



# Sharing Highlights from the Study of Work-based Learning District Data Systems

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# Welcome – Meet the Authors



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# Meet the Presenters



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# Agenda

- Welcome and Introductions
- Findings Overview
  - Student Work-based Learning (WBL) Participation
  - Student Outcomes Related to WBL
  - Data Systems
  - WBL Reporting and Data Use
- Example from Fresno Unified School District
- Q&A

# Show of Hands Poll

- Do you work with:
  - ✓ K–12 schools?
  - ✓ Postsecondary?



# Show of Hands Poll

- **What is your primary role?**
  - ✓ Work directly with students (instructor, counselor)
  - ✓ School district administrator
  - ✓ State agency administrator
  - ✓ Researcher
  - ✓ Other



# Purpose of the Study

- The need for better WBL data:
  - Practitioner wisdom says that WBL is critical to students' career readiness.
  - But we lack hard evidence about what works, for which students, and in which contexts.
  - Better data would help target resources to the most effective WBL approaches.
  - WBL experiences are complex and varied, making systematic collection difficult.
- The aims of this report:
  - To lift up examples of innovative practices from which districts and state agencies can learn
  - To help the field generate reliable, valid data that support research on how WBL affects student outcomes and drives program improvement

# Methodology

- Created a pool of potential districts from professional networks and reports on states investing in data systems
- Held screening calls with 18 districts in 12 states
- Selected six districts to reflect a diversity of settings and practices
- Interviewed staff involved in data collection, management, and use
  - WBL coordinators, teachers, administrators, business partners
- Topics discussed included data elements collected, systems used, training, needed resources, use of data, and innovations



# Report

- Final report coming soon to <https://cteresearchnetwork.org/>
- March 2024 *ACTE Techniques* magazine article



# District Innovations in Tracking & Measuring WBL

## KEY FINDINGS

# Data on Student WBL Participation

## HIGHLIGHTED PRACTICES

- Tracking **individual** students over time, starting in **middle school**
- Linking student **interests** to WBL experiences, sometimes through personalized learning plans
- Tracking **hours** per student per experience
- Capturing all points along the **WBL continuum**, including awareness and exploration – not limited to internships

“By having this report about work-based learning across the continuum, our goal is that each student in our district has a minimum of 10 of those experiences prior to [the senior year of WBL activity]. If we look at a student who from grade six to grade 11 only has six experiences, that's data we need to know.... So we're hoping to utilize that data to continue to enhance our experiences across the continuum.”

*WBL Coordinator*

# Data on Student Outcomes Related to WBL

## HIGHLIGHTED PRACTICES

- Tagging **student skill gains** to a specific WBL experience
  - Tied to O\*NET or career cluster standards
- Collecting **employer ratings** on a set of employability and technical skills in a systematic way after a WBL experience
- *Area for future growth:* Post-graduation employment outcomes remain difficult to capture

“The students do weekly entries. So they get to put in the number of hours that they've worked, what skill sets they've learned, they get to self assess their mastery level.... There is a mobile version. So the students literally could be in the greenhouse, take a picture of what they're doing, ...and they can upload it right in there. And then give a verbal explanation on it.”

*CTE Teacher*

# Data Systems

## HIGHLIGHTED PRACTICES

- Eliminating or reducing paper-based and disconnected ad hoc systems
- Experimenting with a range of solutions:
  - Commercially available online platforms
  - Custom platforms
  - Building automation with free online tools
- Establishing routines to facilitate and monitor data completeness
  - Running a student login report
  - WBL coordinator review of data input by teachers or students
  - Setting aside time during home room for entering data

“So we have been thrilled [with new data system], particularly when you think, 10 years ago, it really was about collecting information, via emails and Post-it notes and the half slips of papers and napkins, etc. So being able to look at where we've come over the last 10 years is phenomenal.”

*District CTE Director*

# WBL Reporting and Data Use

## HIGHLIGHTED PRACTICES

- Using WBL data to generate annual economic impact reports for local education and business stakeholders
- Enabling stakeholders to gain access to data dashboards and using queries to create WBL participation reports
- Using reports on student participation to identify equity gaps and spark advisory board discussions

“I can go into Xello and say, oh my goodness, there's 1,000 students interested [in a particular career] and we only have five businesses....It's valuable data because you can see the need, you can see the gaps, and then in my role, you can help fill those gaps.”

