Resource Packet:

Improve Questioning + Increase Participation

3B: Using Questioning and Discussion Techniques

3C: Engaging Students in Learning

3D: Using Assessment in Instruction

Name _____

Question Words for Levels of Questioning

Level 1 – Recall

What is....?

Who is...?

Where is ...?

What does _____ mean?

How many...?

Level 2 – Understand

Why did ...?

How did ...?

Compare _____ with _____?

How does _____ affect/ apply to _____?

What are some of the reasons for ...?

Level 3 – Apply

Imagine...

How would _____ change if...?

Based on _____predict...

What do you think were some of the reasons behind _____?

What would have happened if _____?

EXPEDITIONARY
LEARNING

Questioning Strategies to Engage All Learners

Purpose

In order to engage all learners in the classroom, ensuring everyone has the opportunity to participate in discussions and do the important thinking when a question is posed, teachers use a variety of questioning strategies. In addition, teachers strategically vary the types of questions they ask to generate meaningful dialog that supports the development of high-order thinking skills. For more on developing strategic, focused and higher order thinking questions, see *Strategic Questioning.* See also *Total Participation Techniques* (citation here) for a variety of approaches to engaging all learners.

Building a Culture of Total Participation

1. Clarify with students the importance of everyone doing the thinking, learning and reflecting throughout each stage of every lesson.
2. Model how a variety of questioning strategies will be used in the classroom, reminding students that they can say "please come back to me" if they need more think time or are unsure and want to build on the ideas of their peers. However, be sure to let them know you will *always* come back to them.
3. Ensure you and your students have the materials needed, such as cold call cards or sticks, white-boards, dry-erase markers, poster board, computers/other technology, pencils, etc.
4. Practice questioning strategies with students. Repeat over several classes or as necessary until various strategies become routine.
5. Make think-time a regular routine. This means structuring thinking time of about 3 seconds after a question is posed in various ways:
    a. During student responses—give students at least three seconds to articulate their responses
    b. Before sharing, students pause to illustrate a response to a question
    c. In response to questions, students synthesize their thinking with individual or group headlines: short, compelling phrases that capture their thinking like a news headline
    d. Teachers ask recap questions and students review and add to their notes
    e. Students stop and track their own questions during learning activities or after a question is posed
    f. Students pose questions to each other and respond to teacher questions in chalk talks and written conversations with a peer or small group

Strategies

Cold Call

- Name the question before identifying students to answer it
- Call on students regardless of whether they have hands raised, using a variety of techniques such as random calls, tracking charts to ensure all students contribute, name sticks or name cards
- Scaffold the questions from simple to increasingly complex, probing for deeper explanations
- Connect thinking threads by returning to previous comments and connecting them to current ones. In this way, listening to peers is valued, and even after a student's been called on, he or she is part of the continued conversation and class thinking

No Opt Out

- Require all students to correctly answer questions posed to them
- Always follow incorrect or partial answers from students by giving the correct answer themselves, cold calling other students, taking a correct answer from students with hands raised, cold calling other students until the right answer is given, and then returning to any student who gave an incorrect or partial answer for complete and correct responses

Think or Ink-Pair-Share

- Students 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.
- Students then share their thinking or writing with a peer for another short and specific timeframe (e.g. 1 minute each).
- Finally the teacher leads a whole-class sharing of thoughts, often charting the diverse thinking and patterns in student ideas. This helps both students and the teacher assess understanding and clarify student ideas.

Turn and Talk

When prompted, students turn to a shoulder buddy or neighbor and in a set amount of time, share their ideas about a prompt or question posed by the teacher or other students. Depending on the goals of the lesson and the nature of the Turn and Talk, students may share some key ideas from their discussions with the class.

Go-around

When a one- or two-word answer can reveal student thinking, teachers ask students to respond to a standard prompt one at a time, in rapid succession around the room.

Whiteboards

Students have small white boards at their desks or tables and write their ideas/thinking/ answers down and hold up their boards for teacher and/or peer scanning.

Hot Seat

The teacher places key questions on random seats throughout the room. When prompted, students check their seats and answer the questions. Students who do not have a hot seat question are asked to agree or disagree with the response and explain their thinking.

Fist-to-Five or Thumb-Ometer

To show degree of agreement or commonalities in ideas, students can quickly show their thinking by putting their thumbs up, to the side or down; or by holding up (or placing a hand near the opposite shoulder) a fist for 0/Disagree or 1-5 fingers for higher levels of confidence or agreement.

Human Bar Graph

Identify a range of answers to a question or prompt as labels for 3-4 adjacent lines. Students then form a human bar graph by standing in the line that best represents their answer to the question(s) posed.

