Rural Tech Project

Builder: Woodlake High School

RURAL TECH PROJECT

Table of contents

Builder overview

This builder is organized into six sections, arranged in chronological order: program introduction, foundational considerations, program design and planning, community engagement, program evaluation, and sustainability. Each section describes opportunities and decisions, processes, and outcomes made by one Rural Tech Project finalist team — and offers considerations for developing a similar program in your own community.

About the Rural Tech Project

The Rural Tech Project was a $600,000 challenge to advance technology education, support rural educators, and prepare students for the careers of today and tomorrow. The challenge, which launched in June 2020, invited high schools and local educational agencies to propose technology education programs that use competency-based distance learning.

Five finalist teams each won $100,000 and received on-the-ground support to implement their programs over the 2021-2022 and 2022-2023 school years.

- **iLEAD Academy (Carrollton, Kentucky)**. The Virtual Computer Science Career Academy offers students across five high schools the opportunity to take virtual, dual-credit courses leading to the completion of computer science degrees.
- **Louisa County Public Schools (Mineral, Virginia)**. The Louisa County Cybersecurity Program prepares students to meet a critical need in the workforce through sequential, high-quality course work, work-based learning, and leading industry certifications.
- **Premont Independent School District (Premont, Texas)**. In collaboration with the Rural Schools Innovation Zone, the Leaders in Future Technology Startup Incubator helps students learn about technology and use it to solve real-world problems in their community.
- **Ravenna Public Schools (Ravenna, Michigan)**. The Start the Buzz Let's Grow MainStreet project empowers students to develop competencies and build portfolio experiences in technology, science, and business — with the goal of stimulating economic growth within the Ravenna agricultural community.
- **Woodlake High School (Woodlake, California)**. The Woodlake Aviation Pathway prepares students for regional aviation careers or postsecondary degrees, utilizing drone operations, geometry, and aerodynamic principles.

1. Program introduction: Woodlake

Learn more about Woodlake High School's program, its history and context, and its team.

Description

The Woodlake High School aviation pathway prepares students for related regional careers or postsecondary degrees through courses, community events, and work-based learning opportunities. The pathway, piloted during the Rural Tech Project, allows students in all grades to learn drone operations, geometry, and aerodynamic principles, applying knowledge through in-person drone flights and simulator work.

Through the pathway, students have the opportunity to obtain industry credentials, such as an OSHA 10 certification, Snap-on Multimeter Certification, and FAA Remote Pilot Certificate. In the second year of the pathway, students can earn up to four college credits through dual-enrollment courses hosted by Reedley College, a local community college with aviation mechanic and pilot career pathways. The pathway is ideal for students interested in Reedley College's programming, but open to all students who are interested in building STEM and communication skills through applied learning opportunities.

Outcomes

During its first two years, the program demonstrated success through sustained and diverse student engagement, academic achievement, development of career readiness skills, and attainment of industry credentials.

- **Student engagement.** Students demonstrated deep engagement with the content through courses and extracurricular activities. The program's use of cohorts facilitated strong peer relationships, furthering interest in the pathways. Even students who were not eligible or available for courses were able to participate in the school's extracurricular aviation club. All students were invited to attend public events like the Experimental Aircraft Association's (EAA) annual Fly for Food event, during which guests were invited to donate a bag of nonperishable food in exchange for a free flight.
- **Academic achievement.** Student academic success was demonstrated through improved math scores and the passage of Reedley College dual-enrollment courses. Of particular note, students in Math for Aviation consistently scored higher than those in the comparable Integrated Math 2 course.
- **Career-readiness skills.** Through project-based learning, students developed collaboration and communication skills. Especially in a rural context, the opportunity for students to meet and talk to adults outside of family and school can be rare. Increased confidence in communication could be seen with second-year students in particular, who had frequent opportunities to meet with

guest speakers, EAA members, and individuals at Reedley College. A couple of students also participated in aviation internships, where they translated what they learned in the classroom to a workplace setting.

- **Industry credentials**. All 16 students in the second year of the pathway passed their OSHA 10 and Snap-on Multimeter Certification exams. Four students also earned their FAA Remote Pilot Certificates. These credentials prove skills to future employers, increasing hireability and workforce readiness. The credentials also provide a sense of accomplishment for both students and educators.

Team

The schools and core team members involved are listed below.

