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CUES, QUESTIONS, AND ADVANCE ORGANIZERS

Cues and Questions

Students construct meaning by drawing connections between new information and what they already know (background knowledge). Cues and questions are used at the beginning of a lesson to help students access and activate background knowledge and connect that knowledge to new learning. Background knowledge can consist of content knowledge, personal experiences, and certainly misconceptions.

Ovando and colleagues (2003) recognized the importance of prior knowledge in providing “rich clues to meaning” (p. 92). ELLs can use these clues to reach those “a-ha!” moments that come when they connect content presented in their new language with what they already know. Furthermore, in addition to revealing what students know about the subject matter, cues and questions help teachers discover what students need to know.

Building background is one of the eight components of the Sheltered Instruction Observation Protocol model discussed in Chapter 3 (Echevarria, Vogt, & Short, 2000). Teachers link new information to students’ background knowledge by giving them cues—or hints—about what they are about to experience. For example, while watching a film about cats, a teacher can provide a cue by explaining that

students will see some things they already know about cats and some things they do not know. By providing the topic of the film, the teacher has activated prior knowledge—the students will start thinking about what they already know about cats.

Questions can do the same thing—for example, the teacher could simply ask students what they know about cats. Questioning can take different forms. Simich-Dudgeon (1998) reports on three question-answer patterns:

1. **Question-response-evaluation.** The teacher asks a question and then appraises the answer.
2. **Question-response-feedback.** The teacher asks a question, the student answers, and then the teacher provides feedback. The teacher feedback takes the form of paraphrasing the student's answer, which leads to the student rephrasing his response.
3. **Student-organized interaction.** Students ask and answer questions in small groups. The teacher becomes a facilitator and discussion participant.

Although Simich-Dudgeon found question-response-feedback and student-organized interaction to have the most positive results with ELLs, you must always take into consideration a student's level of English proficiency when questioning. Tiered questions can be used with ELLs (see Chapter 2) precisely because they take into account the level of language acquisition, thus allowing students to be successful responders. To use tiered questions, you must monitor student communication and pose questions that allow students to participate with confidence and success.

You are encouraged to ask questions frequently throughout a lesson (Simich-Dudgeon, McCreedy, & Schleppegrell, 1988) because it provides many opportunities for ELLs to use their new language. Students will need a chance to put their thoughts into words, so providing some wait time after asking questions will lead to higher-quality responses. Participating in classroom interactions will help students gain confidence in themselves and their speaking abilities.

Teachers who ask tiered questions adjust their questions to maximize the ways in which the student can respond in the new language (Herrell & Jordan, 2004). After determining the stage of language acquisition, a teacher can decide if a student can be expected to point, use one- or two-word responses, answer with short phrases (some grammatical errors acceptable), or produce longer sentences (fewer grammatical errors acceptable). Questions can then be planned to elicit the desired level of response and ensure student involvement.

Wait time has been huge for me this year. This is the first year in an English classroom for one of my students. I think she understands quite a bit, but it takes her a long time to process and think. Plus, she's very shy and very quiet. I ask a question and wait because, given the opportunity, she wants to answer and she will figure out the answer. In small groups, I've noticed that the wait time is becoming less, and I think it's because she's more comfortable. She feels safer with her English in the small groups.

—E. B.

Generalizations from *Classroom Instruction That Works*

Classroom Instruction That Works provides four generalizations from the research when using cues and questions.

1. **Cues and questions should focus on what is important rather than what is unusual.** Teachers often structure cues or questions around something they perceive as interesting or unique, under the mistaken assumption that it will motivate students by piquing their interest. However, ELLs need to focus on what is important rather than on what is unusual, and they need to be able to filter out unnecessary information in order to grasp the critical content. For example, to introduce a unit on the solar system, a teacher might ask students what they know about UFOs. Although students might find this topic interesting, it does not activate any prior knowledge about the solar system. Having students—particularly ELLs—focus on superfluous material will take them off track, away from the primary learning objective.
2. **Higher-level questions produce deeper learning than lower-level questions.** Adapting questions for ELLs will be a new technique for many classroom teachers. You will need to understand the stages of language acquisition in order to appropriately adapt questions. See Chapter 2 for examples of how to use tiered questions with students at each level of language acquisition.
3. **Waiting at least three seconds before accepting responses from students increases the depth of answers.** A brief pause after asking a question is known as “wait time.” When students are given more time to formulate their responses, they are likely to participate more in classroom discussions about the content. As noted earlier, wait time is particularly valuable for ELLs because it allows them time to think about not only what they are going to say, but also how they are going to say it in English.
4. **Questions are effective even before a lesson begins.** You may think that you should only ask questions after a learning experience. Research shows, however, that using questions before a learning experience can serve to activate and access prior knowledge.

