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This article discusses the effectiveness of concept mapping and visualization in a Chemistry classroom. The researchers took these two strategies and imposed them on their test subjects and observed its impact via pre and post tests of the concepts. Students of the same grade level and science level were picked at random and arranged in groups assigned by the researchers. Under the same lesson plan, type of instruction, and amount of time, each group of students studied electrochemistry. The only difference between each group depended on what experimental technique they were assigned, working with concept mapping, or visualization, or a combination of both, or a control group that does not use any of the two strategies. Statistics were calculated by comparing the students’ results of all pre-tests and post-tests. At the end of the test, researchers saw that visualizations had a positive impact in the students learning. On the other hand, they did not see any significant impact with the use of concept maps in the instruction.

This study is very strong with how it was conducted. The organization of how the classes were taught shows consistency in the different groups. The researchers tried to control the tests by providing their own instructors. This study has a lot of potential to be studied in the future. One of the errors recognized in the test was the students’ inadequate understanding of concept mapping. This affects the outcome of the tests because students are not familiar with a new technique. How can a new technique be used to determine how students learn a new concept? Students need time and practice with a new strategy in order to be effective. Students are figuring out how the strategy works and how they can fit in their learning style. The other change I would do to this test would be the amount of groups. The test had 10 groups total, but there was an imbalance with the divisions of the groups. There would be more consistency if the researchers chose the same amount of control groups, visualization group, concept mapping
group and a combination of both. Researchers should continue to study these strategies, for more than one topic. It would be nice to see how a group of students use these strategies throughout a year and see their test results.

As a teacher, I understand that students have different learning styles. I use a variety of ways to get my students involved and interacting with the concepts. In my class, you can observe the students use graphic organizers and different strategies at different times of the unit. I use it to provide the students another way to interpret the content and a way for me to observe their understanding. I picked this article because I want to see the effectiveness of one of the strategies I use in my classroom. I was disappointed to see that it was not as effective in the tests conducted in this research. I truly believe that concept mapping is a strategy that students need to fully understand. It needs to be practiced several times until students use the strategy properly. Many of my students use concept mapping on their own when they are reviewing the chapter. Students show interest in this strategy because they get to see the bigger picture and the connections made.