- Schools involved: Woodlake High School, Reedley College
- Team Lead: Rudy Cardona (Assistant Principal, Woodlake High School)
- Community Engagement Manager: Ana Lugo (Counselor, Woodlake High School)
- Classroom educators: Gabi Aguilar (Math for Aviation), John Johnson (Math for Aviation, Reedley College), Melissa Warner (all second-year courses, Reedley College)

As you reflect on Woodlake's program, consider:

- What outcomes are you hoping to achieve for your students and broader school community?
- Who within your community might support program design and delivery?

2. Foundational considerations

Before your own planning begins, consider the following foundational elements that were in place when the team at Woodlake first developed their aviation pathway.

Summary

Woodlake was well-positioned for an aviation CTE pathway because of its existing relevant CTE pathways, the presence of supportive school personnel, and a strong local aviation industry network. The high school hosted several successful agricultural pathways, but the aviation pathway was the school's first transportation-related pathway.

Aviation programming was a natural extension of Woodlake's existing agricultural coursework. Woodlake sits within the California Central Valley, one of the most important agricultural regions for the entire nation. Aviation is an important activity in the agricultural industry: From dusting crops to monitoring yields, agricultural aviation ensures a safe and reliable supply of food and resources.

Woodlake also has a local airport that is home to a local chapter of the Experimental Aircraft Association (EAA) and a local community college aviation program at Reedley College. The team lead, Assistant Principal Cardona, is a retired Lieutenant Colonel in the United States Air Force.

Opportunity

The aviation pathway created more opportunities for career and postsecondary exposure for students at Woodlake. It also met a need for math education innovation and addressed college affordability.

The proliferation of one industry in a community can suggest to students that their career options are limited. Even the onset of one additional pathway helps students see that other careers and industries exist and are within reach. Students begin to understand how skills can be leveraged in different industries. For example, students who were interested in becoming mechanics learned that airplane mechanics — an attainable, local occupation — earn more than auto mechanics.

Woodlake also sought to improve math scores through this pathway. Math for Aviation (MAV) is an alternative to a required course, Integrated Math 2. The MAV course has sustained more success and interest than its counterpart. It has also acted as a funnel into the aviation pathway, introducing students to applied learning and work-based learning possibilities.

The program also addresses a continued need to make college more affordable for students. The dual-enrollment courses in the second year provide students with up to six college credits, lowering the future cost of a college degree.

Community support

The presence of existing champions for aviation education in the local community contributed to the program's success. Reedley College aviation educators and EAA members provided ongoing consulting and teaching support. As an Air Force veteran, Assistant Principal Cardona also provided valuable insights about aviation and facilitated connections to potential guest speakers and mentors.

The existing aviation pathways at Reedley College for both mechanics and pilots were an essential foundation for Woodlake's program. Early engagement from pathway faculty and the college president was particularly influential in building Woodlake's program.

The local airport in Woodlake was also a key reason for the creation of the pathway. The airport owner and president of the local EAA chapter was an enthusiastic early supporter, offering knowledge and opportunities to students.

With this community and administrator engagement in place, interest in aviation quickly spread to students and educators. The MAV educator in the first year was particularly enthusiastic to learn about aviation with his students.

Budget

A high-level overview of Woodlake's budget can be found in Appendix A. One-time equipment costs comprised the bulk of the costs — including seven flight simulators, flight simulator software, and a Snap-on multimeter. In addition to what is noted in Appendix A, the Community Engagement Manager role was a substantial development cost.

Woodlake funded its program primarily from the prize purse awarded through the Rural Tech Project.

As you explore designing your own program, consider:

- What does your school have in common with Woodlake's community? What is different about your school?
- What student, community, and/or workforce needs would this program meet?
- What support already exists within your community?
- What funding sources are available?

3. Program details

As you begin thinking about implementation, learn from how Woodlake structured its program design and how it achieved its desired outcomes.

Summary

This program began as a two-year pathway, starting with one course per year (Math for Aviation in the first year and Aviation 1 in the second year). As planned, Woodlake's program then expanded to include additional courses through dual enrollment with Reedley College.

The program follows the STEMPilot curriculum for flight simulations. It also utilizes the Aircraft Owners and Pilots Association high school curriculum and SAFEDrone software.

Primary objectives

The pathway is designed for students to increase academic achievements, build career readiness skills, and obtain industry credentials and/or college credits. All of these outcomes grow student career confidence and exposure, ensuring they can thrive in their local community and beyond.

