Julia Hasson

Oxford Scholars

Mr. Rutherford, Mr. Scharfen

7 April 2016

My Journey Through Education

As we rapidly approach the finale of senior year, the question dawns in many of our minds: How did we end up here? We each have had a unique personal experience with education, starting with our development as toddlers and continuing through our high school learning. We had no guide book on how to navigate the extensive journey of education, but some combination of factors seemed to distinguish our scholastic paths. The elements that branch a student onto a path of high academic achievement are not exactly black and white, but looking back I can see the major influences that helped define me as a student and as a person.

"You seem to have inherited the family math genes," my dad would say to me. He was often buried in an old calculus textbook, his continued fascination for math fueling his eagerness to help with his kids' homework at any hour. I wondered if "math genes" could be real, or if intelligence was an inheritable trait at all. According to a study published in the Journal of Neuroscience Feb. 18, UCLA neurology professor Paul Thompson concluded that intelligence is strongly linked to heritable traits of neurons in the brain. He writes, "Genes appear to influence intelligence by determining how well nerve axons are encased in myelin — the fatty sheath of "insulation" that coats our axons and allows for fast signaling bursts in our brains." An aspect of how I would fair throughout my education was determined before I was even born, so I guess I do have my parents to thank for what my dad called our family "math genes." But I know that there is far more to it than that. There are countless times I've heard someone say, "He's smart,

but he just doesn't apply himself," about a student with a high IQ but a low GPA. There have been nights at 1:00 am where I've looked down at my stacks of paper and wondered why I've always felt the need to finish my homework or why it was my nature to choose a rigorous course load in the first place. Perhaps this was instilled in me through the unspoken expectations of my family, or the impressive examples set by my two older siblings. Either way, the little sacrifices would build over time and become continued motivation to not give up just yet.

Underlying the development of our knowledge through education exists a level of growth that is equally important: the development of self-confidence in our intellectual abilities. In my experience, I noticed that girls tended to shy away from expressing confidence in their knowledge when compared to boys. This gap in behavior became particularly evident to me this year in taking AP Calculus BC, where I was one of the two girls in a class of nine total students. Whether the overwhelming ratio of male to female students who had made it to this math course in high school was a coincidence, I am not sure. But I never quite understood why women often tended to state their findings with a tone of softness and even uncertainty. I would catch myself exercising these habits, while the boys asserted their ideas with such conviction in the open environment of AP Calc BC. Dr. Heidi Grant Halvorson describes in her *Psychology Today* article "The Trouble With Bright Girls," an explanation as to why girls easily lose confidence in their intellect when compared to boys. The article examines a comparative study of 5th grade girls and boys. It was shown that, "At the 5th grade level, girls routinely outperform boys in every subject, including math and science." The findings concluded that failures were interpreted differently between boys and girls, and this had a great impact on the students' confidences. "Bright girls were much quicker to doubt their ability, to lose confidence, and to become less effective learners as a result." Further research was shown by the article to explain why the

difference in outlooks was occurring. Since girls typically develop self control at a younger age and are better able to follow instructions, they are often praised for success by being told they are "smart" or "a good student." These compliments instill the idea that intelligence is innate and is either present or absent in each girl. Boys, on the other hand, are more difficult to control at a young age, and are often told things like, "if you try to sit down and pay close attention, you can learn this concept." This conditioning, in contrast, instills the idea that "smartness" is gained by practice and is achievable through effort. This research proposes that later in life, the boys and girls subconsciously carry these beliefs, and girls are more likely to be discouraged from failure, for they see this as a sign that they are just not smart enough, while boys see failure as a challenge that can be overcome through effort. Recognizing these habits within myself helped me to develop my confidence as a woman in a male-dominated classroom. This ability will equip me to exude strength in any environment I am faced with.

I feel confident and ready for taking the next step of my educational journey into college. I am still weighing my options and have yet to make a final decision on which college I will attend. I am particularly interested in UCSB and UCLA. Although the end of my schooling will eventually come, my curiosity and search for knowledge will never cease, because I have been inspired with a love of learning that will last forever.