Workshop Reflection

I attended the excellent workshop titled "Engaging Students with Effective Questioning" led by Barbie Windom on October, 26th, 2007 in the FCTL conference room. There were over 20 people present and nearly all seats were filled! The workshop was very well done with a good mix of audience participation and lecture/demonstrations by Barbie. She showed us several video examples of effective questioning and effective tutoring throughout the course of the hour. The workshop attendees were invited to share their experiences and were, of course, given the opportunity to answer effective questions on effective questioning. Barbie summarized the session with some precise, practical takeaways for effective questioning.

I learned many things during the course of this workshop, mostly through Barbie's own effective questioning. She asked us questions about questioning, which led us to discover the reasons that we ask questions, what the intent of asking a question is, and other fundamental ideas that might otherwise have been overlooked or taken for granted. Indeed, understanding questioning is at the heart of been effective at it. I learned several specific techniques that were interesting, such as using open-ended questions more often than closed-ended questions, asking students to verbalize the sources of confusion one-on-one, and allowing adequate wait time for a response.

One of the most interesting points for me, personally, was the interleaving of Bloom's taxonomy with techniques for effective questioning. Barbie passed out a closed-ended questions will tend toward the lower levels of Bloom's taxonomy, while open-ended questions will tend toward the higher levels (this is, of course, subject to presentation). The incorporation of Bloom's taxonomy revealed an interesting strategy for what to do when students are stuck and cannot answer a question. A student's inability to answer is a common problem, but simply telling them the answer rarely improves actual learning of the material. One method to deal with an unanswered question is to step *down* Bloom's taxonomy and ask a related question. For example, if a student cannot answer, "What does this equation look like when you apply Reverse Polish Notation to it?" step the question down to a comprehension question such as "Can you summarize what Reverse Polish Notation looks like?" If the student still can't answer, lead them into memory or recall questions like "What is an operator and what is an operand? What order do they appear in Reverse Polish Notation?" Stepping the question down Bloom's taxonomy in this fashion has at least two major benefits in my view: 1) by eventually answering a related question, they create another building block to stepping to a higher level of knowledge, 2) it reminds the student of what they already know, which can give them confidence even if they do not know the initial answer.

I learned many things in the course of this workshop. Questioning is a powerful tool in learning, but one that should be applied effectively. Effective questioning, in my mind, serves a two-fold purpose: 1) to help students learn material and 2) to give them confidence in what they already know. Both are equally important. Enjoying learning and learning achievement is as or more important as the material

itself. I am very thankful to have into every teaching and learning of	and will certainly carry	over what I learned