Four Corners

Students form four groups (vary the number based on your purpose) based on commonalities in their responses to a question posed. In those groups students discuss their thinking and one student shares their ideas with the class. Students in other groups/corners may move to that corner if they change their thinking based on what they hear.

Questions That Promote Deeper Thinking

Surveys of college faculty reveal that their number one instructional goal is to promote critical thinking, and reports on the status of American higher education have consistently called for greater emphasis on the development of college students' critical thinking skills. Definitions of critical thinking range from the narrow ("a well-reasoned evaluative judgment") to the broad ("all thinking that involves more than the mere acquisition and recall of factual information").

A more inclusive definition of critical thinking embraces all thought processes that are "deeper" than memorization and recall of factual information. When students think critically, they think deeply; they not only know the facts, but they take the additional step of going beyond the facts to do something with them. Critical thinking involves:

- reflecting on the information received
- moving away from "surface" memorization and toward deeper levels of learning
- a shift away from viewing learning as the receiving of information from teacher or text to a transformation of received information into a different form by the learner
- incorporates evaluation

To combat the prevalent student misconception that critical thinking means being "being critical," some use the term "deep thinking" skills.

The following can be used as a guide by instructors to develop teaching strategies that intentionally promote the development of critical thinking skills and by students to assess whether they are engaging in effective critical thinking when speaking, writing, or studying. Each of the critical thinking skills is defined in terms of a corresponding mental action and is followed by a trio of sample questions designed to promote that particular form of thinking and can be adapted for use in specific courses.

1. "Open-ended" questions intentionally designed to provoke divergent thinking

Some college instructors spend little class time posing questions to students, or when questions are posed, many are memory-level questions that ask for factual recall, the least likely to promote student involvement. In contrast, "open-ended" questions calling for divergent thinking (i.e., questions that allow for a variety of possible answers and encourage students to think at a deeper level) are more effective in eliciting student responses than "closed" questions calling for convergent thinking (i.e., questions that require students to narrow-in or converge on one, and only one, correct answer).

Insert open-ended, divergent-thinking questions into your lecture notes as a reminder to pose them at certain points in class, for general class or small group discussion. Students may be asked to write a minute-paper in response to the question. Or students may write a minute paper first and then discuss their written responses, allowing the more reflective students time to gather their thoughts prior to verbalizing them and those self-conscious about public speaking a script to use as a support for communicating their ideas orally.

Students can also learn to generate their own higher-level thinking questions. Using a technique called "guided peer questioning," students are first provided with a series of generic question

stems that serve as cognitive prompts to trigger or stimulate different forms of critical thinking:
(a) "What are the implications of _____?"
(b) "Why is _____ important?"
(c) "What is another way to look at _____?"

2. Questions that ask students to reflect on their own thinking processes and to identify what particular form of critical thinking they are using

After students have communicated their ideas, either orally in group discussions or in writing with minute papers, they may be asked to reflect on what type of critical thinking the question was designed to promote and whether they think they demonstrated that critical thinking in their response.

One distinguishing characteristic of high-achieving college students is that they tend to reflect on their thought processes during learning and are aware of the cognitive strategies they use. Students can learn to engage in such "meta-cognition" (thinking about thinking) if they are regularly asked self-assessment questions, which require reflection on their own thought processes. When students learn to routinely ask themselves these questions, the depth and quality of their thinking are enhanced.

Classification of Critical Thinking Skills

1. **Comprehension** (Understanding): to convert information into a form that is **personally meaningful**, i.e., that *makes sense* to the *individual* who is learning it.
- How would you put _____ into your own words? (Paraphrasing)
- What would be an example of _____? (Illustrating)
- How would you translate _____ into visual form? (Concept-Mapping)

2. **Application**: to apply *abstract* or *theoretical* principles to **concrete, practical** situations.
- How can you make use of _____?
- How could _____ be put into practice?
- How would _____ be converted into an action plan?

3. **Analysis**: to **break down** or **dissect** information into its component *parts* in order to detect the relationship among the parts or the relationship between the parts and the whole. (For example, identify the underlying causes or sources of disagreement during a class discussion.)
- What are the most important/significant ideas or elements of _____? (Prioritization)
- What assumptions/biases underlie or are hidden within _____? (Deconstruction)
- What parts of _____ would be similar to/different than _____? (Comparison-and-Contrast)

4. **Synthesis**: to **build up** or **connect** separate pieces of information to form a larger, more coherent pattern. (For example, connect related ideas discussed in separate sections or units of a course into a single, unified product, such as a concept map; integrate ethical concepts learned in a course and philosophy with marketing concepts learned in a business course to produce a set of ethical guidelines for business marketing and advertising practices.)

- How can this idea be combined with _____ to create a more compete or comprehensive understanding of _____? (Integration)
- How can these different ideas be grouped together into a more general category? (Classification)
- How can these separate _____ be reorganized or rearranged to produce a more comprehensive understanding of the "big picture?"

