



Tomorrow's Engineers

Adventures Ahead students are learning about robots - and in the process patience, perseverance, and problem-solving too!

A year ago last April, we embarked on a new adventure in Lego robotics. A high school robotics team joined us for a week to teach the kids the basics of robot building and programming. The week culminated in an exciting sumobot wrestling competition, but the real journey was only just beginning.

There was a lot to be learned between the time of our introduction to robotics and our first competitive season. The summer was a race to build the skill set necessary to compete in the First Lego League. Robot days were squeezed in between very full weeks of our academically rigorous summer program. In the fall, our young team experienced a roller coaster of emotions as frustration set in after multiple failed robot attempts, but then through grit and determination they were able to achieve success, first in practice and then finally during actual competition. Late last year marked a turning point in the team as they emerged a more confident bunch, eventually earning a place at the Los Angeles Regional Tournament. The season ended with the kids talking excitedly about their plans for next year.

Like all competitive teams, what you do in the off-season will impact your performance during the season. Our kids are "staying in shape" by participating in monthly robotics challenges and trainings. One Saturday a month, you will find them at Adventures Ahead building and programming bumper cars, roller coasters, and catapults. They are learning to create sturdy designs and to program a robot to drive straight (which is actually a lot harder than it sounds!) They are practicing giving presentations to volunteer judges and explaining their design choices. Their enthusiasm hasn't waned; in fact, they are growing more confident each day and are eagerly awaiting the release of this year's tournament challenge.

One year later, kids who knew nothing about designing and programming are building their very own robots. They are expressing interests in computer programming and engineering as careers. The journey for them has begun. Will you consider supporting them along the way?

Become a monthly sponsor of our team and we will put your name on our team shirt and send you one. See the enclosed envelope for more details. And check out page 2 of this letter for reasons why we've chosen to focus on STEM education.

Support our budding engineers!

Become a monthly sponsor of our robotics club -- we'll put your name on our t-shirt and send you one too!

- **Little Engineers Club:** \$20/month
- **JV Robotics Team:** \$50/month
- **Varsity Robotics Team:** \$100/month

Join the RCP Prayer Team

Over the years we have seen many victories in our neighborhood as a result of prayer.

If you'd like to commit to praying for us weekly and receive weekly prayer updates contact Lisa at:

lisa@redeemercp.org

or take a picture with your mobile device:



Even kindergarten and first grade students are learning the basics in our Little Engineers Club

Why STEM?

68% of high schoolers in our neighborhood want a college diploma or more from their education. Less than 1/3 of elementary students in our neighborhood can read on grade level. Fast forward a decade and, if nothing changes, only 1/4 of them will graduate from high school with a diploma that sends them to college. Research shows the solution is surprisingly simple. Teach children to be literate and patient enough to stay in school and they can escape the trap of cyclical poverty.

The road to dropping out of school starts extremely young. Six-year-old Ricardo was going to do anything he could to get out of finishing his homework. Our staff encouraged and cajoled until Ricardo finally explained why he couldn't do the assignment. "I can't read," he blurted out. Like most of the kids who join our program, Ricardo thinks he's a reading failure, even though he's only in first grade. Since his 13-year-old cousin already dropped out of school, he knows where this road leads.

If we're going to turn things around with Ricardo we've got to convince him to come 12 hours a week to work on the very thing that makes him feel like a failure. That's where our science and engineering focus comes into play. We sneak the reading skills in among the frogs, robots, and electrical circuits. STEM (Science, technology, engineering, and math) allows us to attach abstract reading skills to concrete things kids can see, touch, and discover.

Over the course of the robotics season students have the opportunity to design their robot, use complex programming language and logic, collaborate with their peers, research a problem facing their community, brainstorm the solution, and create a communication plan for that solution. They're learning in every academic discipline and they think they're just having a good time.

The time spent doing robotics is not just changing their literacy and their skill sets. Students lives are being changed forever by this encounter. Over the years we've heard many of our kids say they want to be basketball players or singers "when they grow up." Most kids have an idea that they want to be rich or famous or just in a different situation than they are now. They're plans are often vague or unrealistic. Ever since we started doing robotics there has been an obvious change in the way kids see their futures. Kids now tell us about their plans to be engineers, designers, computer programmers, and science teachers.

Ricardo loves to get his hands on a robotics kit. The more we can engage him the more time we will have to work on his reading and bring him to place where he can confidently learn on his own. The excitement around STEM gets kids in the door and the successes they experience in hands-on science give them the courage to tackle other challenges. Consider partnering with us to help kids like Ricardo achieve their full potential.



More Than Robots and Donuts by Devin Caplow-Munro

Devin is a member of the CyberKnights, a championship high school robotics team which has mentored our young team for the past year, hosting two Spring Break robotics camps for Adventures Ahead and neighborhood students

I entered South LA for the second time with a sense of familiarity. Little surprises like the new dispensary across from Adventures Ahead, and wake-up calls like circling helicopters reminded me where I was, but I felt safe and comfortable. I felt like I could relate to people. We were excited to teach the kids more about robotics, and we were excited to go back to Donuts World.

But as the week progressed, I began to notice things, little things, which broke my heart. Some of the kids who acted out, I was told, were emulating their older, gang-affiliated siblings. One of

the kids in my group, a fourth grader, didn't know what an average was, let alone the way to go about finding one. It only took a few minutes of explanation for him to understand, but he had never received even that. I realized that despite appearances, I was in the midst of terrible need.

I began to be fascinated by the sacrifice that many members of Church of the Redeemer had made, and their attitude in making it. In church they talked about fasting, praying, the best way to live your life for God, and I realized that they were doing it right. By living where they did, caring about

who they did, and spending their time the way they did, they were putting Jesus' words into action. By addressing the needs of the community, they were really loving their neighbor, and they did it cheerfully, with a truly joyful heart.

On this trip I didn't just serve. I also learned what it means to show God's love to others. For that I'm truly grateful.

Interested in serving with our church and tutoring center? Email Lisa@redeemercp.org about bringing your group to RCP.