Farm To Classroom

An Agricultural Vocational Journey

Ray Bueche-SVUSD
Michael Seyler-SVUSD
Jason Suppes-South Coast Research
3/8/2022


PAST
PRESENT
FUTURE


Northwest Indian College
Fort Belknap College
Blackfeet Community College
Turtle Mountain Community College
Cankdeska Cikana Comm. College
White Earth Tribal & Community College
Lac Courte Oreilles Ojibwa Community College
Washington State University
Univ. of Idaho
Salish Kootenai College
Stone Child College
Fort Peck Community College
Fort Berthold Comm. College
Leech Lake Tribal College
Fond du Lac Tribal & Comm. College
Bay Mills Community College
Oregon State University
Montana State University
Little Big Horn College
Chief Dull Knife College
United Tribes Technical College
North Dakota State Univ.
Sitting Bull Coll.
Sisseton Wahpeton Community College
Si Tanka Univ.
Oglala Lakota College
South Dakota State University
Sinte Gleska Univ.
University of Minnesota
College of Menominee Nation
University of Wisconsin
Saginaw Chippewa Tribal College
Michigan State University
University of Vermont
University of Maine
University of Massachusetts
University of New Hampshire
Cornell University
University of Rhode Island
University of Connecticut
Rutgers University
University of Delaware
Delaware State University
University of Maryland College Park
University of Maryland Eastern Shore
University of the District of Columbia
Virginia State University
D-Q University
University of California
University of Nevada
Utah State University
University of Wyoming
Colorado State University
Nebraska Indian Community College
Little Priest Tribal College
University of Nebraska
Iowa State University
Purdue University
Ohio State University
University of Illinois
Pennsylvania State University
West Virginia University
Kansas State University
Haskell Indian Nations University
University of Missouri
Lincoln University
West Virginia State Univ.
Virginia Polytechnic Institute & State Univ.
Kentucky State University
University of Kentucky
Diné College
Navajo Technical College
Institute of American Indian Arts
Southwestern Indian Polytech. Institute
New Mexico State University
Oklahoma State University
Langston University
University of Arkansas
University of Arkansas Pine Bluff
Tennessee State University
University of Tennessee
North Carolina A&T State University
North Carolina State University
Clemson University
University of Georgia
South Carolina State University
Alabama A&M Univ.
Auburn University
Tuskegee University
Fort Valley State University
Mississippi State University
Alcorn State University
Louisiana State University
Southern University and A&M College
Texas A&M University
Prairie View A&M University
Florida A&M University
University of Florida
University of Hawaii
HAWAII
University of Arizona
Tohono O'Odham Community College
Ilisagvik College
University of Alaska
ALASKA
PACIFIC BASIN
NORTHERN MARIANAS
Northern Marianas College
GUAM
University of Guam
FEDERAL STATES OF MICRONESIA
College of Micronesia
AMERICAN SAMOA
American Samoa Community College
PUERTO RICO / U.S. VIRGIN ISLANDS
University of Puerto Rico
University of the Virgin Islands
1862
1890
1994

COOPERATIVE EXTENSION

UNIVERSITY OF CALIFORNIA
Agriculture and Natural Resources

UC CE University of California Cooperative Extension

Located in every county in California

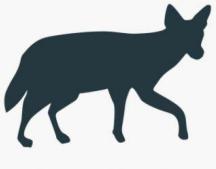
RECS

Research Extension Center System
(Nine total in California)

