

The Importance of Questioning

During the course of a normal school day teachers ask many questions. In fact, something like 60 percent of the things said by teachers are questions and most of these are not planned.

One way of categorizing questions is to describe them as either *open* or *closed*. Closed questions are those that simply require an answer or a response to be given from memory, such as a description of a situation or object or the reproduction of a skill. Open questions are those that require a student to think more deeply and to give a response that involves more than recalling a fact or reproducing a skill.

Teachers are usually skilled at asking open questions in content areas such as language arts or social studies. For example, teachers often ask children to interpret situations or justify opinions. However, in mathematics lessons closed questions are much more common.

Questions that encourage students to do more than recall known facts have the potential to stimulate thinking and reasoning. To emphasize problem solving, application, and the development of a variety of thinking skills it is vital that we pay more attention to improving our questioning in mathematics lessons. Teachers should use questions that develop their students' higher levels of thinking.

Good Questions for Math Teaching looks in more detail at a particular type of open question that we call a "good" question. Our goals of education are for our students to think, to learn, to analyze, to criticize, and to be able to solve unfamiliar problems, and it follows that good questions should be part of the instructional repertoire of all teachers of mathematics.

In the book, Good Questions for Math Teaching, you are shown the features of good questions, how to create good questions, some practical ideas for using them in your classroom, and many good questions that you can use in your mathematics program.