5. **Evaluation**: to *critically* **judge** the validity (truth), morality (ethics), or aesthetic (artistic) value of ideas, data, or products by using relevant assessment criteria (standards for judging quality).

- How would you judge the accuracy or validity of _____?
- How would you evaluate the ethical (moral) implications or consequences of _____?
- How would you rate the aesthetic quality (beauty) of _____?

6. **Deduction**: to draw conclusions about **particular instances** that are logically consistent with or derive from general principles and premises.

- What specific conclusions can be drawn from this general _____?
- If this general _____ were true, then it would logically follow that _____.
- What particular actions or practices would be consistent with this general _____?

7. **Induction**: to infer (derive or draw out) well-reasoned **generalizations** or **principles** from individual instances or specific examples. (For example, identify recurrent themes or categories that emerge during a class discussion.) One form is the ability to abstract and extrapolate a concept learned in one context and transfer that learning to another context, a cognitive process often referred to as "decontextualization." This capacity to transfer knowledge, i.e., to apply a concept learned in one context to different contexts than the one in which the concept was originally learned, is often presumed to be the litmus test of whether a student has really (deeply) learned the concept or has simply memorized it in its original form, for example, the ability to solve different versions of math problems that require comprehension of the same underlying mathematical concept.

- What are the broader implications of _____?
- What patterns or themes emerge from _____?
- What can be extrapolated or extended from this particular _____ that may have more general or universal value?

8. **Adduction**: to make a *case* **for** an argument or position by accumulating *supporting evidence* in the form of logical arguments (*rational* thinking) or research evidence (*empirical* reasoning).

- What proof exists for _____?
- What are logical arguments for _____?
- What research evidence supports _____?

9. **Refutation**: to make a *case* **against** an argument or position by accumulating contradictory evidence in the form of logical arguments (*rational* thinking) or research findings (*empirical* reasoning).

- What proof exists that _____ is false?
- What are logical arguments against _____?
- What research evidence contradicts _____?

10. **Balanced Thinking**: to carefully consider arguments/evidence **for** and **against** a particular position or viewpoint.
- What are the strengths/advantages and weaknesses/disadvantages of _____?
- What evidence supports and contradicts _____?
- What are arguments for and counterarguments against _____?

11. **Multiple Perspective-Taking**: to view an issue from a variety of **viewpoints, standpoints,** or **positions** in order to gain a more *comprehensive* and *holistic* understanding.
- How would people from different ethnic or racial groups view this _____?
- How would people from different socioeconomic backgrounds be affected by _____?
- How would people who differ in age or gender react to _____?

12. **Causal Reasoning**: to identify **cause-effect** relationships between different ideas or actions.
- How would you explain why _____ occurred?
- What is responsible for _____?
- How would _____ affect or influence _____?

13. **Ethical Reasoning**: to identify what is **morally right/ wrong** or **good/bad** about particular ideas, attitudes, or practices.
- What does _____say about a person's values?
- What are the moral implications of _____?
- Are the expressed or professed convictions of _____ consistent with actual commitments and observable actions?

14. **Creative Thinking**: to generate **imaginative** ideas, **unique** perspectives, **innovative** strategies, or **novel (alternative)** approaches to traditional practices. (Note: Although critical and creative thinking are often seen as separate cognitive skills, the latter is included because it does involve thought processes that are deeper or higher than memorization.)
- What might be a metaphor or analogy for _____?
- What could be invented to _____?
- What might happen if _____? (hypothetical reasoning)

Critical and Creative Thinking Question Stems

Modified from Kagan 1999

What qualities/characteristics.....?

Applying:
How is _____ and example of ....?
What practical applications.....?
What examples....?
How could you use.....?
How does this apply to ....?
In your life, how would you apply...?

Augmenting/Elaboration:
What ideas might you add to....?
What more can you say about...?

Categorizing/Classifying/Organizing
How might you classify...?
What category does __ belong to? Why?
What else could you ass to this category?
How else could you organize....?

Comparing/Contrasting
How would you compare...?
What similarities....?
What are the differences between....?
How is_____ like _____?
How is ____ different from_____?

Connecting/Associating
What do you already know about.....?
What connection can you make between....?
What things do you think of when you think of.....?

Decision Making
What are theh props and cons of choosing.....?
What would be a better decision? Why?

Defining
How would you define....?
In your own words what is .....?

Describing/Summarizing
How could you summarize...?
If you were a reporter how would you describe....?

Determining Cause and Effect
What are the causes of....?
How does ____ effect____?
What impact might....?

Drawing Conclusions/Inferring Consequences
What conclusions can you draw from....?
What would happen if .....?
What would have happened if....?
If you changed--------, what might have happened?

