## **Questioning to Promote Understanding**

Structured interviews are regularly scheduled, formal times for students to interact with teachers. They may be brief or comprehensive, depending on the circumstances. Students are expected to prepare for a formal interview and may even know the questions they will answer in advance.

Structured interviews between the student and teacher help identify what students have learned, what they are having difficulty understanding, and what they still need or want to learn. They provide for a connection with students at a deeper level. The interviews also provide a time for students to present their work and gain firsthand knowledge about how their work is assessed. Students learn strategies that will improve their performance and help them to generate goals and next steps.

Several researchers have found that interviews are better than traditional assessment methods for determining students' reasoning and level of understanding; for diagnosing their misconceptions and missed connections; for identifying areas of strength; for discovering students' attitudes toward the subject; and for assessing their ability to communicate verbally about the subject areas they are studying. Interviews allow for the direct response to students' misconceptions and errors (Moon and Schulman, 1995; Stiggins, 1997).

Set up a formal time for the interview, calling a student aside as the class is involved in other activities. During the interview, ask students directly about their comfort level, needs, and interests. Students can set the tone when initial questions are asked such as: How's it going? What are you working on today? What do you need help with today?

From there, the questions should draw the students into thinking out loud, explaining how they've worked on aspects of the project, what they've had difficulty with, or what conclusions they've made. Ask probing questions to encourage students to elaborate or think more deeply about the issues or problems. If students don't provide a complete answer, they may know a partial answer. Asking the right questions and allowing for plenty of "wait time" will provide teachers with a more accurate picture of students understanding. Some probing questions follow:

- Could you say more about that?
- Could you explain what you mean by...?
- Why do you think that?
- What were you thinking about when you said ...?
- What do we know about this?
- Why do you think that happens?
- What reasons do you have for that?
- What would be an example of this?
- What evidence do you have about that?
- What does this remind you of?
- Do you see a connection between this and ...?
- How else could you approach that?
- How could you do that?
- What does that tell us?
- Can you think of a situation where that wouldn't work?
- When wouldn't that happen?

• Is that the same as what you said earlier, or have you changed your mind?

Talk very little during the interview, resist the urge to teach, to give students answers or suggestions, or to pose leading questions. Write down a few key ideas and observations as the student speaks and then expand on the notes immediately after the session is over. For more accuracy, a tape recorder or video camera can be used.