When we think about teaching and what it involves, we can start by recognizing that it requires many kinds of knowledge. These understandings can be specific (such as in subject matter content) or more variable (such as knowledge of a particular group of students).

In many of our classrooms, an underlying assumption is that subject matter knowledge is the most important learning and that if content is “covered,” thinking necessarily follows. Given that content knowledge plays a prominent role in teaching, Lee Schulman (1986) generated interest in understanding the role of teachers’ knowledge of the content they teach by suggesting three kinds of content knowledge: subject matter content knowledge, pedagogical content knowledge, and curricular knowledge.

Most college professors are steeped in their subject matter content knowledge and are comfortable in a classroom responsible for content coverage. Furthermore, they feel responsible preparing the next generation and often feel burdened by the ever-increasing amounts of content.

Pedagogical content knowledge, the specialized knowledge needed for teaching the subject, is often learned through experience and can require thoughtful scrutiny of the teaching and learning cycle. Often instructors who are steeped in pedagogical content knowledge may not be able to articulate why or how they teach a subject like they do.

Knowing the materials and resources for teaching particular content, including how subject matter content is structured and sequenced in different materials, is curricular knowledge. Such understanding is needed in order to help students make connections as well as to help them fill in gaps in their knowledge.

What can we take from recognizing that instructional knowledge is multifaceted and complex? Paul (1992) suggested that teachers’ persistent reliance on covering content reflects the underlying assumption that coverage is more important than depth and that student must first learn what to think and then how to think. Yet as a professor in a classroom, you have lots of ways to think about their learning and to go beyond content coverage.

One way to move away from the need to teach by covering content is to question your assumptions about your students, the content, and what to teach. Here are some sample questions to get you thinking:

- What do students struggle with and how do I help them?
- What do they understand? What do they not understand?
- When do they ask questions?
- What do they already know?
- What is the nature of their questions?
• What are their misconceptions?
• What engages them?
• How often do I check for understanding? Is it enough?
• Are they thinking? What are they thinking about?

When you think about your class holistically, you recognize that your understanding of content knowledge seeps into all aspects of the teaching and learning process. By being reflective, you may find yourself released somewhat from the pressure to get through the content and instead focus on what students need to be able to know and do at the end of instruction.

What if…? If you would like to think more about teaching and coverage? Why not read about how this issue has been addressed in a course? Using a history example, authors Sipress and Voelker, critique a history survey course and the coverage dilemma. The article can be found at: http://jah.oxfordjournals.org/content/97/4/1050.full

If you use instructional methods such as active learning or problem-based learning, you will not cover as much content. In a study of medical students, content coverage was achieved as effectively through problem-based learning rather than through lectures (Shahabudin, 1987). Furthermore, the content covered through problems is relevant to the learners. Keep in mind that any active learning technique that engage a student will slow down class time, but there is ample evidence that active learning increases academic achievement.

When we concentrate on covering content, we sacrifice depth. The lack of content depth can have negative impacts of students. For example, a study using 8310 undergraduate students, found that students who reported covering at least 1 major topic in depth, for a month or longer, in high school earned higher grades in college science than did students who reported no coverage in depth (Schwartz, et al., 2009).

Think of active learning this way – teach less and have students learn more.

References:

