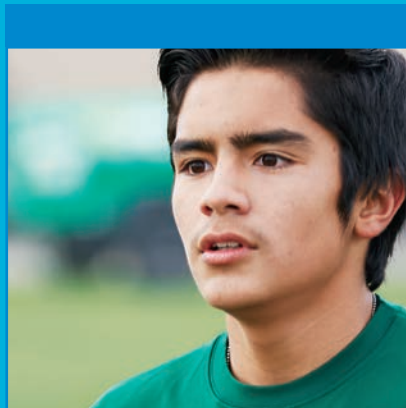
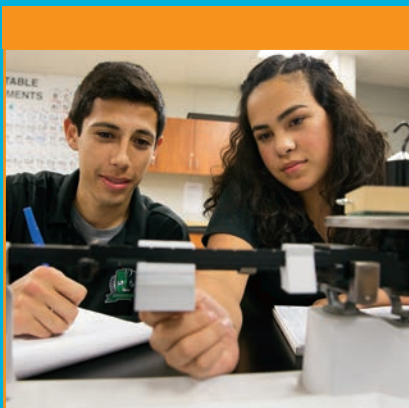




JOB'S FOR THE FUTURE

Getting Ahead at School



How Ag Prep Is Supporting and Accelerating Student Learning

Fall 2016



Contents

Introduction	1
Ag Prep Results	2
What is Ag Prep?	3
Ag Prep's Five Principles for Supporting Student Learning	4
What's Next?	8

By Thad Nodine

Thad Nodine is an education writer affiliated with Jobs for the Future, a Boston-based national nonprofit that provides technical assistance in support of The Wonderful Company's education programs.



Imagine you're a sophomore in high school in California's Central Valley. Like many of your peers, you began ninth grade two or three years behind academically—at the sixth or seventh grade level in English and math. But you're already catching up. During your freshman year:

- You made two years of academic progress.
- You earned college credits for three classes (computers, nutrition, and Spanish 1).
- You passed your college-prep courses and you're on track to pass the courses you'll need for admission at the University of California (UC) and California State University (CSU).
- You gained skills for well-paying career positions in Ag Business, Ag Mechanics, or Plant Science.
- You expect to earn an associate degree for transfer (AS-T) the summer after high school, which will enable you to complete a bachelor's degree in two years.

Q: How are you making so much progress so fast?

A: That's what Ag Prep is all about: helping students succeed by creating a fundamental change in the educational experience, so that more high school students are engaged in a rigorous, relevant curriculum that gives them direct experience in college classes, agricultural careers, and work-based learning.

“None of my family members have been to college. I want to do that for my younger brothers and sisters so they can see that anything is possible.”

— Ag Prep Student, Sanger High School

Ag Prep Results

High school students participating in Wonderful Agriculture Career Prep (Ag Prep) made sharp gains in learning during the program's first two years. The following rates far exceed the performance of peers in the Central Valley and are based on the 475 students participating in Ag Prep in 2015–16. This year, Ag Prep will serve about 825 students across three grades. At full capacity in 2020, the program will be serving about 1,450 students.

For 9th graders in 2015–16:

- *Academic progress:* Freshmen **grew by almost three academic years in reading and math** during their first school year in the program.
- *On track for a college degree:* **89% are on track to earn their associate of science degree** by the summer after high school graduation (they passed 2 or 3 college classes by the end of freshman year).
- *On track for university success:* **79% are on track to meet college entrance requirements** for UC and CSU (they have passed 5 or 6 classes in the a-g sequence).

For 10th graders in 2015–16:

- *Academic progress:* **Sophomores grew by over four academic years in reading and math** during their two years in the program.
- *On track for a college degree:* **81% are on track to earn their associate of science degree** by the summer after high school graduation (they passed 5 or 6 *increasingly difficult* college classes). By the end of the year, our sophomores completed *nearly a third* of their degree requirements.
- *On track for university success:* **78% are on track to meet college entrance requirements** for UC and CSU (they have passed 13 or 14 classes in the a-g sequence).



“This program shows if you have high expectations and you give students the support, you can get amazing results.”

— **Stephanie Bollweg**
Coordinator, Avenal High School

What is Ag Prep?

Wonderful Agriculture Career Prep (Ag Prep) is a partnership in the San Joaquin Valley that brings together seven high schools, three community colleges, and several agricultural companies—including The Wonderful Company and its brands—to create fundamental changes in how students experience school (see “Ag Prep Partners”). In a region where too many students face *low* expectations, Ag Prep expects **big** things of students, and supports them along the way.

