CTEOS
2019 RESEARCH ACADEMY
TAPPING THE HIDDEN SUPERPOWERS OF DATA

CALIFORNIA COMMUNITY COLLEGES

CTE EMPLOYMENT OUTCOMES SURVEY

CTEOS.org . **AUGUST 1ST & 2ND**
Hosted by the Office of Institutional Research
Santa Rosa Junior College, Petaluma

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WELCOME!

Tapping the Hidden Superpowers of Data!

Welcome to the third annual CTEOS Research Academy – so glad you are here!

The California Community College Career Technical Education Employment Outcomes Survey (CTEOS) is entering its ninth year of providing actionable outcomes data for CTE program improvement.

The survey provides an incredibly rich data set, and through this Academy we are inviting you to tap the superpowers within the data! The extensive data include MIS data elements for all students in the cohort, as well as survey results for all who responded. Join your colleagues in honing your superhero powers as we dive deeper into the data!

KC Greaney, Ph.D.
Executive Director, CTEOS
Director of Institutional Research
Sonoma County Junior College District

ACADEMY INFORMATION

Website: cteos.santarosa.edu/research-academy-2019

Santa Rosa Junior College, Petaluma Campus
680 Sonoma Mountain Pkwy, Petaluma, CA 94954
707-778-2415

Campus parking is free on August 1st and 2nd.

Connect to the "SRJC Public Wireless" network. No password required. You'll need to go through a login portal page before getting online.

Install the "MySRJC" app. Open the app, choose "Get Started," then "Petaluma Campus," then "Visitor" (no login needed). Select "CTEOS Research Academy" to have the academy details at your fingertips.

San Francisco Airport (SFO)
Oakland Airport (OAK)
Sonoma County Airport (STS)

Sheraton Sonoma County - Petaluma
745 Baywood Drive, Petaluma CA 94954
707-283-2888

Hampton Inn by Hilton - Petaluma
450 Jefferson St, Petaluma, CA 94952
707-397-0000

Hotel Petaluma
205 Kentucky St, Petaluma, CA 94952
707-559-3393

UBER
Uber.com

**Uber rides are available for our attendees
July 31st to August 2nd**

In the Uber app, tap the upper-left button to open the side menu, then tap "Payment", then tap "Add Promo/Gift Code", then enter code **erj7xxz**. When you request an Uber ride, please make sure that the payment method you use is the promo code (and not any other payment method that may be selected by default in your personal Uber account). Please use either the "UBERX" or "UBERXL" options when requesting a ride. **THIS CODE IS ONLY VALID ON JULY 31, AUGUST 1, AND AUGUST 2, AND ONLY ON TRIPS WITHIN PETALUMA.** Uber rides that use the prepaid promo code do not need to be included in the reimbursement request.

Note: The promo code is good for up to $25 per ride and up to 4 rides per Uber account.

Car Rentals
Car rentals are available at each of the three nearby airports. You will be reimbursed for expenses associated with your car rental, including bridge tolls.

Personal Auto
For those driving your own car, you will be reimbursed at the IRS mileage rate of 58-cents per mile, as well as for bridge tolls and parking fees. Parking is free on the SRJC Petaluma campus on August 1st and 2nd.

Airport Shuttle
AirportExpressInc.com
Airport Express: Petaluma Fairgrounds Stop
175 Fairgrounds Dr., Petaluma, CA 94952
707-837-8700

The Airport Express provides shuttle services to and from SFO and OAK and the Petaluma Fairgrounds —which is the closest stop to the hotels. Upon arriving at the Fairgrounds, you can take a taxi/Uber to your destination.

SRJC Shuttles
SRJC is providing limited morning shuttles from all three hotels – the Sheraton, the Hampton, and Hotel Petaluma – to the Research Academy. Afternoon shuttles are also available from the Research Academy to the hotels and Airport Express stop. **See the following page for pick-up locations and schedule. Look for a white van with the SRJC Logo on the side.**

SHUTTLE SCHEDULE

SHUTTLE A / HOTEL PETALUMA & HAMPTON / THURSDAY		
Hotel Petaluma	**Hampton**	**SRJC Campus**
Pick Up by Courtyard	Pick Up by Lobby	Drop Off
9:10 AM	9:20 AM	9:30 AM
9:45 AM	9:55 AM	10:05 AM
10:20 AM	10:30 AM	10:40 AM
10:55 AM	11:05 AM	11:15 AM

SHUTTLE B / SHERATON / THURSDAY		
Sheraton	**SRJC Campus**	
Pick Up by Main Entry	Drop Off	**Return Shuttles leaving SRJC as needed until 5:30 PM**
9:15 AM	9:30 AM	
9:45 AM	10:00 AM	
10:15 AM	10:30 AM	
10:45 AM	11:00 AM	

SHUTTLE A / HOTEL PETALUMA & HAMPTON / FRIDAY		
Hotel Petaluma	**Hampton**	**SRJC Campus**
Pick Up by Courtyard	Pick Up by Lobby	Drop Off
7:40 AM	7:50 AM	8:00 AM
8:15 AM	8:25 AM	8:35 AM
8:50 AM	9:00 AM	9:10 AM

SHUTTLE B / SHERATON / FRIDAY		
Sheraton	**SRJC Campus**	
Pick Up by Main Entry	Drop Off	**Shuttles leaving SRJC to Hotels & Airport Express as needed until 2:00 PM**
7:45 AM	8:00 AM	
8:15 AM	8:30 AM	
8:45 AM	9:00 AM	

FULL CONFERENCE SCHEDULE

Each breakout session is categorized into these tracks. Look for these icons next to each breakout title to discover which session is right for you.

