

Essay Example and Analysis from 50 Successful IVY League Application Essays by Gen and Kelly Tanabe

“Always Been a Math-Science Girl” (anonymous admissions essay to MIT)

I have always been a math-science girl. I sighed and sulked through classes on US History and French in eager anticipation of the formulas and applications I would be learning later in the day. I believe there are many factors which attribute to my success, two being my fascination and persistence. When I was seven I once asked what math was good for and why I should learn it. The answer I received simply does not do math justice, “One day when you’re in line at the grocery store the cashier will give you too little change and you’ll be glad you learned this.” now in calculus I see the application of all these once foreign symbols, formulas, and letters. I am often amazed by the calculations I am able to do using the cumulative information acquired from nearly 12 years of education, such as how to maximize the volume of a box given a certain surface area. Math is not just plug and chug as many view it but it requires creativity and thinking out of the box to solve the problems encountered in the real world. Beauty lies in its simplicity and in the fact that proofs and observations are what brought the golden rectangle from ancient Greece, Pascal’s triangle, and the Pythagorean Theorem as well as a host of other theorems, equations, and postulates. Math has made the impossible possible and the once long and tedious, simple and quick. The genius of it is amazing as well as the fact that any person is capable of applying and discovering it. I draw graphs and try to make shapes from functions for fun, count to 10 to calm down, and save money at the store, too. For all of these reasons and many more, I am fascinated by math.

I wasn’t always good at math, contrary to what students in my classes might say. When I first showed interest in math in the 5th grade my parents laughed; middle school was even worse. Incoming 6th graders were given a test on the second day of school and depending on their scores were placed into a high or low speed math class. I was put in the slow speed math and missed a lot of class my first year, as a result my grade drifted from a B to a C to a C-, then I got help. I knew I liked math and I didn’t want to do bad in it so I bought books and hired my older brother to help me. I eventually made it to a B+. Later, in the summer after my junior year, I took a course that covered nearly a year of Calculus. I was told that if I decided to take Calculus AB, I would be bored, so I went for a challenge. My strongest subject began to take up most of my time. I had to read review books, go online for help, and stay in during nutrition and lunch for extra instruction. It was hard, but my dedication paid off and I earned an A. This persistence and drive also help me excel in math.

Analysis

In this essay, the student begins by stating that she has “always been a math-science girl.” The honest confession that follows, “I sighed and sulked through classes on US History and French,” underscores this point. She goes on to provide specific examples of her “fascination and persistence” regarding math, even causing a chuckle when she asks why math is useful to learn and receives an answer that doesn’t “do math justice”—being able to count change at the grocery store. This is comical, providing an excellent contrast to algebra with its “foreign symbols, formulas and letters.” The rendering of math as a “foreign” language shows us the fascination the student has with math and its applications. Her praise of math and vision for the potential of what to others might merely be a boring academic subject is memorable in its admiring tone:

she notes the “creativity and thinking out of the box” math requires, and believes its “beauty lies in its simplicity.” The references to specific math theorems, equations, and postulates further strengthen the student’s assertion that she is intrigued by all the applications that math has for the real world, whether they are ordinary or academic. The strength of this student’s examples lies in their accessibility to a general audience. She summarizes this nicely when she writes, “I draw graphs and try to make shapes from functions for fun, count to 10 to calm down, and save money at the store, too.” The reference to saving money at the store nicely ties back to the original anecdote about math being undervalued in society. The second half of the essay addresses the student’s “persistence” in math, following a most persuasive first section that clearly convinces us regarding her “fascination” for this area of study. “I wasn’t always good at math, contrary to what students in my classes might say,” she writes. This first sentence of the second paragraph comes as a surprise, since we are accustomed to associating passion for a subject with skill in the field. This section shows that writing about a weakness and not meeting expectations can still make an effective essay topic. Though most people would not admit to getting a C- in class, this student does so in an honest way in order to show the amount of progress she has been able to make. While the improvement in her grades is impressive, this anecdotal information might have been even more interesting had she spent more time explaining the ups and downs of achieving higher grades and taking a summer calculus course. Still, details the essay mentions—such as staying in for lunch to get extra instruction—certainly attest to her dedication. Overall, this essay provides a full and balanced explanation of the student’s passion for math as well as her arduous journey toward excellence.