Eliminating
What part of _____ might you eliminate?
How could you get rid of.....?

Evaluating/Assessing
What is your opinion about....?
Why did you like/dislike.....?
How would you grade/rank....? Why?
Would you prefer/rather...? Why?
What is your favorite.....? Why?
Do you agree/disagree with.....? Why?
What are the positive and negative aspects of.....?
What are the advantages and disadvantages of .....?
Is it better or worse...? Why?
By what criteria would you assess....?

Explaining
How could you explain why....?
What reasons might explain...?
What are some alternative explanations for....?

Experimenting
How could you test....?
What experiment could you use to...?
If you changed _____ how would it effect_____?

Generalizing
What general rule can...?
What principal could you apply...?
What is common to all....?

Interpreting
What does ____ mean to you?
What is the significance of.....?
What role.....?
What is the moral of.....?

Inventing
What could you invent to....?
What machine could....?

Investigating
How could you find out more about....?
If you wanted to know more about....?

Making analogies/Similes/Metaphors

How is __ like_____?
What similarities do_____ and _____share?
What analogy/simile/metaphor can you invent for.....?

Observing
What did you notice about.....?
What observations did you make about.....?
What changes.....?

Patterning
What patterns can you find.....?
How would you describe the organization of....?
If the pattern were to continue.....?

Planning
What preparations would you.....?
How would you plan to.....?

Predicting/Hypothesizing
What would you predict...?
What is your theory about.....?
What are some possible explanations for/why.....?
If you were going to guess....?

Prioritizing
What is more important.....?
How might you prioritize....?
In what order would you rank....?

Problem Solving
How would you approach the problem?
What are some possible ways to.....?

Questioning
What questions do you have about.....?
If you could ask a question of.....?

Reducing/Simplifying
In a word/sentence, how would you describe.....?
How can you simplify.....?

Reflection/Metacognition
What were you thinking of when.....?
How has your thinking changed on.....?
How could you describe what you thought about .....?

Relating
How is_____ related to _____?
What is the relationship between.....?
How does_____ depend on_____?

Reversing/Inversing
What is the opposite/antonym of .....?

Role Taking/Empathizing
If you were someone/something else.....?
How does_____ look like to _____?
What would it feel like to be.....?

Sequencing
How would you sequence.....?
What are the steps involved in.....?

Substituting
What else could you use for/instead of.....?
What is a synonym for.....?
What is another way you could.....?

Symbolizing
How could you express it with a drawing/symbol/song/movement/poem?

Synthesizing
How could you combine/put together.....?
What could you make using.....?

EXPEDITIONARY LEARNING

Strategic Questioning Criteria for Lessons

Category	Accomplished Indicators...*the lesson includes*	Observations
Questions are planned for	◦ Questions aligned to the learning targets ◦ Strategies to make questions visible to students (charts, visual aids) ◦ Thinking extenders and challenge questions with an emphasis on probing	
Questions focus on specific content, concepts, skill and character targets	◦ Warm-up questions to clarify learning targets and illuminate schema ◦ Questions that build on schema and increase in complexity ◦ Questions that clarify criteria for success and help students determine next steps	
Questions emphasize critical thinking and metacognition	◦ Questions focused on critical thinking—top 4 levels of Bloom's Revised Taxonomy ◦ Questions that promote metacognition (thinking about thinking)	
Questions are structured to promote engagement and deep thinking of all learners in varied patterns of dialogue	◦ Structures for think-time to promote deep thinking by all students ◦ Note-taking, illustration, written conversations or quick-check strategies to help all students engage during think time ◦ Cold call, no opt out, whiteboards and/or other whole-class engagement strategies ◦ Strategies to support students to ask their own questions ◦ Student-centered protocols that create varied patterns of dialogue	

Sharing Learning Targets and Criteria for Success: Questioning

Excerpts from Chapter 2 of *Advancing Formative Assessment in Every Classroom* by Connie Moss and

Figure 2.1. Strategies for Sharing Learning Targets and Criteria for Success

General Strategy	Specific Tactics	Examples
Questioning	Teachers check for understanding by asking for student questions or by asking students to put learning goals in their own words.	*Kevin, can you tell me one thing about the water cycle you already know? ... Jacob, can you tell me one other thing about the water cycle? ... Jaden, can you put those two things together so we have a definition of the water cycle?*
	Teachers use directed discussion or warm-up questions	*Why is it important to know about the water cycle?* *What would a good report on the water cycle look like?*
	Students think-pair-share what they think they will be learning, why it's important, and how it relates to previous learning	*Donna, what do you think of Matthew's idea about the way to do a picture of the water cycle?* *How long would the report have to be to show you really understood the whole water cycle?*
	Students use rubrics to assess their own work and revise.	*How do you think your water cycle report measures up on this rubric? Use a highlighter to show the descriptions in the rubric that you think describe your work. Is there anything you want to revise?*

Questioning

Questioning, along with directed conversation, is one strategy for communicating learning targets.. Sometimes all that is needed is that a teacher ask students what questions they have about an assignment. Listening to these questions can provide the teacher with some information about what the students think they are to do and what they are to learn.

