

What does one think of when accepted into a program such as a RET? Personally, having had experience doing research first hand, my goal going into the RET program was to pull and glean information from other current teachers. Being I was about to embark on my first year of teaching, I had little experience upon which to draw in order to implement ideas into the classroom. Therefore, the hope for this program was to build meaningful connections with other teachers and build a base for how to successfully and meaningfully apply content to the classroom.

Before looking at the outcome, it is useful to consider part of the research project that was being studied. The Xue Han research lab was studying a part of science called optogenetics that involves studying biological phenomena using light and genetics. In particular, the group was taking a special light receiving gene from algae and inserting it into the brains of mice in order to use light to control whether or not the neurons fire off. The hope for researching this area in science is that it will lead to a better understanding of the brain without causing damage to the brain itself.

Where these expectations met? The best way to decide this is to look at the evidence. Having gone through this program, nine more people were added as a network of science teachers. Another part of the program that has been beneficial in the classroom was the pedagogy sessions that have manifested themselves in the classroom as lessons where there is problem based learning. These situations have been leading students to apply the problem solving process to solve problems where students have real life questions that are related to physics, but that they may actually be asked to one day in the future. Another aspect that these RET pedagogy sessions introduced was to utilize the web and it's resources for the students.

I have been able to draw upon my experiences of resourcefulness, hard work, and curiosity from the research lab by conveying to the students the ideas of current research, group work, and assignments. My students are not allowed to just look at their class work as an entity in and of itself but as a piece of the puzzle of science as a whole. In conclusion, was this program what I expected? Based off of all the newfound resources, connections, and implementations, this program turned out to be more than was expected when walking in on the first day. This program offered pedagogy, research, and life skills that not only help one as a person, but can carry over to the classroom.