“Healing Beyond Borders”

Mathew Griffin’s admissions essay to Brown University

While healing people will be my main priority as a doctor, I don’t want to only help individuals overcome disease after disease. For true change I must work on a much larger scale. I plan on being involved in research, and drawing ideas and information from my patients and sharing it with researchers to find answers about the ailments that plague the human mind. By being a voice from the front lines I hope that I can catalyze the development of treatments and cures. Additionally, I want to become an advocate for public health. If a government is doing something that is detrimental to the health of its citizens, someone needs to point it out, and fight for a better alternative. Unless I do this then the people I help will continue to get sick regardless of how much I help.

Still, my main task as a doctor is to help patients, and I want to help as many of them as I can. Seeing the reality of the health of the world is very important to me if I am going to properly improve it. I have been so fortunate to live in a place where medicine is so refined, and I am even more blessed to know that I have the chance to help spread this refinement. While issues such as world hunger are constantly being improved, doctors in other countries are scarce and locals are still being trained in ancient ways and often hurting their patients more than helping. I want to give back my blessings a hundred-fold and spread better medicine. First, I want to see the health of our world as I help it by joining Medecins Sans Frontieres as soon as I can. Only after I help things first hand can I make a mature decision on how I should try to help the world as a whole. I feel the experiences that I get from my education and the experiences helping people across the world will give me a very strong ability to know how to help to the best of my abilities. Today I am already planning for this journey by teaching myself foreign languages. I hope that by the time I am ready to help people,

knowing many languages will help me bond with my patients and truly make me a doctor without borders. I plan on fighting for health for as long as I can, and I want to help every person I can regardless of background, money or stigma.

Analysis

In “Healing Beyond Borders,” Mathew makes good use of a small amount of space to answer the two questions in the essay (“What is your vision of a physician?” and “How do you view your role as a future physician?”). When there is more than one specific question in an essay, it can be tempting to answer them separately as in a survey/questionnaire; but for college essays, it is best to take advantage of the format allotted to write a coherent piece. Mathew’s essay does an excellent job of providing a strong thesis sentence to address both questions in a single argument: he places healing people as his main priority, but he also wants to “work on a much larger scale.”

Mathew goes on to explain what this “larger scale” work would look like, giving us a vision of his role as a future physician. He writes about his desire to research mental health issues and to become “an advocate for public health.” He then extends the “larger scale” beyond the U.S. to global proportions. However, rather than writing abstractly about “the world,” which can sound idealistic but lacking in substance, Mathew pinpoints a specific way in which he can engage in global healthcare: Medicins Sans Frontieres. This reference demonstrates Mathew’s research of healthcare on a worldwide scale, and the sentence “Today I am already planning for this journey by teaching myself foreign languages” demonstrates his commitment to this goal. Aspirations in college essays are strengthened by concrete “evidence” that you are already making progress toward these goals. Mathew could have mentioned the specific foreign languages he is studying to further define those places to which he is most drawn.

Overall, this essay gives us a strong sense of Mathew’s commitment to global medicine. The essay could be strengthened by using more specific examples rather than generalized statements, such as the statement that “doctors in other countries are scarce and locals are still being trained in ancient ways and often hurting their patients more than helping.” When writing about other cultures, it is important to be sensitive and avoid passing negative value judgments. Universities tend to be diverse places with people from many different backgrounds, making culturally sensitivity important for communicating with peers.