A variation on simple questioning as a strategy to communicate the learning target is for the teacher to describe a lesson's target and an assignment or activity that embodies it and then to ask students to repeat what she said in their own words. Putting something in one's own words is a classic comprehension activity. In so doing, students will show how they are understanding what the teacher is asking them to do.

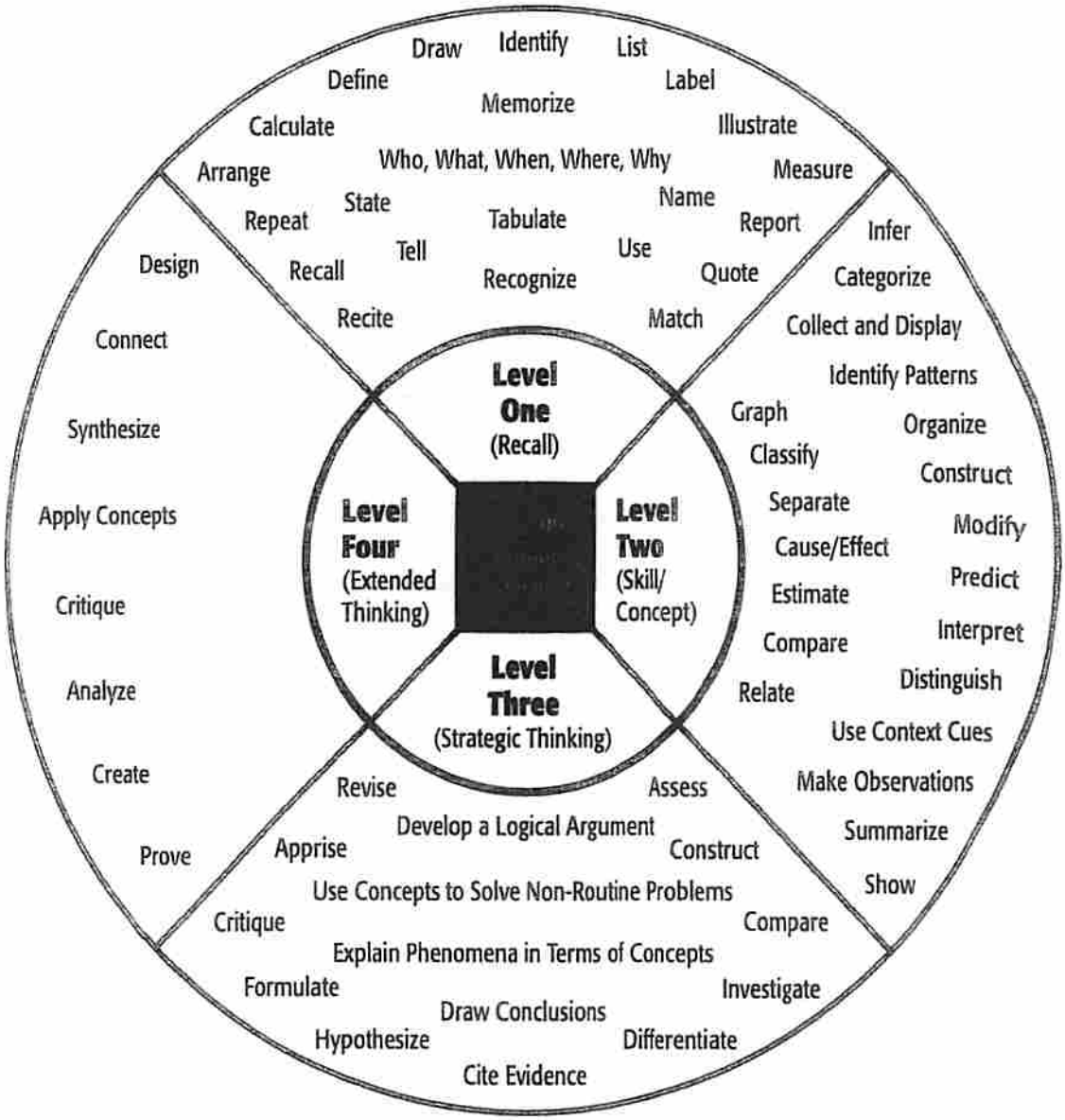
A slightly more complex version of this questioning strategy is to use a think-pair-share activity. The teacher can have pairs of students (1) explain what they think they are going to learn, in their own words, (2) explain why they think it is important, and (3) figure out at least one previous lesson topic this target is related to. In whole-class discussion, the pairs share and discuss their answers and come to a class consensus for the three questions (*What are you going to learn? Why is it important? What previous lesson topic is this goal related to?*). The

purpose of the third question is to explicitly help students see that they are building knowledge and skill and to activate relevant prior knowledge that they can then use as they work.