Classroom Recommendations

Cues and questions need to be used before a lesson begins in order to activate background knowledge and to help students focus on

what they will be learning. There are three recommendations from *Classroom Instruction That Works* for the use of cues and questions in the classroom.

1. **Use explicit cues to access prior knowledge.** Figure 5.1 depicts a K-W-L chart, which directly asks students what they already know about a topic.

Figure 5.1
K-W-L Chart

K (What I know)	W (What I want to learn)	L (What I learned)

English-dominant students as well as Speech Emergence, Intermediate, and Advanced Fluency learners can write about what they already know in a K-W-L format, while Preproduction and Early Production students can draw what they know. Use explicit cues to find out what students do and do not already know.

2. **Ask questions that elicit inferences.** Intermediate and Advanced Fluency students can make inferences in English, but Preproduction, Early Production, and Speech Emergence ELLs will have more difficulty because their levels of language acquisition limit their verbal and written output. To engage Preproduction students, ask questions that require a pointing or gesturing response. For Early Production students, ask yes/no questions, either/or questions, or questions requiring a one- or two-word response. Speech Emergence students can answer questions with a phrase or a short sentence.

A lot of times we will just start with the question, "What do you know about . . . ?" to access that background knowledge. Showing [students] a picture or physically bringing in something to show them will get them thinking about what we are going to be learning.

—D. H.

3. **Use analytic questions.** These types of questions will pose difficulties for students at early stages of language acquisition—not because the students do not possess the cognitive skills needed for analytical thinking but because of limits placed on their output by how far along they are in acquiring their second language. Therefore, you need to once again match the level of the question to the stage of language acquisition. Your skill at doing so will be challenged as you try to implement these recommendations. (You may wish to consult Figure 2.1 in Chapter 2, which depicts the stages of language acquisition along with appropriate teacher prompts for each stage.) You'll also want to keep Krashen's $i + 1$ hypothesis and Vygotsky's zone of proximal development in mind when posing questions (again, see Chapter 2).

Advance Organizers

Advance organizers are organizational frameworks presented in advance of lessons that emphasize the essential ideas in a lesson or unit. They focus student attention on the topic at hand and help them draw connections between what they already know and the new knowledge to be learned.

Schoen and Schoen (2003) recommend advance organizers, noting that they help ELL students understand key concepts that they will be exposed to in a text. For example, when webs are used as advance organizers, students can see connections between words or phrases and the topic by following symbols and arrows.

Generalizations from *Classroom Instruction That Works*

Four generalizations are identified in the research on advance organizers:

1. As is the case with cues and questions, advance organizers should focus on what is important instead of what is unusual.
2. Again as with cues and questions, higher-level advance organizers produce deeper learning than lower-level advance organizers.
3. Advance organizers are best used to give structure to information that is not well organized.
4. There are four main types of advance organizers: expository, narrative, skimming, and graphic. Different types of organizers can be used for different purposes and produce different results.

Because advance organizers help students organize new information, they are particularly helpful for students at early stages of language acquisition. Students should be introduced to each of the four main types of advance organizers, as each of them produces different results.

Classroom Recommendations

There are four recommendations for using these four types of advance organizers in the classroom.

1. Use expository advance organizers because they describe the new content that will be introduced. Expository advance organizers are a clear-cut, uncomplicated means of describing the new content students will be learning.

Before having ELLs in his class, 5th grade science teacher Mr. Abrams used an expository advance organizer to teach an activity as follows:

Mr. Abrams tells students in his science class that he is going to float a potato in the center of a beaker of clear liquid. He wants them to apply what they already know about density and solubility to figure out why the potato floats.

Mr. Abrams explains that he will place three beakers on a table in front of the room and fill each with a slightly different solution. All the solutions will appear clear, says Mr. Abrams, but one beaker will be filled with plain water, another will contain a very strong sugar and water solution, and the third will be filled half with the sugar/water solution and half with water.

Next, says Mr. Abrams, he will cut a potato into one-inch wedges and place one wedge in each beaker. In one beaker, the wedge will float on the top, in one it will sink to the bottom, and in one it will float right in the center of the liquid. Mr. Abrams challenges his students to figure out which solution is which and why the trick works.

