

The STEAM City of Women – Week 5

Sofia, *student*

Monday 8/9

Rise and shine, its Week 5! This morning, we worked on our Flower Power project and were visited by guest speaker LaTonya Jones! Analytical, expressive, and loyal LaTonya is the Director of the Community and External Affairs/EEO Officer at NYC Department of Records and Information Services. She arrived at this agency 6 years ago and works on the social media and public program events, community outreach, and sharing history with the NYC community. LaTonya explained how she worked in social services which in some situations was very stressful, but she met many amazing parents and role models along the way that she is grateful for. Because of her experiences and connections, she values the importance of teamwork. As an athlete, I most definitely agree with LaTonya on collaboration! Growing up, everyone told her to be a lawyer or teacher. Though she did like law and psychology and even wanted to be a profiler for the FBI, she minored in English and Sociology in college and grad school. In school, she became a tutor for students as a TA. At this point, she was torn between her original plan and teaching. However, in the end, she found her calling. Not only does she value teamwork, but LaTonya also understands that being authentic and fully present in her work is key, especially when representing the government. One thing is for certain, you never know how things will play out professionally. In her case, coworkers became her friends. Through the ups and downs of her job, in the end, she has had more good experiences than bad. Her advice to us was to be comfortable building a career around skills and interest rather than a designated path. I think this is so crucial, especially because a career is a passion, not just a job. As someone who loves to bring on interns, she is always looking for those with interest in her unit's work, research and communication abilities, the ability to move fast, and also go with the flow. Do not worry if English is your second language, as LaTonya encourages being bilingual as a skill. You don't have to be fluent to do well and have a different perspective of language. Outside of work, LaTonya is a huge reader. Her favorite book varies from time to time but one thing is for certain, her favorite genre is literary fiction. She likes to read books that involve magical realism and sci-fi. If you like these types of books, join LaTonya on her next read of Octavia Butler's works. Me time! Latonya is an introvert. She loves video games! In fact, she is an online moderator and loves to play the Sims. Who doesn't like the Sims? It's such a fun game! Like the real world, LaTonya told us about marginalization and stigmas in video games for different communities such as LGBTQ and Women of Color. Regardless, she has a big sense of community and support in the online world. Stereotypes have nothing to do with you as an individual. For example, she expresses how it is very unique to be black and a women. When faced with racism, sexism, discrimination, and other uncomfortable situations, LaTonya isn't the type of person to point out things, as she would rather make it a teachable moment, find ways to protect herself, and get her point across peacefully and respectfully. It is best to not assume. Instead, take a step back and realize that in situations that are complicated, you can only be in control of yourself. Thank you LaTonya for visiting, we really enjoyed your time with us! For the next hour of the session, we worked on our Flower Power project posters. It's almost time to present, I'm so excited!

Tuesday 8/10

It's Neuroscience Tuesday. Personally, today was the most exciting day of all. Dr. C took the time to eloquently give us a view into the world of Neuroscience, her experiences, and more. I love neuroscience and would love to be a neuroscientist like Dr. C one day! The mind is so beautiful. Well, what is Neuroscience? It is the interdisciplinary STEM science that studies what the nervous system does, how it works, and develops. The nervous system controls thoughts, emotions, and behavior as well as other bodily functions such as breathing and digestion. The brain is a 3 pound organ protected within the skull. It is wrinkly, like a walnut, and is made of 60% fat. The brain is made up of grey and white matter, nervous cell bodies, dendrites, and axons. We went over the typical structure of a neuron. They are a little funny looking. When neurons form, they go through 3 stages to solidify memory: learning, stable, and recall, which is the most stable stage, which means that when you are relaxed you can learn and pick up information easier. Dr. C. showed us how and why she added the A in our program, so we practice STEAM instead of just STEM. There are approximately 86.1 billion neurons in your brain. I can't even begin to picture that number! The brain is full of neurotransmitters such as adrenaline, dopamine, acetylcholine, and serotonin. Chemicals like serotonin and dopamine make us happy, for example. Dr C is a neuroscientist with a specialization in Neuropharmacology. Before today, I honestly did not know that career existed. However, after Dr. C explained it to us all with so much love and passion for what she knows, I most definitely have an interest in this field. I hope the other participants of this program can also say the same! Neuropharmacology is the study of how drugs affect the nervous system. As stated in Dr. C's presentation, "It is focused on the development of compounds that may be of benefit to individuals who suffer from neurological or psychiatric illness." Wow! Dr. C explained to us her experience in working with animals for studies, such as rats, mice, fish, and zebra finches. These animals are used to study drugs of abuse and their effects on human behavior and the brain: nicotine, morphine, heroin, and cocaine. One of the goals of this science is to further understand disorders such as Alzheimer, Autism, and Schizophrenia in order to find new treatments. In her studies, one of Dr. C's main focuses was how nicotine affects cognitive development of zebra finches. Particularly, how or if the song behaviors of these birds change following nicotine exposure. Turns out, nicotine significantly changes the song of these birds. We were all so full of excitement and questions, that the two hours of our session flew by! I'd love to hear more about Dr. C's experiences again sometime!

