An Introduction to *Questioning*

Questioning is a critical thinking strategy closely linked to the process of metacognition, or thinking about thinking. People ask questions for many different reasons, including curiosity and clarification, but many times the most important questions are the ones we ask ourselves. The language used when creating questions drives the type of response. Some questions can be answered with simple responses, while others require explanation. All students can be taught to articulate complex responses to the "inner questions" that guide their thought processes.

Active learners are always questioning. Students who take responsibility for asking their own questions become more productive and engaged in their learning processes. Metacognitive processes, such as questioning, help us monitor the success of our problem-solving skills, the depth of our knowledge, and our understanding of the world around us. Reflecting on our individual patterns of learning is empowering and inspiring. Exploring questions about our thinking helps us to develop realistic plans of action, implement these plans, and then evaluate the success of our endeavors.

Note: *This lesson is structured in questions. Students uncover new understandings in ways that are personally meaningful to them as you model good questioning techniques. It is important that teachers be very active listeners during this discussion and use questions to clarify both the discussion content and students' reasoning. When the discussion is over, teachers should summarize what has been said and tie the key points together with the summary information provided at the end of the lesson.*

ACTIVITY (time required: 30 - 40 minutes)

1. Ask students, "Do you think you are a passive or active learner? Why?"

2. Pose the question, "What is the difference between being an active learner and a passive learner?"

3. As students brainstorm, list the characteristics of an active learner on the board. **(Help students conclude that one of the characteristics of an active learner is asking questions.)**

    - *Active Learners are people who take responsibility for their own learning by asking questions to make sure they understand expectations and directions for projects and assignments. Active Learners make connections between what they already know and new information. They are able to develop plans to manage their time and work independently. Active Learners are intrinsically motivated, curious, and seek to make sense of the world around them. They use reflective thinking to metacogitate.*

    - *Passive Learners begin work without fully understanding directions, expectations, or new information. They accept the world around them as it is and do not ask questions to clarify their understanding. Passive Learners do not challenge ideas or make connections beyond what is presented to them. They become uncomfortable when unknown information or a change from the norm is presented to them.*

4. Share the following quotation: ***When the mind is thinking it is talking to itself.*** *(Plato*) Guide students through a discussion of what Plato might have meant. *(**BACKGROUND INFORMATION:** Plato was a student of Socrates, who developed a method of teaching centered on **asking questions** and respectfully sharing opinions. Socrates drew knowledge from his students by monitoring the flow of conversation and **questioning** students to help them examine the foundations of their own responses. Material written by Socrates has never been found. We know about him because of the writings of Plato and other Greek thinkers.)*

5. Explain that if we practice thinking in words, we can slow our thought processes down to clarify our own thoughts before acting or speaking. Developing "internal" language is important because we do not always think in words. Active learners use their internal voice to evaluate information, make connections, and direct where they need to go next.

6. **(LESSON SUMMARY)** Explain to students that we each have an "inner voice" which allows us to search for answers and generate questions. All human beings possess the ability to evaluate their thinking but not everyone knows how to be reflective or why it is important to reflect. Point out that such reflection does take energy and can often be hard work, so not everyone chooses to use the ability to their advantage. However, one of the rewards of developing your "inner voice" can be doing better in school. (For example, a student can use his or her inner voice during Standards Of Learning tests when they are not allowed to converse with friends!)

7. Ask students to respond in writing to the following question: How can thinking before we act (or speak) help us? (Reinforce that speaking is taking an action.)

EXTENSION: Students can maintain **Thinking Journals** to record their metacognitive reflections throughout the year. Thinking Journals could include written reflections about thinking processes, as well as Mind Maps, lists, personalized step-by-step directions for problem-solving, etc. Teachers may want to join their students in keeping a Thinking Journal. Rather than Thinking Journals, some teachers keep Thinking Portfolios, and other teachers assign metacognitive reflection pieces from time to time. Some teachers have a "Thinking Thursday" or let students spend time on Friday afternoons reflecting on their learning from the past week.

Helpful Hints for Teachers When Questioning Students

- provide "wait time" for responses, especially with more difficult questions
- "silence is golden" – especially when thinking reflectively
- ask questions that draw from students' personal experiences, activities, interests
- don't answer the questions you ask – instead, ask more questions to clarify your meaning and guide students
- accept all answers -- reward responding, not the response
- encourage unusual or creative responses
- LISTEN (**REALLY** LISTEN!!!)
- model good questioning by asking follow-up questions to help guide the natural flow of discussion
- ask students to describe how they arrived at their answers – encourage them to articulate their reasoning and thinking processes
- question students to ensure their responses are based on accurate information, rather than secondhand opinions or hearsay
- model metacognition by "thinking aloud" during instructional explanations
- be flexible about the time allotted for discussions and projects
- use "think-pair-share" strategies

Thinking Prompts for Quality Questions

Knowledge- Identification and recall of information
Who, what, when, where, how _____ ?
Describe _____ .

Comprehension- Organization and selection of facts and ideas
Retell _____ in your own words.
What is the main idea of _____ ?

Application- Use of facts, rules, principles
How is _____ an example of _____ ?
How is _____ related to _____ ?
Why is _____ significant?

Analysis- Separation of a whole into component parts
What are the parts or features of _____ ?
Classify _____ according to _____ .
Outline/diagram/web _____ ?
How does _____ compare/contrast with _____ ?
What evidence can you list for _____ ?

Synthesis- Combination of ideas to form a new whole
What would you predict/infer from _____ ?
What ideas can you add to _____ ?
How would you create/design a new _____ ?
What might happen if you combined _____ with _____ ?
What solutions would you suggest for _____ ?

Evaluation- Development of opinions, judgments or decisions
Do you agree _____ ?
What do you think about _____ ?
What is the most important _____ ?
Prioritize _____ ?
How would you decide about _____ ?
What criteria would you use to assess _____ ?