

Especially for High School Teachers

by Erica K. Jacobsen



Take the First Step

The first step is often the most daunting. It could be the first step into anything—a new relationship, a new job, a new project, even taking a bite of an unknown, exotic dish. While teaching, it fell to me to design and teach my high school's initial foray into Advanced Placement Chemistry. The first step into that was a doozy! Before I began selecting my own curriculum, I wanted to know what others had done in a similar situation. How had this group structured their labs? How had that group dealt with preparation for the AP test? I attended an in-depth workshop for new and continuing AP Chemistry teachers, and picked their brains. If they could do it all over again, what might they change? What would they leave the same? This information helped me feel more confident when I took the first step in creating my own curriculum.

Another daunting first step for me? Putting the first words down on this page. Even after penning more than twenty “Especially” columns, it's hard to start each new one. I can always find any number of trivial jobs I'd rather do. Writing is a project where people often dread taking the first step. This holds many teachers back from submitting an article to a professional journal about an idea in their curricula. A blank page is tough to face. You may feel you can't write. You may feel your idea just isn't good enough for sharing. You may feel that the article won't come out perfect, so why start at all? To banish these fears, I often find it a comfort to examine other writings. What has someone else shared? What direction does their writing take? How does my idea relate? What is the twist I've added?

This month's issue provides plenty of inspiration. A string (pun intended) of Tested Demonstrations begins with Davis's (p 1287) description of how he uses a guitar in class to demonstrate a standing wave. He then extends the idea to an analogy of “boundary conditions inherent in atoms”. The beginning of his article states “Most general chemistry textbooks make use of guitar and violin strings as familiar examples of one-dimensional standing waves”, and includes several citations. He took the idea and put his own stamp on it. The title of the demonstration by Najdoski et al. (p 1292) “Mercury Beating Heart: Modifications to the Classical Demonstration” says it all. They modified a classic demonstration and share their variations here. Mattson (p 1296) provides a microscale version of a well-known, oft-photographed demonstration showing “liquid oxygen suspended between the poles of a large magnet”.

Where could you start your own submission? Try the *JCE* Classroom Activity series. Activities are often based on classic experiments. You'll find a new Activity (p 1312A) in this issue, along with an accompanying article by Wahab (p 1308). Beginning this month, Activities will appear during



Secondary School Featured Articles

- ▲ *JCE* Classroom Activity: #91. Fluorescent Fun: Using a Homemade Fluorometer by M. Farooq Wahab, p 1312A.
- ▲ Fluorescence Spectroscopy in a Shoebox by M. Farooq Wahab, p 1308.

the even-numbered months year-round. Odd-numbered months during the school year will feature a new column on how readers use Activities in their classrooms. Why not reread one of your favorite Activities, and note where you've extended the ideas, or improved the procedure, or integrated it with your existing curriculum? Then submit your ideas to me at jacobsen@chem.wisc.edu. Watch for the first column next month.

If you need another kick-start, please join us at our ChemEd 2007 workshop “Publishing Your Chemical Education Ideas: What, How, When, Where, Why?” on Monday, July 30, at 10 a.m. We'll have tips to get you going, and plenty of encouragement on tap.

Daunting or not, take the first step! Write away.

Laura's Take on the Issue

This fall the ACS National Meeting is being held in Boston, my favorite “big city”, and this issue contains lots of information about that meeting. Not only will you find program information (p 1249); Hoffman and Lichter (p 1260) provide a plethora of useful information about the city itself. The afternoon session of High School Day, Sunday, August 19, also includes a presentation on “Ready-to-use Resources from the *Journal of Chemical Education*”. Though school will already have begun for many of us, it is a great opportunity to be reminded about all the valuable resources that are readily available to us.

I will be incorporating more inquiry, especially guided-inquiry, into my students' laboratory time this year. I found the information about the use of the Science Writing Heuristic (SWH) in Pooock, et al. (p 1371) quite helpful to me as I began to revamp the writing part of my course. Though his article focuses on using SWH in the college laboratory setting, there are numerous parts of this article that directly apply to the high school classroom. Roecker's (p 1380) description on how he includes scientific literature in his course and the improvement that he has seen in his students' writing skills also made me reconsider how I use various journal articles in my classroom.

I know there are lots of you who also use various types of scientific literature in your classroom. Like Erica, I encourage you to consider starting with those as another avenue to share your ideas and write for the *Journal*.