

## *How to do* . . . . .

### DO A DR-TA

A DR-TA is relatively easy to prepare. The most difficult part of preparation is deciding where to place stop-points, and for novice DR-TA teachers, the tendency is to stop *more* often than necessary, as opposed to less. The only other hard part is learning to ask open-ended, DR-TA-type questions rather than lots of literal questions and becoming used to lesson episodes in which students do most of the talking. Here are the preparation steps:

1. Select the reading assignment (chapter, article, story, and so on).
2. Determine stop-points. Stop first after the title. Then use logical breaks, such as subheadings, chapter parts, and so forth to establish three or four additional stops.
3. Prepare questions to be asked at stop-points; for example, "Based on this title, what do you think the chapter will be about?" "Why?" "Now what do you think?" "Why?" "What do you think we'll learn or find out next?" "Why?"
4. Obtain/prepare cover sheets for students to use to cover text following stop-points (if needed).

Now compare the quality of that response with anticipated responses to the following literal questions:

- "Who are the main characters in the story?"
- "Where does the story take place?"
- "Why was Rigel an outcast?"
- "How did the narrator and the little man differ from the others at the sale?"

The point is that there *is* no comparison between the quality of the student's response to DR-TA questions and the kind of responses the literal questions would encourage. More importantly, it is clear that in the DR-TA literal information is used for the exploration of much larger, student-generated questions: "What is the bond between these two seemingly disparate people?" "How does one reconcile her right to the horse and his need for the horse?" "How can the story end in such a way as to reflect reality and at the same time let both characters 'win'?" These qualitative differences are just as apparent in physics and other content area DR-TA lessons as they are in this one.

The open-ended questions of the DR-TA focus attention on the larger issues, and thus literal meaning remains in rightful perspective. It is only when student response to the open-ended question indicates misunderstanding that literal questions are asked. Literal questions are asked immediately to clarify and remove the misunderstanding; as soon as that is accomplished, teacher questions should return to the types described earlier.

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### THE COMBINED CONTENT DR-TA, GROUP MAPPING, AND VSS

One of the nicest things about the Content DR-TA is how easy it is to use with just about any text or other learning medium. It requires no special materials or equipment, no elaborate preparations, and no alteration of text or textbooks.

What is critical is that you define *explicitly* the lesson topic and goals you wish to address so that you can establish clear focus for what the students respond to in the two stages of idea-listing. The first stage is always focused on the *general topic*: the prior knowledge and previous experience students have *related to* the actual topic of study. This is followed in the second stage by attention to the *specific topic*, which is made fuller because of the associations triggered by the previous exploration of related information. The following steps will lead sequentially through the Content DR-TA, GMA, and the VSS.

#### CONTENT DR-TA

1. Ask student teams to list everything they know about a *general topic* (for example, "whales," "baking," "algebra," or "baseball"). 6 to 8 minutes.
2. Announce *specific topic* (for example, "feeding habits of humpbacked whales," "yeast bread baking," "factoring," or "fielding").
3. Ask students to predict what information on their lists might appear in the reading (✓); add any new predictions they have. 2 to 3 minutes.
4. Ask students to read the assignment; note how well they predicted (\*).
5. Lead short discussion about the predictions and the reading (for example "How well did you predict?" "How many of your ideas appeared in the reading?" or "What new ideas appeared?").

#### GMA STUDY AIDS

6. Ask students to map their perceptions of the reading without talking to anybody and without looking back at the reading. Remind them that the maps will be used as study aids and should include all information they consider important.
7. Ask partners to share their maps with one another and to assist each other in elaborating what they considered important, how they chose to organize it, and why they made the choices they made. Allow students to refer to the reading as they wish.
8. Lead whole-class display and discussion of selected study maps.

#### VSS STUDY AIDS

9. Have student teams choose a word or term that students believe to be important to the chapter. Teams should be prepared to tell where they found the word, what they think it means, and why they think it is important. (You also nominate a word.)
10. Lead discussion as words are nominated and defined; write all nominated words on the board.
11. Lead discussion for students to choose the final class vocabulary list; review and refine definitions of words on the list.
12. Have students enter vocabulary words on their study maps where the words fit the map. Mark vocabulary words with an asterisk.
13. Develop follow-up activities for using the vocabulary words meaningfully.
14. Provide opportunities for students to elaborate on what was learned.