Science and Math Brown Bag Lunch

Nov. 12, 2014

Present: Bridget Gourley, Mary Kertzman, Jim Mills, Jeane Pope, Pam Propsom, Jackie Roberts, Michael Roberts, Dan Rusu

We talked about students’ concerns regarding diversity and campus climate for a while.

We discussed the *Science* article about Peer Instruction (PI)/Think-Pair-Share approaches. One person mentioned some frustration that even after doing this students still don’t seem to retain the information. Another person mentioned that one thing she likes about PI is that when she hears the students talk, it reveals to her students’ thinking processes and what their misunderstandings are. It also forces students to participate more in class and be accountable.

One person who is using the ABCD cards this semester said it’s been a real success in class; students seem to be doing better. Another who’s using them for the first time indicated that she has not seen a dramatic improvement in student performance, but she’s willing to attribute this to not implementing the approach as effectively as she could, given that it’s the first time. At the least no one is sleeping in class.

One person who’s using the ABCD cards has found that it has the potential to backfire when the room is shaped such that students can see each others’ cards (their responses are not anonymous). He has a student of color who consistently got questions wrong, which might single them out and suggest to others that they’re not as bright. Some students also need more time to read and think than others. On the other hand, it can alert the instructor to someone who has severe misunderstandings about content so they can seek them out for additional instruction/help.

Someone shared that before exams she shares all the ABCD questions used in class with students, but without the answers, so students can use them for review and aren’t scrambling just to copy questions in class.

Another person shared that she’s not using ABCD cards as much, but doing more worksheets.

Using quizzes every day in class is good practice for students (forcing them to keep up on reading and studying/retrieving material), but do we have to wean them off of this at some point? Make them more responsible for actively doing this on their own? Maybe it has to do with the level or the course; more support in Intro but less in upper-level courses.

Discussion about trade-off between using more active-learning and loss of coverage. We talked about how just because a topic is “covered” doesn’t mean that students are actually learning everything they’re exposed to. Jackie shared a summary of an article she read about a revision to a General Chemistry course, paring it down, and finding that it doesn’t hurt the students in terms of how they perform on the ACS test. Often times disciplines expect certain knowledge attained from one level of course before they move on to the next level, which is an issue of coverage.

Issue of whether we have majors or non-majors courses. Who are we teaching to in an Intro course?