Learning Project 7 Drawing Conclusion From the Text

Inquiry Activity 7-1: Deriving a Conclusion

The item in this Inquiry Activity is characterized by a short, two-sentence passage with strong information from which the test taker must derive the correct conclusion. As we consider this short passage, we do not separate the item from the answer choices.

(Note: Italicized portions should be directed to the students.)

1. Identifying the Problem (Item 16 Science PA)

Look at the test item.

What must you do in order to answer the question correctly?

Where else have you seen questions like this?

You may wish to have your class identify that this is an application question.

What will you have to do to be successful in this Activity?

Jot down your thoughts, or share them with your partner.

16. Bats navigate by sending out and receiving sound waves. The bat can determine the shape, size, and location of an object by measuring the time it takes for the sound waves to return.

    Which of the following uses this principle?

    (1) a telephone call that is transmitted via satellite
    (2) a radio signal that is sent from a tower to a radio receiver
    (3) a special photograph taken by a satellite that shows areas of different temperature
    (4) a message transmitted over phone lines from one computer to another
    (5) a sonar system that can determine if there are fish beneath a ship

2. Becoming Familiar with the Problem

Scan the item, and ask yourself questions like the following as your first step to identifying the question.

Is there anything in the item you do not understand?

What do you know about bats?

What technical terms might you need to have clarified or defined?

What kinds of technologies are being referred to in the answer choices?

3. Planning, Assigning, and Performing Tasks

***Planning**: You may decide to work by yourself, in a pair, or a small group to do this Activity.*

This IA is best done in pairs or small groups.

***Assigning**: Decide with your partner or in your group how you will carry out the task of answering the question.*

***Doing the Work:** As you read the question, do the following:*

Scan the item; find and mark any words in the paragraph or the answer choices you might not know. See if the passage gives you enough information to clarify the meaning of the words. If not, ask someone or look up what the words mean.

The technological vocabulary may be confusing initially. Learners who recognize and can define the word **sonar** will likely know the answer.

What words in the question can guide you to derive the correct answer?

This is an application question, where the information in the reading can be applied to another field. Application questions are defined in Reading Inquiry Activity 1-1. A good reader will recognize that this is an application question from being asked to take the principle from one topic or field and apply it to another.

Determine which answer choice is correct.

Choice (5): the sonar system uses the same technology, bouncing sound off of an object and tracking its return, to find and recognize size, shapes, and movement as do the bats. The first two choices refer to telecommunications, the photograph does not use sound, and while electronic mail does use sound, the visible output has nothing to do with where things are located.

4. Sharing with Others

Telling people what you know helps you understand the material better. Take this opportunity not only to share the knowledge, but also to learn it more completely.

***Small groups:** Compare the answer you found with others in the group. Discuss the methods you used to find the answer, the support for your answer in the passage, and the reasons each learner thinks his/her answer and support are correct.*

Agree on the correct answer and the strategy you would use for answering questions that ask you to draw conclusions from what you have read.

***Whole class:** Share with the whole class the steps you used to answer the question. Take notes on any different ways of answering the question other groups gave.*

5. Reflecting, Extending, Evaluating

Reflecting: Think about what you have learned.

Here are some questions to start your thinking about the experiences you just had. Thinking about what you have learned and experienced is part of the learning process. When the focus is only on the answer, you don't get much time to think about what was learned.

1. *How helpful will it be to know what type of question is being asked?*
2. *Are questions that ask you to apply information from one field to something in another easy or difficult for you? Explain.*
3. *Does it make a difference in how you answer the question if the topic is of interest to you or not? Why might that be?*
4. *How important is the correct vocabulary in understanding how to answer the item?*

The vocabulary that appears in science items creates most of the challenge to answering the questions correctly. Most of the

science in the PA can be answered from life experiences or a very general knowledge of how things work. Finding ways to develop a scientific vocabulary will be of the greatest help to your learners. Appendix E has some good resources for vocabulary development.

Extending: Extend what you learned to new situations.

In extending, you are being asked to transfer the information presented in this Inquiry Activity to other information or situations.

1. *What kind of reading might you do on the job or at home that would call for you to apply what you know to another topic?*
2. *Have a discussion in your groups or with the entire class sharing ways that you might develop a scientific vocabulary.*
3. *Using some reference materials in your class, try to find some other examples of technology using animal behaviors, like the bats' method of navigating by sound waves.*

A number of popular science books and television shows feature a variety of animal behaviors. Another interesting aspect might be considering how animals change their behaviors in the face of technology.

*Have you seen any movies about submarines (*Crimson Tide, Hunt for Red October*)? How did seeing these movies help you understand the question?*

Evaluating: Assess what you learned and how you learned it.

In this last step, you get a chance to review the content of what you learned and the methods used to learn. These questions have no right or wrong answers. This is your chance to look more closely at your learning style and the opportunity to state how you benefited or did not benefit from the content and/or the methods presented in this IA.

1. *What parts of the activity worked best for you? Explain.*
2. *What parts did not work well for you? Explain.*
3. *What ideas in this Inquiry Activity will you use when taking the GED test? Why?*
4. *How does following this 5-step format make you feel?*