At Ag Prep, **students complete a college-prep curriculum and over 50 college credits in high school**, which enables them to earn an associate degree for transfer (AS-T) during the summer after graduation. Students also participate in one of **three agriculture-themed pathways—Ag Business, Ag Mechanics, or Plant Science**. Graduates can choose between accepting a well-paying, skilled career position within The Wonderful Company or entering a four-year college as a junior, **earning their undergraduate degree in half the time, at half the cost**.



Ag Prep Partners

High Schools

Avenal High School
Mendota High School
Reedley Middle College High School
Sanger High School
Wasco Union High School
Washington Union High School
Wonderful College Prep Academy (Delano)

Community Colleges

Bakersfield College
Reedley College
West Hills College

Agricultural Companies

The Wonderful Company and its brands:
POM Wonderful, Wonderful Citrus,
Wonderful Halos, Wonderful Orchards,
Wonderful Pistachios & Almonds
Olam International

Ag Prep's Five Principles for Supporting Student Learning

Ag Prep programs have been implemented for two years at Avenal High School, Sanger High School, and Wonderful College Prep Academy. Each of these schools enrolled new cohorts of about 60 freshmen in 2014–15 and in 2015–16. Reedley Middle College High School, Wasco Union High School, and Washington Union High School enrolled their first cohorts in 2015–16. Mendota High School launched Ag Prep in 2016–17. The programs at each school will grow annually, as new freshmen enroll and existing students progress toward graduation.

All seven schools serve some of the lowest-income and lowest-performing students in the state. **A key challenge they face is that most freshmen arrive performing below grade level in math and reading. Yet from day one, their classroom assignments are at or above grade level—including college courses.** This brief highlights Ag Prep's strategies to support and accelerate student learning, based on the experiences of high schools that have implemented Ag Prep for two years: Avenal, Sanger, and Wonderful College Prep Academy.

The following five principles help Ag Prep high schools create strong academic supports to accelerate and support student learning.

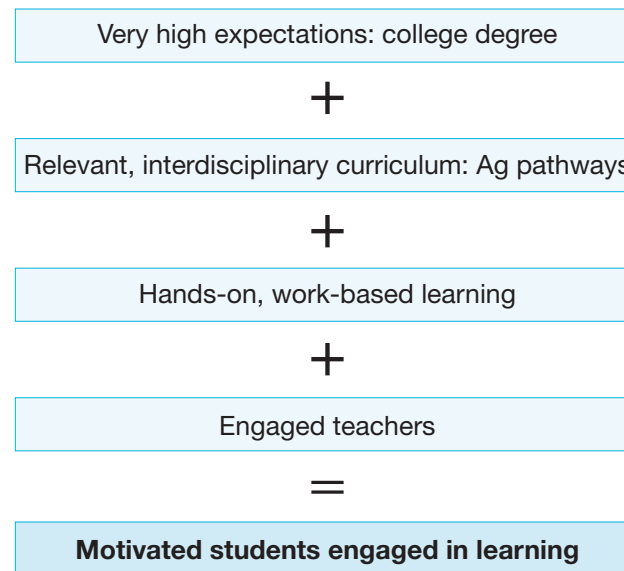
1. Integrate Academic Supports into Fundamental Changes in the School Experience for All Students.

At Ag Prep, student supports are integrated into an overall approach that brings fundamental changes to the high school experience. **The program raises academic expectations to college levels for all students**, while grounding learning through hands-on, work-based learning. High school teachers are actively engaged in helping all students prepare for and succeed in rigorous classes. Students explore academic and career interests through interdisciplinary projects across English, math, and science as they engage in experiential learning off-site:

- **Freshmen** participate in a professional conference in agriculture.
- **Sophomores** engage in a daylong job-shadowing experience.
- **Juniors** build a yearlong mentorship relationship with a career professional.
- **Seniors** who fulfill program requirements are guaranteed a paid internship.

Through these experiences, students become more motivated to excel in high school. High schools make student supports part of everything they do.

Strong Student Supports are Integrated into a Rigorous, Grounded Approach



“High schools need to provide support everywhere, all the time, in everything they do, to all students. It’s a mind-set and follow-through to help all students meet high expectations.”

— **Noemi Donoso**
Senior Vice President, Wonderful Education

Principle 1 in Action: Transforming the School Experience

Wonderful College Prep Academy, Delano

Pathway: Ag Business

Interdisciplinary Project: Producing Food in a Soilless World

In an English support class at the end of March, sophomores at Wonderful College Prep Academy are writing their one-minute “elevator pitches” to summarize their business plans directed to potential investors. The business plan presents the results of the students’ yearlong efforts to grow a nutritious food crop in a soilless world. The business plan draws from cutting-edge practices in agriculture—based on research, instruction, a job shadow at Wonderful Citrus or



Wonderful Orchards, and participation in a professional agricultural conference.