SOUTH COAST RESEARCH & EXTENSION CENTER

UC Cooperative Extension of Orange County Programs

UC University of California Cooperative Extension

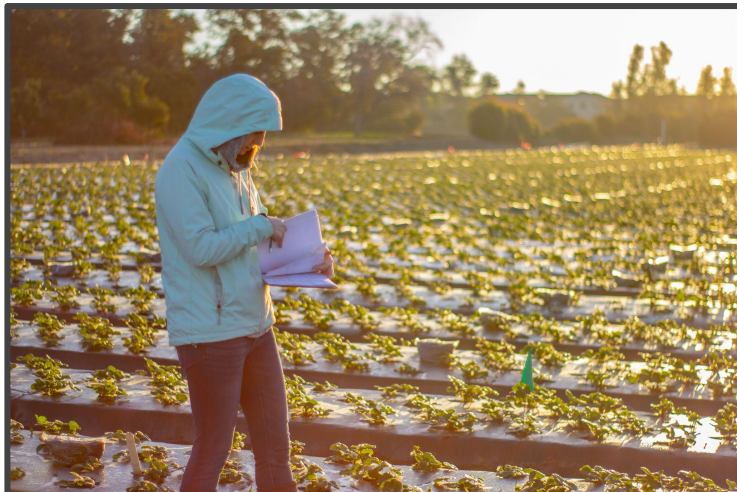


Human-Wildlife Interactions

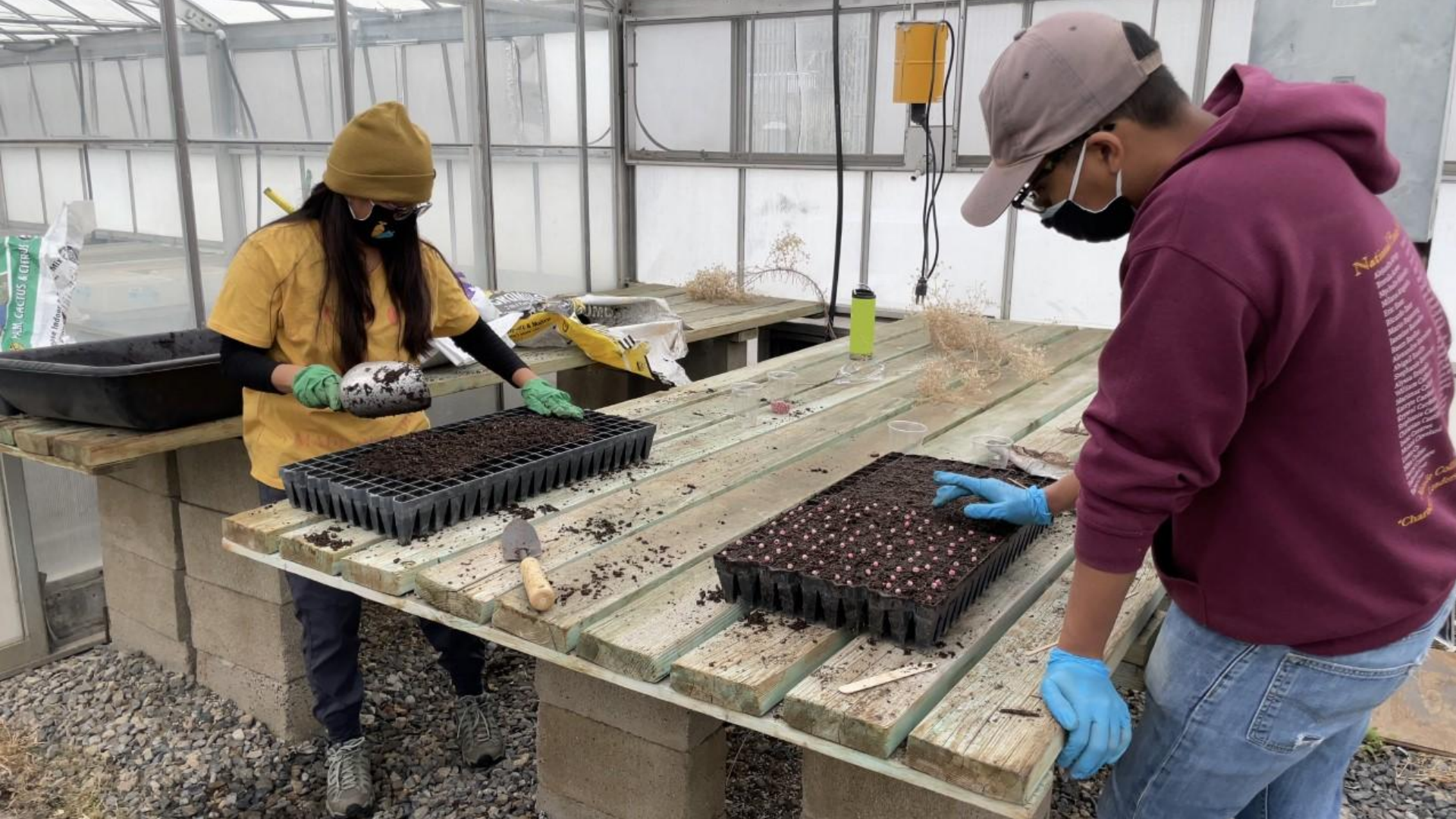
Urban Forestry

Water Resources

SOUTH COAST RESEARCH & EXTENSION CENTER




REGISTRATION




25121
ESPERANZA
EDUCATION CENTER

SVUSD/ SCREC Partnership

Saddleback Valley Adult Transition Program and the University of California South Coast Research and Extension Center(SCREC) have been developing a vocational training program for ATP students.

We've identified three distinct job path/industries that we think we can help prepare students for:

- Garden Centers
- Commercial Nurseries
- Landscaping

Building Curriculum & Future Partnerships

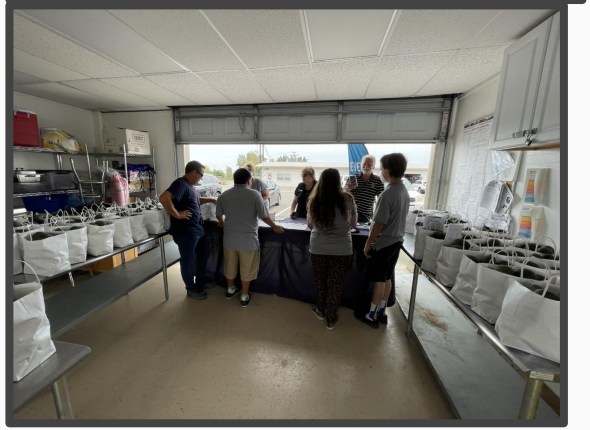
- We are in the process of identifying potential partners who can help strengthen career education as it relates to garden centers, nurseries, or landscapers.

- Will create special components to our program to help pre-train workers to reduce need on-the-job-training.

- Will focus on basic use of hand and landscaping tools, irrigation management, care and maintenance of fruiting and landscape trees.

Life on the Farm

Life on the Farm



Life on the Farm Video

From a Partner Perspective

- It starts with a tour
  - Important in early collaboration. Learn about each other's programs. Identify potential challenges
  - ATP participants have a chance to experience the wide range of working environments, before the commit. Some come tour and decide that this isn't for them.

- Start slow and incrementally. It's trial and error to see what task participants can carry out and which ones present more challenge.

- The business or organizations you partner with are learning as much as your students/participants. Most probably don't have experience working with special needs youth

Best Practices - An Educator’s Perspective

- Collaboration between team members
- Develop a plan and be prepared to be flexible and make changes as needed
