

# Child's Play

*Learning about STEM through sports is more than a game*

BY CARY MIDLAND

**GO AHEAD AND TELL THE YOUNG LADIES OF PLAY** Like a Girl, a nonprofit group dedicated to promoting fitness and empowerment among girls through sport, that they throw like a girl. Or run like a girl. Or do anything like a girl. They'll thank you. Now these middle schoolers are taking sports' lessons of leadership, commitment and confidence off the field, and they're showing their communities how to take part in STEM like a girl, too.

In June 2017, Play Like a Girl bridged sport and tech when it hosted its first STEM-and-sports camp at Google Fiber, Google's internet and television provider, in Nashville. Partnering also with Gatorade, "Our goal was to test a concept that was ultimately intended to increase our students' ... interest, confidence and knowledge of STEM," says Dr. Kimberly S. Clay ("Dr. Kim"), the Play Like a Girl founder, president and CEO. Teachers and professionals in sports careers that use STEM taught them about how the sciences are related to athletics. The organization has run other smaller-scale clinics over academic breaks, and this daylong camp pilot was such

a success that the group has weeklong camps planned for spring and summer in Nashville, where Play Like a Girl is based.

One project the campers participated in involved turning balloons into "brains"—filling them with oatmeal and water—and then building structures to protect them, the way a helmet is meant to protect a football player's head. The balloons were dropped dramatically from the roof of a building to test for survival. "The students also participated in Google CS First Sports, a program in which students use computer science to simulate extreme sports, make their own fitness-gadget commercial and create commentary for a big sporting event. During camp, our girls learned what computer science is, saw its connection to various sports and, finally, made their own program," Clay says.

▼ Kimberly "Dr. Kim" Clay with a camper at the Play Like a Girl 2017 STEM in Sports camp.



Campers at last summer's event at Google Fiber take part in a Pound class, a high-cardio workout that mixes Pilates and other forms of fitness to music using weighted drumsticks called Ripstix.

To assist with integrating STEM into the curriculum, Play Like a Girl is partnering with more businesses and professional sports teams to host camps for its clubs; Nashville's National Hockey League team, the Predators, will take Play Like a Girl members behind the scenes in a weeklong camp over Nashville's spring break in April and another STEM-related camp over the summer.

### How It Began

It's been a long journey to the laboratory, and, for Clay and others within her organization, there have been as many hypotheses and discoveries as there are in any experiment. Clay founded what now is Play Like a Girl in 2004 in Alabama as a social group for new moms who, like her, were graduate students and fellows with the National Science Foundation and the National Institutes of Health's National Cancer Institute. Originally, she and her colleagues set out to reach overweight and obese women, especially women of color, who are at higher risk of developing obesity, diabetes, cardiovascular heart disease, cancer, and hypertension, according to the Centers for Disease Control and Prevention. "We were

convening these huge events with audiences of 1,300 ... but once we looked in the audience, we saw we were educating and screening people for chronic disease, but our audience wasn't changing," says Clay.

Instead of being discouraged, in 2010, inspired in part by First Lady Michelle Obama's launch of the Let's Move initiative, the board shifted its mission to a more proactive one: They would get middle school girls, mostly in Title I schools, involved in physical activity, starting them down a healthier path in the hope of preventing obesity and illness rather than treating it in adulthood. With funding from the Pat and Emmitt Smith Charities, they orchestrated after-school programs in Texas—Clay had relocated by then—to introduce girls to sports, starting with tennis, that they might not have had exposure to otherwise; in fact, in some of the schools, girls had very few opportunities for any physical activity or active play at all.

In 2014, Clay secured additional funding from Toyota and the Women's Sports Foundation, when she was honored by the Everyday Heroes program by Toyota and ESPNW, which identifies leaders who promote and create sports opportunities for girls and women. Play

Like a Girl, which is run entirely by volunteers, now has seven clubs—in Alabama, Connecticut, Tennessee and Texas—and there are plans to expand this year; the largest chapter consists of more than 300 female college students at Fairfield University, in Fairfield, Connecticut, who partner with local Boys & Girls Clubs to implement the Play Like a Girl curriculum. The board (members include Olympic swimmer Claire Donahue and executives at such companies as Under Armour, NBC Sports Group and LinkedIn) also is working to restructure the organization so it can hire paid staff, increasing the potential to reach more girls.

### Winning Off the Field

Play Like a Girl is tapping into the soft skills athletes learn through sports—team-building, leadership, confidence—and teaching girls how to apply them in everyday life. Fitness is still crucial, of course: According to the organization, more than 80 percent of members have increased their moderate-to-vigorous physical activity from zero to at least 30 minutes a day.

Beyond physical activity—and particularly worth noting in light of the recent cases of systemic abuse of female gymnasts and other athletes—Play Like a Girl always has sought to embolden its participants off the playing fields. As part of its 10 Girl Power Principles—among them are setting goals, working their strengths, learning from failures and knowing when to ask for help—each time a group meets for its 90-minute sessions, a few times a week, 20 minutes are spent on esteem-building activities as well. By the end of a 12-week session, 95 percent of participants say they have more confidence. "What we have found from our girls, what they reported [is] that there's this team component, this built-in set of cheerleaders or support mechanism that they get from participating in sport. They learn the skill of teamwork. We also hear girls talk about their confidence being increased ... in sport as well as in other areas of life," Clay says.

"We've seen girls blossom with their communication skills and leadership skills. ... Those things help to set these girls apart, help set them on the path to fully realizing their potential," she says. This is why exposing them to STEM fields, still mostly dominated by men, makes sense as a next step: If girls can internalize the confidence and resiliency they've learned through sports, use those skills at school and elsewhere in their lives, and maintain the wonder and curiosity awakened when they are exposed to new ideas through experiences like these STEM camps, they can parlay them into successful careers. "We don't just focus on a ball and a bat and a racket and a net," Clay says. "We're really preparing girls to live life." ■