

Clicker Case Study: General Chemistry 1 – Fall 2007

Dr. Jerry Mundell

by Rowen Garcia, Director, Academic Development and Services

One of the benefits of using Clickers in the classroom is to get immediate feedback of the students' understanding of the subject matter. Outcomes of the polling can suggest that the class has not fully understood the topic, therefore, a review is in order. Or, it can give the green signal to move ahead to the next topic.

Dr. Jerry Mundell has taken this a step further. At the start of each consecutive lecture, he polls students using very similar questions -- almost identical with a little twist. He then captures and publishes the outcomes of the polling along with notations intended to help the students analyze the questions and answers better. He provides the students with reasons behind the incorrect answers and provides them with helpful study tips. Students have found this feedback beneficial. It reinforces their understanding of the subject matter and helps them walk thru the answers to the questions.

As to be expected, Dr. Mundell observed that the results from the second polling showed an increased number of correct answers (see Fig. 1 and 2). Surprisingly though, one of the questions had a decline in correct answers (see Fig. 3 and 4). What does this suggest? Were the questions that far different from each other that the students didn't make the correlation? Did the students understand the question? Were the students guessing their answers? Not sure at this point why the percentage of correct responses declined.

Overall, Dr. Mundell believes that using clickers has helped him and students be on the same page during lectures. By publishing the polling results with notations, he is able to help the students better understand the topic at hand and aid in their overall learning.

