
Questioning Techniques

Effective questions can help students review material, strengthen concepts and challenge them to think critically. According to Crunkilton and Krebs (1982), there are four levels of questions. Try to use questions from all four levels.

Recall: These are questions that have factual answers and are used to see what a student already knows or what he or she remembers. These are the easiest questions to ask and answer. Ex: “What kinds of animals live at the pond?” “What does a chickadee sound like when it sings?”

Comprehension: These questions require students to think more deeply. These are questions that ask the students to explain, interpret, give examples, or summarize concepts in their own words. Ex: “Why does a hawk have a sharp, curved beak and a cardinal has a short, strong beak?”

Analysis: These are questions which make students apply their understanding to new situations. Problem solving and decision making require this kind of thinking. Ex: “What would happen if all the insects in the pond were gone?” “Why did the robins leave for the winter but the chickadees stayed all winter?”

Evaluation: These questions require students to make a value judgment, express opinions, or raise their own questions. Ex: “What was your favorite bird we saw today and why?” “Why should we not pollute the pond?”

On the Trail:

Before you ask a question, think—what is the goal of the question? Are you trying to . . .

- Review information
- Assess the students’ understanding of a concept
- Help them process information and/or make connections
- Challenge their previous understanding

Match the question with your objective. If it is the beginning of class, easier questions are good to see what students already know. Ex: “What are some birds that you can see at River Bend?” If you’ve already covered some concepts

with your group, you should ask some higher level questions. Ex: “Why are male birds usually more colorful than female birds?”

Use different types of responses. So everyone can answer: shout-outs or choral responses for questions everyone knows, thumbs up or down for yes/no questions or opinion questions, hand-raising for questions that not everyone will know.

Give students time to answer. This is a tough one for many teachers. Many students need time to process your question. Don’t always call on the student who raises his/her hand first or take the answer that is shouted out first. Try counting to five before calling on anyone. Or tell the group that you expect everyone to have an answer. Have them share their answer with the person next to them and then share the answer with the group.

Don’t answer your own question. It’s okay to leave a question unanswered until later.

Use as few yes/no questions as possible. These are the easiest to ask and also the easiest to answer—challenge your students and yourself.

Tips for using higher-level thinking questions:

Use easier questions to build up to a harder question. If no one knows why ducks are born more fully developed than robins, first ask students where ducks are born, then ask them what dangers might be nearby for ducklings, and then ask them why ducks are born more fully developed than robins who have their nests high above ground.

Come back to a concept several times. Have students apply knowledge they learned earlier or ask students to compare two observations. Ex: If you saw a turkey vulture soaring and a bluebird flying zig-zag-like over top the prairie plants, you could ask students why the two birds moved differently.

If you find yourself asking a lot of “what” questions and not many “why” questions, throw in some higher-level thinking questions. Ex: “Put in your own words. . . .” “Why do you think _____ happened?” “Why do you think _____ does that?” “If _____ happens what will happen to _____?”