



By Liz Crowder

Girls Who Code, Librarians Who Teach

It is no secret that we love librarians and educators here at The Sartorial Geek (insert shameless plug for my profession here). As luck would have it, the stars aligned, and Jordan and I were able to chat with Leslie Cartier and Jessica Regitano, two self-proclaimed “teacher-librarians” who co-run a STEAM-focused summer camp for girls.

GEMS (Girls Engaged in Math and Science) was Leslie's brainchild and has been a wildly successful summer program since its inception in 2015, boasting around 50 participants each summer.

This year, the duo decided to partner with the area nonprofit Ophelia's Place (an organization that provides support for people who have been impacted by eating disorders, disordered eating, and body dissatisfaction) to further enrich GEMS' curriculum, and the result was something truly special.

But don't take my word for it. Keep reading for an in-depth look at GEMS and to hear a little about the girls who will be taking the STEAM career world by storm in a just few short years.

Can you tell us a little about yourself, GEMS, and how you came to be involved in creating a STEAM-focused summer camp?

Leslie: I'm a school librarian. About four or five years ago, I went to a technology-based conference for educators, NYSCATE, held in Rochester, NY. I went to a session where a couple of teachers/librarians were talking about establishing an after-school program

for girls to get them involved in STEAM activities and hopefully STEM-themed careers. The session basically gave me the information I needed to start a summer camp for girls in the tween age group. That age group is where research shows that their confidence in themselves starts to wane. As a school district at that time, we really didn't have a pathway for attracting girls to computer science or STEAM career paths. Research also showed a shortage of women in those fields. That's why I had the idea to start GEMS.

Jessica: When I was in graduate school I did my student teaching with Leslie, and she kind of became my mentor. I've worked in Chittenango, NY, as a school librarian for the past three years, and Leslie had wanted me to be involved for a while, but I was never able to until this year. Technically we have the same role with GEMS, but I would say she is the director, and I assist the director.



You mentioned that each day of the week-long summer camp has a different focus with different activities and speakers. Can you tell us a little bit about some of the activities and speakers you had this year?

Leslie: We had a guest speaker from Syracuse University's School of Information Studies. Her name is Dr. Angela Rieks, and she has a science background. She does programming, and her Ph.D. focus was on getting minorities in underrepresented populations into computer science and programming. Dr. Rieks coincided with the day we were coding Sphero robots. She talked about the digestive system and then led two hands-on activities.

Jessica: You'll like this: we broke the girls up into groups that were named after Infinity Stones!

Leslie: During one activity, we had a large scale diagram of the digestive system on five tables, and the groups worked together to code their robots through it. It was a lot of trial and error. There were girls that were really great about being persistent. The average group did 75-80 tries. You have to move the Sphero right through the digestive system, turn it at the right point, and have it change lights or make a sound as it reaches new organs. It was pretty complicated. One group actually programmed the robot to go through the digestive system and then return.

Another activity during camp was videography, so one group filmed the Sphero going through the digestive system from the Sphero's point of view. One of the assignments was that the girls had to record the final run through to show that their group completed the task, and that particular group decided to change things up and apply some of their videography lessons.

Jessica: Leslie gave a really great motivational speech, too.

Leslie: I was talking about how proud I was of them for their perseverance and the grit it took to get through that activity. I said to them, "This is an example of how in life there are two outcomes in every situation. One outcome is success. What do you think I'm going to say for the second outcome?"

They said, "Failure." And I told them there is no failure. There is only information. So when your robot went a little too far, that's not failure. It's giving you information on how to run it better the next time. You got a lot of information, and you made those adjustments until you finally did have success as an outcome.

Jessica: We had three other speakers come in. The first day Holly Lowery, a representative from Ophelia's Place, came in and did an activity with the girls. She's also in charge of a podcast called *Well and Weird*. Holly is actually going to feature the girls on her podcast, and they asked her a variety of questions about being kind to your body.

I really think talking to Holly set the tone for the rest of camp. Leslie mentioned that this is the happiest camp she thinks she's ever had with GEMS. The girls were so excited and so kind to each other.

Leslie: This is my third year doing GEMS, and I haven't had a community partner before. We never explicitly focused on kindness and how to move each other forward, and concentrating on these things makes a huge difference. There was definitely more competitiveness in the past. This year, the mindset was very, very different, and I just loved it. I think we made the best decision to kick off the week with Ophelia's Place. It made such a huge difference this year.

Jessica: One of the activities we did with Holly was light-up greeting cards. This relates to Ophelia's Place as they have a marketplace called Circles of Change where they sell greeting cards, tote bags, t-shirts, and mugs. A lot of those items are sold at their cafe or online at circlesofchange.org.









The girls designed their greeting cards using an app called Cricut Design Space. After designing and printing their greeting cards, they used copper tape, LED lights, and batteries to create circuits so the greeting cards would light up when you pressed them.

On the second day our speaker was Debbie Rolf, who is a freelance video editor. She did a Google Hangout with us and taught the girls a lot of hands-on activities related to video production. She taught them about different principles involved in taking video, as well as putting a whole video project together. The girls then worked with Leslie to create videos using the Clips app from Apple.

Leslie: Clips was Apple's solution to making and editing videos on the fly and then publishing them to social media sites, all with a mobile device.