Wednesday 8/11

What's the weather like for you this beautiful Wednesday? For us in STEAM, it was splendid! We had two lovely guests this morning, Krissy Klinger and Pam Remetta-Chopack from Weather Trends International! While Krissy is courageous, inquisitive, and silly, Pam describes herself as organized, motivated, and passionate. While they used to work together some 6 years ago, now they are not in the same office. Their company is considered a very small company, and they have direct communication lines with their CEO. Both expressed their liking for a close-knit company, since everyone is able to feel valued and important. There are 4 females in the 13

person company. Since it's a small company, it's easy for the ratio of male to female to be unequal. However, neither of them ever felt treated less than anyone else. In fact, Krissy says they feel like a family. Each member of the team is identified based on their qualities and skills, not gender. They warned that sometimes you will be the only female in classes and the workplace, but you have to have the courage to prevail. In the company, Pam and Krissy focus on predictive analysis of the weather, as well as climate change predictions. They use the weather information to help other companies with their sales and marketing tactics. Data can be interrupted by power outages, for example, and sometimes reports are off. To prevent this from interfering with the accuracy of reports, all data is checked and scanned so that erroneous points can be quickly corrected. Both knew from an early age they had a passion for meteorology. Growing up, Krissy watched the weather forecasting news as if it were cartoons and while Pam was terrified of thunderstorms, she found herself tracking hurricane Katrina and become fascinated by weather patterns.

Next workshop, our favorite guests ever... Renata and Olney from New Victory Dance! Today was our very last session with these two wonderful women. It is most definitely a bittersweet feeling. I have greatly enjoyed our time together, have learned so much about dance, and gotten to let my creativity shine through. In this session, we went over everything we have worked on together, from the EDsnaps dance we created as a group, to our individual dances, and the BEST acronym. We combined everything to make one final unique dance! It came out so well, I had a lot of fun dancing behind the screen. Not only was our dancing today out of this world, Olney had some new music for us, which was definitely energizing and gave a good vibe to our moves! I will miss them both very much, but their inspiration will always remain with me. Thank you Olney and Renata, you are truly superstars!

Thursday 8/12

It's teamwork Thursday! This morning, we had Women in Engineering come to visit! We met Maia Raynor, Mia Huang, Sophia Ziemian, and Marjolein van der Meulen. Marjolein is the head of this team and is the James M & Marsha McCormick Director, Meinig School of Biomedical Engineering at Cornell University. She is a mechanical engineer.

First up, we talked about STEAM and what it means to each guest, in honor of our program. Maia, who is a mechanical engineer major, says STEAM means incorporating your creativity, Marjolein says engineering is solving problems and finding solutions to challenges with the help of art, Mia says STEAM is incorporating everything you know to think in a well-rounded way, and Sophia said that STEAM is thinking outside the box to find out how things work. As we all know, engineering is still a very male dominated field. Our guests had a lot to say about this and how to combat it! For example, Sophia says societal expectations continue to exist that assume women are less than men. However, as an individual you have to be confident in yourself because you are just as deserving and smart as others, if not more. Maia says being around more boys can sometimes be challenging, but as the first woman in her family to be involved in STEM she sought out other role models and remained true to what she loved to expand her knowledge and confidence. Speaking of role models, our panelists had specific role models to share. For example, Mia's is her grandma who was a Chinese literature teacher. Not only was it rare to be a teacher at that time, but it was also rare for a woman to divorce her husband, which she did. To Mia, her grandmother is a symbol for a strong, smart, and very tough woman.

