

North Florida, Sunshine & South Carolina Regions

Imagine¹⁰
the power of 10



The Power of Cues, Questions, and Advance Organizers

Teachers set the stage for learning by finding out what students already know, and then connect new ideas to students' existing knowledge base. Using a variety of instructional strategies, teachers guide students from the known to the unknown, from familiar territory to new concepts. Cues, questions, and advance organizers are among the tools and strategies that teachers use to set the stage for learning. These tools create a framework that helps students focus on what they are about to learn.

Asking questions and prompting students' replies with cues are strategies that come naturally to most teachers. In fact, some 80% percent of student-teacher interactions involve cues and questions (Marzano, Pickering, & Pollock, 2001). By fine-tuning questioning strategies with insights from research, teachers can become even more effective at guiding students' learning. Like questions, advance organizers are also commonly used to help set the stage for instruction.

For example the K-C-L chart lists what students KNOW, what they are CURIOUS about, and what they have LEARNED develops an organized learning progression. Graphic organizers show how new ideas or concepts relate, providing students with a visual framework for acquiring and organizing new information.

K-C-L		
What do you <u>know</u> ?	What are you <u>Curious</u> about?	What have you <u>Learned</u> ?

Create a Learning Environment for students' success in cues, questions and advance organizers.

Model how to ask questions & provide opportunities for students to generate their own questions.

Consistently use explicit cues to pique curiosity at the beginning of a lesson.

Consistently provide advance organizers to make connections to prior knowledge.

Big Four

Content Planning

Establish cues, questions, and advance organizers to help students activate prior knowledge and deepen understanding of current learning.

Classroom Management

Engage students in critical thinking activities to deepen their understanding and become increasingly curious as they make sense of the world.



The Power of Cues, Questions,
and Advance Organizers



Instruction

Equip students with highly analytical tools that focus on what is important and are most effective when presented before a learning experience.

Assessment

Evaluate student understanding by asking analytical and inferential questions before learning to help fill-in the gaps and provide a focus for learning.

Provide students with **advance organizers** that help the learner anticipate and organize new information.

- Expository: A description of a new concept to be presented, highlighting important content.
- Narrative: anecdote that connects personal experiences or real world events to the new concepts to be presented.
- Skimming: preview of readings that will occur later in the lesson, paying special attention to headings, bold print, etc.
- Graphic: such as KCLs, flow charts and other visual tools that tap into prior knowledge or imply the scope and organization of new content.

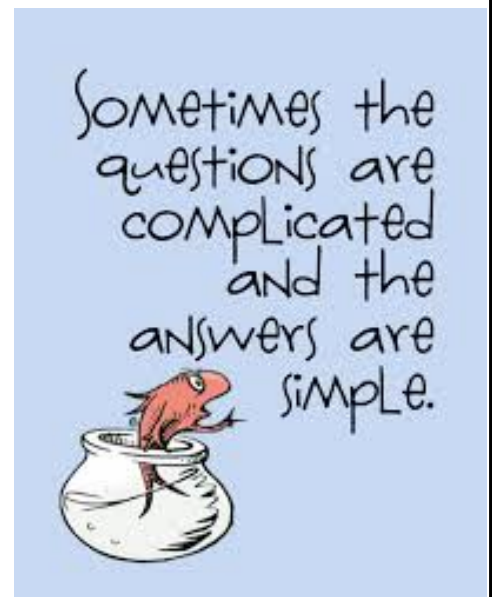


Practical ways to implement:

- 📖 Pace yourself. Teachers commonly underestimate how often they ask questions in class. Use questions to help students focus on what is more important to learn. Remember to ask questions when you introduce new content, and not just at the end of a learning experience. Asking questions will not only tell you what students already know, but also whether they are starting with misunderstandings about a topic.
- 📖 Ask higher-level questions. Think about how to phrase questions. By asking questions that require analysis, you prompt student to go beyond simple recall of information and help to develop their higher-order thinking skills.
- 📖 Wait time matters. Give students time to think before jumping in with an answer to your own question. Pausing for just a few seconds is likely to generate better classroom discourse, including more conversation among students.
- 📖 Preview the big picture. Help students see where you are going by giving them an overview of what a lesson or unit will cover.
- 📖 Use multiple modes. Connect with diverse learning styles by presenting previews of information in multiple ways – visually with graphic organizers, verbally (aloud), and in writing.

Developed by the Northwest Regional Educational Laboratory, Portland, Oregon

As teachers, we want the time spent planning and instructing to generate the most effective and sustained learning. By implementing the recommendations above focused on cues, questions, and advance organizers we maximize effort.



Key Research Findings...

- 📖 Learning increases when teachers focus their questions on content that is most important, not what they think will be most interesting to students. (Alexander, Kulikowich, &Schulze;1994; Risner, Nicholson,&Webb,1994)
- 📖 Higher-level questions that ask students to analyze information result in more learning than simply asking students to recall information. (Redfield&Rosseau,1981) However as teachers we are apt to ask lower order questions if we don't plan for it. (Fillippone,1998; Mueller,1973)
- 📖 Advance organizers, including graphic ones, help students learn new concepts and vocabulary. (Stone, 1983) Presenting information graphically as well as symbolically in an advance organizer reinforces vocabulary learning and supports reading skills. (Kullberg&Strawser,1999;Moore&Readence ,1984)
- 📖 Students learn more when they are presented information in several modes. (Paivio, 1986)
- 📖 By increasing the amount of "wait time" after asking a question, teachers foster increased student discourse and more student-to-student interaction. (Fowler,1975)

