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

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#NPSCTE24

Welcome – Meet the Authors

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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

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

Questions?

Source: Shutterstock 1039757701

Example From the Field

Fresno Unified School District

Fresno Unified Overview

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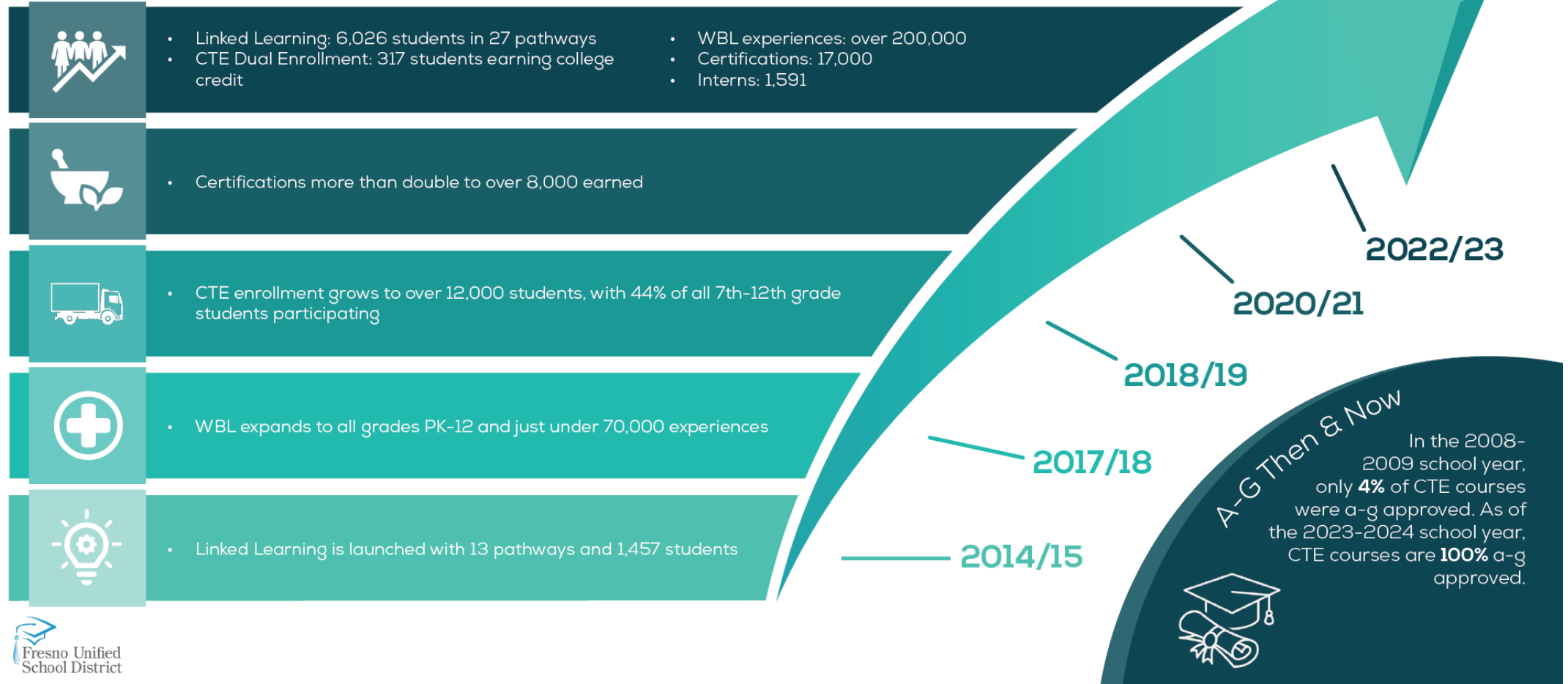- 87.7% socioeconomically disadvantaged
- 1.1% foster youth