Sato and Atkin (2006/2007) report on a version of this activity that they call "warm-up questions." The teacher prepares warm-up questions that review the previous lesson or preview the coming lesson. As students respond, the teacher asks students to comment on their peers' ideas and clarify or extend them. This directed discussion brings students' ideas about the learning target out into the open, where they can be examined and focused until everyone is clear on what the upcoming lesson is going to be about. An important feature of this strategy is that the teacher should discuss with students what high-quality responses to these questions would sound like. Students will not immediately be good "clarifiers and extenders." This skill needs to be developed.

When teachers use questioning as a strategy for clarifying a learning target, they should ask students about their attitudes and experiences as well as their knowledge. Teachers can ask students to describe what prior school or other experiences and what attitudes and feelings come to mind, as appropriate to the topic. They can assess students' responses for relevance and then use the information for adjusting instruction. For example, many elementary school students study recycling as a community activity or as part of a science unit. It would be useful to know which students come from homes where recycling is an important activity, what they do at home to recycle, and why their parents have told them they are doing it.

Depth of Knowledge (DOK) Levels



Level One Activities	Level Two Activities	Level Three Activities	Level Four Activities
Recall elements and details of story structure, such as sequence of events, character, plot and setting.	Identify and summarize the major events in a narrative.	Support ideas with details and examples.	Conduct a project that requires specifying a problem, designing and conducting an experiment, analyzing its data, and reporting results/ solutions.
Conduct basic mathematical calculations.	Use context cues to identify the meaning of unfamiliar words.	Use voice appropriate to the purpose and audience.	Apply mathematical model to illuminate a problem or situation.
Label locations on a map.	Solve routine multiple-step problems.	Identify research questions and design investigations for a scientific problem.	Analyze and synthesize information from multiple sources.
Represent in words or diagrams a scientific concept or relationship.	Describe the cause/effect of a particular event.	Develop a scientific model for a complex situation.	Describe and illustrate how common themes are found across texts from different cultures.
Perform routine procedures like measuring length or using punctuation marks correctly.	Identify patterns in events or behavior.	Determine the author's purpose and describe how it affects the interpretation of a reading selection.	Design a mathematical [illegible]
[illegible]	Formulate a routine problem given data and conditions.		

Video Information

Austin's Butterfly: Building Excellence in Student Work

https://vimeo.com/38247060

In this video students reflect on how kind, specific, and helpful critique led first-grade student Austin, from Anser Charter School in Boise, Idaho, to persevere through multiple drafts so that he could create an accurate and beautiful scientific drawing of a Tiger Swallowtail Butterfly.

"They told him what was wrong about it...they were specific but they weren't mean about it"

Student

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 students see what is working and then ask questions and offer suggestions, leading to revision. It is important for students to understand that the focus should be on offering feedback that is beneficial to the author. Explicit modeling is necessary for this protocol to be used successfully.

Materials

- Anchor chart for feedback norms
- Optional: recording chart for peer feedback, one per student

Procedure

1. Begin with the norms:
   - Be Kind: Always treat others with dignity and respect. This means we never use words that are hurtful, including sarcasm.
   - 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.
   - 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.
   - Participate: Peer critique is a process to support each other, and your feedback is valued!
2. Have the author explain his or her work and state exactly what type of critique would be helpful (i.e., what questions or confusions he or she has and 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:
   - "I notice..."
   - "I wonder..."
   - "If this were my work, I would..."
5. Use questions whenever possible. For example, "Did you consider adding...?"

Variations

- Model critiquing multiple times before having students try it on their own.
- Combine with a checking-for-understanding strategy to make sure critiques follow the guidelines of being kind, specific, and helpful.
- See also, Praise, Question, Suggestion

Praise, Question, Suggestion

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 students see what is working and then ask questions and offer suggestions, leading to revision and improvement. It is important for students to understand that the focus should be on offering feedback that is beneficial to the author. Explicit modeling is necessary for this protocol to be used successfully.

Materials

- Product descriptors and rubrics
- Revision checklist or questions
- Anchor chart for protocol norms (see Peer Critique for suggested norms)

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, providing copies for the critique group is 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. Have students work in groups of two to five.
5. The first student presents or reads the draft of her piece. She may ask peers to focus on a particular revision question or two that she is struggling with from the list.
6. Peers first focus on what is praiseworthy or working well. Praise needs to be specific. Simply saying, "This is good" doesn't help the author. 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 she wants to implement and thanks the group.
10. Others then present their work in turn and cycle through the feedback process.

