Ag education adapting to changes

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BY CAROLYN LUCAS-ZENK | WEST HAWAII TODAY

Honokaa High School has offered agriculture programs at least since the 1940s. Back then, the education was mostly aimed at adequately preparing students for trade work at the plantations. It also catered to those who hoped someday to run the family farm, said Manuel Jadulang, the school's agriculture teacher.

Today, Honokaa's agriculture education classes focus on horticulture, agricultural technology, forestry, natural resources, agricultural science and aquaculture. Over the past five years, Jadulang has tried to provide greater opportunities for those who want to enter the agriculture field. He's passionate about training the next generation of farmers, ranchers, researchers, veterinarians, agronomists, inspectors, horticulturists, environmental scientists, ag mechanics and whatever else.

"Agriculture and the education programs are continually evolving because we have to be able to adapt to the changes in the industry and meet the demands," he said.

The agricultural, food and renewable natural resources sectors of the U.S. economy will generate an estimated 54,400 annual openings for individuals with baccalaureate or higher degrees in food, renewable energy and environmental specialties through 2015. Seventy-four percent of the jobs are expected in business and science occupations; 15 percent in agriculture and forestry production; and 11 percent in education, communication and governmental services, according to the U.S. Department of Agriculture.

Nationwide, there's a movement to promote the education and training of future generations for the agricultural workforce.

It's not just perfecting sustainable agriculture and having resilience in Hawaii's food systems, but it's also growing sustainable communities, Jadulang said.

Several West Hawaii high school agriculture teachers said agricultural and vocational education should be required for a half semester like it once was years ago.

However, agricultural education is not always seen as a value in all schools, especially when test scores seem to dominate, administrative support is lacking and dwindling funds is the reality, said Adriel Robitaille, Kohala High School agriculture teacher.

There's also a shortage of agriculture education teachers because a large number have retired or are nearing retirement age and few are entering university agriculture education programs, said Maverick Kawamoto, 29-year agriculture teacher and Vocational/CTE Department chairman at Konawaena High School.

A leadership change at Kohala High and the success of a sustainable gardening project with at-risk students led to the creation of the school's first natural resources class this year, Robitaille said. Also, funding from the Kahiau Foundation is helping him revive the school's ag program, revitalize the overgrown 3-acre farm, create an outdoor classroom and offer three classes next year. Partnerships with the community and colleges are key, he added.

Often, the notion is agriculture is only farming and production. But programs nowadays go beyond the subject matter and the content becomes the context within which they learn math, science, communication and leadership, Robitaille said.

"It gives students another avenue to apply the subjects, learn a different way, build on success or interest and know they can succeed," he said.

Jadulang said high school agriculture programs, which are electives, sometimes have difficulty recruiting and retaining students because of perceived images of agriculture, scheduling difficulties and competition from other programs and activities.

This year, there are approximately 90 students taking his five classes. Students use greenhouses, an ag shop, a plant tissue culture lab, an aquaculture area and a garden on 2 acres. Jadulang attributed the success of Honokaa's program to Nathan Kawashima, who was the ag teacher for more than 23 years and had the foresight to broaden the program and helped develop these facilities.

For those wanting to strengthen their classroom experience, go more in depth in the industry and do projects or competitions, Jadulang encourages participation in the school's chapter of the Future Farmers of America, or FFA. The national organization helps youth develop leadership, personal growth and skills for ag careers, whether it's in production, business, communications, science or education.

On the Big Island, Pahoa and Keaau are the only other high schools with FFA chapters, he said. Of the 13 students in Honokaa High's FFA, two serve as state officers — a major accomplishment Jadulang touted.

Konawaena High has maintained an agriculture program since its inception. But over the years, the program has diversified to keep up with the dramatic transformation of Hawaii's agricultural industries. The school's more than 3-acre farm includes an aquaculture area, greenhouse, garden, petting zoo and soon a butterfly house, Kawamoto said.

Enrollment has remained steady, with approximately 80 students in three classes. However, many students still have a lack of awareness about the importance of agriculture and drive to work hard or do a dirty job, Kawamoto said.

Agriculture teachers Donna Sonnenberg of Kealakehe High School and Noel Light of Ka'u High School could not be reached as of press time.

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