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
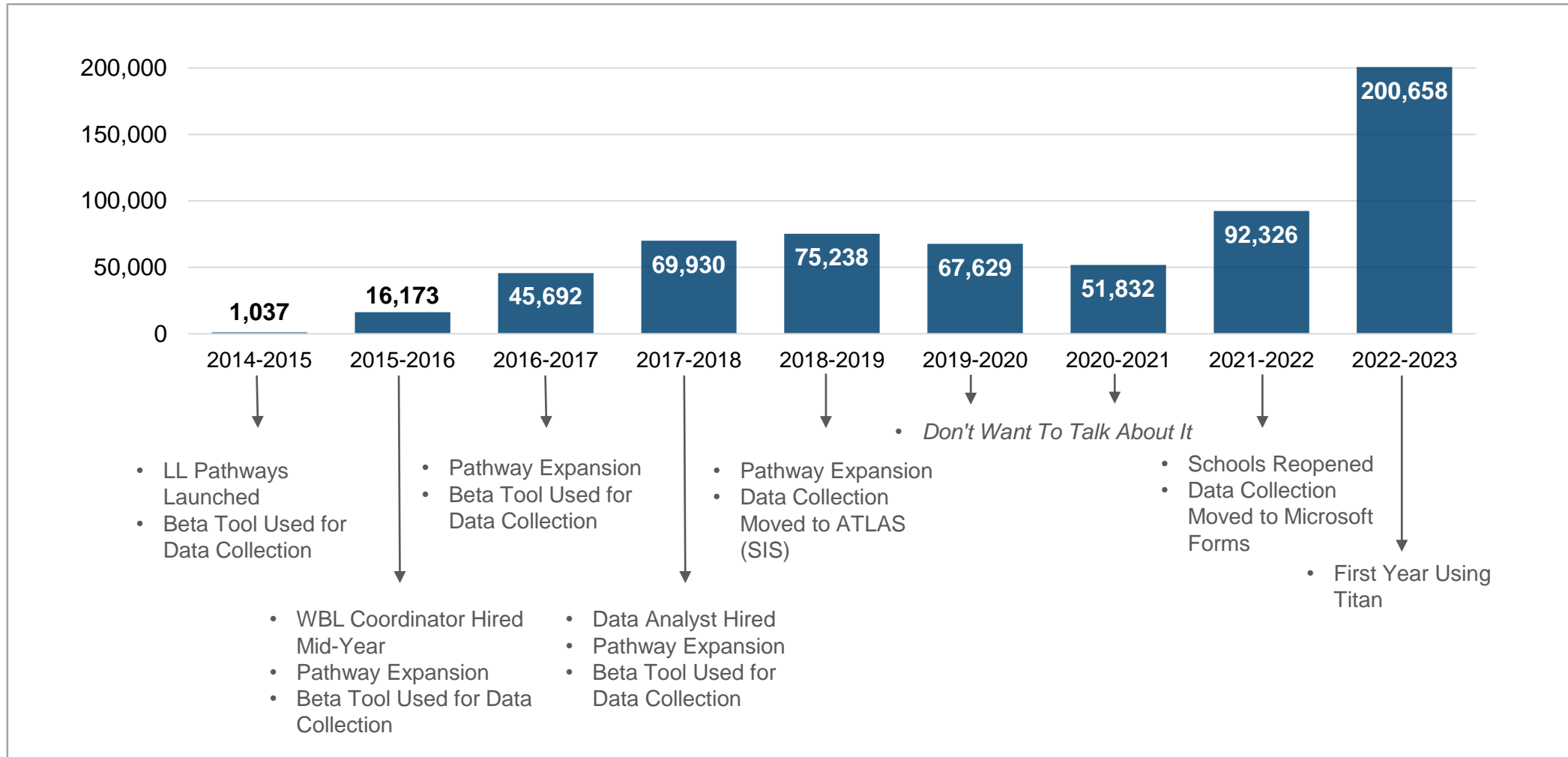
A LOOK AT THE HIGHLIGHTS OF A GROWING PROGRAM

