

# Statesman

---

## Westlake High School robotics students apply for patent

By **Katie Hall**

**@Katie\_Statesman**

Posted Feb 27, 2014 at 12:01 AM

Updated Sep 27, 2018 at 1:44 AM

Three Westlake High School students in the school's robotics program have applied for a patent for a remote they built.

The students, their teachers and an attorney working pro-bono sent off the application after a year of work. Sophomores Rachel Gardner, Ben Gorr and Akshay Prakash were recognized Feb. 20 during a ceremonial signing of the patent applications.

One of the program's mentors, Eric Rothfus with technology investment firm Alara Capital, developed the prototype, but he tasked the three students with coming up with a less bulky and less fragile model, he said.

"We knew exactly what we wanted to do," down to how many buttons it would have, Gardner said.

Being an entrepreneur, Rothfus said he's been lucky to work with the best and the brightest throughout his career, and these students were no different in terms of their "willpower, stick-to-itiveness ... and their ability to get stuff done."

While school robotics teams typically use laptops to control their robots, the students' device "the ChapR" replaces that. Instead of plugging controllers into a PC, students can plug controllers into the small, boxy device instead. It can connect to any vehicle through wireless Bluetooth technology, students said.

As they developed the ChapR, the Westlake students gave one to an Austin robotics team so they could get some feedback.

“They said all six of their teams were fighting over it, which was rather flattering,” Gardner said.

Eventually, the group shifted their focus from development to marketing and started approaching as many teams as possible during robotics competitions, asking them if they’d be interested in buying one, the students said.

“From the start, we knew it was useful, but would people pay \$100 for it?” Gardner said.

It turned out that the answer was yes — they have sold 26 and given four away for free throughout the United States of the 38 they’ve made so far. They hope to develop a business plan that involves giving away one free ChapR to a school robotics team in need for every three they sell. If they still make a profit after that, it will go to the Westlake and Eanes Science and Technology Association, to which the three students gifted the patent and which paid for the ChapR parts and footed some of the patent filing fees. Parents also chipped in for the filing fees, Rothfus said.

One of those who purchased the ChapR includes an employee with LEGO in California, Prakash said.

“This is a prime example of kids taking a problem, developing solutions to the problem and developing things that go way beyond the curriculum,” said robotics teacher Norman Morgan. “They really have not let education get in the way of our learning.”

Morgan said he thinks more Westlake students will be applying for patents in the future.

In about a year, they should know whether the federal government will issue the patent or not, said attorney Josh Tucker, an associate with the law firm Bracewell and Giuliani LLP.

“We’ve done some research, and it looks like it might be patent-able,” Tucker said.