The purpose of the first year is to motivate and engage students in aviation while also increasing math achievement. The second year of the pathway focuses on obtaining industry credentials and college credits. Both years include industry exposure through guest speakers, field trips, and engagement with Reedley College and the Experimental Aircraft Association (EAA).

Program activities

The program includes coursework and out-of-school opportunities, such as field trips and internships. Below is a description of years one and two.

Year one coursework: Math for Aviation (MAV) (Integrated Math 2 and aviation)

Students who earned a C grade or better in Integrated Math 1 are eligible to enroll in MAV. In this course, Integrated Math 2 curriculum is condensed to accommodate one day per week of aviation-focused learning. Along with the flight simulations, students participate in activities such as paper airplane design and historical plane modeling. Students complete specific flight missions throughout the year to learn skills such as reading maps; understanding dials for measuring speed, height, and angles at which the plane flies; and how to take off and land a plane. Students also learn how to build a wind tunnel for analyzing the effect wind has on a plane's wing.

Guest speakers include a naval pilot from Naval Air Station Lemoore, a local drone operator, the CEO of STEMPilot, and stakeholders from California Aeronautical University. Many of these speakers also contribute to year two courses.

Year two coursework: Safety and Basic Electricity, Careers in Aviation, Remote Pilot Ground School for Small Unmanned Aircraft Systems, and Aviation History

To participate in year two of the pathway, students must maintain at least a 2.0 cumulative GPA. The second year of the pathway requires students to engage daily in four dual-enrollment courses taught by Reedley College faculty. Courses are taught through a variety of methods: hybrid, in-person, remotely synchronous, and asynchronous.

As the course proctor, the Woodlake physics educator takes attendance and monitors the students in the classroom. The courses students take in the second year align with the two Reedley College pathways for aviation: mechanics and piloting. Students complete SAFEDrone training, learning skills such as hovering, landing, and forward flight. Students also engage in a one-quarter course on aviation careers.

The second year of the pathway also offers the following certifications:

- OSHA 10 — needed before or within 90 days of any entry-level job in a shop, warehouse, or manufacturer.
- Snap-on Multimeter — demonstrates commitment to and essential skills related to electrical training.
- FAA Remote Pilot Certificate — needed to professionally operate a drone.

Work-based learning

Some students had the opportunity to intern at the local airport in the second year of the program. All students in the pathway engaged with Proteus, a non-profit organization in the California Central Valley that provides career training and support. Through the Proteus Youth@Work Program, students qualify for a paid internship, work readiness training, and one-on-one mentoring.

Two second-year students had internships at the local airport through EAA. During their internships, students learned essential basic skills for working on planes using different types of materials and different ages of components, and encountered various issues in need of fixing.

Community engagement

Many students engaged with opportunities outside of coursework, including through the EAA, the school's aviation club, and course field trips.

During the initial implementation phase of the program, students participated in field trips to the Reagan Library, the STEM Career Expo, and Reedley College on multiple occasions. Various speakers visited both in person and virtually. These speakers included pilots from Naval Air Station Lemoore, representatives from a local drone operating company, and faculty from the California Aeronautical University.

Students could also attend EAA member meetings (two of which were held at Woodlake each year) and supported biannual events. Students provided support during events for Young Eagles, including guiding passengers in and out of planes, and learned the basics of marshaling planes on the runway.

Students in the aviation club also held fundraisers at school to raise money for branded shirts and hats.

Competencies

Competencies developed were predominantly tracked through the industry credentials, math scores, and qualitative data. These competencies include:

- **Academic skills**, such as applied math and physics.
- **Technical skills**, such as workplace safety, multimeter usage, and drone operation.
- **Career-readiness skills**, such as communication, collaboration, reliability, and adaptability.

Staffing

Woodlake utilized community leaders across their high school, Reedley College, and the EAA to design and pilot this program. Roles and responsibilities included:

Woodlake

Role	Responsibilities	Expertise
MAV educator	Teach Integrated Math 2 courses with aviation principles included weekly to a class of 25-30 students. (Math credential required.)	Math education, project-based learning, student engagement.
Community Engagement Manager (CEM)	Support students, provide on-the-ground assessment, connect community members to relevant school staff.	Community outreach and engagement.
Career and Technical Education (CTE) Manager	Collaborate with team lead, classroom educators, and CEM.	Program design and industry relationship building.
Assistant Principal (team lead)	Manage strategy and execution of program.	School administration, strategic planning.