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.
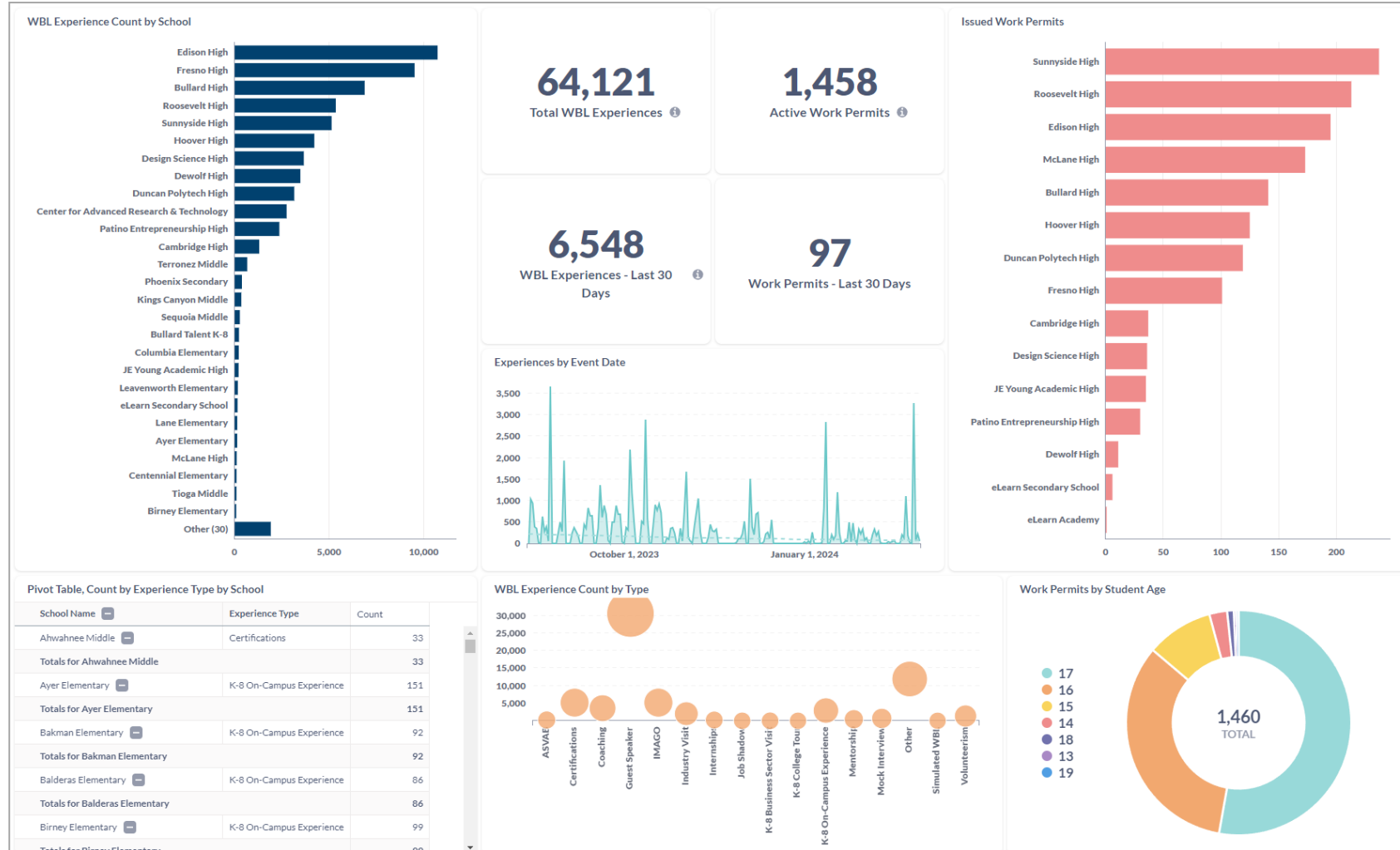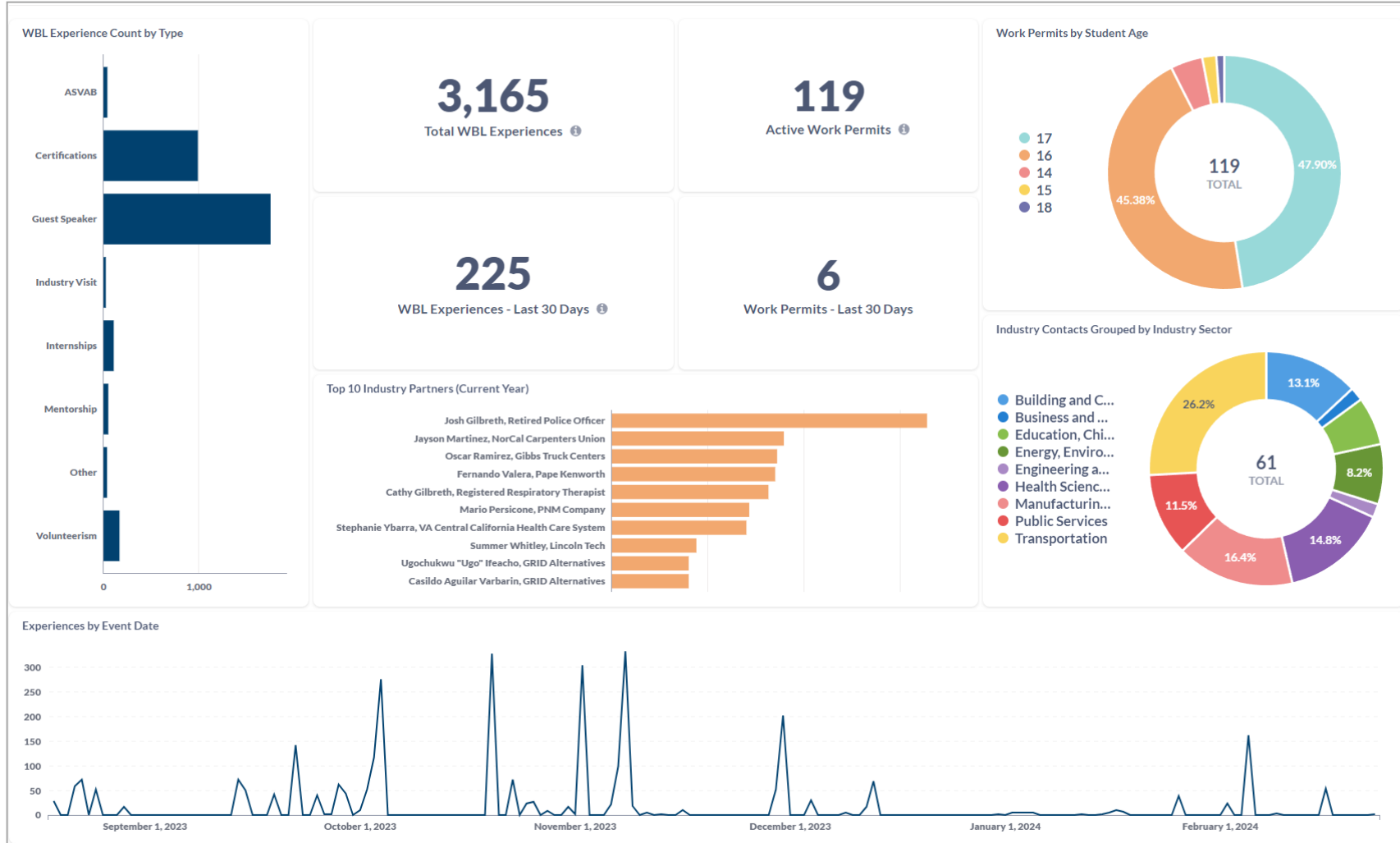
- Linked Learning: 6,026 students in 27 pathways
- CTE Dual Enrollment: 317 students earning college credit
- WBL experiences: over 200,000
- Certifications: 17,000
- Interns: 1,591

