

# QUESTIONS

By Dr. Carol Santa

Greetings from Montana! Any *questions* out there? All of us remember sitting in classrooms where the teacher was the OMNIPOTENT INTERROGATOR. The teacher would ask a question, and a few brave souls would raise their hands. The majority of students slumped in their chairs hoping to be ignored. A brief interchange would occur as one after another quickly answered the teacher's questions. These question-answer recitations intimidated rather than promoted learning and thinking. Conversations among students seldom occurred.

As teachers, one of the most difficult tasks is to move aside and allow students to become the chief interrogators in our classrooms. After all, one of the goals of the CRISS project is to help students become active questioners of their reading, listening, and writing. We can't have students dependent upon us for their comprehension. When the dialogue is only between us and those few students who always have their hands raised, little learning occurs. We need to create an atmosphere and situations where all students become involved. In this newsletter, we describe several procedures which turn the responsibility for questioning directly over to the students.

## Unanswered Questions

One of our favorite strategies is unanswered questions. These are real questions--ones that students truly don't understand. They aren't questions devised by teachers to test comprehension, but rather questions generated by the students as they read. ***Unanswered questions*** focus on topics or issues which are confusing or about which students want more information.

Begin by explaining to students that proficient readers are those who generate many questions while they read. Start by reading aloud part of a reading assignment. As you read, model the questions that come to mind. Talk about the fact that proficient readers always generate questions as they read. As you model, write your questions on the overhead. Then divide students into pairs. Have each pair read a section and together come up with their own questions. Use these questions to promote a class discussion over the selection.

The following example comes from a senior American government class. Student pairs were reading and generating ***unanswered questions*** on an article about the United Nations. As they

read, they placed sticky notes where they had questions. After reading, they went back to the marked sections, reread them, and if they still had those questions, they wrote them in their journals. Several samples follow:

1. In the article, there is a statement "reform or die." What needs to be *reformed* for the U. N. to stay alive?
2. Why is the U. N. less successful now than it was in the past?
3. Do you think the U. N. has lived beyond its usefulness?

These questions then led to a spirited discussion about the future of the United Nations as pairs took turns asking their questions. Discussions launched from students' own questions are far richer than those where teachers are the interrogators. Moreover, self-questioning demands active comprehension.

## Question Answer Relationships (QARs) With Mathematics

A recent article in the Journal of Adolescent & Adult Literacy (Applying the Question-Answer Relationship strategy in mathematics, by McIntosh and Draper. October, 1995. 39 [2], 120-131) focuses on using **QARs** in mathematics. The authors taught middle and high school students how to analyze questions in mathematics according to the **QAR** rubric. The teachers began by modeling, one at a time, the four types of questions (**Right There, Think and Search, Author and You, and On My Own**) based on a text selection. Next, after reading another selection, students were given a question. The teachers asked the students to **identify** the type of question, **answer** the question, and provide an **explanation** of why they categorized the question as they did, i.e., what was the question-answer relationship. Next, the students practiced writing their own questions over the text. They passed their questions to other students, who had to identify, answer, and explain the relationship. See the following example using the “quadrant activity worksheet.”

<p><b>Question:</b> Tara is “T” years old. Her younger brother, Dale, is 15 yrs. old. How much older is Tara than Dale?</p>	<p><b>Answer:</b> <i>Tara is T - 15 years older.</i>  <b>Check:</b> <i>If Tara is 19 she is 4 yrs. older. T - 15 = 19 - 15 which is 4, so it checks out all right.</i></p>
<p><b>Relationship:</b></p> <p style="text-align: center;"><i>Think &amp; Search</i></p>	<p><b>Explanation:</b> <i>This is T&amp;S because the question is like the one in Ex. 3, p. 114, but the numbers are different. I had to <u>search</u> for the Ex., then <u>think</u> for the answer.</i></p>

Students discovered that fill-in-the-blank questions or questions that ask for a definition of a term were generally **Right There**; those based on text examples, but with different numbers, were **Think and Search**, questions asking students to integrate ideas from other sections in the book were generally Author and You questions, and questions they could answer without even reading the text were **On My Own**. The authors found that teaching students about the “craft” of questions led not only to more student-centered discussions, but to an improved understanding of mathematical concepts.

## QARs With Literature

We are also using **QARs** as part of literature studies. After students have read several chapters in a novel, cooperative teams are assigned to prepare questions for discussion. For example, a fifth grade class was reading *Julie of the Wolves*, by Jean Craighead George. Each team was assigned one part for developing their questions. As the sections were discussed, teams responsible for developing the questions for that part led the discussions.

**Right There:** What language did Miyax (Julie) use when she first spoke to Amaroq, the wolf? *Ans. “...half English and half Eskimo....”*

**Think & Search:** What did Miyax’s house on the tundra look like? *Ans. It was sod bricks put together with mud, her caribou cloth was on the floor, her sleeping bag was on that. A table of sod was next to her bed. She stuck feather flowers in the table to make it look pretty. She cooked outside.*

**Author & You:** How did Miyax and her father Kapugen get along? *Ans. I think she really liked him. He was kind of like a teacher to her, he told her about wolves and fear and other stuff.*

**On My Own:** Describe a time when you were lost. What did you do? How did you feel?

## Question Starters

Several CRISS teachers have assisted their students in writing and analyzing their own questions by giving them a list of *question starters*. These starters are particularly helpful when asking students to design their own tests on content. A family and consumer science teacher gave students, working in cooperative teams, the following list of question starters to use in preparing for a semester test. Notice that these starters represent different levels of questions:

### Starters

Who, what, list, repeat, identify, name, when, define (**RECALL**)

Summarize, categorize, divide, separate (**ANALYSIS**)

Differentiate, compare, contrast (**COMPARISON**)

Predict, conclude, what if, anticipate, infer (**INFERENCE**)

Judge, defend, prove, assess, evaluate (**EVALUATION**)

Each team was responsible for preparing review questions for one topic covered during the semester. They had to use at least one starter from each group, and they had to answer each of their own questions in writing. As each topic came up for review, a different student team was responsible for leading a class discussion. The teacher then incorporated many of their questions into the semester final exam.

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