DEAD QUESTIONS REFLECT INERT MINDS

Most students ask virtually none of these thought-stimulating types of questions. Most tend to stick to dead questions such as, "Is this going to be on the test?" This sort of question usually implies the desire not to think at all.

We must continually remind ourselves that thinking begins within some content only when questions are generated. No questions (asked) equals no understanding (achieved). Superficial questions equal superficial understanding; unclear questions equal unclear understanding. If you sit in class in silence, your mind probably will be silent as well. When this is the case, you either will ask no questions or your questions will tend to be superficial, ill-formed, and self-serving. You should strive for a state of mind in which, even when you are outwardly quiet, you are inwardly asking questions. You should formulate questions that will lead you to productive learning.

If you want to learn deeply and independently, you should always strive to study so that what you do stimulates your thinking with questions that lead to further questions.

> The best thinkers ask live questions that lead to knowledge and further questions that lead to knowledge and yet further questions.

> Isaac Newton at age 19 drew up a list of questions under 45 headings. His goal was constantly to question the nature of matter, place, time, and motion.

6.2, 6.3 *Think for Yourself*

QUESTIONING AS YOU READ

Read a chapter in one of your textbooks specifically to generate questions. Only when you are asking questions as you read are you reading critically. After reading each section, or every few paragraphs, make a list of all the questions you have about what you are reading. Then try to answer these questions—either by looking in the textbook or by raising them in class.

QUESTIONING YOUR QUESTIONING ABILITY

At this point in your intellectual development, to what extent would you call yourself a skilled or deep questioner? That is, how would you rate the overall quality of the questions you are asking (those that you share with others and those you keep to yourself)? Do you know anyone who you would say is a deep questioner? If so, what makes you think this person questions deeply?

THREE CATEGORIES OF QUESTIONS

Before we go further in our discussion about how to question deeply, we want to introduce a useful way of categorizing questions. This way of classifying questions provides a "jumpstart" in discovering the kind of reasoning a question calls for.

The three categories of questions are:

1. Questions of fact. Questions with one right answer (Factual questions fall into this category.)

- What is the boiling point of lead?
- What is the size of this room?
- What is the differential of this equation?
- How does the hard drive on a computer operate?

2. Questions of preference. Questions with as many answers as there are different human preferences (a category in which mere subjective opinion rules). These questions ask you to express a preference.

- Which would you prefer, a vacation in the mountains or one at the seashore?
- How do you like to wear your hair?

EXHIBIT 6.1 *In approaching a question, it is useful to figure out what type it is. Is it a question with one definitive answer? Is it a question that calls for a subjective choice? Or does the question require you to consider competing answers?*

THREE KINDS OF QUESTIONS		
1 One System	**2** No System	**3** Multi-System
Requires evidence & reasoning within a system	Calls for stating a subjective preference	Requires evidence & reasoning within multiple systems
A correct answer	A subjective opinion	Better & worse answers
Knowledge	Cannot be assessed	Judgment