- Certifications more than double to over 8,000 earned

- CTE enrollment grows to over 12,000 students, with 44% of all 7th-12th grade students participating

- WBL expands to all grades PK-12 and just under 70,000 experiences

- Linked Learning is launched with 13 pathways and 1,457 students

2022/23

2020/21

2018/19

2017/18

2014/15

A-G Then & Now

In the 2008-2009 school year, only **4%** of CTE courses were a-g approved. As of the 2023-2024 school year, CTE courses are **100%** a-g approved.

Fresno Unified School District

ACTE — Association for Career and Technical Education

CTE RESEARCH NETWORK

#NPSCTE24

How Did We Get Here?

Industry Partners

Pathway Growth

Teacher Supports

Data Collection

Data Collection Processes / Our Learning

Bar chart of data collection values by school year:

Year	Value
2014-2015	1,037
2015-2016	16,173
2016-2017	45,692
2017-2018	69,930
2018-2019	75,238
2019-2020	67,629
2020-2021	51,832
2021-2022	92,326
2022-2023	200,658

Annotations:

- LL Pathways Launched
- Beta Tool Used for Data Collection

- WBL Coordinator Hired Mid-Year
- Pathway Expansion
- Beta Tool Used for Data Collection

- Pathway Expansion
- Beta Tool Used for Data Collection

- Data Analyst Hired
- Pathway Expansion
- Beta Tool Used for Data Collection

- Pathway Expansion
- Data Collection Moved to ATLAS (SIS)

