# Lander University's

# White Board

## Become An Effective Teacher & Save Your Valuable Teaching Time and Energy

# Facilitating Effective Classroom Discussion, the Devil is in the Details

I HAVE BEEN KNOWN to berate the quality of classroom discussions—student-teacher exchanges that occur in the presence of mostly uninvolved others. Perhaps instead of berating I ought to be trying to help faculty improve how they lead discussions, and that has gotten me thinking about all the details discussion leaders must keep track of and make decisions about — all on the fly. Leading discussions effectively is not an easy task for any of us. Even those who make it look easy have actually worked very hard to hone this important skill.

Consider what needs to be decided after each student comment:

- Is the point being made clear and coherent? If not, what follow-up question needs to be asked?
- Is the answer or comment relevant? Does it answer the question? Is it on the topic currently under discussion? What needs to be done, if it's not?
- Should you respond? Invite someone else to respond? Not respond and solicit more comments? If you respond, what and how much should you say?
- Can the student's comment be linked to what another student said, to something you've said, to something in the text? Who should make that link?
- Would a follow-up question deepen the answer, sharpen its focus, encourage others to comment? If so, what is that question?

As the discussion unfolds, here's some of what needs to be monitored and kept in mind:

- Who's speaking and how often?
- Who gets called on when there are a lot of volunteers? What about when there aren't any volunteers?
- What's the level of attentiveness within the class collectively and individually? Who's clearly not paying attention?

- What are they doing and does that need to be addressed?
- Is the discussion losing steam? If so, how might it be re-energized?
- Is the exchange becoming heated? Are emotions running too high? Does the atmosphere feel tense and threatening? If so, what should be done about it?
- Is it time for a summary? Do the main points need to be sorted out of the morass?
- Where did the discussion start, where is it now and where does it still need to go?
- Has there been enough discussion of this particular point or on this topic in general?

That's a lot to keep track of at the same time you're processing content. You might need to summon information to answer a question, come up with an example, or point out other relevant material. When we facilitate discussion, most of the focus is on the content. All of these discussion details are at the periphery of our awareness.

How then do we develop our discussion leadership skills? Let me suggest three ways, each involving one thing: awareness. First, we need to be aware of what discussion involves. Now that I think about it, I don't think I ever made a list like the one above — and that's just a portion of what facilitators must consider to keep the discussion flowing. Next, we need to observe how we facilitate a discussion (or several of them). The idea is to stand alongside and observe, to pay attention to things like the details listed above. Yes, the content still needs our attention, but at the same time we need to become aware of how we "do" discussion. Finally, we need to reflect on discussion after the fact. We need to recall the details and use them to develop an accurate account of what happened during a particular discussion that then becomes part of our larger understanding of how we lead and guide discussion.

Building discussion skills begins with awareness—awareness of what's involved, awareness of our skills, and awareness of what actually happens during discussion. The individual strategies used in discussion aren't all that difficult. There are lots of things you can do when a student makes a point that isn't relevant. There are many ways to respond when a comment isn't very good. If you consider the options, become aware of how you usually respond, then you can try something different the next time. What's complicated as the dickens is how many individual responses are needed to ensure a productive discussion and how all of those things must be selected and delivered without the benefit of time to carefully think about any of them.

*Maryellen Weimer, PhD in Teaching Professor Blog; Faculty Focus; April 10, 2013; [ http://www.facultyfocus.com/articles/teaching-professor-blog/facilitating-effective-classroom-discussion-the-devil-is-in-the-details/ ], April 25, 2013.*

## Summer 1 Term Begins - May 12

# Promoting Frequent Testing and Self-testing as Best Practices for Student Learning

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WHAT IS THE purpose of testing students? Historically, most teachers would have answered that the purpose of giving tests is to measure how much of the information presented in the class students have learned. However, a growing body of pedagogical research on a phenomenon known as the testing-effect is calling this answer into question. The testing effect refers to a robust finding that emerged across numerous studies, multiple contexts, and diverse subject matter, in which frequent testing of previously studied information improves retention compared to spending the same amount of time restudying that information (Carpenter, 2012; McDaniel, Anderson, Derbish, & Morrisette, 2007; Roediger & Karpicke, 2006). Based on this mounting evidence it is now clear that testing does not simply measure what a student already knows but rather it actually improves what they know.

