When you tell a student factual information, you can’t know, at that moment, if the information is grasped. If, instead, you ask a question that gets a response, you have a sense that, at that moment, the student knows. But what if you want the student to synthesize significant amounts of knowledge and to use that knowledge to predict new directions for thinking? How do we go about that task? The simple act of asking intentional questions steps us toward that end.

By now you have had a chance to see how targeted questions and follow-up targets help move student thinking up Bloom’s ladder. However, synthesis comes only when learners link thinking and content systems. This can be done with well designed Connection Questions.

Put simply, Connection Questions recognize knowledge systems. No knowledge stands alone, but rather is connected to other knowledge systematically. Students often need reminding of this, especially since they’ve generally been taught through right/wrong paradigms. Questioning can move them beyond simple dichotomies, and link them to a world where dialectic thinking rules.

Connection Questions can be as simple as “what are the similarities between tinea capitis and hand-foot and mouth disease?” or “What are the significant differences in growth rates of breast vs. colon cancer?” These issues are sometimes treated as facts, but treated as a question, students must pull together multiple sources to conceptualize similarity and difference, and so some basic connections are made.

Connection Questions can also be precursors to subsequent material in the presentation. For example: “Curtis, we’ve been talking about the doubling time of breast cancer cells. If we are going to move our discussion toward cells with more aggressive doubling times, what are two possible choices?” or “Samantha, after dealing with this case of roseola, and considering I want our discussion to continue to deal with the same patient age-group, tell me why or why not we’ll be dealing with hand-foot and mouth disease next.” These may be simple questioning routes, but they require students to link information, evaluate it, and prepare a synthesized response in a short time.

In short, Connection Questions get at the mechanisms of learning. Learning occurs through the juxtaposition of new and old information and/or experiences. Learners make meaning by continually rearranging sense or vicarious stimuli. Connection Questions stimulate this kind of meaning making. For example: “Veronica, based on your understanding of our previous case conveying the difficult news that a colostomy would be required, how will this new patient deal with the news of a recurring cancer after three years of no signs?” Notice how Veronica must respond on one situation based on her perception of another. In this instance, the instructor can spend time with Veronica teasing out the significant aspects. The instructor can probe the issues about the first case that led Veronica to her conclusion. The instructor can get Veronica to compare the two patients. Even the two kinds of cancer can be compared. One well designed question can stimulate a great deal of critical thinking on the part of the student.

It is quite probable you already think in terms of Connection Questions. However, it is also probable that you don’t ask them often enough for fear that either the students are not ready to respond at this level, or that you are unsure what these questions might do to the flow of your presentation. Let me encourage you to begin developing your questioning techniques so that all three of the styles presented so far—targeted questions, follow-up targets, and Connection Questions—become a major part of your teaching toolbox.