



Representation Matters

How one Gonzales woman is shaping the face of STEM for Gonzales girls

By Leslie D. Rose

Alsie Dunbar has had a knack for science since she was a young girl, and while she always knew she would choose a career in STEM, the path wasn't lined with mentors who looked like her.

A 2006 study showed that white men make up 55 percent of scientists and engineers (the vast majority) and white women 18 percent. Asians were the only minority group with significant numbers working in STEM, holding 17 percent of the jobs between both men and women. When it comes to other minority groups, the statistics are striking. Black men and women make up less than 3 percent of scientists and engineers, Hispanics 4 percent, and all other groups 3 percent. Added together, under-represented minorities make up only 10 percent of all of those working in science and engineering occupations, and only one in 10 STEM professionals is a minority woman.

That's why Dunbar made it her mission to help girls heed interests in STEM with her mentoring program STEM GEMS. STEM being the acronym for Science, Technology, Engineering, Math and GEMS meaning Girls Excelling in Math and Science.

"I don't have any models for STEM GEMS - it's coming from personal experience," Dunbar said. "As a minority student who was heavily, heavily invested in math and science, there just weren't enough people who looked like me in my classes and there weren't enough people in college who looked me and shared the same interests."

The STEM GEMS objective is promoting the interest of Girls Excelling in Math and Science through mentoring and encouraging them to pursue careers and advanced degrees in STEM majors where women and minorities are still underrepresented.

"I want to be a vessel to help girls understand that they can be anything that they want to be," Dunbar said. "If that's

their dream then they can do it, and any way that I can help them to achieve it, I will. I will make whatever resources I have at my disposal available."

The STEM GEMS Mentoring Pilot Project has been working with the Ascension Parish School Board mentoring those young girls who are identified as high achievers in math in science.

"STEM GEMS is an excellent program exposing our young girls to the many opportunities available to them through the study of math and science," said Patrice Pujol, Ed.D., President of Services and Partnerships. "It is especially important for our young women to see themselves in these roles. Having someone like Alsie who does this work everyday as an engineer come in and mentor them is especially effective."

To date, Dunbar has mentored over 150 students with a high level of success at Gonzales Primary, Gonzales Middle, Pecan Grove Primary, Donaldsonville High School and Bright Futures Community Learning Center. Dunbar also hosts STEM

GEMS Saturdays at various schools in the Gonzales area to accommodate students she doesn't work with at a STEM GEMS school.

"My passion for the community and math and science led to me founding the STEM GEMS Mentoring Project in the spring of 2013," Dunbar said.

"I have worked diligently in partnering with local businesses and other STEM professionals to bring STEM outreach to the following areas as well, including St. Helena, St. James, St. John the Baptist, St. Charles and Iberville parishes."

The program is funded through a bevy of community partners including Motiva Enterprises, LLC, St. Elizabeth's Hospital, Cox Communications, Crescent City Dentistry, Don's Seafood (Gonzales), Google, Liberty Bank, BASF, Gonzales Police Chief Sherman Jackson, Gonzales City Councilman Kirk Boudreaux, Marie Broussard of Coldwell Banker, Linda Melancon of the Legacy Center of Louisiana and The Futures Fund.

Succeeding based on the support received and Dunbar's more than 17 years of experience in the chemical industry through process and plant design, research and development, product quality management and environmental regulation, STEM GEMS provides girls a look at a demonstrated career track record which allows for a greater impact.

Gonzales Middle School STEM GEMS ambassador and 2016 Eighth grade Student of the Year, Lauren Bennett, said that while she was already excelling in science and math, the mentoring project has helped bring her grades up even higher. She plans to become a marine biologist.

"I really enjoy [STEM GEMS] - it makes me feel proud because I get to explore different places of STEM and get to learn more than I already have, and it just allows me to explore my boundaries," Bennett said.

On top of the extra STEM exposure, representation is very important to Bennett.

"It allows me to see that I can be whatever I want as long as I

work hard and put my mind to it.

It's a really good organization to be in - it'll help you - it allows me to be motivated."

And not just for Bennett, STEM GEMS has made such an impact in Dunbar's hometown of Gonzales that Mayor Barney Arceneaux proclaimed STEM GEMS Day in her honor on Sept. 28, 2015. Parish President Kenny Matassa, who was a city councilman at the time, shared endearing sentiments about Dunbar's commitment to Gonzales.

"I just want to thank Alsie for all she does for the city of Gonzales," Matassa said. "If there were more like Alsie, these young people wouldn't have any problems."

Dunbar is in the process of getting 501(c)3 status for STEM GEMS. The funding provided by the community partner helps to pay for t-shirts, science experiments, field trips, swag bags, wrist bands, snacks and other science-related paraphernalia.

Those interested in supporting the program may email info@theSTEMGEMS.org.

