

# A Collection of gifts



Issue 19, Fall 2019

## Great Ideas For Teaching

### 19.4 Engaging Students on the First Day

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Before students walk into the classroom on the first day, they may have already formed an opinion about the course. Chemistry is one of those courses that everyone has heard something about, and often that something can be reduced to one word: HARD. Chemistry can be a tough subject, but it is even tougher if students don't believe there is anything of interest for them to learn. The typical mindset of the non-major science student is that chemistry is a foreign language, impossible to understand and with nothing to offer them. The only reason they are taking the class is because it is required. If they continue to have this mindset, the class will end up being just what they expect, but if I can help them see that the material has merit and is important in their lives, then the result can be much different.

In my class, on the first day, even before we go over the syllabus, everyone introduces themselves, including their name, major and the one thing they have heard or that most worries them about the course. By doing this first, the students begin to develop a sense of community; they see that they are not the only ones thinking the same thing. Next, I pass out index cards and the students write one question they have wondered about that they think may be answered through science/chemistry. Questions include "What are GMOs?" "Why don't oil and water mix?" "How does aspirin work?" and

"Are all chemicals bad for you?" I collect the cards, put them in a bag, and ask a student to pick one. I read the question out loud and give the students the opportunity to answer or come up with what they have heard about the subject. Then I fill in the gaps. After I answer the question, I try to link the question and answer to a topic from our textbook and write the subject and chapter down on the board. Sometimes there are questions that I can't fully answer, and when that happens we do some research together, using the textbook and smartphones to find the answer. After 5-10 questions, the board is usually full and the students are beginning to realize that chemistry does have something to offer them and might even be interesting! We usually don't get through all of the questions in one class period, but I bring the bag with me to every lecture and try to answer another question at least once a week.

This exercise doesn't necessarily change their opinion that the course will be hard, but now they also think it will be interesting and add value to their lives, thus opening the door to learning the subject and, as a side benefit, making for a much more enjoyable semester.