Three college classes this year (as well as a science class) have informed their projects: Introduction to Agribusiness; Agriculture, Environment and Society; and Agriculture Sales and Communication. They have been working in teams to research hydroponic

and aquaponic systems, design a model to support plant growth without using soil, build a prototype, test it, adjust the model and test it again, and write up results. In math class, they developed cost and growth projections for their agricultural enterprise.

Building on last year’s college classes in computers and nutrition, the students created spreadsheets and documents, shared their findings, and made slideshow presentations. After receiving feedback from teachers and peers,

students revised their work using their own laptops provided by the program.

At the end of the school year, the students will showcase their findings, present their agricultural model, and make their elevator pitches at the school fair.

“Of all the supports, some of the most successful have been the project-based learning and the visits in the field. Through those experiences, students can see what they’re learning in action.”

— **Stephanie Bollweg**
Coordinator, Avenal High School

2. Relentlessly Monitor Student Performance and Quickly Address Gaps in Learning.

Each high school sets up a case management system to identify early and often those who are struggling and address their gaps in learning through personalized support. A coordinator at each high school gathers data and tracks Ag Prep students at least monthly. **The priority is to identify students who are struggling very early, through a variety of means, including meetings with instructors, grades, formative and summative assessments, contacts with students and parents, and other data.** Based on how students are performing, they are directed to mandatory interventions, which are adapted and personalized to meet their individual and changing needs.

“Ag Prep helps high schools gather and review pertinent student data regularly throughout the year in order to develop strategies to address individual student needs. We use an exhaustive approach to help all students achieve.”

— **Rebecca Farley**
Senior Director, Ag Prep

Principle 2 in Action: Developing a Strong Case Management Approach

Avenal High School

Every few weeks the Ag Prep coordinator at Avenal contacts teachers and reviews grades and absences to identify those students who are struggling in their classes and those most at risk for failing. The coordinator works with the Ag Prep leadership team at the school to match each struggling student with the team member who is best in a position to coach and mentor the student. The leadership team includes the coordinator, the Ag Prep counselor, the math intervention teacher, and the English intervention teacher. The team member works one-on-one with the student to set up goals and an action plan for tutoring and supports, and meets with the student at least weekly to track performance on weekly objectives. “Case management doesn’t really explain the full role,” said Stephanie Bollweg, the Ag Prep coordinator at Avenal. “For us, it also involves engaging with students as motivator, mentor, and success coach.”

3. Provide Personalized Supports to Address Learning Gaps in Math and English.

In monitoring student performance, high schools identify each student’s learning and skills gaps and provide personalized supports to address those needs. **Each high school develops, draws from, and adapts a range of supports based on the student’s needs.** Current supports in Ag Prep high schools include peer study groups, one-on-one supports, in-class assistance, pull-out support, after-school study, support classes, adaptive technology, and project-based learning that isolates skills practice and application. During the summers, students at all the schools are required to attend summer sessions where they receive individualized support focused on their learning gaps and complete a college course.

A promising approach has been to design support classes in math and English that use a rotation model with learning stations. The teacher adapts the topics covered in each station based on the students’ needs at that time—from supporting their current instruction in their math or English class to addressing their prior learning needs. The stations include:

1. **Small group instruction.** The teacher works with about a third of the class for a third of the class time, providing direct instruction on identified learning gaps or in support of the content of their current class.
2. **Project-based learning.** Students work either individually or in groups on interdisciplinary projects or other hands-on applications.
3. **Adaptive technology.** Students work on the computer, using software applications that assess their learning or skills gaps and lead them through exercises or activities to address them.

Adaptive technology can be particularly effective at isolating skills that students need to master and providing them with extended time to practice and apply those skills. For adaptive technology, the high schools are using either Read Naturally or Reading Plus to help students develop English fluency. For math, they are using either ALEKS or Knowre to target learning gaps and to help students reinforce their understanding.

Principle 3 in Action: Providing Personalized Supports

Sanger High School

Sanger has a well-established pull-out and push-in intervention system schoolwide. Two intervention teachers are dedicated to Ag Prep, one in English and one in math. The teachers pull targeted students from P.E. or an elective class to provide them with tutoring in math or reading. They also provide “push-in” support by going into math or English classes and working with targeted students individually or in small groups. After-school tutoring is mandatory for students who are identified as struggling.