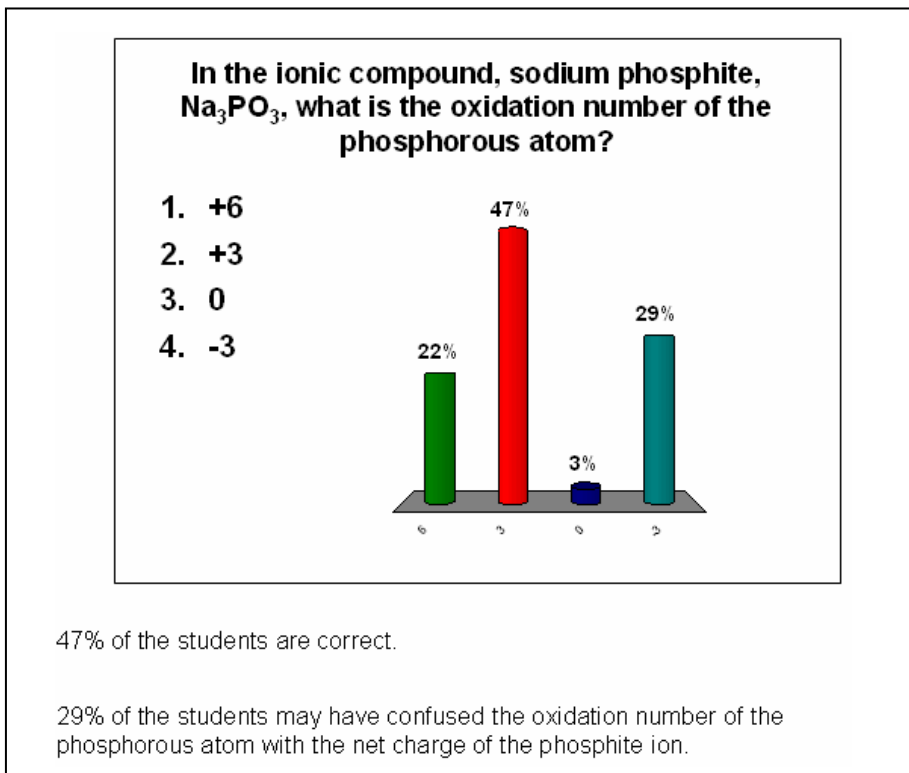


Figure 1. Question 1: Polled October 22, 2007 – 47% answered correctly

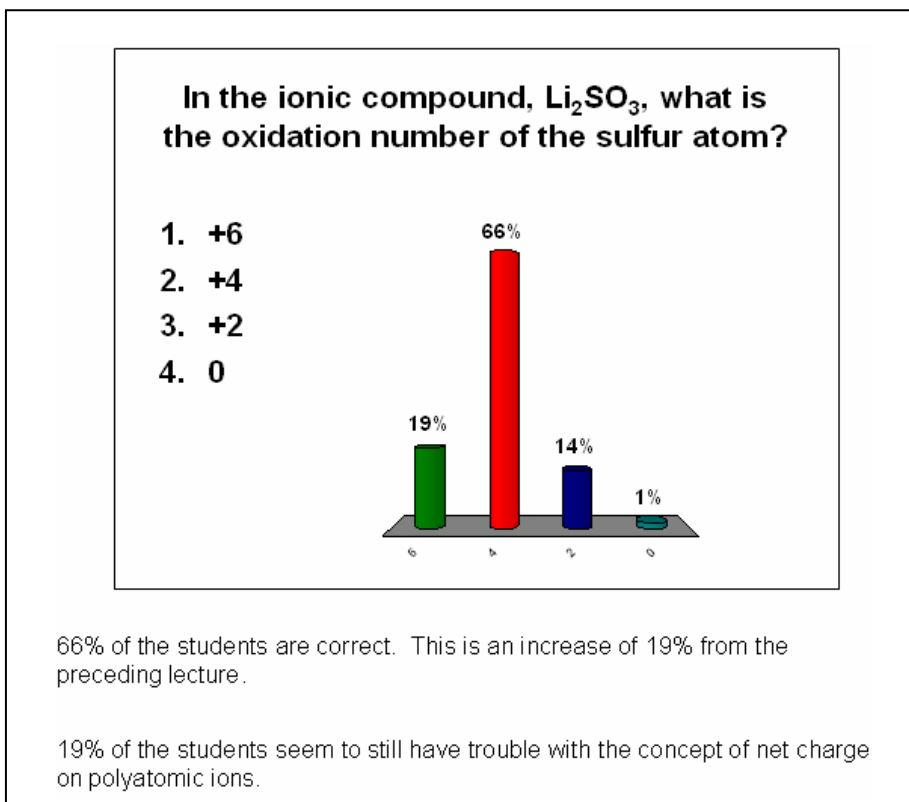


Figure 2. Question 1: Polled October 24, 2007 – 66% answered correctly

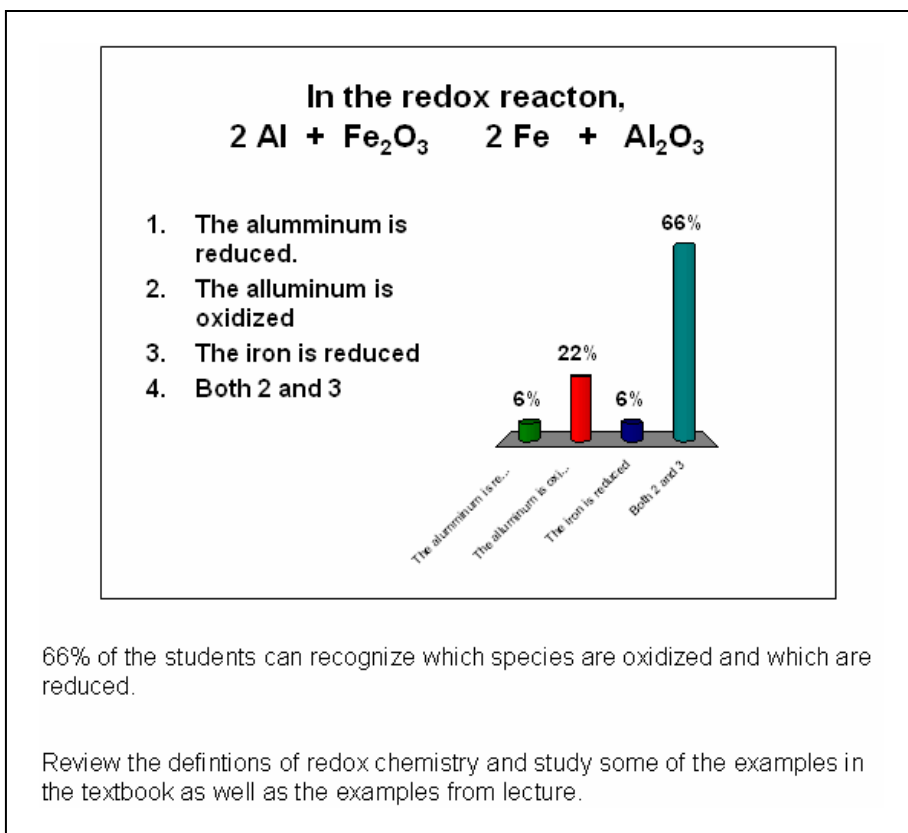


Figure 3. Question 3: Polled October 22, 2007 – 66% answered correctly

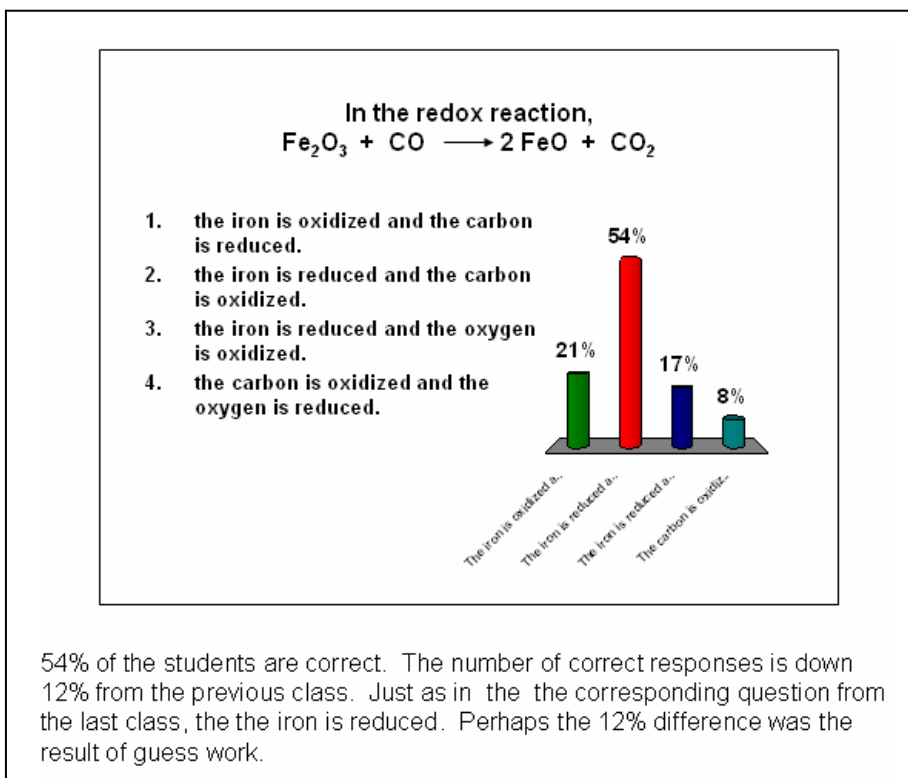


Figure 4. Question 3: Polled October 24, 2007 – 54% answered correctly