 2002). Sorts can be used successfully throughout different content areas.

Materials:

- Word collection (on a note-catcher, 3x5 cards, paper strips, or the like)
- Note-catcher with listed word categories

Procedure:

1. In closed word sorts, the Instructor defines the process for categorizing the words. Cadets engage in critical thinking to determine which words fit into which category.

Variations:

- In open word sorts, the Cadets determine how to categorize the words, using critical thinking to determine their own logical sorts (Vacca & Vacca, 1999).

References:

- Johns, J., & Berglund, R. (2002). *Fluency: Questions, answers, evidence-based strategies*. Dubuque, IA: Kendall Hunt.
- Lenski, S., Wham, M., & Johns, J. (1999). *Reading and learning strategies for middle and high school Cadets*. Dubuque, IA: Kendall Hunt.
- Vacca, R., & Vacca, J. (1995). *Content area reading (5th ed.)*. Glenview, IL: Scott Foresman.



World Café

Purpose:

To discuss a topic or various topics, rotating the role of leadership and mixing up a group of Cadets.

Procedure:

1. Form three groups of 3 or 4 and sit together at a table.
2. Each group selects a “leader.”
3. The leader’s role is to record the major points of the conversation that takes place at the table and to then summarize the conversation using the recorded notes...a bit later.
4. The group discusses the topic at hand until time is called. Groups can be discussing the same topic or related topics.
5. The leader stays put; the rest of the group rotates to the next table.
6. The leader (the one who didn’t move) presents a summary of the conversation recorded from the former group to the new group.
7. Each table selects a new leader.
8. Again, the new leader’s role is to record the major points of the conversation that takes place at the table and to then summarize the conversation using the recorded notes...a bit later.
9. The group discusses the topic at hand until time is called.
10. Repeat the process, ideally until all Cadets have had a chance to lead.
11. After the final round, the last group of leaders present to the whole group rather than reporting out to a “next rotation.”



Written Conversation

Purpose:

Created by Harvey Daniels and Steve Zemmelman in *Subjects Matter* (2004), Written Conversation harnesses the universal urge to share via written notes. After reading (or hearing a lecture, watching a video, or doing an experiment), pairs of Cadets write short notes back and forth to each other about the experience. Think of Written Conversation as legalized note-passing, taking the place of “class discussion” as a key after-reading activity. “Class discussion” usually means one Cadet talking and 29 others sitting, pretending to listen. With Written Conversation, you can have a “discussion” where everyone is actively talking at once—though silently, and in writing.

Procedure:

1. After the reading is completed, have Cadets identify partners for a written conversation. If necessary the Instructor pairs Cadets.
2. Explain the activity first, if this protocol is new to them, so Cadets understand that they will be writing simultaneous notes to one another about the reading selection, swapping them every 2-3 minutes at the Instructor’s command, for a total of 3 exchanges (or 2 or 4, depending on your time constraints), and keeping quiet along the way. They are to write for the whole time allotted for each note, put down words, phrases, questions, connections, ideas, wonderings—anything related to the passage, or responding to what their partner has said, just as they would in an out-loud conversation. Spelling and grammar do not count—after all these are just notes.
3. The Instructor can leave the topic open: “What struck you about this reading?” Or, give an appropriate open-ended prompt: “What do you understand and not understand in this selection?” “What are the most important ideas here?” “Do you agree or disagree with the author, and why?”
4. Both Cadets in each pair start writing a note (e.g., “Dear Bobby, when I read this chapter I was amazed that Abraham Lincoln actually said...”). Meanwhile, the Instructor watches the time, and after 2-3 minutes, asks Cadets to exchange notes. The Instructor reminds: “Read what your partner said, then take 2 minutes to answer just as if you were talking out loud. You can write responses, feelings, stories, make connections of your own, or ask your partner questions—anything you would do in a face-to-face conversation.”
5. After the planned 2-3 note exchange is complete, the payoff comes when you say: “O.K., now you can talk out loud with your partner for a couple of minutes.” You should notice a rising buzz in the room, showing that Cadets have plenty to talk about.
6. Next, a short whole-class discussion can be much more engaged and productive, because everyone will have fresh ideas about the topic. Ask a few pairs to share one highlight or thread of their written conversations as a way of starting the discussion.
7. Some predictable problems occur. The first time you try this, the Cadets will tend to shift into oral conversation when papers are passed (Adults also do this—it’s a normal human response when you are bonding with a partner). Be ready to remind them to



“Keep it in writing” during the transitions. Then, even with the best instructions, some Cadets will write 2 words and put their pens down, wasting 2 good minutes of writing time with each pass. You have to keep stressing, “We write for the whole time.” If necessary, provide additional prompts to the class or individuals to help them keep going. Finally, after you call Cadets back to order at the end, when they are talking out loud with their partners, you might find it hard to get them back. This happy little “management problem” shows you that Cadets are connecting to each other and the materials.