*County business liaison*

# Example From the Field

Fresno Unified School District

# Fresno Unified Overview

- Student population: 72,000+
  - Third-largest district in California
- 20.5% English learners
- 87.7% socioeconomically disadvantaged
- 1.1% foster youth



Ethnicity	Percentage
African American	7.5%
Native American	0.6%
Asian	10.7%
Hispanic	69.8%
Pacific Islander	0.5%
White (not Hispanic)	7.8%

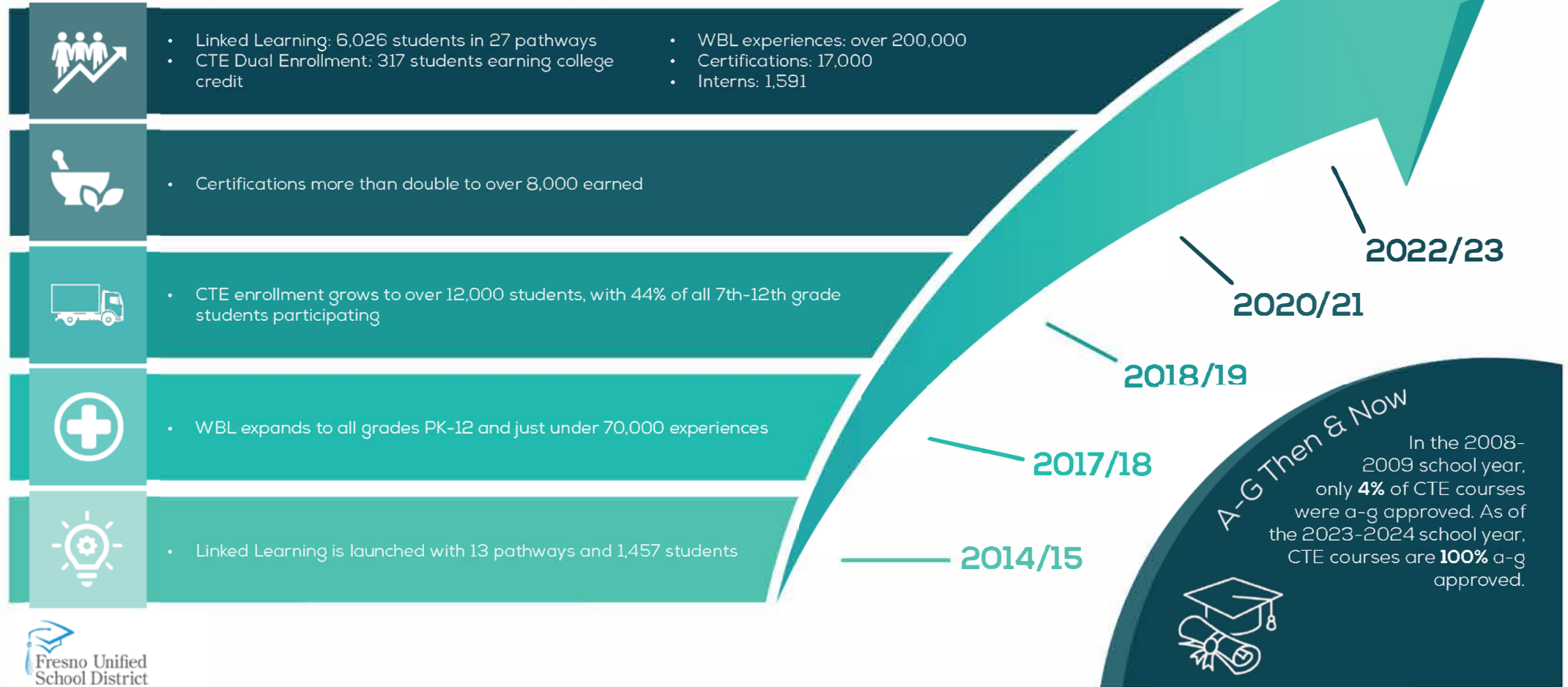


# THE STORY OF CTE IN FRESNO UNIFIED

## A LOOK AT THE HIGHLIGHTS OF A GROWING PROGRAM



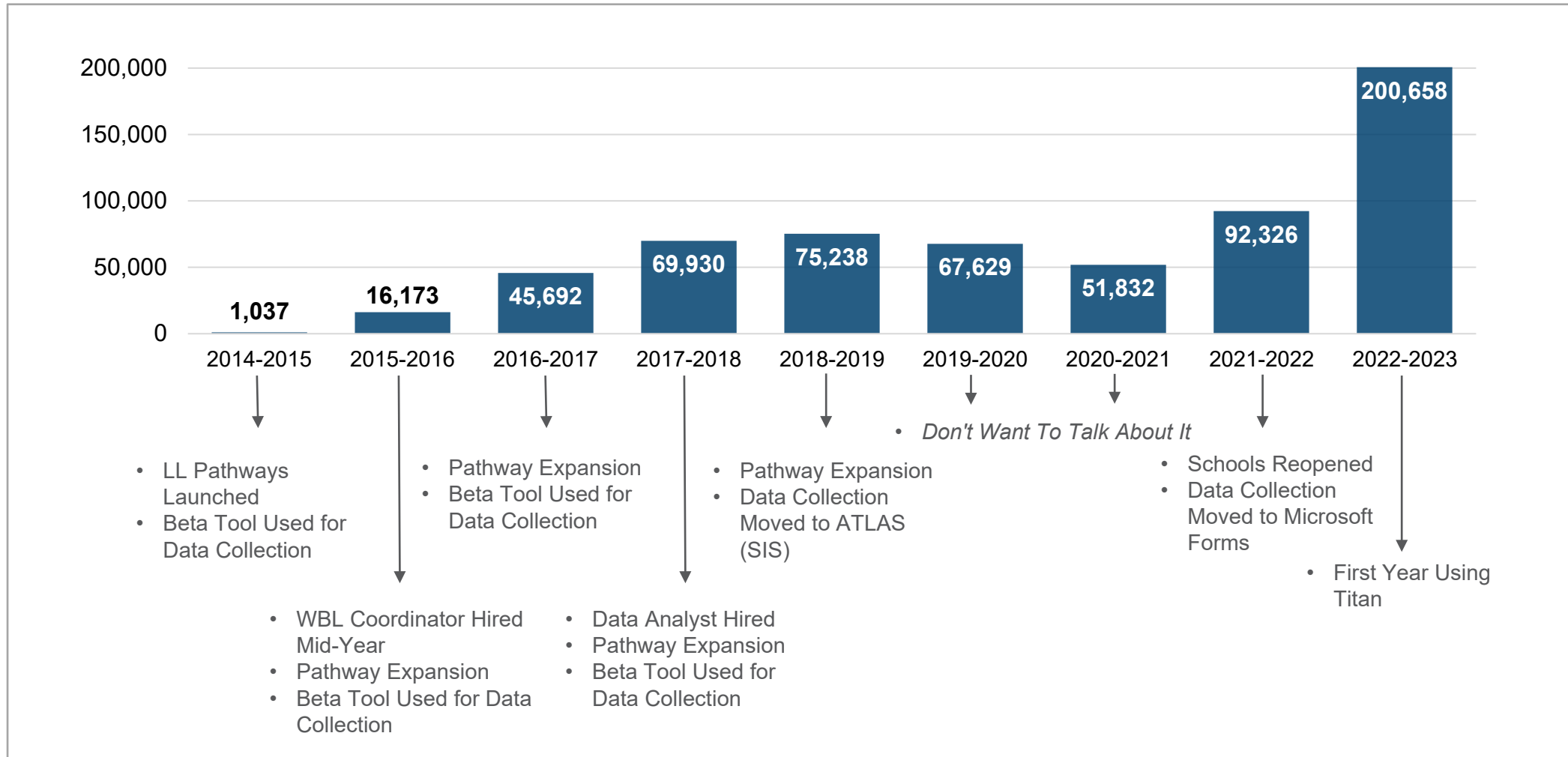
As an education strategy, CTE inspires and facilitates learning and, unlike traditional vocational training, aims to prepare students for ongoing education, long-term careers, and entry into the workplace. As the foundation of workplace development, CTE in Fresno Unified responds to the needs of our economy and provides seamless pathways that bridge all levels of education (PK-Adult), enabling students to develop skills required in the workplace while pursuing their personal, educational, and career goals. Fresno Unified offers 79 CTE pathways across multiple industry sectors that integrate Linked Learning pathways, International Baccalaureate Career-related Programmes, California Partnership Academies, CTE courses, and work-based learning opportunities.