Reedley College

Role	Responsibilities	Expertise
Supporting faculty for MAV	Support Woodlake's MAV educator in designing projects and teaching aviation lessons one day per week.	Aviation mechanics, aviation safety, aeronautics.
Faculty for second-year student's courses	Design and implement dual-enrollment aviation courses for 15-20 students.	Aviation, project-based learning, career exploration.

Experimental Aircraft Association (EAA)

Role	Responsibilities	Expertise
EAA founder and local airport owner	Facilitate connections between EAA members and students, supervise interns.	School administration, strategic planning.

Time commitment

Before considering capacity to build a program, a team must determine if students, classroom educators, administrators, and local community leaders have time available. This includes time to collaborate and iterate with each other and with other community stakeholders.

Program design and implementation. As part of the Rural Tech Project challenge, Woodlake's aviation pathway development spanned three years between proposal and refinement.

Propose	Plan	Run	Refine
June - Oct. 2020	Jan. - July 2021	July 2021 - June 2022	July 2022 - June 2023

In the proposal phase, Woodlake's team lead created the vision for the program; generated buy-in from district leaders, administrators, educators, and students; and recruited the right talent. The classroom educators then developed and tested new curriculum while the CEM acted as on-the-ground eyes and support. The CEM worked with the team lead and classroom educators to refine or adjust strategy, providing real-time assessment and student counseling. The CEM also found, built, and maintained relationships with community members, like Reedley College educators, EAA members, and employers.

Below is a table that provides insights into the amount of time Woodlake stakeholders dedicated to the design and initial implementation of the program over the three years.

Stakeholder	Activities	Time required
CEM	Community outreach and engagement	80-100 hours per semester
	Student support	20-40 hours per semester
	Reporting	40-50 hours per semester
Classroom educator	Curriculum-building	30-40 hours one time
	Iterating and reporting on curriculum	1-2 hours per week
Administrator	Program design and planning	80-100 hours one time
Community member	Program consulting	20-30 hours one time

Ongoing program execution. Below is a table that describes the amount of time needed to administer and participate in Woodlake's aviation pathway after the initial implementation phase.

Stakeholder	Activities	Time required
Students	Year one: MAV course	1-2 additional hours of class time and coursework per week in comparison to parallel course; 5-6 hours total per week
	Year two: dual-enrollment courses (1-3 courses)	2-6 hours of class time and coursework per week
	Aviation club (optional)	1-2 hours per week
	Ad hoc events such as EAA fundraiser (optional)	6-10 hours for preparation and attendance per event
Classroom educators	Onboarding	5-10 hours one time
	Year one: MAV course	1-2 additional hours of class time and coursework per week in comparison to parallel course; 5-6 hours total per week
	Cross-team communication and collaboration	1 hour per week
	Planning and reporting	1 hour per week
Administrators	Cross-team communication and collaboration	1 hour per week
	Planning and reporting	1 hour per week
Community members	Cross-team communication and collaboration	1 hour per month
	Mentoring	1-2 hours per week

Resources

In addition to the staff time required for this program, the team uses the following technologies in their courses.

- Seven flight simulators with simulation software
- Snap-on multimeters
- DJI drones

As you move your program from concept to implementation, consider:

- What program activities will you need to create or adapt to meet the needs of your school community?
- What competencies are you hoping students will develop?
- Within the school community, who will work on this program? How much time could participants (including students, educators, and administrators) spend?
- If current staff cannot fill all the needed roles, who and how will you recruit?
- What additional resources will you need?

4. Community engagement

Learn from Woodlake's community engagement strategy, including the specific individuals and entities involved, and why and how they were engaged.

Summary

Community engagement is vital for CTE pathway development. At Woodlake, the team leveraged student excitement over the first two years to build and maintain momentum in the school and external local community.

Engaging the school community

The first cohort of students, especially those who continued into the second year, were energized by the pathway and supporting activities. Their enthusiasm spread to other students through word-of-mouth and in more formal settings. The cohort presented to younger students, highlighting the comradery they felt as part of a pathway cohort, as well as applied learning opportunities such as drone operation.

