New innovative robotics program engages youth in STEM curriculum

**AT A GLANCE**
New robotics program teaches students the basics of robotics and programming using innovative STEM curriculum.

**The Situation**
Idaho Falls School District 93 teachers and administrators noticed a lack of Science, Technology, Engineering and Math (STEM) curriculum. The importance of STEM education becomes more pronounced each day as careers in these fields boom. As these careers grow, especially since the Idaho National Lab facility in Idaho Falls provides opportunities for science careers locally, school staff become increasingly aware of the need to capture the effect that using STEM lessons could have on youth. Furthermore, teachers and administrations have been looking to implement more STEM activities and lessons into school settings.

**Our Response**
University of Idaho Extension worked with the school district to implement science education by utilizing the We-Do 2.0 Robotics kits during 4-H school enrichment. This program engages youth during class time with technology, engineering, vocabulary, organizational skills, teamwork, as well as direction following. Students are taught how to build robots of differing shapes and sizes while also programing tasks for their robot each day. Students worked in pairs to hone their STEM skills. Additionally, the We-Do 2.0 program connects each robotics task to a real world scenario, directing students to take what they learn and apply it outside of their scope of just a robot.

**Program Outcomes**
During the two day a week, six week program with two third grade teachers, students excelled beyond our expectations. All the student were able to program and build multiple different robot types that completed many different tasks. Youth learned to program motion sensors, make loop sequences, and when given freedom on their program, could create their own codes. The students grew more excited with each day and looked forward to their time working with the program. This curriculum engaged students better than expected and introduced youth in early education to the possibilities in STEM.

**FOR MORE INFORMATION**

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