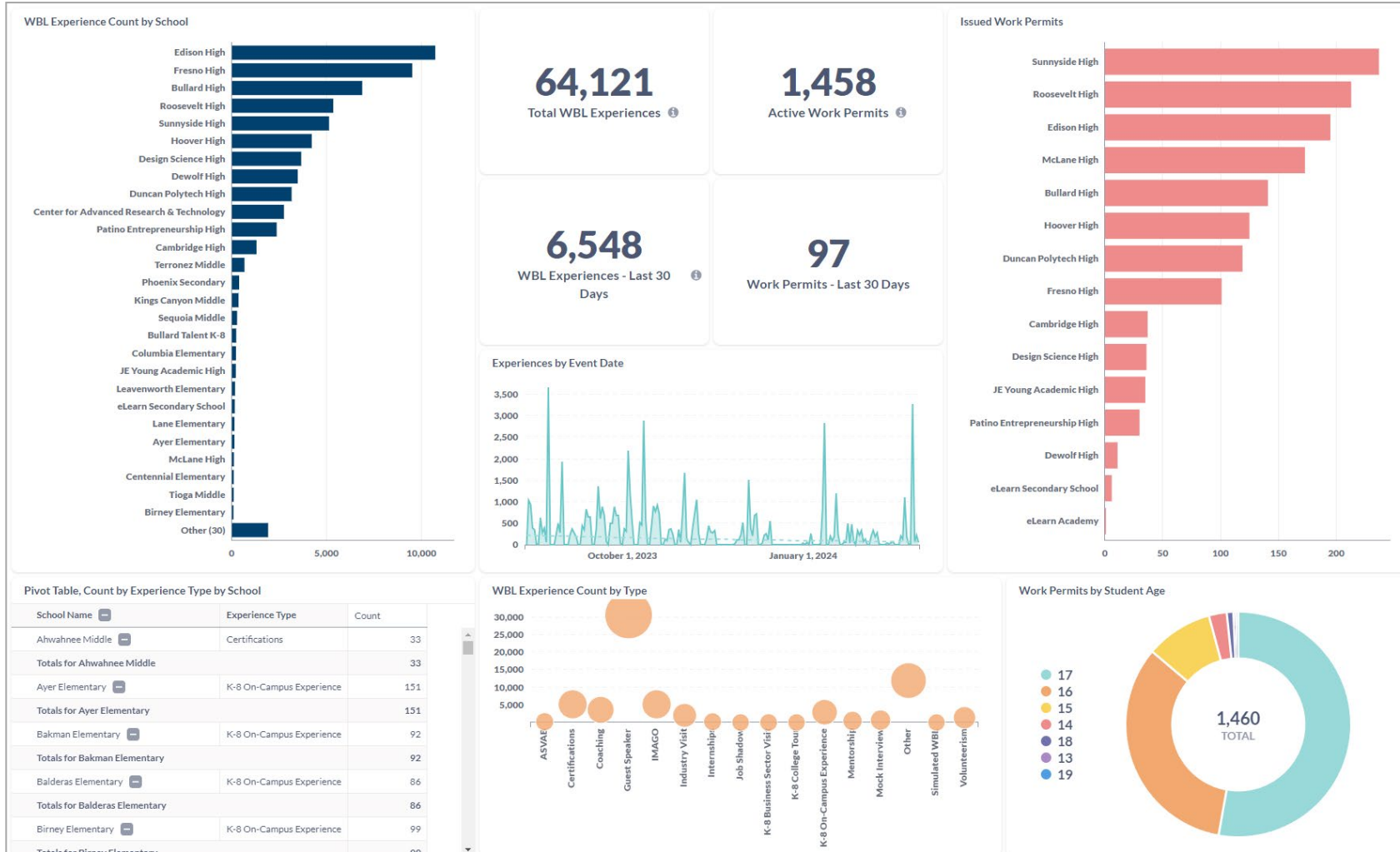
# How Did We Get Here?



