

I am interested in investigating the science behind learning, and how this applies to today's school system, in my inquiry this year. I chose this because I am currently choosing between two paths in college, either majoring in cognitive science and continuing research like this or in English and becoming an English teacher. I'm testing both out, one through my TA position and the other through this class. As you know, 21st Century Learning is really exciting to me, and I believe the next step to igniting this change is to back our claims with evidence. I want to get three main things out of my inquiry:

1. An understanding of the science behind learning: I want to investigate how students learn, the science behind memory and retention, and the general cognitive development of students of high school age.
2. An understanding of curriculum and standards in public schools: I am doing a bit of this in my TA block, but I want to understand what standards or expectations schools across the nation are expected to align to.
3. An inquiry into possible changes: I want to look into how forward-thinking schools have developed new practices, and how these changes affected their student's learning "success". Here I would also propose new changes backed by my knowledge from #1 and #2.

I believe this inquiry aligns most closely with the Solution Seeker and Global Citizen competencies, which is interesting because I've never worked with either of these in the PoL workshops I've done. I will be building my skills as a Solution Seeker by investigating possible solutions to an outdated education system, while reflecting on the changes already made by those around me. I will also be improving my abilities as a global citizen by investigating learning styles and experiences different from my own.

This inquiry will require collaboration with schools as well as professionals in the cognitive science field. I have talk to my advisor, Ms. Neives, who said she would serve as the advisor for my science credit. She is friends with the teacher who used to teach neuroscience at Nipmuc, and told me she would connect with her for any questions regarding that portion of my inquiry. I have also talked to Mrs. Henry about applying what I learn in this class to my lesson plans as her TA. In regards to connections with schools, I not only have the ability to work with Nipmuc administration, but I also shadowed Hopkinton's principal as a sophomore. They are doing some innovative work within their school as well, so I would be excited to reach back out to them while compiling my evidence.

Breaking down my inquiry into the three steps above makes it easy to develop a timeline. I plan to spend the first and second term completing focuses #1 and #2, and the third and fourth working on focus #3. I have found many (free) online courses that would provide me with a general understanding of psychology and neuroscience, so my first goal would be to find and complete a few of those. My goal is to create a specific portion of my website dedicated to the science behind learning, which is where I will keep track of this learning. There would be another section dedicated to education standards in today's classroom, and a third that focuses on proposed/observed changes. In addition to my website, I plan to use my podcast to share my findings with others.