

Aligning CTE and WBL with Core Academics and Dual Credit



We do High School Differently

ACE Leadership High School is where education meets the real world. Our team approaches high school differently. We invest in every aspect of our students' lives to prepare them with the tools, support, and connections they need to thrive. We focus on practical projects instead of tests and partner with leaders in New Mexico's Architecture, Construction, and Engineering (ACE) industries to get everyone learning on their feet rather than cramped behind a desk. We all know the world of work is changing, and education should too. That's why we're building a better future together.



ACE Leadership High School

Mission

Our mission is to support our students in their individual journeys while preparing them for lives of leadership, purpose, and impact.

Vision

Our dream for education is a world where every young person is supported and equipped to reach their highest potential in learning, life, and work.

Promise

We are a high school that puts dedicated care, hands-on learning, and real world opportunities to work to ensure every student is prepared for their future.



About ACE Leadership HS

COMMUNITY **LEARNING ENGAGEMENT** BY DOING Mutually beneficial Students use partnerships deepen problem solving student learning and innovation to experiences and address real-world support student problems growth 360-DEGREE SUPPORT **High expectations** require high levels of student support

Model

- Three pillar model of Hands-on Learning by Doing, Holistic Student Support and Authentic Community Engagement
 - Pillars are equally important with a focus on convergence
- Focus on transition to living wage careers and healthy lives
 - Meet students where they are
- Day & Evening Programs
 - Day serves about 215 students
 - Evening program serves about90 students ages 17-22



ACE uses Architecture, **Construction and Engineering** Industries to teach core academics, CTE, and workforce skills.



Projects at ACE



Simple Structures

PROJECT SUMMARY

In this course, students expand their knowledge of designing, building, and testing simple structures to focus on math and science skills and knowledge. Students develop safe hand tool practices while building structures to withstand outside forces.



CREDITS OFFERED

Math and physics

DRIVING QUESTION

How do we build stronger simple structures?



INDUSTRY PARTNERS





Build a Better Burque

PROJECT SUMMARY

In Build a Better Burque, students learned NM History and practiced English Language Arts and Drafting skills through the lens of city planning in Albuquerque, NM. Students also learned about principles of city planning and design.



CREDITS OFFERED

NM History, English, Drafting

DRIVING QUESTION

How can city planners use history to build a better Albuquerque?





How did/does the ACE
Leadership Graduate Profile
guide the structure and
programming of the school?



Guiding Documents for ACE

ACE Industry Framework

ACE Leadership HS Graduate Profile



ACE Leadership HS Industry Framework

"Sometimes the people making models but have no idea how the building will stand up or if the roof will collapse. It's important to put the theoretical model and the practical model together and see how those things connect." - Employer

Staying Safe

OSHA-10 First Aid Common hazards Safe tool use Protective equipment Safety procedures

"The ACE industries | hold workplace safety in the highest esteem to safequard against the real risk associated with construction jobs." - BCTD SmartMark OSHA Training

Mastering **Industry Basics**

Arithmetic Measurement Tools Materials Site maintenance Technical reading and writing Design thinking

"People come in and they have never used the tools in the field. Knowing how to use a drill, saw, or tape measure is huge."

Understanding **Projects**

Construction Life Cycle Career paths Blueprints Project management Terminology

Working With People

Attendance

Initiative

Code switching

Equity and Inclusion

Collaboration



Using Technology

Computer basics Spreadsheets

- Employer

"If you have a question, ask it; there is probably a manual or procedure to address it. We provide a new hire list that people can get stuck on and don't ask questions. Those people don't last as long."

