

East Columbus Jr-Sr High and Hallsboro-Artesia Elementary Earn SPRK-ing Interest in Computer Science Robotics & Computer Science Grant



East Columbus Jr-Sr High (ECJSHS) and Hallsboro-Artesia Elementary (HAES) are set to embark on an exciting journey into the realm of computer science robotics and STEM education, thanks to the prestigious SPRK-ing Interest in Computer Science Robotics & Computer Science Grant awarded by the American Indian Science and Engineering Society (AISES).

This groundbreaking program, fueled by cutting-edge technology and powered by Sphero BOLT robots, is designed to propel students beyond traditional classroom boundaries. By immersing them in real-world applications through hands-on STEM activities that seamlessly incorporate their cultural perspectives, SPRK aims to spark a lasting interest in the field of computer science.

This AISES project, backed by generous support from notable funders such as Micron, Resolution Copper, San Manuel Band of Mission Indians, General Motors (GM), Motorola, and the National Security Agency (NSA), has empowered ECJSHS and HAES with an invaluable toolkit. Each school has received the following:

- Sphero BOLT PowerPack that includes 15 Sphero BOLT Robots
- 15 Bluetooth-capable tablets with the Sphero Edu app installed
- On-site professional development, introducing teachers to Sphero Education resources and recommendations for incorporating Sphero and coding into curricula
- Virtual preparation or onsite (depending on COVID-19 restrictions) 2-hour activity for the students
- AISES' SPRK-ing Interest Lesson Booklet
- Sphero Educator Guide
- Educator access to customized Sphero online training at the virtual Sphero Academy
- Access to 100's of BOLT activities and curriculum on Sphero Edu offering a rich repository of activities and curriculum on Sphero Edu.



The grant applications, spearheaded by Courtney Patrick of ECJSHS and Jennifer Bowen of HAES, were instrumental in securing each school's kit valued at an impressive \$10,000 for a total of \$20,000 for the district. The dedicated efforts of these educators, along with Darlene Graham (HAES), Christina Jacobs (ECHSHS), and the enthusiastic teacher cadets of ECJSHS, culminated in professional development sessions. These sessions equipped the educators with the knowledge and skills to leverage the materials for an enhanced teaching and learning experience while fostering a keen interest in STEM+CS.

Jennifer Bowen shared her excitement, stating, "I saw this opportunity in an electronic newsletter and reached out to learn more. I then reached out to ECJSHS, and Mrs. Courtney and I worked on our submissions. We were so excited when we received the great news!" Courtney Patrick echoed the sentiment, expressing, "The most exciting part for me was watching our teacher cadets interact in the professional development with us and seeing their passion for teaching and learning."

Students at ECHSHS and HAES are now poised to deepen their engagement with Science, Technology, Engineering, Mathematics, and Computer Science (STEM+CS) through the AISES SPRK-ing Interest in STEM+CS program. This captivating coding initiative merges STEM and computer science to raise awareness, interest, and competency in STEM+CS among Indigenous K-12 students. While the primary focus of the grant is on indigenous students, the benefits extend to all students at both schools through the newly established AISES Chapter, serving both institutions under the banner of AISES of Lake Waccamaw.



Club interest meetings are on the horizon, and all students are invited to participate. Dr. Kenneth L. Bowen, Principal of ECJSHS and a newly elected Board Member for AISES, expressed his enthusiasm, stating, "I am excited to support the newly created AISES chapter in Columbus County Schools, and I am proud of our staff for taking the initiative to seek out this grant to better prepare our students in STEM and computer science."

AISES, a national nonprofit organization committed to significantly increasing the representation of Indigenous peoples of North America and the Pacific Islands in STEM studies and careers, continues to make strides in fulfilling its mission. For more information about AISES, please visit www.aises.org. If you are interested in SPRK-ing Interest in Computer Science Robotics & Computer Science, please visit www.aises.org/sprk-ing.

