

# impact

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

## Teton County 4-H helps serve community needs through new STEAM offerings

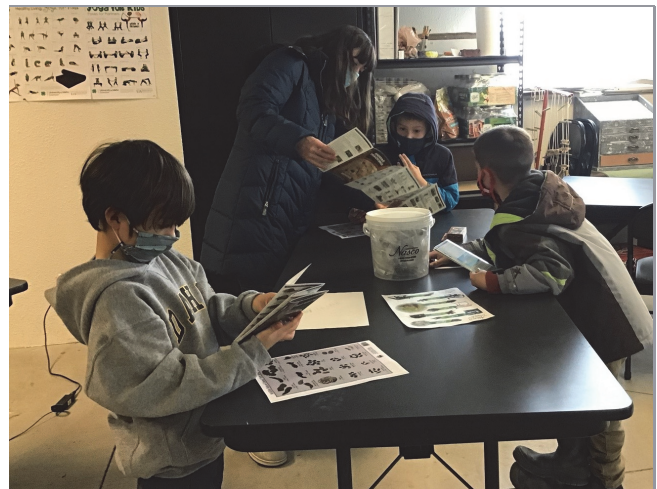
### AT A GLANCE

Enthusiasm for STEAM programming in Teton County leads to creation of new 4-H club, summer camps and community partnerships.

### The Situation

Teton County is a small county in eastern Idaho nestled on the western slope of the Teton mountains. While rich with tourism and recreation, growing economic inequality leaves many community members struggling to meet basic household needs. Finding reliable and affordable childcare is one of those needs. There are limited childcare facilities for elementary age youth available afterschool during the academic year and on Fridays during the summer.

Likewise, the demand and need for science, technology, engineering, art and math (STEAM) offerings continues to grow, with out-of-school programming presenting a valuable and accessible opportunity for youth to broaden their educational experiences. STEAM learning promotes critical thinking skills and innovation. Underserved youth and minorities often do not have the same access and support in these fields. The University of Idaho Extension office staff in Teton County has tackled these needs through big picture thinking — using experiential STEAM learning as an overarching theme for new programs and by partnering with community organizations to reach underserved youth.



Extension educator discusses differences in animal tracks with 4-H members.

### Our Response

Beginning in 2020, Teton 4-H combined the strengths of hands-on experiences with the excitement of learning about natural phenomena with our day camps, STEAM club and Cloverbud groups. By incorporating STEAM subjects into out-of-school activities, these subjects can be taught in a welcoming and fun environment, free from academic pressure. Teton 4-H enrollment fees are intentionally kept low (\$25-35 per year), and participation scholarships are offered, helping to lessen barriers to participation. In late summer 2021, STEAM programs were evaluated by parents and guardians through a Qualtrics online survey.

## Program Outcomes

4-H STEAM Clubs and Cloverbud Groups — To increase outreach and resources for 4-H STEAM, we partnered with the Valley of the Tetons Library and the Above and Beyond the Classroom (ABC) Teton Valley program. In the summer of 2021, 4-H Coordinator Leslie Sandefur taught 10 robotics lessons to 10 female minority middle schoolers at the ABC summer program, helping to reach this underserved demographic. With a couple youth at first reluctant to participate, observing behavior changes and knowledge gained during the classes, all youth exhibited increased understanding and enthusiasm of subject matter, with a couple students taking on leadership of showing and building their own creations to other participants.

In February 2020, AmeriCorps youth instructor Stefan Merriam began a 4-H STEAM club. Three meetings were in-person with seven meetings taught online due to COVID-19. Seven youth ages 6-12 initially participated, although participation dropped off to about half once meetings transitioned to Zoom. Feedback indicated that online only meetings were difficult to manage with homeschool and other pandemic pressures, especially for the younger participants who need more guidance with each activity.

Learning from this experience and meeting increased demand for afterschool activities for Cloverbud age youth (ages 5-7), in the spring of 2021, UI Extension Educator Jennifer Werlin offered four weeks of afterschool, in-person STEAM-based Cloverbud meetings. Reaching six youth, lessons covered biology, Lego™ robotics and aeronautics. Participants delighted in learning about wildlife, with one participant giggling, “I liked learning about the differences in scat and finding their (animal) poop and tracks outside in the mud and snow.” Other participants immersed themselves into paper airplane creation while informally learning engineering concepts. The most popular activity was Lego™ robotics.

4-H Summer Camps — Four Friday half-day camps were taught by the AmeriCorps instructor in the

summer of 2020. Attendance was capped at eight participants to allow for social distancing. Participants learned about science and healthy living through physical activity and outdoor games. Due to popularity of the camps, in the summer of 2021 our 4-H coordinator, Extension educator and county Extension assistant executed six Friday STEAM camps, reaching 11 youth. One parent messaged on Facebook, “As a parent in southeastern Idaho, I appreciated learning about the Teton County STEAM 4-H day camps.” Activities included watershed science, biology, robotics, gardening, pollinators, yoga, art and community service.

Parent Participant Evaluation Results — In late summer 2021, the 2020-2021 4-H STEAM programs were evaluated through a parent online survey (N=9; 30% survey response rate). Before child participation, the average knowledge of Teton 4-H programming was 2.22 on a scale of 1-5, with five being a high level of knowledge and one being little to no knowledge. Fifty-five percent of respondents had little to no knowledge of 4-H before participation. After participation, the average response was 3.3 (some knowledge). Sixty-seven percent of parents indicated that they participated because of child interest; 67% reported content/subject matter; and 33% reported convenience, affordable price and parent/guardian interest. On a scale of one-five, with five being highly likely, 89% of participants indicated that they are highly likely to participate in 4-H in the 2021-2022 year, with a median response of five and average response of 4.56. Scheduling conflicts were the most common reason for why a child wouldn't participate in the future.

## The Future

The popularity of 4-H STEAM programming is timely to help meet society's needs in the 21st century. Demand for STEAM programming is increasing, and there is a tangible need for more volunteers and instructors. UI Extension, Teton County received a 2021 Idaho Health and Welfare Community Grant to continue expansion of STEAM-based learning and participation barriers for minority and at-risk youth.

## FOR MORE INFORMATION

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