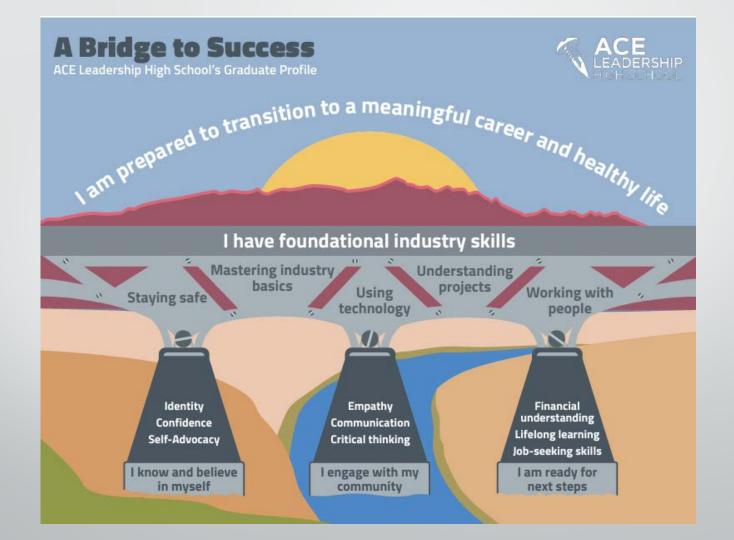
- Employer

Emerging technology

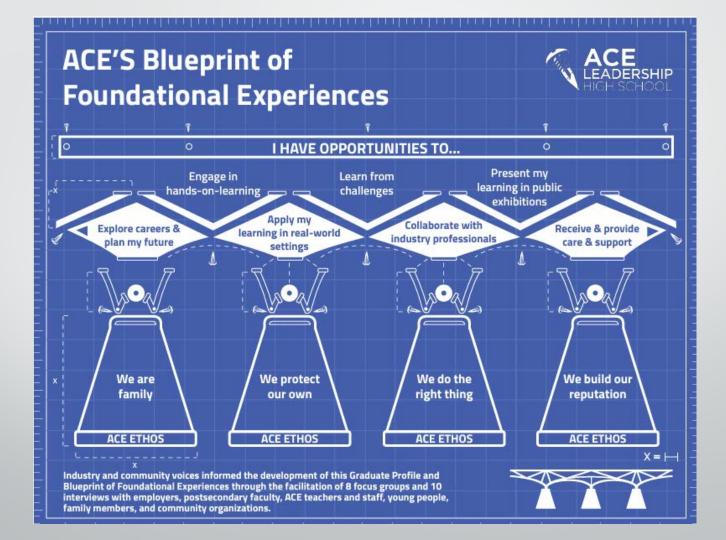
"I hope to see schools providing hands-on experience with technology across the fieldbut what is currently used in the field and not outdated tech the teacher/faculty was trained to use." - Higher Ed Faculty



	Competency Area	Competency	Brief Description
	Staying Safe	OSHA-10	Complete the OSHA-10 training
	Staying Safe	First Aid	Complete First Aid training
	Staying Safe	Common hazards	Recognize common hazards and unsafe conditions that occur in workshops and at worksites, common causes, and how to prevent them
	Staying Safe	Safe tool use	Practice safe tool and equipment use, including ladders
	Staying Safe	Protective equipment	Practice safe use of personal protective equipment such as respiratory protection and fall protection equipment
	Staying Safe	Safety procedures	Read, comprehend, and follow safety procedures and protocols
	Mastering Industry Basics	Arithmetic	Complete workshop or worksite tasks using arithmetic with whole numbers, fractions, decimals, and percents.
	Mastering Industry Basics	Measurement	Use a measuring tape and other gauges/instruments to take measurements, calculate areas and volumes, and convert between different measurement units (e.g., from English to metric)
	Mastering Industry Basics	Tools	Identify common hand and power tools, describe their properties and uses, and use them as appropriate to a task or project
	Mastering Industry Basics	Materials	Identify common building and construction materials, describe their properties and uses, and use them as appropriate to a task or project
	Mastering Industry Basics	Site maintenance	Prepare and maintain a clean and organized work environment
	Mastering Industry Basics	Technical reading and writing	Write technical instructions that break a process down into steps; understand and follow through on written and visual instructions prepared by someone else
	Mastering Industry Basics	Design thinking	Practice the five-step design thinking process, using creativity and critical thinking to brainstorm ideas, decide on solutions that meet the needs of the people you are designing for, testing the solution, and making improvement based on data and feedback.
ACE LEADERSHIP HIGH SCHOOL	Using Technology	Computer basics	Use basic computer hardware (e.g., mouse, trackpad, touchscreen, keyboard, printer), navigate between applications/software, type simple documents, and organize files for easy retrieval
BUILDING FOR SUCCESS	Using Technology	Internet research	Use internet search engines to gather information relevant to the project or problem at hand; assess websites for









Work-based Learning Wednesday's

> The added component <





ACE LEADERSHIP WORK-BASED LEARNING WEDNESDAYS

WBL Wednesdays are designed to diversify ACE students' learning experience and create additional space for collaborating with community and industry partners. We are always looking for community organizations, industry partners, and individual contractors to support with these learning opportunities.