Here is how Mr. Abrams modified the activity for use with ELLs:

Mr. Abrams knows that he cannot just tell his science students what they are going to do. He needs to explain it to them using sheltering techniques, including

- Manipulatives, miniature objects, and realia
- Visuals (photos, pictures, drawings)
- Body movement and pantomime

- Facial expressions and gestures
- Clear expression and articulation
- Shorter, simpler sentences
- Eye contact
- High-frequency vocabulary
- Reduction of idiomatic expressions
- Personalized language and nouns favored over pronouns
- Synonyms

Mr. Abrams tells his students that he is going to “float” a potato in the center of a beaker of clear liquid. He wants them to apply what they already know about density and solubility to figure out why the potato floats.

In addition to orally explaining that he is going to fill each of the three beakers with a different solution, he pantomimes the act. When describing the different solutions, Mr. Abrams shows a drawing of plain water, another of water and sugar, and a third of a beaker filled half with the sugar/water solution and half with water.

As he tells his students about the potato, Mr. Abrams actually cuts a potato into one-inch wedges and pantomimes placing a potato wedge in each beaker. He continues to use body movements to let everyone know that in one beaker the potato will float on the top, in one it will sink to the bottom, and in one it will float right in the center of the liquid. Mr. Abrams challenges his students to figure out which solution is which and why the trick works.

2. Use narrative advance organizers to let students know what they are going to be learning in a story format. Because Mr. Anderson was going to be starting a 3rd grade unit on the experiences of immigrant groups as they moved to the United States, he told students the following story:

My grandfather Gustav came here from Sweden with his cousin, Nels, in the late 1800s. They were young kids, 18 or 19 years old. They had been farmers in Sweden, but there was a potato famine and thousands of Swedes immigrated to the United States about that same time. I’ve often thought what a spirit of adventure they must have had.

Somehow Grandpa Gus and cousin Nels made it to Minneapolis, where Grandpa Gus met a girl named Brynhild, whom he married. Grandma Bryn also was from Sweden. When I was little, we would go to their house to celebrate

Santa Lucia Day, near Christmas. One of my cousins would get to wear a beautiful white dress and a garland of lighted candles on her head. There was always a huge table full of food. There was one kind of fish that was very stinky, but there were also lots of delicious cookies and cakes. Like other immigrants, we were celebrating our heritage but also making new traditions in the United States.

In a classroom with English-only students, a teacher could essentially stand in front of the room and tell this story. With ELLs, however, and particularly with Preproduction students, this would simply sound like noise. Remember when a teacher would talk to Charlie Brown and all he would hear was “Wa-wa, wa-wa-wa-wa?” That’s how English can sound to these students. By using sheltering techniques such as visuals, pantomime, and simple vocabulary, teachers can bring understanding and comprehensibility to the story.

3. Use skimming before reading as a form of advance organizer.

The Survey, Question, Read, Recite, and Review (or SQ3R) strategy (Robinson, 1961) has long been popular with ESL teachers because it engages students in each phase of the reading process, including skimming. This activity will need to be teacher-directed and modeled before students can do it on their own. Provide students with the following directions for the activity.

Step 1: Survey what you are about to read.

- Think about the title: What do you know about this subject? What do you want to know?
- Glance over headings or skim the first sentences of paragraphs.
- Look at illustrations and graphic aids.
- Read the first paragraph.
- Read the last paragraph or summary.

Step 2: Question.

- Turn the title into a question. Answering this question becomes the major purpose for your reading.
- Write down any questions that come to mind during the survey.
- Turn headings into questions.
- Turn subheadings, illustrations, and graphic aids into questions.
- Write down unfamiliar vocabulary and determine the meaning.

Step 3: Read actively.

- Read to search for answers to questions.

The kids call it “skim and scan.” They use it as kind of an initial glance over, looking at the title and captions, and looking for bolded and italicized words, and looking at the pictures. Just kind of a quick glance to predict what it is going to be about. Then I try to tap into their background knowledge at some point with that.

—Eliza Sorte,
Berry Creek Middle School,
Edwards, Colorado

The science textbook has great pictures and little figures and captions that go with each section, so we cover a whole section and just look at the pictures and talk about those for a little bit. We spend some time talking about what do you see here, how might that go along with the earth’s changing surface, and what we are going to talk about, weather erosion. Then we start to think that way—think ahead and plan what might come up, and anticipate what we might see in the text and learn about.

—Adam Schmucker,
Berry Creek Middle School,
Edwards, Colorado

- Respond to questions and use the context clues for unfamiliar words.
- React to unclear passages, confusing terms, and questionable statements by generating additional questions.

Step 4: Recite.

