Unit 7: Inferential Comprehension Instructional Routines

TEXAS TALA ADOLESCENT LITERACY ACADEMIES

Module 3: Generating Questions to Monitor Comprehension, Level 3

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Participant Notes

The Meadows Center FOR PREVENTING EDUCATIONAL RISK

THE UNIVERSITY OF TEXAS AT AUSTIN

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Comprehension Strategies Across Content Areas

Unit 7: Inferential Comprehension Instructional Routines	
Module	**Title**
1	Generating Questions to Monitor Comprehension, Level 1
2	Generating Questions to Monitor Comprehension, Level 2
3	Generating Questions to Monitor Comprehension, Level 3

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Objectives

- Understand how generating questions improves students' comprehension of text.
- Generate "making connections" questions.
- Apply the three-step process for explicit instruction to help students generate "making connections" questions.

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Promoting Conceptual Understanding

- Asking students to generate thoughtful questions about passage content promotes their learning and understanding of the information.

(Pressley et al., 1992)

- Higher-level self-generated questions led to higher levels of students' conceptual knowledge gained from expository text.

(Taboada & Guthrie, 2006)

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Asking/Answering Different Types of Questions

- Level 1 Questions: Right There
- Level 2 Questions: Putting it Together
- Level 3 Questions: Making Connections
  - Cannot be answered by looking in the text alone; require students to think about what they have just read, what they already know, and how these ideas relate

(*Vaughn et al., 2006*)

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Generating "Making Connections" Questions: Modeling Phase: *I Do*

1. Use the vocabulary instructional routine to introduce important vocabulary words.
2. Briefly state the primary focus of the chapter or section and explain how it connects to students' prior learning.
3. Explain the purpose for generating questions.
4. Introduce the Level 3 "making connections" question type.

(*Vaughn et al., 2006*)

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Generating "Making Connections" Questions: Modeling Phase: *I Do* (cont.)

5. Use a short passage from your text to model how to create a "making connections" question:
   - Read the passage aloud and discuss what it is about.
   - Relate something in the passage to something you have read, studied, or experienced.
   - Use stems to make a question:
     - How is _____ like (similar to) _____?
     - How is _____ different from _____?
     - How is _____ related to _____?
   - Model combining information in the passage with what you already know to answer the question.

(*Vaughn et al., 2006*)

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Generating "Making Connections" Questions: Modeling Phase: *I Do* (cont.)

Practice passage
"Poisons on our Planet"

- Talk about the passage in a way that relates to what you have already studied.
  - "This passage talked about how toxins can be both helpful and harmful. When we studied bacteria, we said that bacteria could be both helpful and harmful, too. I wonder what makes them different."
- Use a stem to make a question that helps you relate information in the passage to what you already know or have studied.
  - How are toxins different from bacteria?

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Generating "Making Connections" Questions: Modeling Phase: *I Do* (cont.)

Practice passage
"Poisons on our Planet"

- Show how you connect information in the passage with information you already learned.
  - "I know that bacteria don't have warning signs like bright colors or labels on a package to tell us when they are dangerous, but when toxins are in plants, animals, or products, they often have these warning signs."

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Generating "Making Connections" Questions: Modeling Phase: *I Do* (cont.)

Correct Examples	Incorrect Examples
• Why is it important to learn about toxins? • What would happen if we tried to get rid of all toxins on the planet? • How are toxins related to what we studied about modifying the environment?	• How is poison important to a spider? • How can toxins be harmful to people and the environment? • When oil was spilled in the Gulf of Mexico, how was it cleaned up?

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Generating "Making Connections" Questions: Teacher-assisted Phase: *WE Do*

1. Use the vocabulary instructional routine to introduce important vocabulary words.
2. Briefly state the primary focus of the chapter or section and explain how it connects to students' prior learning.
3. Explain the purpose for generating questions.
4. Introduce the Level 3 "making connections" question type.
5. Have students work with partners to create "making connections" questions.

(*Vaughn et al., 2006*)

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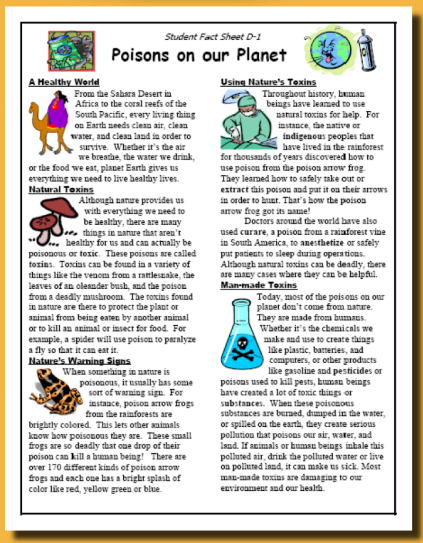
Practice Generating "Making Connections" Questions

Practice writing two "making connections" questions that could be used with the "Poisons on our Planet" passage.



Student Fact Sheet D-1

Poisons on our Planet

A Healthy World

From the Sahara Desert in Africa to the coral reefs of the South Pacific, every living thing on Earth needs clean air, clean water, and clean land in order to survive. Whether it's the air we breathe, the water we drink, or the food we eat, planet Earth gives us everything we need to live healthy lives.

Natural Toxins

Although nature provides us with everything we need to be healthy, there are many things in nature that aren't healthy for us and can actually be poisonous or toxic. These poisons are called toxins. Toxins can be found in a variety of things like the venom from a rattlesnake, the leaves of an oleander bush, and the poison from a deadly mushroom. The toxins found in nature are there to protect the plant or animal from being eaten by another animal or to kill an animal or insect for food. For example, a spider will use poison to paralyze a fly so that it can eat it.