WBL WORKSHOPS

ACE offers a variety of workshops to expose students to different areas of the trades and help build student skills. Workshops include welding, electricity, carpentry, and more.

SERVICE LEARNING

Students volunteer at Roadrunner Food Bank, Barelas Senior Center, Locker 505, the Storehouse, and ECHO Inc.

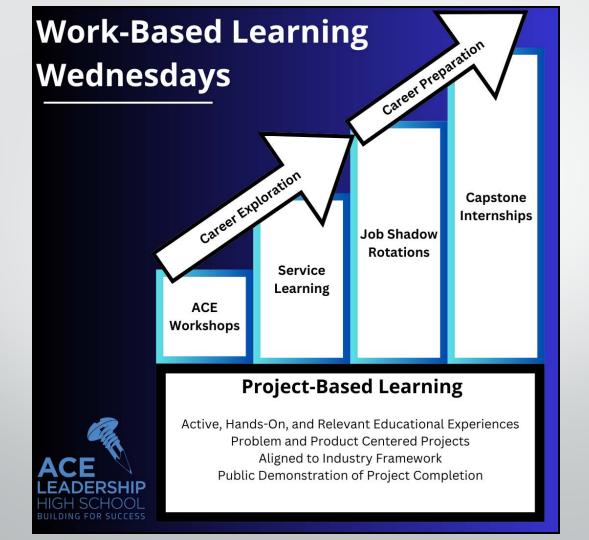
JOB SHADOW ROTATIONS

Students explore different career areas by shadowing with community and industry partner organizations.

CAPSTONE INTERNSHIP

students in their last year at ACE participate in paid internships to explore career options and build skills while working.







WBL Trimester 3 Schedule

Justin, Matt launch offsite, Lilia City drop offs, coordinates late arrivals w/ drivers after city drop off Julie offsite- Capstone site visits

Matt in back float, backup driver

Cohort	Subgroup- # Students	Advisory 9:10 - 9:20	9:25 - 10:40	Location	10:45 - 12:00	Location					
	On site workshops										
1	1A 10		Welding Jason + Mike Luna (contractor)+ Matt float			Welding Lab					
	1B 9		Larry (co	Dirty Lab							
	1C 10	~		Electricity Annex							
	1D 9		Hand Tools Leon (contractor) + Beach +Brad build sub & Matt float			Back Patio					
2	2A 9	Pod 1	Math & Measurement w/ Surveying Athena + Chavez + Natalie float		Adobe Drafting						
	2B 9	Pod 2	Math & Measurement w/ Building Marquez + Sabrina + Brad build support		TinkerCad						
	2C 9	Clean Room	<mark>TinkerCad</mark> Ben + Alex		Math & Measurement w/ Surveying						
3	3B 10	Portable C	Adobe Drafting C.E. (contractor) + Helen + Natalie float		Math & Measurement w/Building						
Offsite workshop											
	12		Explora Workshop Both Angela's + Casey & Justin help w/ walkover, walk back			Max 12 @ Explora					



	3A 16		Adelante Tech Workshop w/ DiversIT- Sen + Jonathan (arrival before 9:30)	max 16					
	SERVICE LEARNING								
	4A		Locker 505 - Miguel (start at 10) Closed March 27th	Max 10					
4	4-B	4-B Roadrunner Food Bank - Tim (flexible start, 2hrs-ish)		12					
	4-C		Barelas Senior Center - Mindy (open arrival)	12					
	4-D The Store house - Marina (flexible start)		The Storehouse - Marina (flexible start)	Max 6					
			ECHO, Inc Johnny + Angel internship	Max 12					
	PRE-CAPSTONE ROTATIONS								
5	40-60		CAbq NAPA Union Co-Op	ACE Vehicles					
	CAPSTONE								
6	50 Internships Various			Various					