Wonderful College Prep Academy

Wonderful provides a robust system of support classes during the day for all Ag Prep students. For freshmen, the school schedule builds in two class periods for math and two for English. One math class provides primary instruction and the second class (with a different teacher) provides individualized support. The same is true for English. At the end of March, for example, the support class in math is focusing its small-group instruction and project-based stations on helping students understand and graph quadratic equations (for algebra). At the adaptive technology station, students work on their identified learning gaps, using ALEKS software.

“The intervention teacher was with us during class when our main teacher was in the front teaching. She would be mingling with us to make sure we understood what she was saying. It was helpful.”

— **Ag Prep Student**, Sanger High School



4. Provide Dedicated Supports for College Classes.

Ag Prep has found that all of its students need academic supports in college courses. As with its learning supports generally, **each high school has developed its own approaches to supporting students in college classes**, but most embed a high school instructor in the college class with the students. The college classes generally meet fewer than five days a week. During the off days, the students attend support classes with the high school instructor. The support ranges from instruction in college study strategies to hands-on help with homework and test preparation. One high school embeds tutors with the high school students in the college classes; the students meet with the tutors outside of class to receive additional support. Another high school is experimenting with providing an online college class, with students attending a support class at the high school with a high school instructor.

“Every time we have a college class, we have another class just for support. So right now we’re taking Art Appreciation, which is a lot of notes and a lot of writing. And we have another two-hour class just on the assignments of that class.”

— Ag Prep Student

Wonderful College Prep Academy

5. Be Persistent in Adapting Existing Systems to Meet the Needs of Students.

Engaging students in high school classes, college classes, and industry-driven learning opportunities requires flexibility and persistence in adapting existing school systems. There are no easy answers as to how to schedule the school day in order to provide sufficient support and interventions. Most Ag Prep schools have adopted block schedules to accommodate longer class periods, which

can be useful in offering college classes. Some schools are adopting a longer school day or are extending the day by providing mandatory tutoring for targeted students before or after school. Additional logistics are required to support job shadowing, mentoring, and internships off-site—all of which are more individualized, hands-on, and goal-oriented than one-size-fits-all “field trips.” In many cases, **it’s the students who are struggling academically who are most inspired by work-based learning activities**; that inspiration helps motivate them to advance academically.

What’s Next?

The high schools partnering with Ag Prep achieved substantial gains in student performance during the program’s first two years. They also provided leadership in adapting their student supports and interventions to address the emerging needs of students. As part of this process, they became more aggressive in identifying students who were struggling in classes and providing those students with personalized support.

Over the next two years, as the inaugural class of 2018 progresses to graduation, Ag Prep will continue to gather information, share experiences and findings across high schools, and refine its approaches.

“This program, the activities in the field and at the plants—it’s driven me to learn more and to know more.”

— Ag Prep Student, Sanger High School





Jobs for the Future

Jobs for the Future works to ensure economic opportunity for all. Our innovative college and career pathway models give those struggling to succeed access to needed knowledge, skills, and credentials. We partner with education, workforce, and business leaders to understand the labor market and design systems to sustain a pipeline of skilled workers. We advocate with policy makers for state and federal policies to support this work.

The Wonderful Company

The Wonderful Company is a privately held \$4 billion international company that offers healthy, iconic brands for healthy lifestyles. Wonderful Pistachios & Almonds is the largest vertically integrated pistachio and almond grower and processor in the world. Wonderful Citrus is the largest integrated grower, packer and shipper of fresh citrus in the U.S. These operations, which are located in California's Central Valley, are also affiliated with the worldwide leader in fresh California pomegranates and various pomegranate-based products. The Wonderful Company's products can be found in the produce aisles of grocery stores nationwide under popular retail brands, including Wonderful Pistachios, Wonderful Almonds, Wonderful Halos and POM Wonderful. For more information, go to www.wonderful.com.

Wonderful Education Programs

Wonderful Education is an innovative educational program that is driving positive change in California's Central Valley. As a philanthropic extension of The Wonderful Company, Wonderful Education funds a host of college and career readiness programs to promote opportunities for young people in California's Central Valley. Wonderful Education initiatives include college and career readiness, college scholarships, school grants, summer school programs, arts education, early childhood programs, teacher development and parent engagement. Wonderful Education coordinates directly with The Wonderful Company to offer a sequence of rich work-based learning experiences for all Wonderful Agriculture Career Prep students, including paid internships.



JOBS FOR THE FUTURE

p: 617.728.4446 **f:** 617.728.4857 **e:** info@jff.org

88 Broad Street, 8th Floor, Boston, MA 02110
122 C Street, NW, Suite 650, Washington, DC 20001
505 14th Street, Suite 900, Oakland, CA 94612

www.jff.org