Variations

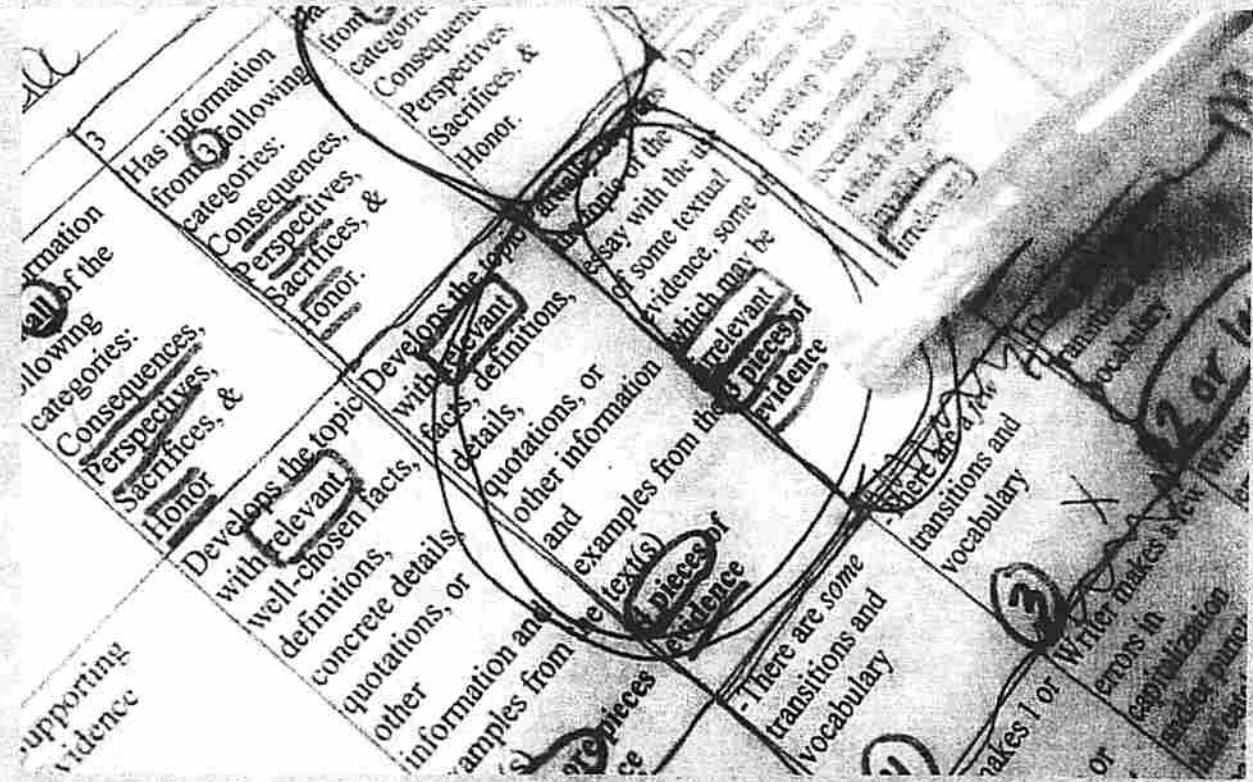
- Give time guidelines for each part of the protocol, so students don't get "stuck" on a particular type of feedback.
- Feedback can be written on sticky notes and given to the author.

Video Information

Strategy: Praise, Question, Suggestion

https://vimeo.com/84899365

Rich Richardson uses the Praise, Question, Suggestion protocol with in his eighth-grade class at Expeditionary Learning Middle School in Syracuse, New York, in this video. Through the modeling, practice, and feedback cycles of the protocol, students learn how to make their peer critique kind, specific, and helpful. This model can then serve as a foundation for any academic feedback: student to student, teacher to student, or even student to teacher.



"Praise, Question, Suggestion is a protocol that helps students provide meaningful feedback to each other. We demonstrate how to give feedback based on Praise, Question, Suggestion in front of the whole class first... Over time, students learn the ability to articulate thinking to a peer in an effective way."

Rich Richardson, teacher

Say Something

Purpose

This is a paired reading strategy that provides students with a structure for reflecting on a portion of text. Students think out loud, listen closely to each other, and develop shared understanding of the text. The time frame for this protocol is intentionally brief.