Nature's Warning Signs

When something in nature is poisonous, it usually has some sort of warning sign. For instance, poison arrow frogs from the rainforests are brightly colored. This lets other animals know how poisonous they are. These small frogs are so deadly that one drop of their poison can kill a human being! There are over 170 different kinds of poison arrow frogs and each one has a bright splash of color like red, yellow green or blue.

Using Nature's Toxins

Throughout history, human beings have learned to use natural toxins for help. For instance, the native or indigenous peoples that have lived in the rainforest for thousands of years discovered how to use poison from the poison arrow frog. They learned how to safely take out or extract this poison and put it on their arrows in order to hunt. That's how the poison arrow frog got its name!

Doctors around the world have also used curare, a poison from a rainforest vine in South America, to anesthetize or safely put patients to sleep during operations. Although natural toxins can be deadly, there are many cases where they can be helpful.

Man-made Toxins

Today, most of the poisons on our planet don't come from nature. They are made from humans. Whether it's the chemicals we make and use to create things like plastic, batteries, and computers, or other products like gasoline and pesticides or poisons used to kill pests, human beings have created a lot of toxic things or substances. When these poisonous substances are burned, dumped in the water, or spilled on the earth, they create serious pollution that poisons our air, water, and land. If animals or human beings inhale this polluted air, drink the polluted water or live on polluted land, it can make us sick. Most man-made toxins are damaging to our environment and our health.

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Creating Ownership of the Routine

1. Introduce the routine by name.
2. Model with a think-aloud.
3. Provide meaningful practice opportunities.
4. Guide self-evaluation.
5. Expand to other contexts.

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Generating "Making Connections" Questions: Independent Practice: *YOU Do*

- Students may need to practice with partners several times at first.
- Students need many opportunities for independent practice in class, so you can monitor and provide prompt feedback.
- Students benefit from noting questions in margins or on sticky notes.

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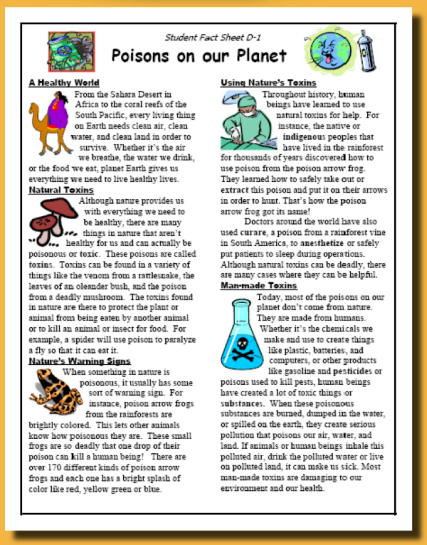
Scaffolding for Generating "Making Connections" Questions

Break the text into smaller sections at first, but gradually increase the length.



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Summary

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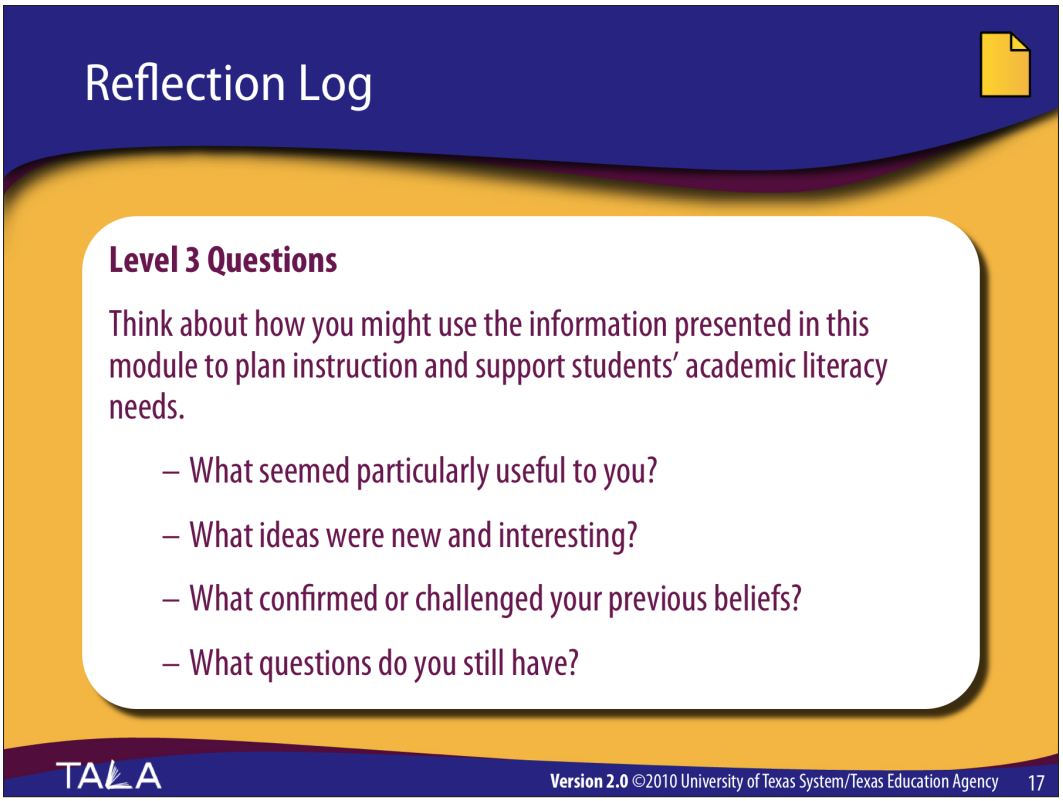
Reflection Log
Level 3 Questions
Think about how you might use the information presented in this module to plan instruction and support students' academic literacy needs.
– What seemed particularly useful to you?
– What ideas were new and interesting?
– What confirmed or challenged your previous beliefs?
– What questions do you still have?
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