Asking Students Questions

Tutors should ask questions that require a variety of levels of thinking. Among other things, this maybe a good way to work with a group of students whose ability levels differ. Being aware of different levels of thinking is also important for tutors because students are often required to think at a variety of levels in class--on an exam, for instance. Being unaware of this requirement, students may study at only the memory level and, therefore, fail to prepare themselves for the higher-level thinking required in an exam.

Tutors can facilitate this higher-level thinking in students by asking questions that require such skills. The following is a description of the seven levels of thinking discussed by B.S. Bloom in *Taxonomy of Educational Objectives*. This summary comes from Chapter One of Norris M. Sanders’ *Classroom Questions: What Kinds*.

1. **Memory**: The student recalls or recognizes information
2. **Translation**: The student changes information into a different symbolic form or language.
3. **Interpretations**: The student discovers relationships among facts, generalizations, definitions, values and skills.
4. **Application**: The student solves a lifelike problem that requires the identification of the issue and the selection and use of appropriate generalizations and skills.
5. **Analysis**: The student solves a problem in the light of conscious knowledge of the parts and forms of thinking.
6. **Synthesis**: The student solves the problem that requires original, creative thinking.
7. **Evaluation**: The student makes a judgment of good or bad, right or wrong, according to standards he designates.

Students can be led to think in each category through the use of such questions as these:

**Memory**: What is meant by “gerrymandering?” (The student is asked to recall the definition presented to him earlier.)

**Translation**: The Encyclopedia of the Social Sciences defines “gerrymander” in this way:

Gerrymander is a term used to describe the abuse of power whereby the political party dominant at the time in a legislature arranges constituencies unequally so that its voting strength may count for as much as possible at elections and that of the other party or parties for as little as possible.

Restate this definition in your own words.

**Interpretation**: Each county in the diagram of the mythical state has about the same population and is dominated by the designated political party “A” or “B”. The state must be divided into five voting districts of about equal population. Each district must contain three counties.
What is the greatest number of districts that Party A could control if it is in charge of the redistricting and chooses to gerrymander? What is the greatest number of districts that Party B could control if it is in charge of the redistricting and chooses to gerrymander? (The students have previously been given a definition of gerrymandering.)

**Application:** The mayor recently appointed a committee to study the fairness of the boundaries of the election districts in our community. Gather information about the present districts and the population in each. Determine whether the present city election districts are adequate. (The student is expected to apply principles of democracy studied in class to this new problem.)

**Analysis:** Analyze the reasoning in this quotation: “Human beings lack the ability to be fair when their own interests are involved. Party X controls the legislature and now it has taken upon itself the responsibility of redrawing the boundaries of the legislative election districts. We know in advance that our party will suffer.

**Synthesis:** (This question must follow the application question given above.) If current election districts in our community are inadequate, suggest how they might be redrawn.

**Evaluation:** Would you favor having your political party engage in gerrymandering if it had the opportunity?

Earlier it was suggested that memory questions excessively dominate education. This allegation can now be defined with greater precision. As a result of overusing the memory category, many teachers tend to offer students too few questions requiring translation, interpretation, application, analysis, synthesis, and evaluation.