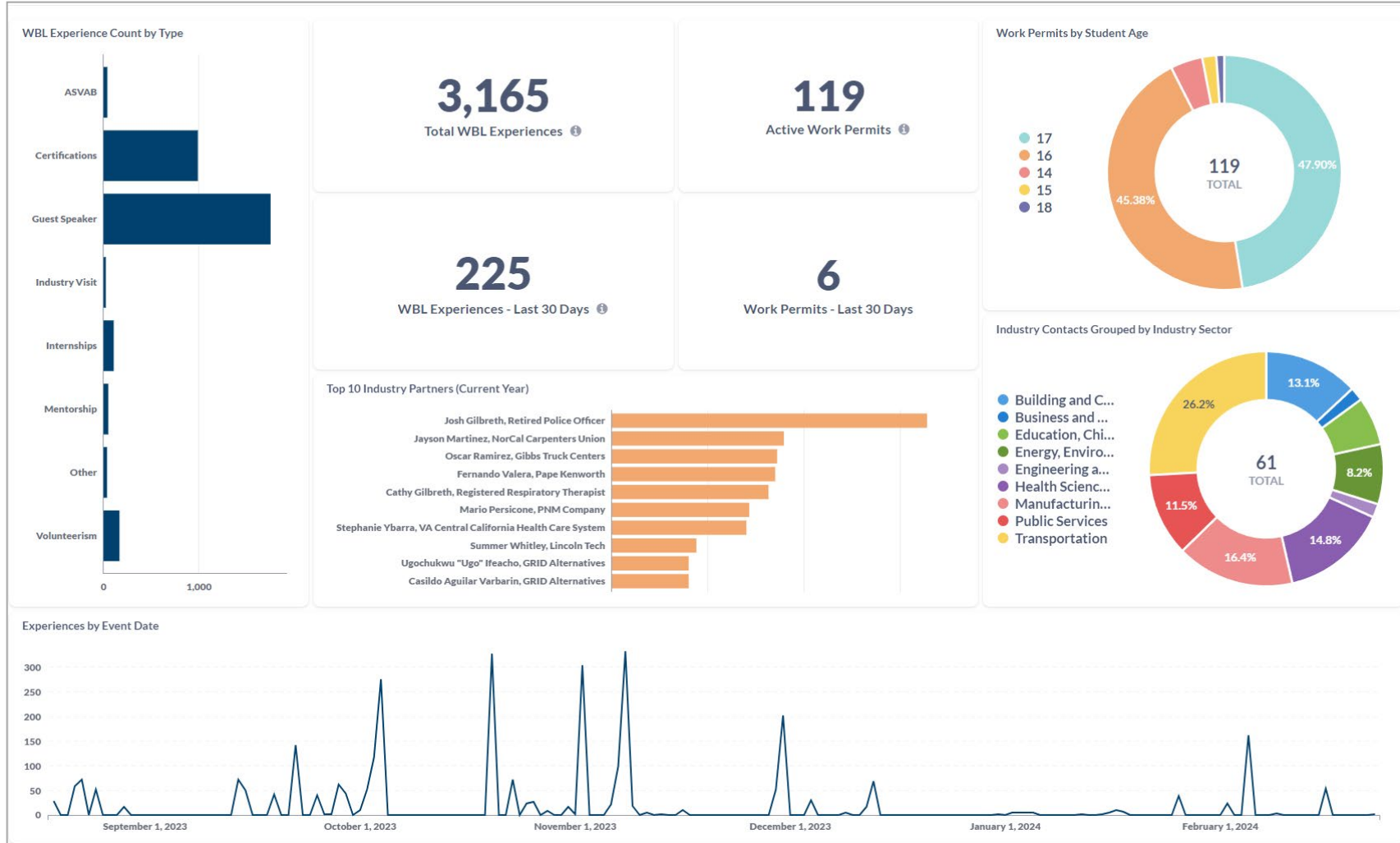
# Data Collection Processes / Our Learning