- Prepare the students before they start working
- Choosing the right student
    - Physical stamina. Agricultural workers need to be able to perform laborious tasks repeatedly.
    - Listening skills. Agricultural workers need to work well with others. Because they take instructions from farmers and other agricultural managers, effective listening is critical.
    - Physical strength. Agricultural workers must be strong enough to lift heavy objects, including tools and crops.
    - Dexterity. Agricultural workers need excellent hand-eye coordination to harvest crops and operate farm machinery.

Best Practices - An Educator’s Perspective

- What has worked so far
  - Choosing the right students to start this project
  - Choosing the right job coaches to support the students
  - Communication is key
  - Be willing to get dirty and learn with the students
  - This is not a typical job site
  - Be flexible
  - Be willing to learn and make adjustments as needed
  - Being able to share all of the food with our school has been very rewarding
  - Students love to physically see and be able to eat the fruit of their labor
  - This has been one of the most rewarding job experiences for our students

Best Practices - An Educator’s Perspective

- What has not worked so well
  - We tried to have students who were not the right fit for this job site at the beginning - It is best to start with students who show interest in agriculture and as they learn more skills they can help teach other students
  - The work is labor intensive - Students need to be prepared for working outdoors
  - Figuring out what to do with all of the produce we brought back to school - Through trial and error we have developed some fantastic ways to share our experience with the whole school
  - Student expectations - We have had to constantly adjust our expectations based on student individual needs and abilities
  - Pairing students appropriately - We try and form groups of different ability levels
  - How to apply the skills learned on the farm and turn them into real world job opportunities for the students