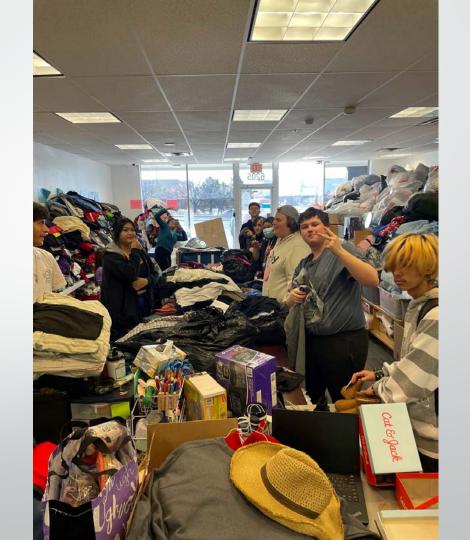












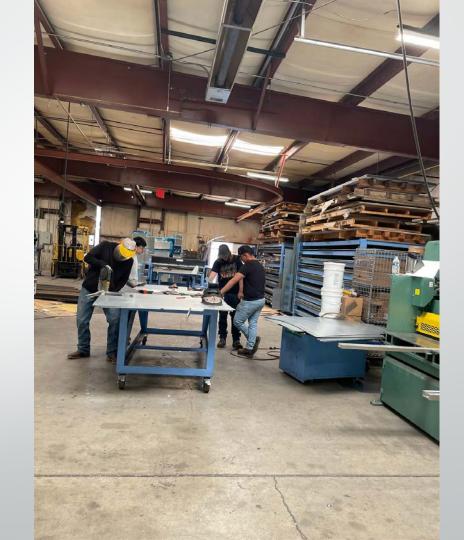




















WBL-Wednesday's The Impact

What impact have your internship(s) had on you?

it gave me a place too see what life could offer besides the stuff i have right now

it has made me more into the job i have decided on

it was hard but got through it

learned how to build a garden bed, so if I ever have a garden im set

learned how to do fraiming and roofing a bit better

made me realize I don't want to go into plumbing

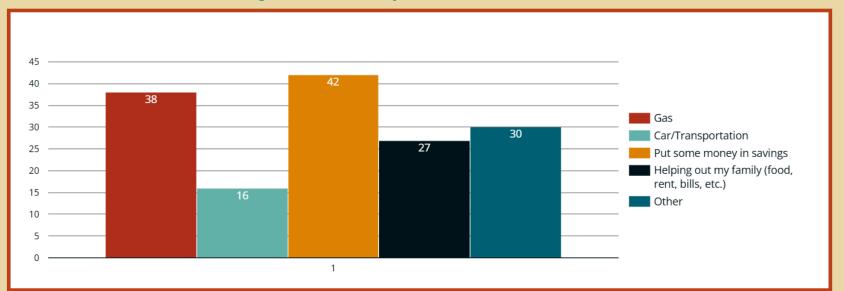
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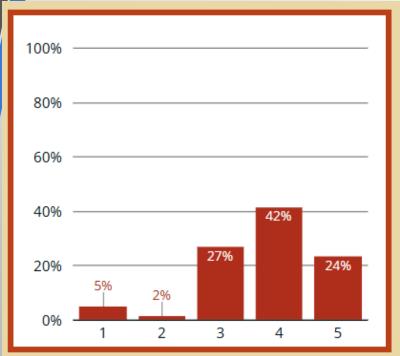


WBL-Wednesday's The Impact

What did you end up using money from your internship for?: All Students







My internship(s) made me feel more confident about my future after high school.



SINCE ITS LAUNCH,

\$384,000

434 total internships

PAID INTERNSHIPS
SINCE 2022



LEARNING OFF SITE



185

68% of internships in a construction-related industry



ACE Dual Enrollment, Transition & Data

Dual Enrollment

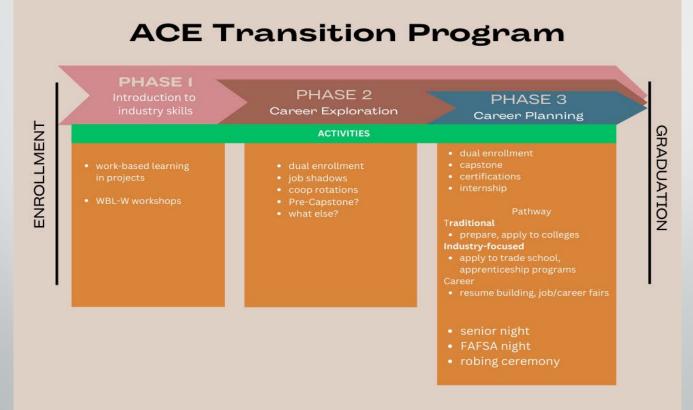
- Partnership with UNM and CNM for individual classes
- Expansion in development with new Credit Recovery Program