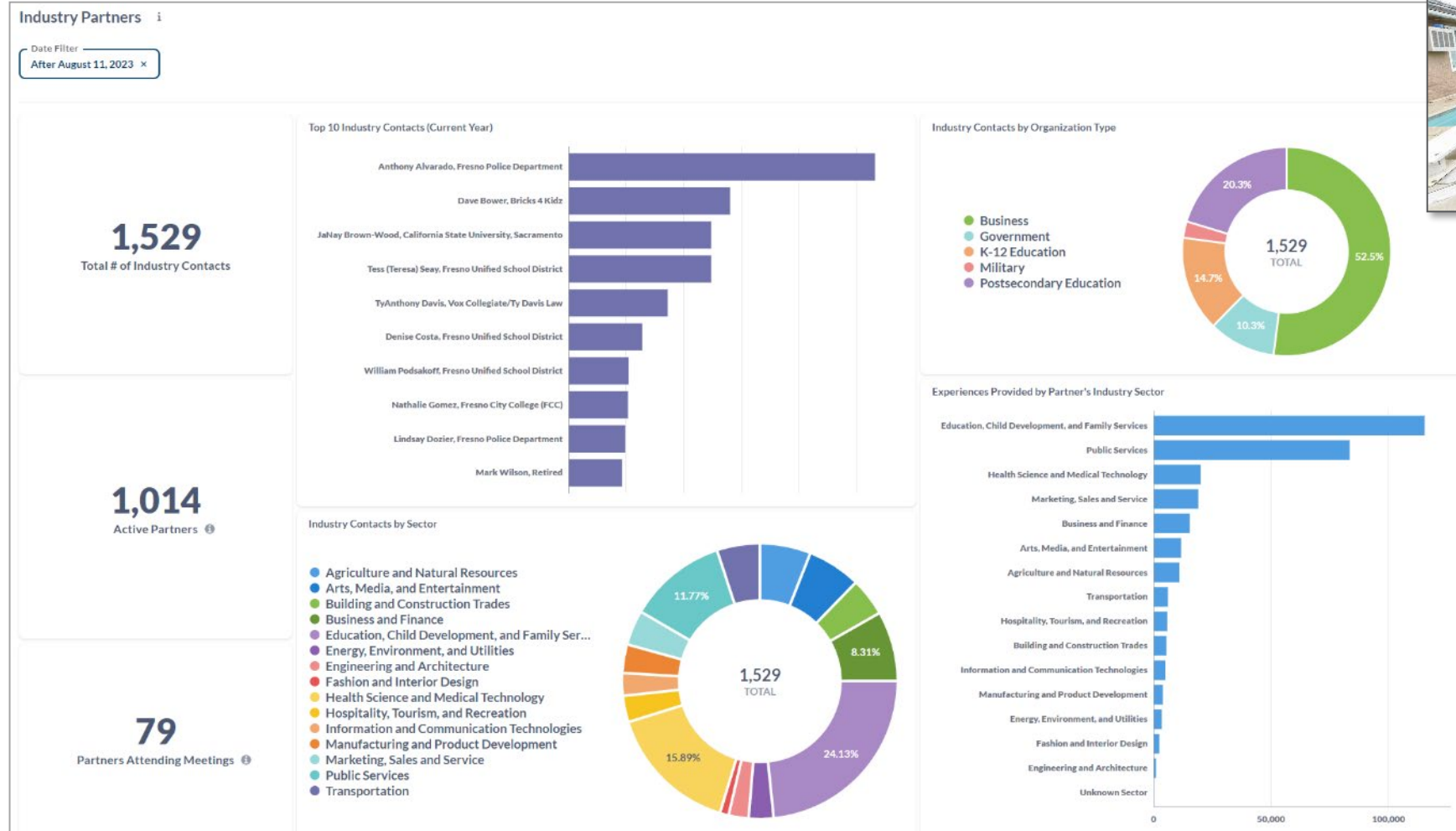
# Titan: Work-Based Learning Tracking



# Titan: School Dashboard

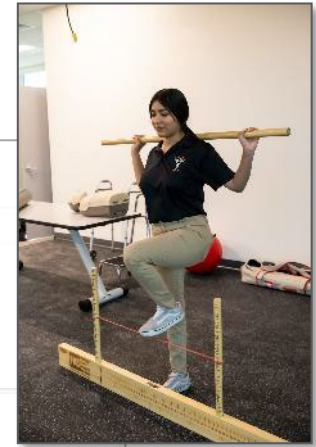


# Titan: Industry Partner Dashboard



# Titan: Student Dashboard

Coming Soon!