- *Don't Want To Talk About It*

- Schools Reopened
- Data Collection Moved to Microsoft Forms

- First Year Using Titan

Titan: Work-Based Learning Tracking

Titan: School Dashboard

Titan: Industry Partner Dashboard
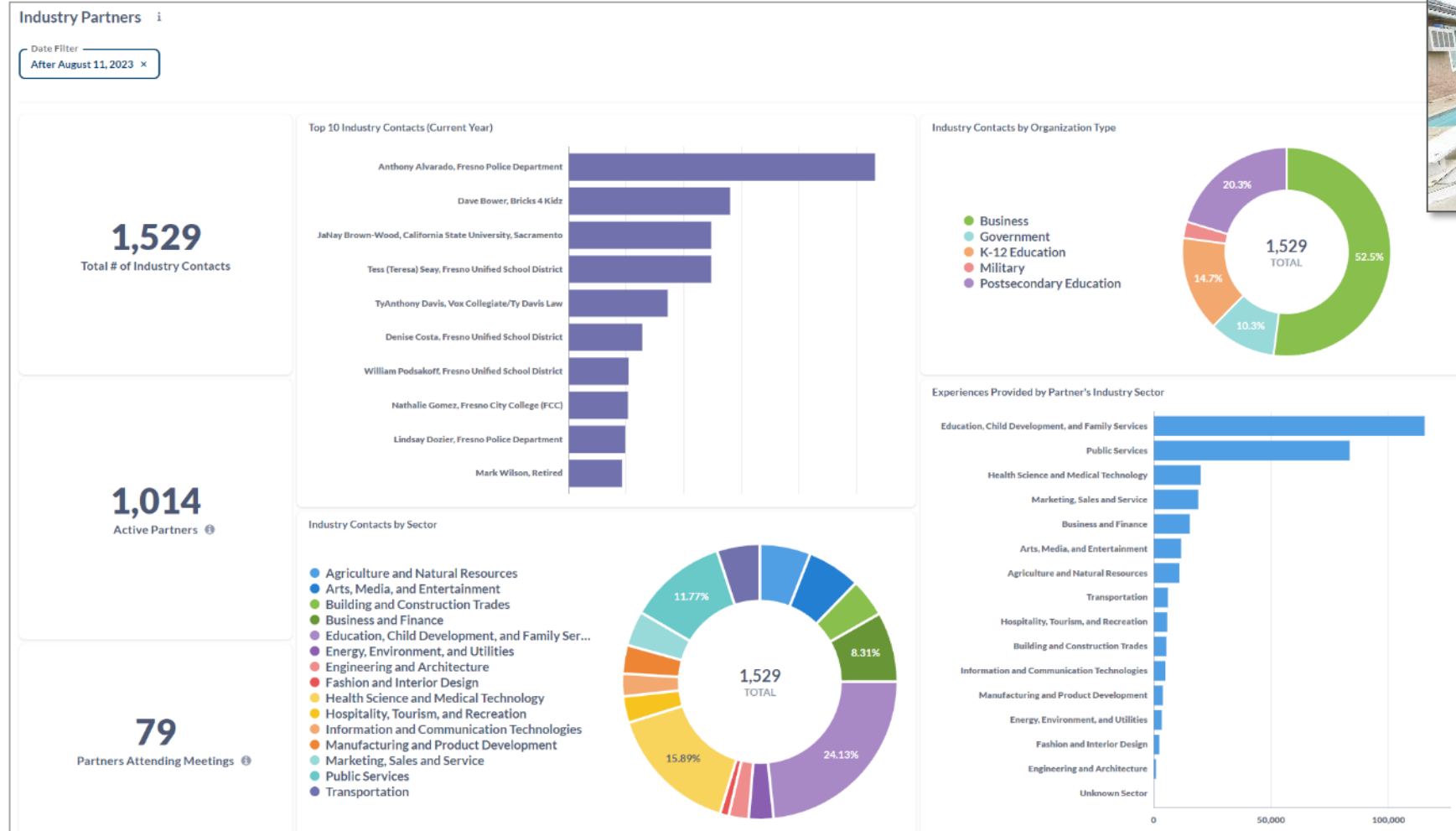
Titan: Student Dashboard

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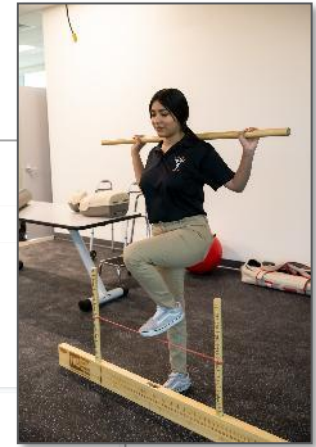
Enter the same Student ID number into both Student ID filter boxes. Click Add/Update Filter even if it says there is no matching result.