Materials

- A common text

Procedure

1. For the portion of text students will read, choose the stopping point(s), or have partners decide together how far they will read silently before stopping to "say something."
2. Describe what students will say to each other when they reach the stopping point: it might be a question, a brief summary, a key point, an interesting idea, or a new connection.
3. Model. Provide one or two examples of what a student might say at each stopping point. Be sure that the modeled statements or questions are succinct, thoughtful, and related to the text.
4. Have students begin reading the text.
5. Once partners have reached the chosen stopping point, they each in turn "say something" to each other about the text.
6. Have partners continue the process, stopping at each chosen stopping point, until the selection is completed.
7. After a designated time, engage the whole group in a discussion of the text.

Variations

- 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.
- To focus the paired interactions or to stimulate a specific type of thinking, the teacher 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.

References

Egawa, K., & Harste, J. (2001, January 1). Balancing the literacy curriculum: A new vision. *School Talk*, 35-57.

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 student, engages students in complex thinking about rich content, and teaches students discussion skills.

Materials

- Provocative question for discussion, chosen beforehand
- Associated text(s)
- Anchor Chart for protocol norms

Procedure

1. Select 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. Develop 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. Students may also generate questions to discuss.
3. Students 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 student's "ticket" to participate in the seminar. The pre-seminar task could easily incorporate work on reading strategies. For example, students 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 students should be involved and should make sure others in the group are drawn into the discussion.
5. Begin the discussion with the open-ended question designed to provoke inquiry and diverse perspectives. The teacher may pose follow-up questions.
6. The discussion proceeds until you call time. At that time, the group debriefs their process; if using a Fishbowl (see Fishbowl entry and variations that follow), the outer circle members give their feedback sheets to the inner group students.
7. Protocol norms: Students…
   - Respect other students. (Exhibit open-mindedness and value others' contributions.)
   - Are active listeners. (Build on one another's ideas by referring to them.)
   - Stay focused on the topic.
   - Make specific references to the text. (Use examples from the text to explain their points.)
   - Give input. (Ensure participation.)

- Ask questions. (Clarifying questions, and probing questions that push the conversation further and deeper when appropriate.)

Variations

- Combine with the Fishbowl protocol. When it is time for the seminar, students are divided into two groups. One group forms the inner circle (the "fish") that will be discussing the text. The other group forms the outer circle; they will give feedback on content, contributions, and group skills. (Note: "Fishbowls" may be used with other instructional practices such as peer critiques, literature circles, or group work. If the number of students in the seminar is small, a Fishbowl does not need to be used.) Each person in the outer circle is asked to observe one of the students in the inner circle. Criteria or a rubric for the observations should be developed by/shared with students in advance: see the following example.

Did the student...	Consistently	Occasionally	Not This Time	Notes/Comments
Respond to other students' comments in a respectful way?				
Listen attentively without interruption?				
Make eye contact with peers?				
Exhibit preparation for the seminar?				
Reference the text to support response?				
Participate in the discussion?				
Ask clarifying or probing questions?				

- Provide sentence stems that allow students to interact positively and thoughtfully with one another: "I'd like to build on that thought..." "Could you tell me more?" "May I finish my thought?"

References

Israel, E. (2002). Examining multiple perspectives in literature. In *Inquiry and the literary text: Constructing discussions in the English Classroom*. Urbana, IL: NCTE.

Think-Pair-Share

Purpose

This protocol ensures that all students simultaneously and collaboratively engage with a text or topic. It allows students to recognize and articulate their own ideas before considering the ideas of others; it also promotes synthesis and the social construction of knowledge.

Materials

- Guiding questions, decided beforehand
- Optional: recording form with questions and answer spaces for students

Procedure

1. Students are given a short and specific timeframe (1 to 2 minutes) to independently and briefly process their understanding/opinion of a text selection, discussion question, or topic (this is the "thinking" part of Think-Pair-Share).
2. Students then pair up and share their thinking or writing with a peer for another short and specific timeframe (e.g., 1 minute each).
3. Finally, the teacher leads a whole-class sharing of thoughts, often charting the diverse thinking and patterns in student ideas. This helps both students and the teacher assess understanding and clarify ideas.

Variations

- Pair the Think-Pair-Share protocol with a close reading lesson to allow students time and space to collaboratively work on their answers to text-dependent questions.
- Allow students to facilitate the whole-class sharing.

(cont.)

Video Information

Reading Closely with Middle School Students

https://vimeo.com/92347719

In this video, students in Chris DiFulvio and Chris Leins' eighth-grade classroom in Homer, New York, engage in the close reading process. The students grapple with the complex nonfiction text Unbroken and use the Think-Pair-Share protocol to deepen their understanding of the book's central character and of the World War II era.

"I believe that working in partners is better because you have two minds reading the book. You can combine your ideas so that you get not only what you got from the book, but [what your partner got as well]."

Eighth-grade student

References

Lymna, F. (1981). The responsive classroom discussion: The inclusion of all students. In *Mainstreaming digest*. College Park, MD: University of Maryland College of Education.