

Innovations in Agriculture

Recent predictions indicate that in order to sustain a world population expected to grow to 10 billion in 2050, [70% more food will need to be produced](#). The job of producing food has never been more important and cultivating skilled workers that are prepared to fill the [nearly 25,000 jobs](#) that already go unfilled each year has become essential. Most of these jobs focus on areas of management and business, science and technology, and food and biomass production.

The agriculture industry needs employees with skills in science, technology, engineering, and math, as well as 21st Century skills such as communication, collaboration, analysis/solution mindset, self-awareness, and entrepreneurial spirit. To address anticipated turnover due to retirement, the recruitment of new employees at an early age is essential. Without the next generation of agricultural workers coming into the pipeline, the future food supply could be very uncertain.

Across the West, innovative people are applying new approaches to address the current and future needs of the agriculture industry. One effort making a mark is the [Center for Land-Based Learning](#) which is seeded in a small program started by Walnut farmers Craig and Julie McNamara. Together they started the Farming, Agriculture, and Resource Management for Sustainability (FARMS) Leadership Program in 1993 out of concern for what they believed was a disconnect between people, their food supply, and the land.

The McNamara's saw that young people were increasingly lacking connections to the outdoors, as well as an understanding of where their food comes from and how it is grown. They also recognized that high school students needed hands-

on experiences in real-life situations to complement their academic training. Concerned that these hands-on experiences were less and less available, the early FARMS program became the Center for Land-Based Learning in 2001.

From its headquarters in Yolo County, California, the Center for Land-Based Learning is developing a critical part of the food system by providing education, mentoring, and support for people entering the agricultural industry. Programs for both youth and adults offer diverse opportunities to develop and practice leadership skills, gain knowledge, build confidence, learn about and pursue career aspirations, and build relationships that will help them reach their fullest potential.

The mission of the Center for Land-Based Learning is to inspire, educate, and cultivate future generations of farmers, agricultural leaders, and natural resource stewards. As the Executive Director, Mary Kimball says, "When the Center for Land-Based Learning began introducing urban youth to agriculture and natural resource conservation 27 years ago, our founders recognized that youth needed more hands-on experiences in the natural environment to give context to their academic experiences and bring their learning to life. Today, however, the need for our programs is at a critical point: aging farmers, population growth, climate change, and decreasing amounts of arable land are real issues facing agriculture today. Solving these problems will require an influx of people, technology, and innovation to keep our food system flourishing and our economy thriving. The Center for Land-Based Learning is committed to solving these problems through... partnerships with schools, businesses, farmers, and conservation organizations to inspire both youth and adults to pursue careers in agriculture and environmental science."

Today, the Center for Land-Based Learning administers programs in 27 California counties. The hands-on educational programs connect participants to agriculture and natural resource conservation, serving over 2,500 youth and adults annually. Providing high school students and new farmers with the training, resources, and hands-on experience to succeed in their chosen field, the Center for Land-Based Learning is securing the state's agricultural industry for decades to come. The goal is robust and sustainable agriculture in balance with an ecologically vibrant California.



Is there someone you know making a difference in agriculture in the West? Let us know! Share their story with us, so we can share it with others.

Stories can be sent to - itinetti@csg.org