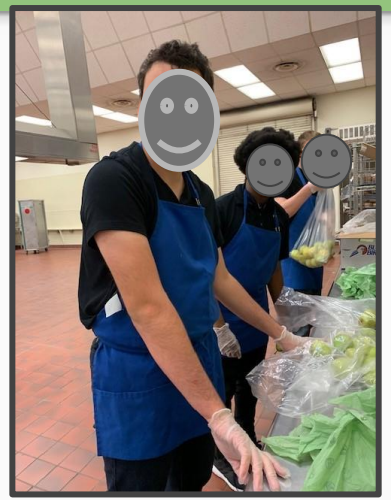
Best Practices - A Student Perspective

- “I didn't like being outdoors but now I enjoy working at the farm” -Brent
  - “The work is hard. I enjoy picking oranges the best” -Taylor
  - “I like eating the food when we get back to class” -Jordan
    - “I do not like weeding. I like picking pumpkins” - Dylan

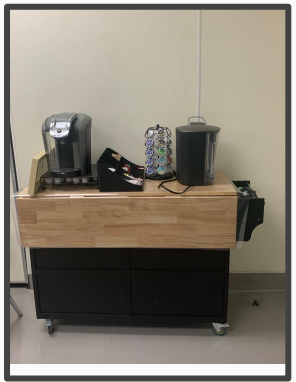
SVUSD ATP Agriculture Program

- On campus garden
  - Flower garden
  - Herbs
  - Citrus trees
  - Succulent Garden
  - Salsa Garden
  - Butterfly Garden
  - Teachers Choice
- Use of the Master Gardeners
  - Better yield
  - Planting the right crops

Enhancement of on campus curriculum

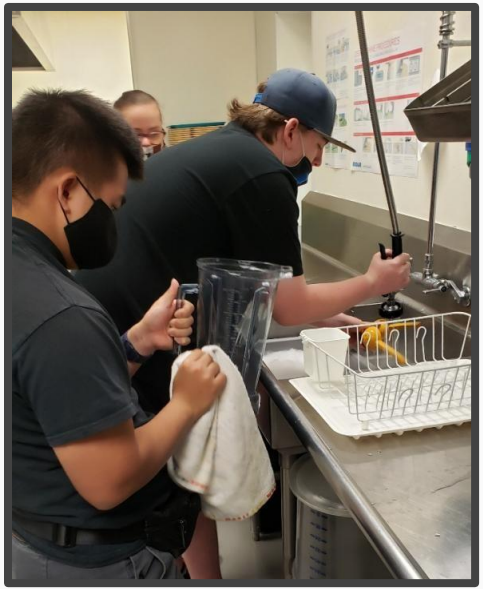


- Educafe-District Commissary
  - Processing of foods for recipes for ATP and District Office
- Hope Cafe-Student run coffee cart
  - Increase selections to include fresh Smoothies and Juices
- Eagles Landing-Student pop-up run restaurant
  - Incorporate fresh items
- Fresh items in every school lunch(breakfast)
  - Grown, and processed by students
- Healthy Harvest Kitchen- On site canning, preserving and food dehydration lessons