Transition Challenge

- From theory to practice
 - Full-scale program this year



ACE Dual Enrollment, Transition & Data





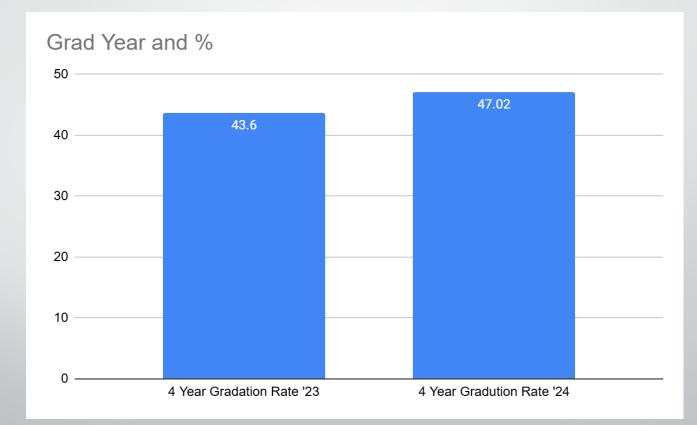
Programming to Improve other Factors

- Graduation Rates
- Attendance
- Student entering the ACE Industries



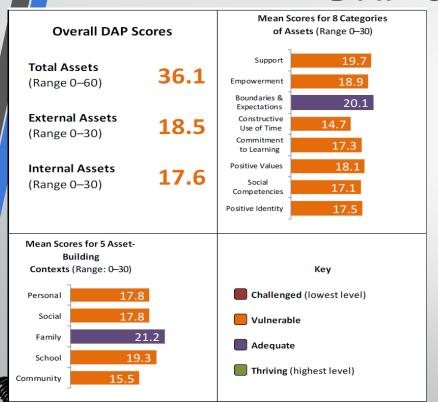
Graduation Rates

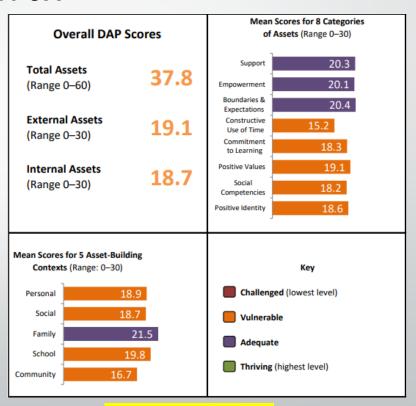
SY 23 was the first year of the full-scale WBL program





DAP Growth

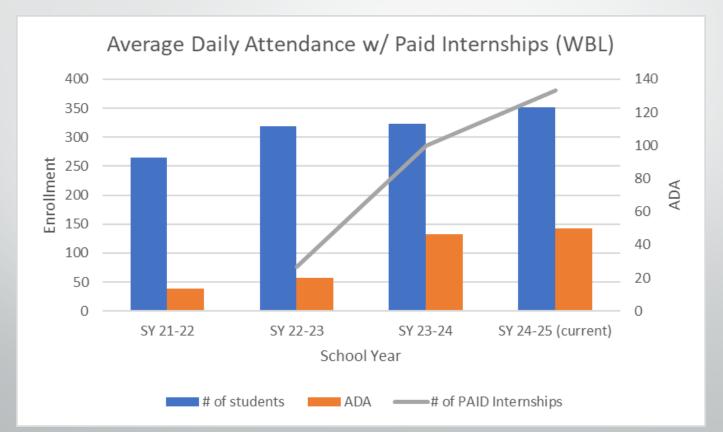




PRE TEST 2023

PRETEST 2024

Average Daily Attendance Since WBL programming & WBL-W





Summary

- 1. Reimaging how students do ACE
- 2. Redesigning the school experience for students
- 3. Aligning guiding documents with school programs, vice versa
- 4. Continue to adapt WBL-W programming
- 5. Continue to measure programmatic data

What's Next

- 1. Continue to adapt and adjust programming to partners needs
- 2. Alumni data- is the theory playing out?