- Look away from the answers and the book to recall what was read.
- Recite answers to questions aloud or in writing.
- Reread text for unanswered questions.

Step 5: Review.

- Answer the major purpose questions.
- Look over answers and all parts of the chapter to organize information.
- Summarize the information learned by creating a graphic organizer that depicts the main ideas, drawing a flowchart, writing a summary, participating in a group discussion, or writing an explanation of how the material has changed your perceptions or applies to your life.

Preproduction

Students will be learning to preview text material by looking at bold print, pictures, and graphics.

Early Production

Students will be learning academic vocabulary such as headings, paragraphs, and questions.

Speech Emergence

Students will be learning how to formulate questions as they hear students turn headings, subheadings, illustrations, and graphic aids into questions.

Intermediate and Advanced Fluency

Students will be able to apply the strategy to text after the teacher has modeled, and students understand, each step.

4. Teach students how to use graphic advance organizers. Graphic advance organizers are visual representations of the information students are about to learn. These visual representations help students understand the confusing relationships presented in the text.

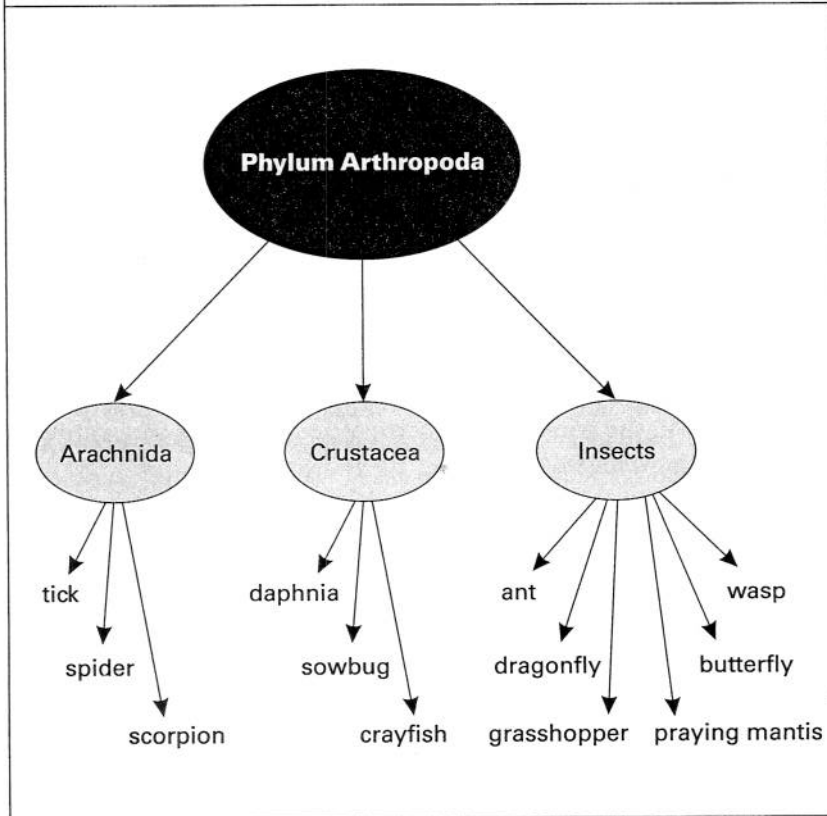
Classroom Example

Subject: Science

Content Objective: To classify organisms.

Mr. Henry's 6th grade class was about to view a video on arthropods. Before showing the video, Mr. Henry gave each student a graphic advance organizer with the main ideas filled in, cueing students about the information they'd be seeing (see Figure 5.2). He asked students to listen and watch carefully so they could add to the organizers as they watched the video. Specifically, he wanted students to add important information related to the ideas on the organizer, as well as other main ideas or topics.

Figure 5.2
Graphic Advance Organizer



Preproduction

Students need to learn vocabulary; for these students, pictures should be attached to the labels. During the class discussion, when others are adding important information, you can engage these students

I think that with second-language learners, a graphic organizer helps because not only does the organizer give them a framework for the information, but I also think it's easier for them to make those connections. Semantic webs are good because sometimes ELLs don't have the vocabulary, but the teacher's organization of the information can help them attach meaning to it.

—E. B.

nonverbally by having them point to various vocabulary pictorial representations.

Early Production

Students should be using vocabulary, so they can be prompted with directives such as "Name a kind of insect."

Speech Emergence

Students will be able to demonstrate good comprehension of the video, especially since they have the advance organizer with pictures. Their contributions to the class discussion will be formatted in phrases and short sentences. They can be prompted by being asked to explain what they have seen.