Healthy Harvest Kitchen

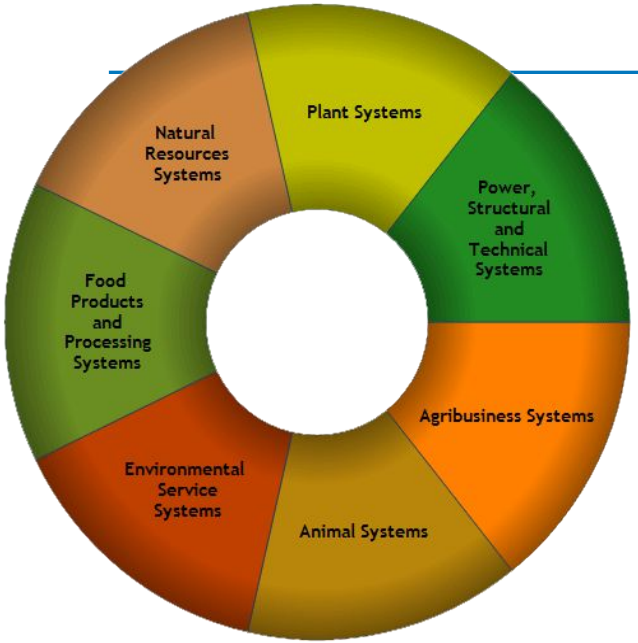
- SVUSD ATP micro business
  - Eagles Landing-Pop up Restaurant
  - Food products
- Provide a complete pathway for Farm to Classroom
- Completion of food handler cards
- Access to unique vocational sectors
-



Plans for the Future

- Careers in agriculture
- How to support individuals with disabilities
- Benefits of employing people with disabilities
- Supporting growth of program within the OCLPA
- Partnering in FDA and agriculture grants with UCANR
- Hosting Master Food Preserver lesson on Esperanza Campus
-

Career Pathways



- Agribusiness Systems
- Animal Systems
- Environmental Service Systems
- Food Products and Processing Systems
- Natural Resources Systems
- Plant Systems
- Power, Structural and Technical Systems

Agribusiness Systems

Agribusiness is the coordination of all activities that contribute to the production, processing, marketing, distribution, financing and development of agricultural commodities and resources. This includes food, fiber, wood products, natural resources, horticulture, and other plant and animal products and services. Agribusiness is a high-tech industry that uses satellite systems, computer databases and spreadsheets, biotechnology and many other innovations to increase efficiency and profitability.

Sample occupations include:

- Agricultural Commodity Broker
- Agricultural Economist
- Agricultural Loan Officer
- Agricultural Products Sales Representative
- Farm Products Purchasing Agent and Buyer
- Farm, Ranch Manager
- Farmer/Rancher
- Feed, Farm Supply Store Sales Manager
- Sales Manager

Animal Systems

People who work in the Animal Systems pathway work to develop better, more efficient ways of producing and processing meat, poultry, eggs and dairy products. They study genetics, nutrition, reproduction, growth and development of domesticated farm animals. Some individuals inspect and grade livestock food products, purchase livestock or work in technical sales or marketing. Others advise agricultural producers on how to upgrade animal housing facilities properly, lower mortality rates, handle waste matter or increase production of animal products, such as milk or eggs. Animal care workers train, feed, water, groom, bathe and exercise animals. They also clean, disinfect and repair their cages.

Sample occupations include:

- Agricultural Products Sales Representative
- Animal Breeder, Husbandry
- Animal Geneticist
- Animal Nutritionist
- Animal Scientist
- Aquacultural Manager
- Poultry Manager
- Veterinarian
- Veterinary Technician

Environmental Services Systems

People who work in the Environmental Service Systems pathway are involved in water and air pollution control, recycling, waste disposal and public health issues. Environmental engineers and technicians conduct hazardous-waste management studies, evaluate the significance of the hazard, offer analysis on treatment and containment, and develop regulations to prevent mishaps. They design municipal sewage and industrial wastewater systems. They analyze scientific data, research environmental projects and perform quality control checks.

Sample occupations include:

- Agricultural Products Sales Representative
- Environmental Compliance Inspector
- Environmental Sampling and Analysis Technician
- Hazardous Materials Handler
- Recycling Coordinator
- Secondary School Teacher
- Toxicologist
- Turf Farmer
- Water Conservationist

Food Products and Processing

People who work in the Food Products and Processing Systems pathway discover new food sources, analyze food content and develop ways to process, preserve, package or store food according to industry and government regulations. They create new food products to meet consumer needs and inspect food-processing areas to ensure that sanitation, safety, quality and waste management standards are met.

