

Year 3 is the year of struggle when every decision you make might impact your future. Like many of my classmates, I struggled whether to take up a huge challenge, the Final Year Project (FYP), which my seniors had always told me not to do so because there wouldn't be any benefits in return for the hard-work.

I chose not to listen to their kind opinions, and went for the FYP. Frankly, I had no idea what Science was at that time; I knew nothing about genetics or bacteria because I forgot all the things after the exams were over. So when I received the document listing the FYP topics available, I struggled for quite a while. I thought, at that time, if I were to take up a FYP, I would have a very low grade because I knew nothing about the topic. Nevertheless, I believe in experiential learning, learning through experience, acquiring knowledge through hand-on experience. Even though I might have a low grade, I would have learned something that I would never forget in my life because I would be doing research in that field around the clock, for a year's time. Because of that, I decided to have a go.

My FYP was about a group of bacteria, called Roseobacter. Some members of this group exhibit rosette-like aggregates, therefore, are they so-named. Roseobacter live ubiquitously in the ocean across the globe. Scientists, however, have long failed to cultivate them in the laboratory. Successful cultivation of a group of bacteria means a lot to biologists because we can only yield meaningful data or extract useful chemicals if we succeed to grow them on agar plates. Therefore, my task was to find the appropriate growth formula for Roseobacter, successfully getting a pure strain of them in the laboratory.

The process was mundane and tedious in fact, and not as interesting or amazing as one might imagine. Lab work involves a series of repeated work, such as test-tube washing, agar plate-making, PCR and report writing. There might not be so many stunning discoveries every day. However, there were still much precious and blissful memory, such as having field studies and observing colorful bacterial colonies. What means more to me is that I have learned a lot of generic skills, a.k.a. transferrable skills. Time management is at the top priority. As I just mentioned, lab work involves lots of tedious, repetitive work, yet they are extremely important. Some of them are time-consuming, and I had to plan my schedule so that I could finish the project on time.

Speaking of which, mentality is also essential. Being meticulous is the foundation of a successful experiment. I learned not to neglect the importance of every small step in each experiment, such as washing test-tubes, weighing chemicals, keeping the laboratory clean and writing lab log. If one makes mistakes in one of these small steps, he/she will be unlikely to get some good results. These qualities are not useful only in Science, but also applicable to other walks of life; scientific way of thinking is appreciated in different disciplines and industries.

To sum up, if you are students choosing amongst the FYP or literature review, I will encourage you to go for the FYP because the training will turn you to become a stronger, meticulous, clear-minded, and logical person. More importantly, don't use weigh your choices only by grade, but to choose something that can truly make you be a better person.