Intermediate and Advanced Fluency

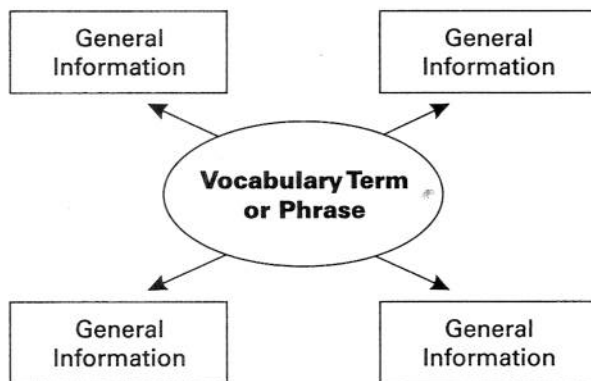
Students will be able to add important information related to the ideas on the organizer.

Summary

By using cues and questions, you can affect what students will learn by helping them make connections between what they already know and what they will need to know. Advance organizers also help students use their personal experiences and content knowledge to learn new information by organizing it into a visual format. Both of these means of helping ELLs access and activate background knowledge will aid them in the continuous process of acquiring and integrating content in a new language.

APPENDIX A

TYPES OF GRAPHIC ORGANIZERS

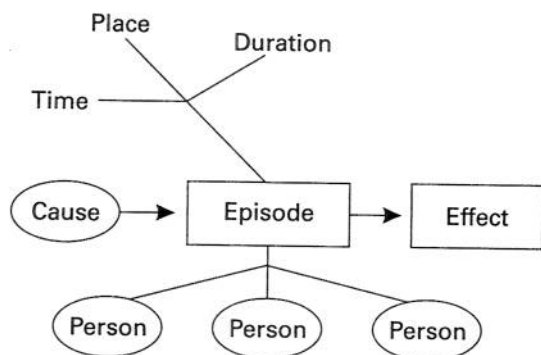


Vocabulary Terms and Phrases

Provides the most important characteristics of a term or phrase, along with examples that further describe it. Students need to have enough information to describe the term or phrase accurately and should have no misconceptions about its meaning, though they may have only surface-level understanding.

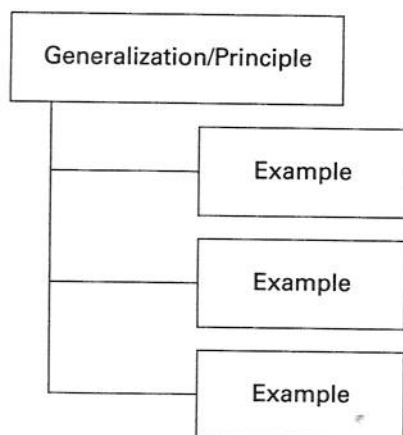
Time Sequence

Includes a chronology of important events that occurred between two points in time. (Example: The events that occurred between the moment of John F. Kennedy's assassination on November 22, 1963, and his burial on November 25.)



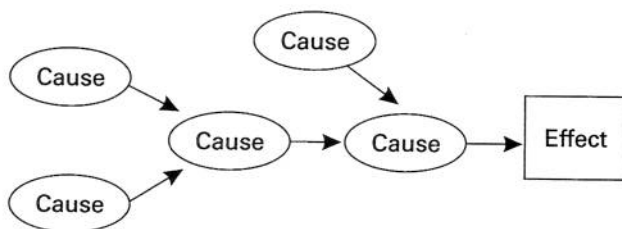
Episodes

Used for events that occurred at a specific time and place, had specific participants, lasted for a specific duration of time, involved a specific sequence of events, were caused by specific events, and had specific effects. (Example: The events of the Watergate burglary and its effects on the presidency of Richard M. Nixon.)



Generalizations/Principles

Generalizations are statements for which examples can be provided. (Example: "U.S. presidents often come from families of great wealth or influence.") Principles are specific types of generalizations that deal with relationships. Cause/effect principles articulate causal relationships (e.g., "Tuberculosis is caused by the tubercle bacillus"), whereas correlational principles describe relationships that are not necessarily causal but in which a change in one factor is associated with a change in another factor (e.g., "The increase in lung cancer among women is directly proportional to the increase in the number of women who smoke").



Cause/Effect Sequence

Used for events that produce a product or an effect. Causes may range from simple and singular (e.g., a game being lost because a player dropped the ball) to complex networks (e.g., the events leading up to the U.S. Civil War).