Generating Questions for Research — Grade Two

Ohio Standards Connections

Research

Benchmark A
Generate questions for investigation and gather information from a variety of sources.
(Grades Pre-Kindergarten - 2)

Indicator 1
Create questions for investigations, assigned topic or personal area of interest.
(Grade 2)

Lesson Summary:
Students will generate questions for the investigation of a topic.

Estimated Duration: *45 minutes.*

Commentary:
It is widely acknowledged that any modern effort to educate an individual is going to include teaching him or her to learn about a subject, to learn how to research and to learn how to locate information. One important outcome of this effort is to raise a person's ability to think critically. This is the larger purpose of this lesson.

The lesson provides a strategic plan to help students identify or compose questions, and recognize the similarities and differences among things, ideas, people and events. It provides a means by which teachers can help students identify what is irrelevant, summarize effectively what is read or heard and know how to ask questions for clarification.

The use of the K-W-L strategy in this lesson – a reading comprehension strategy developed by Donna Ogle in 1986 – is intended to help young readers/researchers organize what they read. The K-W-L chart helps readers frame the before, during and after components of reading. This skill is indispensable to any student or adult who wishes to gain comprehension of large quantities of printed material. There are a variety of models for gathering and organizing information that are not featured in this lesson. This lesson is merely one example of how students can be taught to be better managers and consumers of information.

Pre-Assessment:
Students will demonstrate prior knowledge of the topic or the unit of study through participation in the K "What do we know?" portion of a K-W-L activity.

Post-Assessment:
Each student gives a presentation to the class that answers three questions related to the L "What did I learn?" portion of the K-W-L activity. The questions are: What was my research topic? What two important things did I learn about the topic? and What important thing did I learn about conducting research?

Scoring Guidelines:
3 = answers all three questions completely.

2 = answers some of the questions or gives some answers that only partially fit the questions

1 = attempts to answer the questions but is off focus and unprepared.

0 = makes no attempt to present.

Instructional Procedures:

Generating Questions for Research — Grade Two

Other Related Ohio Standards

Reading Process: Concepts of Print, Comprehension Strategies and Self-Monitoring Strategies

Benchmark D
Apply reading skills and strategies to summarize and compare and contrast information in text, between text and across subject areas.
(Grades Pre-Kindergarten - 3)

Indicator 4
Summarize text by recalling main ideas and some supporting details.
(Grade 2)

Benchmark E
Demonstrate comprehension by responding to questions (e.g., literal, informational and evaluative).
(Grades Pre-Kindergarten - 3)

Indicator 6
Answer literal, inferential and evaluative questions to demonstrate comprehension of grade-appropriate print texts and electronic and visual media.
(Grade 2)

1. Read and discuss a literary text related to a unit of study (e.g., weather).
2. Refer to the K-W-L chart and review the K-W-L activity (see Figure 1: KWL Chart and General Tips).
3. Tell students that they will help you list and record what they know about a topic (e.g., thunder). On the K portion of the K-W-L chart, solicit student responses and encourage active participation.
4. Explain to the students that the "What do we want to know?" portion of the chart is for listing what they want to learn. (Give an example of a question like, "How does thunder start?") Write the words "How, What, Where, When and Why" on the chart or chalkboard and use them to prompt students to generate questions.
5. Give each student a note card. Tell the students to write their names on one side of the card and to write a question related to their topic on the other side. Instruct students to write only one question per note card. Tell them where they can find the supply of note cards if they have more than one question. Remind students to refer to the five question prompts -- "How," "What," "Where," "When" and "Why" -- written on the chart or chalkboard to help students formulate their questions.
6. Collect students' note cards. Sort the cards matching those with similar questions. Place the students who posed similar questions in pairs or small groups to focus on one aspect of the topic (e.g., clouds, thunder, wind chill, tornadoes or hail).
7. Once chosen, individuals, pairs or small groups might make a new list of questions appropriate for their subtopic.

Differentiated Instructional Support:
Instruction is differentiated according to learner needs, to help all learners either meet the intent of the specified indicator(s) or, if the indicator is already met, to advance beyond the specified indicator(s).

- Increase the level of teacher support depending on the needs of the student.
- Challenge students to pose a variety of questions to facilitate a thorough inquiry of the topic.

Extension:
These are ideas for all students to continue learning on this topic – in class or outside class.

- Continue to have students share their questions with one another.
- Have students interview students in other classes, asking questions on the topic and recording their answers.

Homework Options and Home Connections:
Send home a letter explaining the unit of study to prompt discussion between the student and his or her family members.

Interdisciplinary Connections:

- The K-W-L activity can be effective in many content areas.

Generating Questions for Research — Grade Two

- Weather is a topic of study for grade two in the Ohio Academic Standards for Science. Most students in second grade have limited experience with weather outside their immediate environment. Tie the lesson to a geography lesson and investigate weather phenomena in other regions of the world (e.g., hurricanes, typhoons, monsoons, blizzards and droughts).

Materials/Resources Needed:

For the teacher: A literary text related to the topic or unit of study; chart paper for a K-W-L activity (see Figure 1: K-W-L Chart) and markers or a chalkboard and chalk.

For the students: Note cards, pencils.

General Tips:

Rules for Brainstorming

- Simple words; no long explanations
- Don't judge other ideas during brainstorming
- Group ownership of ideas; one idea sparks another
- Write down all ideas
- Review ideas after brainstorming

K-W-L Chart

- K-W-L is a three-part graphic organizer. K is for recording students' prior knowledge; "What students know." W is for recording "What students want to know." L is for recording "What students have learned." Adding information to this chart over the course of an inquiry is a feature of the research process.
- Be flexible in your grouping of students. Do what works best given your situation.
- Revisit the W portion of the K-W-L activity periodically. As students conduct their investigation of a topic, they may generate more questions, ask more specific questions or need to revise previous questions.

Attachments:

- KWL Chart