

impact

University of Idaho Extension programs that are making a difference in Idaho.

Camas County 4-H in-school and afterschool focus on STEAM education

AT A GLANCE

Education in Science, Technology, Engineering, Art and Mathematics (STEAM) fields play an essential role in Idaho and the U.S. economies sustainable growth and stability.

The Situation

University of Idaho Extension, Camas County advisory committee has expressed the need to have outreach programs that partner with the local school and library. The Camas County School district has 170 students with an average class size of 13 students. One hundred percent of the school is on free and reduced lunch program, which is an indication of economic disadvantage. Prior to 2021, there was no established afterschool program. Furthermore, as stated by the Idaho Department of Education Standard Achievement Test (ISAT), Camas County Elementary and Jr. High School is 33% proficient in math. No science test has been conducted.

Our Response

University of Idaho Extension, Camas County staff Carol Reagan and Cindy Kinder designed and directed education efforts for outreach programs with in-school and afterschool settings. Experiential learning 4-H science-based curriculum was reviewed, selected and purchased for conducting activities in the time frame. A part-time Camas County Community Science, Technology, Engineering, Art and Mathematics (STEAM) staff member was hired through University of Idaho Extension 4-H Youth Development to conduct STEAM



Students participating in coding with Lego Spike during the Cam-as 4-H Afterschool program. Photo credit Carol Reagan.

programs within the county's school district and community. Camas County School board, administration and teachers were approached about establishing and conducting the in-school efforts. Camas County Library board, librarian and volunteers were approached about beginning and steering the afterschool efforts. Both the school and library welcomed the partnership and allowed UI Extension staff to train teachers, train volunteers and conduct programs. University of Idaho Extension in Camas County applied for and obtained \$80,000 in grant funds, through the Idaho Department of Health and Welfare American Rescue Plan Act of 2021 (ARPA) grant funds. During the winter, a five-week in-school program with four school grades was conducted, as was a 12-week afterschool program that focused on expanding the 12 in-school

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lessons about Stop-Motion film. Furthermore, during the spring, a four-week in-school program and six-week afterschool program focused on robotics and science exploration, using the Lego Spike Essential curriculum. Kindergarten, first, second, fourth, fifth and seventh grade students from Camas County school district were able to participate in the in-school STEAM efforts. Youth ages five to 10 years old participated in the afterschool STEAM efforts.

Program Outcomes

Four hundred thirty-two youth contacts were reached through the in-school and afterschool efforts during the 2021-2022 program year.

During the winter, 287 youth contacts were impacted via the five-week in-school program plus a 12-week after school program focusing on Stop-Motion film. Students created their own stories, built sets, designed characters and props. They were introduced to color theory, principles of lighting and frames per/second filming. Also, they worked collaboratively on their Stop-Motion picture. The youth completed 10 Stop-Motion movies.

In the spring, a robotics and science exploration project impacted 145 youth contacts during the four-week in-school program. Additionally, a six-week, after-school program was conducted using experiential learning activities. Twelve lessons and activities were conducted to help youth improve reading skills, work collaboratively, follow design instructions and code projects by using tablets and Lego Spike Essentials.

The Future

An additional grant was applied for and received for the 2022-2023 year. Programs will focus on after-school, homeschool and community outreach.

Cooperators and Co-Sponsors

- Idaho Department of Health and Welfare — ARPA Education Grant
- Camas County School District 121 — Program classroom
- Camas County District Library — Program space and volunteers

FOR MORE INFORMATION

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