I started a video lab for my high-school students. There was no equipment in the library when I started, but now I have some quasi-professional lighting. I brought the lighting and a tripod for the summer camp girls to use for their videography project. One day, one of the girls asked me if she could film in the hallway with her group. I went out there and saw three tripods set up, the lighting set up, the lapel mics set up, and the girls doing a documentary-style interview with multiple cameras! I was blown away. They completely self-motivated. They got more into it than my high-school kids. I was so touched to see that.

I feel like as a person in 2018, you have to know how to make videos. No matter what path you choose in life, that's a skill set that will benefit you no matter where you go. It's a medium that is so critical to understand. I'm glad that through Debbie's instruction, and mine, the girls walked away with at least a baseline level of skill.

Jessica: The third day we had a colleague of mine, Gina Fargnoli, who is a freelance graphic designer as well as an art teacher, talk to the girls about graphic design. They used the Cricut app again and designed messages that they then printed and ironed onto tote bags.

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Can you discuss your collaboration with Ophelia's Place?

Leslie: The collaboration with Ophelia's Place was Jessica's idea, which was great.

Jessica: Leslie expressed interest in working with a community partner, and I thought of Ophelia's Place. I'm familiar with them because I've visited their cafe called Cafe at 407 in Liverpool, NY. The cafe supports their nonprofit. They have really great food, and I knew a little about the organization the cafe supported. We both thought Ophelia's Place would be a good choice because of their messaging and our demographic. We reached out to them, and they were really supportive and excited to get involved. It's been great working with them, they've had good programming ideas, and it's been wonderful having Holly Lowery come out and speak to the girls.

Ophelia's Place deals with eating disorders and body image. How do you discuss such a heavy topic with the tween age group?

Jessica: It's not just eating disorders, it's also disordered eating, which Holly described as any abnormal eating behaviors related to your body. I feel like a lot of the girls identified with that.





Leslie: Holly also played a really great video made by Dove that shows girls exactly their age and breaks down the idea of body positivity at their level. It shows girls with freckles saying they wish they didn't have any freckles or girls with straight hair saying they wish they had curly hair. I think that really struck a chord with the girls. Holly asked at the end, "How many of you have ever wished your body looked different?" and a lot of the girls raised their hands.

Jessica: I feel like the focus was less on eating disorders and more about loving your body and thinking about what your body can do for you.

What is your favorite thing about GEMS?

Jessica: I really liked that you could tell the girls were excited about learning and excited about getting to know each other.

Leslie: I agree with Jessica. I would just add that I loved watching their excitement using new tools and technology and becoming adept at it. I really loved sharing that experience with them.

Were you into STEAM activities as a kid?

Leslie: It didn't really exist when I was a kid. When I was a kid, girls could do Girl Scouts, and that was about it. If there was STEAM programming, though, I would have done it.

Jessica: As a homeschooled student in a Christian environment, my focus growing up was on doing more "feminine" things, so STEAM activities didn't really feel like an option for me. If GEMS was around back then, it would have been a good entry point for me because the science we do at camp is really accessible.

What do you want people to know about the work you do?

Leslie: I feel there is still a misconception about librarians, that we're encased in bookshelves and shushing people, and I know Jessica doesn't do that, and I don't do that.

Debunking that myth is really important. Librarians/libraries are often the focus of STEAM activities, and we have the skillset to be adept at technology and integrate that into educational curriculum.

We're often overlooked, and providing a camp opportunity like this gives us librarians great exposure. It shows the community at large that we can do many more things than what we're stereotypically associated with. I often say we're teacher-librarians.

Jessica: Definitely what Leslie said, especially about us being teacher-librarians. I also love that GEMS puts girls as the focus. I think it's really empowering, especially because they are surrounded by supportive adults and supportive campers.

Leslie: This year, with the #MeToo movement, it's so important to empower girls starting when they're tweens. Like I said, this is the age that they are starting to be heavily influenced by social media and traditional media. They're starting to question their bodies and their confidence in themselves. If they walk away from this camp feeling like yes, I can do this, and yes, I'm worth it: that's a win.

Dr. Reiks told me she ran a programming camp for high-school girls at Syracuse University this year, and what she sees as the most fundamental piece for underrepresented groups to succeed, including women, is to be supportive of one another.

Do you have any favorite fandoms?

Leslie: As a little kid, I didn't have Marvel superhero movies, but I was completely obsessed with Wonder Woman.

Jessica: Leslie has a big Wonder Woman poster by her desk!

Leslie: Anything Wonder Woman that my kids find, they give to me.

Jessica: I don't really feel like I have a fandom. After reading *The Sartorial Geek's* summer issue with the article on gatekeeping in fandom and not needing to have a certain level of fandom to belong, I feel better. So I'll say, I have certain things that I enjoy, like Harry Potter or *Firefly*, but if I had to be geeky about something it would be board games. I like games like *Settlers of Catan* or *Ticket to Ride*.

Want to reach out to Leslie or Jessica and support their work with GEMS by being a guest speaker at camp or sponsoring a camper? Feel free to reach out to Leslie by email (lcarter@bville.org) or on Twitter ([@lccarter](https://twitter.com/lccarter)). □