Touro College of Osteopathic Medicine



Middletown

REACH Program

Handout #2

Asking Questions

In previous discussions, we have placed an enormous amount of importance on active learning. In general, active learning involves students in doing things and thinking about the things they are doing, thus reinforcing knowledge. Read actively by summarizing and quizzing yourself. Listen actively by taking notes and identifying key words and phrases. And, study actively by explaining newly learned material to the rest of your study group. Let’s add one more…asking questions.

To think through or rethink anything, one must ask questions that stimulate thought and reinforce comprehension of key points. “What were the main points of this lecture topic?” “What were the clinical examples?” “Can I think of other clinical examples?” Sometimes, higher order questions will go beyond the scope of the learning objectives for a topic, or may even go beyond current knowledge in the field. This is ok, as the process of formulating these questions requires your application of knowledge and therefore, reinforces your understanding.

**Using questions to assess your understanding**

Perhaps one of the most common difficulties among students is recognizing what they don’t know, and being able to ask appropriate questions to find out how deeply they understand material. It is important that while you are studying your course material, you constantly ask yourself (and anyone you may study with) questions that will probe the depth of your understanding and help prepare you for the kind of questions you can expect on exams. In this case, **specific questions are most valuable**: they can be answered clearly, and they can help you to identify exactly what knowledge you are lacking. Inevitably, after spending time studying, you do know a lot of the material; the key to progress is not to keep repeating what you do know, but to use what you know to identify and explore what you don’t know. Any questions that you are unable to answer and explain with clarity point you to material that needs reviewing. If you can’t find the answers in the video, slides or textbooks, perhaps you can work them out, starting from the facts that you do know. If you still are struggling, ask your always helpful instructor.

**Begin** with basic questions that can assess recall of basic information. These types of question ask for literal comprehension, requiring you to define, describe, or rephrase. Your instructors assume that you know the answers to these questions very well, so you need to make sure that you do too. To phrase these questions use words like:

What

When

Where

Who

Which

How many

To use immunology as an example: after completing the B Cell Effector Function lecture, you might ask yourself, “Which antibody isotype provides protection against infection at the mucosal surface?” Basic information that you should know.

**Next**, having understood what is said, your next job is to think about the material a little more. The purpose here is to define relationships, make comparisons, and draw distinctions to begin to interpret the material.

You should be thinking in terms of the following:

Why

How

What for

What are the similarities between

What are the differences

What links … and …

Which part..

What is another example of..

Getting back to our immunology example: “How does the antibody function to provide protection at this location?” “What are the similarities/differences in the function or location of other antibody isotypes?” “How does the antibody itself make its way to the mucosal surface?” Simply the act of phrasing these questions requires some application of what you know about the topic. If you can phrase the questions and answer them clearly without having to reference your notes, that shows clear understanding.

**Finally**, you should be looking to apply what you learn, to push the boundaries of your understanding. The following question types represent higher order questions that you will see more frequently on the exams.

What if…?

How else might…?

What are the consequences of…?

How might … appear in a patient?

Is there another way…?

What if this were changed to …?

How could this be reversed?

What other factors…?

Under what other conditions…?

How does … affect …?

Using our immunology example: “What are likely to be the consequences of being IgA deficient?” “What if this were changed to an IgG deificnecy?” “What factors might be responsible for an IgA or IgG deficiency?” “How could it be reversed?”

Answers to this kind of question will deepen your understanding, strengthen your memory of basic facts, and help prepare you for exams. Sometimes you’ll be able to work out the answer, sometimes you’ll need to ask, sometimes they will take you beyond the scope of your current learning objectives. But, most importantly, they will help you identify gaps in your own knowledge, and improve your ability to reason.