

Let it Grow: SECME: Going Out On a STEM!

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Somewhere in the world lies a small seed submerged in a hole of darkness, working hard to some day gaze upon the light of day and reach the heavens. It's the little things, like this seed, that make a difference in the world, bringing new knowledge, opportunities, and information that can change the way people perceive life and ultimately alter the very fabric of civilization for the better. Each seed's path may seem similar to one another due to size, shape, or conditions, but in veracity, they couldn't be more different. I am one of these seeds: born like many others before me, fighting to make a difference and leaving my mark upon the world. Through SECME and the wonders of science, technology, engineering, and math (STEM), I can make my dream a reality. SECME allows seeds, like me, to discover routes that coexist in harmony with our unique skills, whether they are artistic, mathematical, or technological, opening a wide array of possibilities that can be beneficial in one's career path.

As I delve through my mind, and my colleague's minds, for specific tasks that I enjoy participating in, I came across new information that I would have never realized if not for SECME. Initially I discovered my passion for drafting through the wonders of SECME: the perfection of the paper, the way the lines all connect to display the interior of a mousetrap or water rocket perfectly; I never would have known. However, to say that I learned drafting alone would be an utter lie, for if I hadn't met my technology teacher last year, I wouldn't have known what it was, much less where to begin. Other pieces of information I have discovered through my research include my intense love for computers and the thrill of planning colossal complex projects, which often work hand in hand. Computers comprise the ability to majorly benefit the world, as well as society. Even now through the development of AI's (Artificial Intelligence), which are computers that can think and act for themselves, and nanotechnology, which consists of microscopic pieces of machinery that aid in medical fields, computers are shaping the world

we live in and evolving every day. My fascination with computers emanates from my excitement of being involved in an ever changing system, as well as my deep passion for art. Even though many may question how computers and art coincide, I find that as computers evolve, so do the methods of art, especially if they are technological. New forms of technologies that stem from computers can help produce higher quality equipment, new tablets, and even new programs to aid fledgling or professional artists in their career paths. If it wasn't for my fondness of art, I probably would have never fallen head over heels for computers, simply because art is my passion, whether it be pixelated, digital, or traditional. Furthermore, video games have also had a major role in my appreciation of computers, simply because they are artistic, ever changing, and stimulating for the mind.

Having an occupation is essential to survive in the world, however having a STEM based occupation can prove to be more beneficial to society and for oneself. Several STEM professions that are beneficial include Computer Software Engineers, Accountants, Biochemists, and Network Systems Administrators; the possibilities are endless regarding STEM jobs since science, technology, engineering, and math cover a wide array of careers that grow constantly, mainly due to technological advances in society. Through my research, I vowed to find a career that could suit my needs, complement my interests, and stimulate my mind in STEM fields, and through much effort I uncovered the perfect job for me as a video game designer which qualifies as a STEM profession because it involves technology, engineering, and mathematics. By pursuing the field of designing, I can work with computers, programming games for various platforms, as well as art, designing graphic illustrations that complement the games, both areas that I love. Furthermore, video game designers work together to create games through several complex steps and work on a different game once one is finalized, thus translating in my mind to

projects that can stimulate my mind and never cause boredom. Specifically, designers are expected to develop schemes, create visuals, program games, solve complex technical problems, and work closely with others, which are all tasks that interest me and meet my requirements for a profession. As a fledgling designer, I would earn about \$60,000 a year on average, and as my skill would increase, so would my salary, possibly rising to the three-figure mark, specifically \$103,800 (*How to Become A Game Designer*). Personally, the most exciting part of video game designing for me is the specialization involved; for instance, one could work in game design as an animator while another may be a software engineer. By working as a video game designer I could work for companies like Blizzard, who created World of Warcraft and Diablo, LEGO, who created interactive video games like LEGO Harry Potter and LEGO Lord of the Rings, or even Riot Games, who created the strategic game known as League of Legends. Nonetheless, the road to such opportunities will be long and winding, proving difficult for the faint hearted.

Although a profession proves to be crucial in everyday society, so does a good education, allowing each person to reach their profession of interest with as few bumps along the way as possible. In regard to my profession as a video game designer, most employers search for job applicants with a Bachelor's Degree in Computer Science or Computer Engineering; however, people with a Master's Degree in Computer Science would have a better job outlook (*How to Become A Game Designer*). To acquire a Bachelor's Degree, four years of difficult schooling must pass, and for a Master's Degree, students must go through an additional two years, though the amount of time truly depends upon how much time one takes off and the number of credits accepted upon transferring over to a college (*University of Phoenix*). If I could acquire enough money through scholarships, I would personally go to the University of Southern California to acquire my Bachelor's and Master's Degrees in Computer Science, due to its consideration as

the best video game design college in the nation (*Princeton Review*). However, due to the distance and amount of money needed for tuition without the aid of scholarships, another college that is just as prestigious in STEM fields and has an amazing computer science program that I would be interested in attending is Georgia Tech University, which is affordable and near Florida, allowing me to stay close to my family. Vital courses required to succeed in video game design include Computer Applications, Database Management, Computer Programming, Introduction to C++, and Introduction to Visual Basics; however, other classes vary depending on the particular university one wishes to ultimately attend (*How to Become A Game Designer*). Furthermore, for me to even fathom attending these prestigious universities, I must continue to work hard in school and in my extra-curricular activities to further guarantee that I can be accepted with merit based scholarships along with additional scholarships through other sources such as the Coca Cola Scholarship Foundation.

In a world full of many individual seeds, it can be hard to stop and wonder whether or not one seed can make a difference, for without a guide a seed's potential tends to wither away to ash and dust, as it once was, disappearing almost entirely among a vivacious abundance of green foliage nearby. However, when a caring teacher or an organization like SECME, comes to the aid of these seeds, they are able to flourish and bloom with a beauty impossible to describe in mere words. Once upon a time, I was one of these seeds, lost without a path, forced to face nature's wrath, but with help from my teachers and from SECME, I am able to hone my abilities and use them to help others grow, reaching high above the overshadowing canopies for all to see. "One seed can make a difference, one seed can make a change, whether it be in their own profession or one that may seem strange. One seed can light a fire, revolutionize the world, make everyone see what can be if they focus on what has unfurled. One seed like me can show you,

what we can truly be, helping the world become a better place, through science, math, and technology.” © Aurora Borghi

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