Enter the same Student ID number into both Student ID filter boxes. Click Add/Update Filter even if it says there is no matching result.

### Experiences by Type

- Certifications
- Guest Speaker
- IMAGO
- Internships
- Mock Interview
- Other

### Student Information

Student Name: [REDACTED]

Gender: F

Grade: 12

School Name: Duncan Polytech High

### Current CTE Courses Enrolled

Course Name: Rehab TherapySrvces(WBL3)

### Experiences Chart

Experience Type	School	Start Date	End Date	Hours	Description	Industry Contact
Certifications	Duncan Polytech High	March 21, 2023	-	5	-	-
Certifications	Duncan Polytech High	December 1, 2022	-	8	-	-
Certifications	Duncan Polytech High	December 1, 2022	-	2	-	-
Other	Duncan Polytech High	March 16, 2023	-	5	Career Skills Challenge-FCC	Anthony Ayerza
Certifications	Duncan Polytech High	September 8, 2022	-	5	-	-
Guest Speaker	Duncan Polytech High	February 17, 2023	-	2	-	Mary Frazier
IMAGO	Duncan Polytech High	August 16, 2022	-	-	-	-
IMAGO	Duncan Polytech High	August 16, 2022	-	-	-	-

Rows 1-8 of 19

### Internships Participated In

1 Total Internships

Description: Junior RT students had unpaid internship opportunities relevant to the rehabilitation therapy

### Certifications Earned

6 Total Certifications

11th Grade Leadership Certificate-IMAGO

CPR

Rows 1-3 of 6

### Experiences by Date

# College & Career Readiness Website





# Questions?



Source: Shutterstock 1039757701

# Connect With the Network

- Visit our website:  
<https://cteresearchnetwork.org/>
- Follow us on X (formerly Twitter) @CTEResNetwork and LinkedIn for news and updates
- Sign up on the website for our mailing list
- Email: [CTEResearchNetwork@air.org](mailto:CTEResearchNetwork@air.org)

The screenshot shows the homepage of the CTE Research Network. At the top, there is a navigation bar with the CTE logo, the text 'Career & Technical Education RESEARCH NETWORK', and links for 'ABOUT', 'SUBSCRIBE', and 'CONTACT'. Below the navigation bar, there are links for 'RESEARCH', 'TRAINING', 'EVENTS', 'BLOG/NEWS', and 'RESOURCES'. The main content area features a large banner with the headline 'Expanding the evidence base for career and technical education' and a sub-headline 'Career and technical education (CTE) prepares students with academic, technical, and employability skills for success in the workplace and in further education. Most high school students take at least one CTE course, and postsecondary students commonly pursue credentials in CTE. However, more research is needed to understand the effects of CTE on student outcomes. The CTE Research Network seeks to meet this need by increasing the number of CTE impact studies and strengthening the capacity of the field to conduct and use rigorous CTE research.' A 'Learn more' button is located below the banner. Below the banner, there is a 'WHAT'S NEW' section with six featured articles, each with a 'VIEW' button. The articles are: 1. 'Apply Now! Summer CTE Research Training Institute' (TRAINING), 2. 'Students with Learning Disabilities and STEM CTE' (BLOG), 3. 'Insights on Integrating DEI into Education Research' (BLOG), 4. 'A Snapshot of Noncredit Workforce Education' (BRIEF), 5. 'Work-Based Learning Data Collection Toolkit' (TOOL/GUIDE), and 6. 'North Carolina's CTE Dual Enrollment Pathway' (INFOGRAPHIC).

# THANK YOU!

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