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As I had predicted, very few students were able to successfully complete and demonstrate understanding of this assignment. To me, this is valuable data, as if will help to inform how this (or related scaffold) assignment(s) are formulated and presented.

While final products had good outcomes for visualization and analysis, initial attempts would have received 1 or 2 scores.

Using Excel to do the arithmetic cuts down on errors and allows students to focus on higher order things like interpretation and implications.

My students did very well with Problem Formulation and Visualizations, however, they performed consistently lower on Implications and Interpretations, which I thought was interesting. -

Students seem to be proficient at interpreting experimental results from a single experiment, but have a hard time putting the experiment into the context of a larger study, and even more trouble

the most important reasons why we conduct research, but students usually do not see the connections or fail to provide valuable information at the end of the project.)

My assignment was intended to be 'hands on'; instead students watched a video of the experiment; however, this did not seem to affect their ability to do the visualization or analysis; possibly lower outcome for interpretation than if they had done the experiment themselves - One student wrote "I know these graphs should have axis titles, etc., but I'm working on an ipad and don't know how to make them", so hard to assess -

The impact of COVID-19 was huge to this assignment. This was a simulated 'drylab' version of what we would have done in lab, consisting of cobbled together youtube videos of the methods, and extra lecture time being spent on the chemistry that would have happened had there been no pandemic. Overall, I'm impressed that they appeared to understand as much as they did, despite the lack of lab practice, but I know that critical objectives of this assignment could not be met in a drylab setting.

It might be useful to have a place to make a comment or two about the assignment as a whole, rather than just about the student work.

I mentioned, the overall project and rubric forced me to think more creatively about a summative assessment for my students. So, that was fun.

I think most of the students made a good attempt at this project which was a little demanding. A lot of them were taking quite a few units in order to graduate and that may have affected their performances.