The pathway is also highly visible within the school. A display case highlights the models made by students, and there is a designated "hangar" classroom with equipment. The students created a logo for the pathway and printed it on shirts and hats. They also created a badge for those who have completed five "flight missions." Lastly, the pathway is designed to include multiple access points. Students who did not participate in the pathway were invited to participate in the school's aviation club, public events, and fundraisers.

Parents are engaged throughout the program in various ways, including through frequent communication with the Community Engagement Manager (CEM) and invitations to student events.

Engaging external partners

Reedley College faculty and staff have had regular involvement with the program. In addition to leading dual-enrollment courses in the program's second year and consulting on MAV curriculum, the college president also provided campus tours to pathway participants.

Dual-enrollment courses are also mutually beneficial, meaning Woodlake was met with a lot of enthusiasm from Reedley College from the outset. The college has larger and more stable revenue, in turn supporting classroom educator retention. In addition, the courses build an enrollment pipeline for the college. After taking dual-enrollment courses in the second year of the pathway, a significant portion of the first cohort now plans to enroll at Reedley College.

Since the program's inception, the Experimental Aircraft Association has also been energetic about engaging with the high school program and students. The organization plans to continue to provide internships and find local opportunities for the students. They may also support connection with other high school aviation programs in the larger region such as through a regional drone operator competition.

As you design your community engagement strategy, consider:

- How are you already connected with each stakeholder group? Who are your existing champions?
- Who would a dream industry or postsecondary partner be, and what would their partnership bring to the program?
- Who from your existing school community can help forge connections?
- What is your outreach strategy, and what are your expectations?

5. Program evaluation

Learn more about Woodlake's approach to evaluating program outcomes and the tools used to track results over time.

As part of the Rural Tech Project, Woodlake created a logic model (template for reference in Appendix B) to align on the goals, activities, and outcomes they would like to track. When the aviation pathway was in its second year, the Rural Tech Project provided a tool to facilitate iterative program improvements over a 90-day period: the Plan / Study / Do / Act framework (Appendix C).

Program milestones

Program milestones typically follow school calendars. Given this program's involvement in the Rural Tech Project challenge, Woodlake High School's program milestones were also situated within the challenge phases. The program milestones listed below follow the challenge structure.

Run	Refine
July 2021 - June 2022	July 2022 - June 2023
• Students completed their first flight missions. • Students attended a Young Eagles event with Experimental Aircraft Association (EAA) to ride in planes. • Students created the aviation club. • Students designed aviation club logo and shirts. • Students attended a field trip to Reagan Library to see Air Force One.	• Second-year students volunteered at a Young Eagles event to help EAA. • Students attended the STEM Career Expo. • First students earned OSHA 10 certifications. • First students earned Snap-on Multimeter Certifications. • First students earned FAA Remote Pilot Certificates. • First students participated in paid internships.

Data collection

The team collected data on student engagement, student success, and career outcomes over the course of the two years. They used this data to continuously assess and improve their program.

Student engagement

Data collection focused on students entering the pathway and staying in the pathway for two years. The team also collected demographic data and adjusted their recruitment strategy to address underrepresented groups. For example, the first year of the Math for Aviation (MAV) course had three female-identifying students, whereas the second year of the course had 11.

Student success

Student success was predominantly evaluated through the attainment of industry credentials, math scores, and qualitative data (such as student surveys before and after course completion). Woodlake also tracked the successful completion of Reedley College dual-enrollment courses.

Career outcomes

Career outcomes data collection was focused on qualitative insights around employability skills. In addition, the team tracked the number of students in internships, graduation rates, and enrollment in postsecondary institutions such as Reedley College. As the program continues and Woodlake gathers more data, the team also plans to track employment rates.

Key improvements

Over the first two years, Woodlake implemented key programmatic improvements based on qualitative and quantitative data collection and assessment.

- **Expanding partnerships**. The team solidified the relationship with Reedley College, creating opportunities for dual-enrollment courses.
- **Codifying content.** The Community Engagement Manager has begun pulling together content for lessons and projects that will build knowledge and skills for students from the beginning of year one of the pathway to the end of year two.
- **Stabilizing the classroom educator onboarding process.** The team also plans to create more onboarding materials and processes for the MAV course. The MAV educator changed between the first and second year, resulting in several engagement and implementation challenges of the first-year course. This spurred conversations about how to build institutional memory and a routine onboarding process, especially within the context of educator turnover and recruitment challenges in rural educational settings.

