

impact

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

Career and science fairs focus on local job options and workforce skills

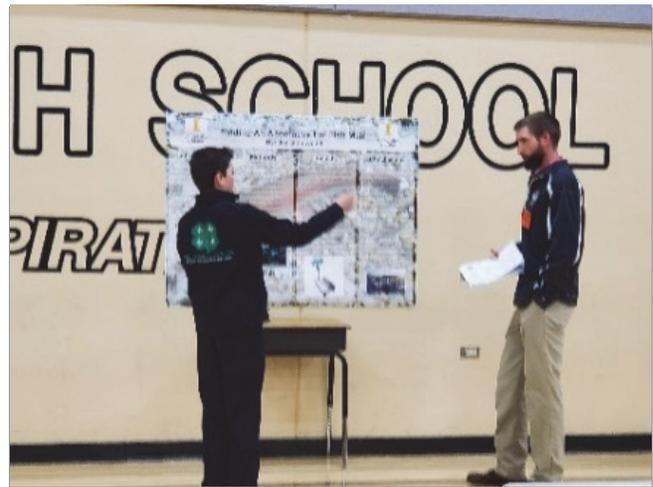
AT A GLANCE

High school students need to be aware of local job and career options and skills sought by employers. Forty-four percent of Idaho students go on to college as compared to the national average of 66%.

The Situation

University of Idaho Extension, Gooding County's advisory committee has expressed the need to bridge high school students' awareness of career and educational opportunities within local industries. Obtaining a high school diploma increases a student's future educational and workplace opportunities. The Idaho State Department of Education reported that the 2019 average graduation rate of all Gooding County high schools was 82.28%. The national rate is 84%; while Idaho's "go-on" to college rate is 44% and the national rate is 66%. Local employers' ability to meet their skilled and educated workforce needs through locally educated youth is critical for Idaho to retain those residents and companies not having to seek workforce outside of the state.

As a result of this need, career and science fairs were hosted at a local school to showcase needed job skills, education requirements and position options for 14 career fields including science. Careers in the Science, Technology, Engineering and Math (STEM) fields play an essential role in Idaho and the U.S. economies' sustainable growth and stability. STEM education produces critical thinkers, increases science literacy, and enables the next generation of innovators. Many



Student scientist presenting his fish research projects to U of I research scientist.

students think to have a career in science, they must leave rural Idaho; this is not often true.

Our Response

Extension Educator Cindy Kinder along with teachers, administration and local community mentors designed and conducted the career and science fairs that were open to schools and communities within the county.

Career fair —The 2020 Hagerman Jr/Sr High School Career Fair reached out to Gooding County students in Bliss and North Valley Academy Charter schools, as well as Camas County. Career fair participants included 213 Hagerman students and community members. The platform had 42 guest speakers, who rotated throughout classrooms sharing information with all

students about career options in their fields and how to prepare oneself for such jobs. In the afternoon, traditional fair booths were set up to share more in-depth information about specific careers.

Science fair — The 2020 Hagerman Jr/Sr Science Fair saw 63 Jr/Sr High students and four community members (open class) present projects in 15 divisions. The 2021 Science Fair saw 46 Jr/Sr High students and nine community members present projects in 10 divisions. Six guest speakers and judges took the time to discuss their related careers and the skill sets sought out by companies. The discussions involved showing students examples of science and its application. In 2020, a total of, 177 (83, 2021) Hagerman Elementary teachers and students, toured and visited the fair, interacting with presenters and discussing their projects.

Program Outcomes

Career fair results include:

- Students had the opportunity to learn and then seek out in-depth information from 46 professionals representing 14 industries.
- Mental health, law enforcement: Local, county and state police, government agencies: Bureau of Land Management, forest service, state parks, federal parks, military, law, real estate, public utilities, medical services, universities and colleges, agriculture businesses, veterinary, music and Extension agencies were available for students to learn about.
- Eighty percent of the career fair speakers expressed the gratitude of being able to explain the education and job skill needs for their profession to students.

2020 science fair results include:

- 65 students developed science projects, working as a team or as individuals and presented their work.
- 36 entered projects, covering 15 science divisions.
- 20-students (11 projects) participated at the Idaho FFA Agri-science Fair.

- 11 students (six projects) won their state division and then entered into the National FFA Agri-science Career Development Contest.
- Three projects received National Bronze Award, three projects received National Gold Award and one received third place overall.

2021 Science Fair results include:

- 55 students developed science projects, working as a team or as individuals and presented their work.
- 40 projects entered covering 10 science divisions.
- 11 students (7 projects) participated at the Idaho FFA Agri-science Fair and Career Development Experience.

2021 survey and focus group discussions were conducted with the following results:

- The paired sample t-test showed a statistically significant increase in the respondents' overall knowledge after program participation [t (df = 53; $\alpha = .005$) = 8.081, p = 0.001].
- Youth reported increased knowledge in science and technology careers, food science, animal agriculture and natural resource systems.
- As evidenced by the paired sample t-test, participants significantly increased their level of confidence to conduct an experiment, understand the collected information, apply scientific ideas, interpret data and communicate [t (df = 52; $\alpha = .005$) = 6.804, p = 0.001].
- Of the participants, 7% were sure and 14% were highly likely to pursue careers in science.

Cooperators and Co-Sponsors

- Hagerman Joint School District, Hagerman High School — Academy of Agriculture & Food Science
- The Bayer Fund — American Farmers Grow Rural Education Grant
- Eight community business and individuals

FOR MORE INFORMATION

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