



CPSS240:Robotics Instructor at Cesar Chavez ES

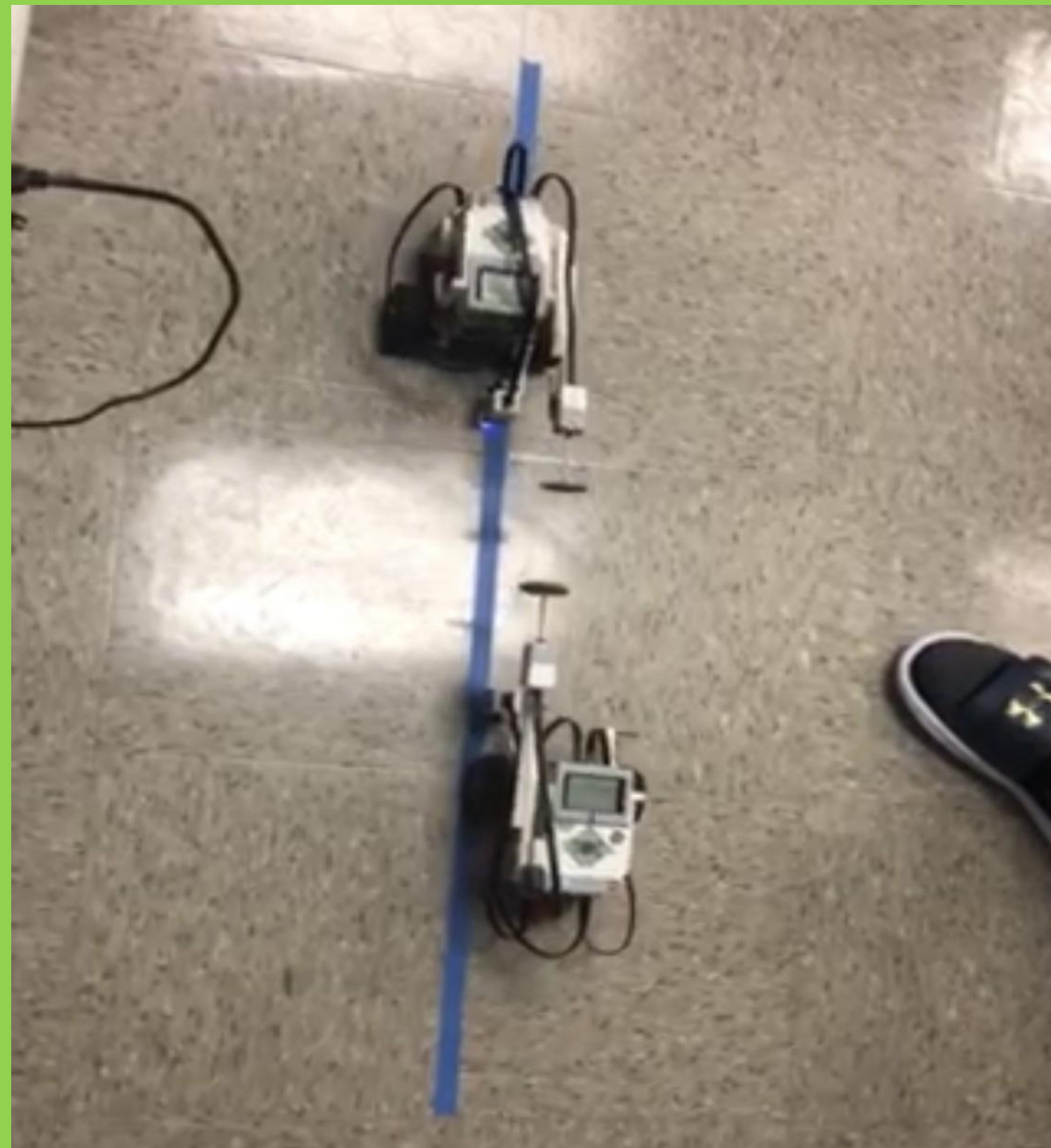


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Introduction: With the increasing necessity for problem solving in society, inspiring a passion for STEM in younger generations is becoming increasingly important. By teaching fun and interactive STEM principles through robotics, we hope to inspire a passion for learning STEM in these students.



These are examples of LEGO robots that the students were expected to build towards during their grand challenge. The grand challenge was to have students build robots that would “joust” each other, requiring them to learn valuable skills such as building, programming, troubleshooting, and collaborating.

Site Information:

Name of Site: Cesar Chavez Elementary School

Address: 6609 Riggs Rd, Chillum, MD, 20782

Your supervisor: Timothy Reedy

The site mission: Engage kids in STEM related projects to inspire a passion for the STEM field and their education.

The particular goals of the site you were at: Teach kids how to use LEGO Mindstorms in order to provide a fun introduction to robotics and STEM capabilities.

Issues on site:

-Kids would often get overly excited to build; it was sometime difficult to reel them back in and focus.

-Students learned valuable lessons about how to troubleshoot issues and problems that arise.



Activities:

-Organized into different schools and taught students the basics of LEGO Mindstorms building and programming in order to complete a grand challenge of having their robots “joust”.

-Design lesson plans with daily goals to keep students engaged and on the right track for their grand challenges.

-Investigated factors that lead to educational inequalities in public schools such as funding and available resources.

-Tutor middle school students online from College Park Academy, whose has been affected by COVID-19.



Photo of Cesar Chavez Elementary School

Takeaways:

While at Cesar Chavez Elementary School, I was able to build connections with the students in their robotics program and learn more about how STEM education is delivered today. Seeing how enthusiastic the kids were about learning robotics and catering to their creative sides reminded me of what inspired me to go into being a STEM major.

Future Work

In addition to helping students learn robotics, I have volunteered to virtually tutor middle school students at the College Park Academy, a local charter school. I plan on helping for as long as needed, as keeping students engaged and academically active is an important challenge for all of us to take on. I plan on using the lessons that I learned from teaching robotics to keep the students actively engaged and interested in what I am teaching them.

Acknowledgments:

I would like to thank Mr. Tim Reedy for holding the class and organizing these opportunities for us to go into our schools while also teaching us valuable lessons about school equality. I would like to thank Jeff and Sra. Ralon for guiding us while at our school and making sure things run smoothly. Finally, I’d like to thank Dr. Holtz and Merck for their supervising the SGC program and inspiring me to use my knowledge to make the world the best place I can possibly make it.