Experiences by Type

- Certifications — 31.6%
- Guest Speaker — 26.3%
- IMAGO — 26.3%
- Internships — 5.3%
- Mock Interview — 5.3%
- Other — 5.3%

19 TOTAL

Student Information

Student Name	▬▬▬▬▬
Gender	F
Grade	12
School Name	Duncan Polytech High

Current CTE Courses Enrolled

Course Name ^

Rehab TherapySrvces(WBL3)

Internships Participated In

Description ^

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

1
Total Internships

Certifications Earned

Certification Name ^

11th Grade Leadership Certificate-IMAGO

Concution Protocal

CPR

6
Total Certifications

Rows 1-3 of 6 ‹ ›

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 ›

Experiences by Date

October 1, 2022   January 1, 2023   April 1, 2023

College & Career Readiness Website
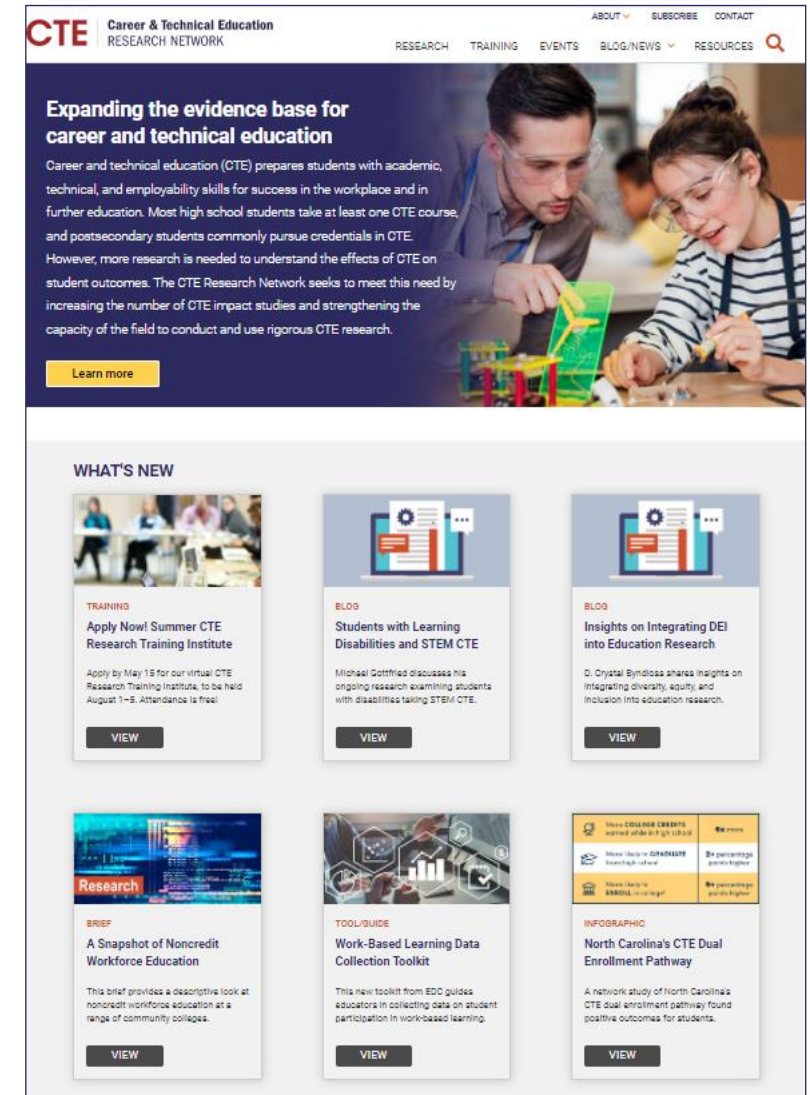
Questions?

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  and updates

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- Email: CTEResearchNetwork@air.org

THANK YOU!

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