There are still many steps ahead for the STEM fields to become more inclusive. One of the best pieces of advice today was from Mia, which was that you don't have to prove yourself to anyone. You are good as you are. Always be yourself! I love this because it is a phrase that is easier said than done and at times it can be hard to remember who we are. Another amazing phrase came from Marjolein: "if you can see it, you can be it". Some other key takeaways were: always bounce back, let go of perfectionism, you can't become who you want by remaining who you are, have fun and shift your mindset to be easier on yourself, and have a good support system. Nothing in life, such as a career, is black and white. Try not to focus on your weaknesses but instead excel at your positives. Build relationships! Help others when they need it so people are also there for you when you need them, the best products mostly come from collaborative efforts. Even if you are an introvert, like Marjolein and Dr. C, try not to let intimidation overwhelm you, chances are others are also intimidated. Enough on advice and careers, let's talk about what our guests like to do for fun! Some of them like hiking such as Maia and Marjolein. Sophia likes running and she coaches track. Mia is a cat lover, like me! She has 2 cats, plays the cello and the piano. I enjoyed taking a look into their interests outside of STEM! I have been encouraged to expand my perspective and try new things! Thank you to our wonderful panel today, you are all incredible women.

Friday 8/13

Woooo it's Friday! We are reaching the end so fast, I can't even believe it. For now, we hopped on a virtual bus and headed over to the Yogi Berra Museum and Learning Center. Yogi Berra was a baseball player for 19 seasons, where he played for the New York Yankees. He was known not only for being great at baseball, but also for being a great person, as he stood for values like kindness, teamwork, optimism, and respect. In fact, the U.S. Postal Service just issued an official Yogi Berra stamp. During our visit, we saw that sports has nothing to do with gender, race, sexuality, etc. Instead, it is about skills, genuine talent, and determination. Speaking of gender, let's get into how women began to play professional baseball. Let's remember in 1920, all women of color were denied the right to vote even though they fought in the suffrage movement alongside white women. Since then, we still had a long way to go before equity. When WWII began, many men went to fight in the war. This left many of their jobs, such as factory jobs, empty. The soldiers and country still relied on these jobs, so women, who were for the most part previously bound to housework and their children, took on male roles. This included "Women in Baseball" and a women's' baseball league was born. Since the demand for employees was so high, women of color were not denied jobs as they were before, which increased opportunities and eventually led to more freedoms. It still wasn't easy for women in sports. Women were allowed to play sports, like baseball and golf, but still had to dress, talk, and act in certain ways on and off the field. If they did not follow the rules they were fined! It was difficult for women in the sports world, there were still a lot of stigmas in society and unfair expectations. Regardless, these courageous women were able to open the sports world for women today, as they are the role models that continue to inspire us for greatness even under oppression. Before Philip K Wrigley's influence, there were no professional leagues for women in baseball. There was much turbulence in 1945, when the second world war was over, and the female leagues were dismissed in the early fifties. This is actually why softball was

created. In 1972, Title IX was passed as a federal civil rights law. This law protects everyone from being excluded from participation or discrimination in school programs, such as sports, on the basis of sex. In the end, it is important to recognize that the Women's suffrage movement, WW2, and Title IX all affected women in sports one way or another. We talked about some of the amazing female athletes we see today, such as Naomi Osaka, Serena Williams, Megan Rapinoe, and Simone Biles. As a soccer player, I love sports and have always admired women such as these. My biggest inspiration has always been Alex Morgan, who plays forward for the US women's soccer team. I think this was a great way to end the week! I hope everyone went out and had a fun and active weekend. See you Monday for our last week in the program!