“Scientific Sparks”

Ariela Koehler’s admission essay to MIT

Growing up with separated parents has not been the easiest life, but it has been my life. When I was younger, I’d hate going out to eat with my dad and seeing a family of four happily enjoying a meal. If my mother and father ever went out together to a restaurant, it was with me, once a year for my birthday, and was usually interspersed with various disagreements. It was when I was in first grade that I began to realize that, although my parents had their differences and no longer loved each other, I was the one thing that united them. I had no basis to be envious of what I thought of as “complete” families.

Both my mother and father, wanting the best for me, recognized early on my love and fascination with all things scientific. They worked to create opportunities for me to pursue my interest. My mother would read at bedtime, at my request, nature field guides instead of nursery rhymes. The two of us often made long journeys at 3:00 A.M. to witness meteor showers in the clear skies of the mountains. She encouraged me to set up experiments around the house, which I happily did—measuring the growth of palm tree saplings and dissecting owl pellets to extract the mouse bones inside. An environmental scientist, my father could not wait to transfer all of his scientific knowledge into my young head. Needless to say, many of his spontaneous lectures were far above my grasp—I still vaguely remember a quantum physics talk he gave me when I was eight—but they inspired me to learn more on my own.

My thirst for scientific knowledge grew over the years, without limits in any one specific area. Then, in January four years ago, my Aunt Diane died after a five-year battle with breast cancer. It was during my aunt’s illness that I realized I could use my natural love of science to benefit others facing similar challenges. I have continually pushed myself closer to this goal by excelling in my AP science classes, studying biotechnology at UC Davis through the COSMOS program, and competing as a member of my school’s Science Bowl Team. This past summer, I had the opportunity to intern at the Reijo Pera Lab at Stanford University through the Stanford Institutes of Medicine Summer research Program. During this two-month internship, I worked with human embryonic stem cells to explore the function of PrDM1, a potentially-useful gene in the creation of regenerative medicines.

The scientific spark my parents recognized years ago has shaped my life, and with it, I wish to shape the lives of others. I aspire to become a biomedical researcher, a career that harnesses my long-time fascination of science and my commitment to improve the quality of life for those facing medical challenges. It would be a privilege to work alongside scientists, exploring new treatments and technologies to create exciting new options for patients and their families.

Analysis

Ariela fits a great deal of information about herself and her family into her response to the essay prompt, which asks for a description of “the world you come from” and an explanation of how “that world shaped your dreams and aspirations.” These challenging questions require writing about outside influences as well as one’s personal goals. Ariela does a wonderful job of focusing the essay by presenting us her family life—mostly in the first three paragraphs—and explaining how this nurtured a “thirst for scientific knowledge”—described in the last three paragraphs. While she also mentions her school (AP science classes), clubs (Science Bowl Team), and summer opportunities (an internship at Stanford), these all fit

within the context of Ariela's family life, particularly her parents who encouraged the "scientific spark" they saw in their daughter. This central thesis holds the short essay together. The introduction to "Scientific Sparks" presents an intimate view of Ariela's life growing up with separated parents. Her realization that "I was the one thing that united" her parents provides a nice segue into the third paragraph, in which she describes her parents' many efforts to support her scientific interests. The specific details Ariela provides are fun and memorable: bedtime nature field guides instead of nursery rhymes, 3 a.m. meteor showers, owl pellet and palm tree experiments, a lecture on quantum physics at the age of 8.

Each of the paragraphs provides a glimpse of Ariela's life growing up. This chronological ordering is clear and effective, helping to move the essay from past experiences to future aspirations. Ariela's use of turning points helps drive the narrative along. For example, she describes the realization in first grade that her parents no longer love each other; then she tells about her Aunt Diane's death, which helped her see that she "could use [her] natural love of science to benefit others." The subsequent examples, which are somewhat list-like, nonetheless show us ways in which Ariela has applied science to health issues. Her experience at the Riejo Pera Lab best supports this point. The end of Ariela's essay provides an excellent, succinct summary that directly addresses the essay questions. Through mentioning her parents, she describes her "world," and through stating her intention of becoming a biomedical researcher, she shows how the two major themes in her essay.