As you determine your own program evaluation approach, consider:

- What are the major milestones you would like to accomplish in the first 30, 60, and 90 days? What would success look like in years one, two, and three of the program?
- What data would help you understand your program's performance?
- How would you collect that data within the systems that currently exist? What could you build or change to collect and analyze that data?
- What would a logic model for your program look like?

6. Sustainability

Learn more about Woodlake's short-term and long-term visions for its program.

Summary

Woodlake designed its program to be self-sustaining, and not reliant on specific people for long-term sustainability. This was done by establishing broad and frequent interactions with community partners to cement partnerships. Program materials were also codified and shared with students and educators within the school.

Moving forward, the team hopes to continue the program and recruit full classes of students. The team also plans to complete a scope and sequence, and pull together lesson plans and projects developed for the first-year Math for Aviation courses.

Community engagement

The Reedley College relationship has been solidified and is growing as Woodlake looks to engage Reedley College in other dual-enrollment opportunities. The Experimental Aircraft Association will also continue to be an important partner, offering internships to students and other opportunities for students to volunteer at events. In addition, speakers from the past two years will continue to be invited back to speak. One speaker has already offered potential job opportunities to current students.

Moving forward, the team hopes to increase collaboration between educators and community stakeholders.

Staffing

The current staffing model will continue. Given the importance of the Community Engagement Manager role in ensuring the success of the program, the team would like to allocate funding for a Work-Based Learning Coordinator to support the program after the Rural Tech Project comes to an end.

The team also intends to provide additional onboarding support to classroom educators and bring more educators into the pathway to increase interdisciplinary learning opportunities. For example, the team may invite the digital media educator to support video editing of film footage captured by drones.

Funding

There were no significant additional material needs to sustain the program. The biggest need for ongoing supplemental funding is for staffing the Work-Based Learning Coordinator role as noted above.

As you determine your own program's longevity, consider:

- What are your goals around sustaining and growing your program?

- What is the intended length of the program? Will your program continue indefinitely, or will it be designed to last for a certain number of years?
- For programs designed to exist indefinitely, how might the program adapt to evolving student, school, industry, and community needs over time?
- What would be needed to achieve the goals and vision described above? What staffing, funding, and community engagement would be required?

Appendix A: High-level budget

Budget item	Relevant notes	Approximate amount ($)
EXPENSES		
STEMPilot simulator and curriculum	One-time purchase	45,500
Snap-on multimeter kit	One-time purchase	9,500
Edustation flight simulator	One-time purchase	7,000
Drones	One-time purchase	7,000
Miscellaneous materials	One-time purchase	2,000
Field trip to Reagan Museum	Reoccurring	3,000
OSHA 10 certification for 20 students	Reoccurring	600
Total spent		**74,600**

Appendix B: Logic model template

PROGRAM GOALS What are your latest program goals? Make updates as needed.	1. 2...

CURRENT CONDITIONS What are the starting resources available for your program? Consider **strengths**, **challenges**, or any neutral conditions you assume will be true and necessary for your program to launch.	EXTERNAL FACTORS What are the external factors — **risks** and **opportunities** — that may impact your work? Some factors you might consider to be unpredictable or beyond your control, but others may benefit your program or be manageable with forward planning.
1. 2...	1. 2...

RESOURCES	→	ACTIVITIES	OUTPUTS	→	OUTCOMES	
What resources do you need to achieve your goals?		What are students and staff doing as part of the program?	What staff or structural changes will result from each activity?		What short-term outcomes and measures do you anticipate as a result of each activity?	What long-term outcomes and measures do you anticipate as a result of each activity?
1. 2...		1. 2...	1. 2...		1. 2...	1. 2...

VALIDATION Why are these the right activities to help you reach your target outcomes and goals?	

GAPS What is missing that you will need to consider in order to achieve the desired outcomes?	

Appendix C: Plan / Study / Do / Act framework

Beginning of cycle	**PLAN**	What is the specific process change that you will test and why? What are you hoping to learn? What are your prediction(s)? What specific steps have you planned to enact this change? What data collection tool(s) will you use? When and for long will you test? Who is the project owner(s)? Who else will be involved, including who will be the tester(s)?
End of cycle	**STUDY**	How well were you able to answer each learning question? How do the results compare to your prediction(s)? What did you learn?
	DO	What happened, including what data and observations did you collect?
	ACT	What will you adapt, adopt, abandon, or repeat again — and why?