In a seminal study on the testing effect, conducted in a laboratory setting by Roediger and Karpicke (2006), all participants read a short article. Next, the participants either reread the article a second time (for five minutes) or tried to recall the contents of the article (for five minutes). A final free recall test was then given two days or one week later. At both testing intervals, participants who had been previously tested on the material performed significantly better than those who had only reread the material. McDaniel, Anderson, Derbish, and Morrisette (2007) demonstrated the testing effect in an actual classroom setting. Students in a psychology course showed greater retention on unit exams for information on which they had been previously tested during weekly internet quizzes compared to information they had restudied for the same amount of time. These findings indicate that instructors can facilitate students' mastery of class material by incorporating more testing into their course. This advice might be met with resistance from both faculty and students because it runs counter to a well-established and mutually agreeable tradition in which many college instructors give only a few exams that they do not want to grade and students do not want to take. This resistance might be overcome by focusing on testing as a necessary means of improving student learning.

The testing effect has implications not only for how instructors should design the number of assessments in their course but also for how students should prepare for exams. How many times have you encountered a student who complained that he/she studied so hard for a test but still made a poor grade? Rather than dismissing the comment as an attack on the validity of your test or as evidence of either the student's dishonesty or intellectual deficiency, we would encourage instructors to use such encounters as a teachable moment to talk about how students should study.

Unfortunately, there seems to be a discrepancy between students' practices and beliefs regarding how to study effectively and the empirical research on memory. In a recent review of dozens of studies on the effectives of various study techniques, Dunlosky, Rawson, March, Nathan, and Willingham (2013) reported a preponderance of evidence that highlighting and rereading are ineffective, whereas self-testing is highly effective. These authors further noted that the ineffective techniques tend to be popular and frequently utilized by students whereas the effective ones were not frequently employed. For example, in one survey, Karpicke, Butler, and Roediger (2009) found that students reported more often using a rereading approach to studying than a self-testing approach. Further, these authors found that when given a choice between rereading and self-testing, students chose rereading as their preferred way to prepare for an exam. The question then becomes, if we know what the most effective study techniques are and we know students are opting not to use them in favor of less effective techniques, how do we get students to change the way they study?

Demonstrating the power of the testing effect may be one way to get students to change their study habits to incorporate more self-testing. Einstein, Muller, and Harrison (2012) replicated the classic Roediger and Karpicke (2006) testing effect study using students in their memory and cognition course as participants. They showed the students that their peers who had read and tested themselves on a passage remembered more of the information on a surprise quiz one week later than did those who read and reread the same passage. As a result of receiving this information, students indicated that they would be more likely to use self-testing in their own future studying.

We observed a similar phenomenon among psychology students here at Lander University (Klein & Bassett, 2013). Students completed a questionnaire measuring their beliefs about the effectiveness of self-testing versus other study habits before and after a classroom memory demonstration showing the superiority of self-testing over rereading. There was a significant change in students' beliefs. Only 42% of students initially endorsed self-testing as the most effective way of studying. Following the demonstration, the number of students making that endorsement jumped to 69%. A comparable effect was observed just by showing students a 5-min video developed by noted psychology textbook author David Myers that described the value of self-testing as a studying strategy ( http://www.youtube.com/watch?v=rFIK5gutHKM ). Before watching the video, only 27% of students selected self-testing as the optimal study method but after watching the video this number increased to 73%.

In conclusion, it seems that instructors can improve student learning by incorporating more frequent testing into their courses and by educating their students about the power of self-testing as an optimal study method.

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