Sample occupations include:

- Biochemist
- Food Scientist

Natural Resources

People who work in the Natural Resources Systems pathway perform a variety of tasks from helping to develop, maintain, and manage the forest and natural environment to catching and trapping various types of marine life for human consumption, animal feed, bait and other uses. Forest and rangelands supply wood products, livestock forage, minerals and water; serve as sites for recreational activities; and provide habitats for wildlife. Conservation scientists and foresters manage, develop, use and help protect these and other natural resources.

Sample occupations include:

- Ecologist
- Fish and Game Officer
- Fisheries Technician
- Forest Manager, Forester
- Forest Technician
- Geological Technician
- Logging Equipment Operator
- Outdoor Recreation Guide
- Park Manager
- Park Technician
- Range Technician
- Wildlife Manager

Plant Systems

People who work in the Plant Systems pathway study plants and their growth. This helps producers of food, feed and fiber crops continue to feed a growing population while conserving natural resources and maintaining the environment. Individuals in this pathway also develop ways to improve the nutritional value of crops and the quality of seeds. They use genetic engineering to develop crops resistant to pests and drought.

Sample occupations include:

- Agricultural Products Sales Representative
- Certified Crop Advisor
- Crop Grower
- Custom Harvester
- Farm, Ranch Manager
- Farmer/Rancher
- Floral Designer
- Floral Shop Manager
- Golf Course Superintendent
- Machine Setter, Operator
- Nursery and Greenhouse Manager
- Soil and Plant Scientist
- Turf Farmer

Power, Structural and Technical System

People who work in the Power, Structural and Technical Systems pathway apply knowledge of engineering, hydraulics, pneumatics, electronics, power, structures, and controls to the field of agriculture. They design agricultural structures as well as machinery and equipment. They develop ways to conserve soil and water and to improve the processing of agricultural products.

Sample occupations include:

- Agricultural Engineer
- Agricultural Equipment Operator
- Agricultural Equipment Parts Manager
- Agricultural Equipment Parts Salesperson
- Machinist
- Parts Manager
- Welder

Farmers with Disabilities

Agricultural work can be mentally and physically demanding, but that doesn't mean that people with disabilities can't enter the field. Many people living with disabilities choose to agriculture for their career. Nationwide, approximately 288,000 agricultural workers between the ages of 15 and 79 have a disability that affects their ability to perform one or more essential tasks (McNiel, 2000, Bureau of Labor Statistics, 1999). Assistive technologies, modified production methods, and other techniques can help individuals with disabilities overcome physical and mental challenges so that they can continue working in the field.

Benefits of Employing People with Disabilities

There are many benefits to employing people with disabilities. These include increased production, quality work environments and beneficial customer relationships. People with disabilities are often the most loyal and long term employees in an organisation.

According to STEPS National Disability Coordination 0fficers, evidence has shown many benefits of a diverse workplace and employing someone with Autism Spectrum Disorder (ASD):

- They take fewer days off, take less sick leave and stay in jobs for longer than other workers
- have fewer compensation incidents and accidents at work compared to other workers
- build strong relationships with customers
- boost workplace morale and enhance teamwork
- Increased productivity, bringing different talents, backgrounds and perspectives
- Broadens your scope to attract and retain talented staff
- Able to link with external organisations for support and guidance

Benefits of Farm Work

The Benefits Of Farm & Ranch Work

There are many reasons why farms and ranches are becoming popular options for special needs families, including:

- The lifestyle is slower paced and more relaxing making it easier for individuals with special needs to adapt to their surroundings.
- On a farm or ranch there a number of vocational activities and skills that individuals can learn.
- A farm can offer a perfect opportunity to create a sustainable business for individuals with special needs by selling their produce in the local markets.

The Toolbox: Assistive Technology Database

AgrAbility has assembled a resource called, “The Toolbox.” This resource is searchable database for assistive farming technologies, including agricultural tools, equipment, machinery & buildings for farmers and ranchers with physical disabilities.

http://www.agrability.org/toolbox/

Thanks!

Contact us:

Jason R Suppes
jrsuppes@ucanr.edu
http://screc.ucanr.edu/
Instagram- @ucsouthcoast

Ray Bueche
Buecher@SVUSD.org
https://www.svusd.org/schools/alternative-schools/esperanza

https://www.svusd.org/programs/career-start
Michael Seyler

SeylerM@SVUSD.org