CTEOS Superstars
In this lecture series, discover from these speakers how CTEOS is being used by a diverse range of stakeholders.

LaunchBoard in Action
Learn about all the exciting features of LaunchBoard, including its integration with CTEOS data.

Sector/Regional Analysis
Look in depth at how different sectors/regions use data to better understand and improve their students' abilities to match job needs outside of school.

Research Tips & Tools
Dig deep into the data, data issues, and analytic workshops where you'll build technical skills.

Affinity/Discussion Groups
Meet with a small group of colleagues for rich discussion

THURSDAY, AUGUST 1ST

9:30 AM - 11:00 AM—Registration, Coffee, & Pastries

Registration: Clock Tower Breezeway

Attendees arriving to the conference should first check in at registration where they will receive their Research Academy materials and have their questions answered by Research Academy staff. Enjoy coffee and pastries while networking with other attendees.

11:00 AM - 12:00 PM — Opening Session

Location: Ellis Auditorium

We will begin the Research Academy with words of welcome, introductions, an overview of the CTEOS, and an outline of the schedule for the Research Academy.

12:00 PM - 1:00 PM — Lunch & Networking

Location: Rotary Plaza

1:00 PM - 1:15 PM — Group Picture

Location: Clock Tower Courtyard

CTEOS: The Basics (CALL 641)
KC Greaney, CTEOS (Santa Rosa Junior College)
Blair Lamb, CTEOS (Santa Rosa Junior College)
Megan Rhodes, CTEOS (Santa Rosa Junior College)

New to the CTEOS, and want to learn the basics? This session is for you! We will briefly cover the history and background of the CTEOS, provide details about the process (What is expected of participating colleges? What do colleges get out of the survey?), and demonstrate how to access more information and data visualizations showing results of surveys from prior years.

Employment Data, Earnings Outcomes, & the Student Success Metrics (CALL 644)
Kathy Booth, WestEd
Karen Beltramo, WestEd

The Student Success Metrics dashboard has helped put employment and earnings on the map for all student pathways, not just those in CTE. This session will walk you through ways to use the Student Success Metrics to support conversations about students, employment outcomes, as well as to leverage other tools like the CTE Outcomes Survey and other LaunchBoard tabs to better understand these measures.

Labor Market Expectations and CTEOS Results (CALL 656)
Michael Goss, Centers of Excellence
Lori Sanchez, Centers of Excellence

Traditional labor market data provides the number of jobs that will be available in the future, and the wages a worker can expect to earn. To what extent does the post-community college student experience reflect labor market expectations? This session can inform faculty, deans, researchers, or anyone thinking about how to use CTEOS data to adjust community college programs to meet the labor market.

Using PowerBI to Visualize CTEOS Results (CALL 657)
Rosaleen Ryan, Monterey Peninsula College
Kath Uyeda, Monterey Peninsula College
Judy Cutting, Monterey Peninsula College

This presentation illustrates the power of visual communication. Monterey Peninsula College used Power BI to develop a user-friendly, interactive data dashboard for the CTEOS results. Participants will learn the data preparation involved in the CTEOS data files, how to create visualizations in Power BI, and some of the interesting findings from our college's CTEOS results.

Integrating CTEOS into a Data Warehouse (CALL 697)
Amber Hroch, Bakersfield College
Rachel Sarabia Ortiz, Kern Community College District

Incorporating CTEOS into Bakersfield College's Research Date Warehouse (RDW) will allow for a deeper look into connecting labor market outcomes to other student information located in MIS and Banner. Connecting student-level data with CTEOS through the RDW will allow for new explorations of research. Specifically, this session will examine the relationship between students' GPA and wages.

3:00 PM - 3:15 PM — Coffee Break

Location: Rotary Plaza

3:30 PM - 4:30 PM — Breakout Session 2

Affinity/Discussion Groups

Sector: Ag, Water, & Environmental Tech (CALL 658)
Moderators: Nancy Gutierrez, Carrie Peterson, Fred Sconberg,
Krista Vannest, Deputy/Sector Navigators

Sector: Health (CALL 691)
Moderators: John Cordova, Wendy Deras, & Trudy Old,
Deputy/Sector Navigators

Sector: Business & Entrepreneurship (CALL 692)
Moderators: Alese Campbell, Angela Cordell, Judy Fox,
& Xavier Nazario, Deputy/Sector Navigators

Sector: Advanced Transportation and Logistics (CALL 695)
Moderator: Katie Mishler, Deputy Sector Navigator
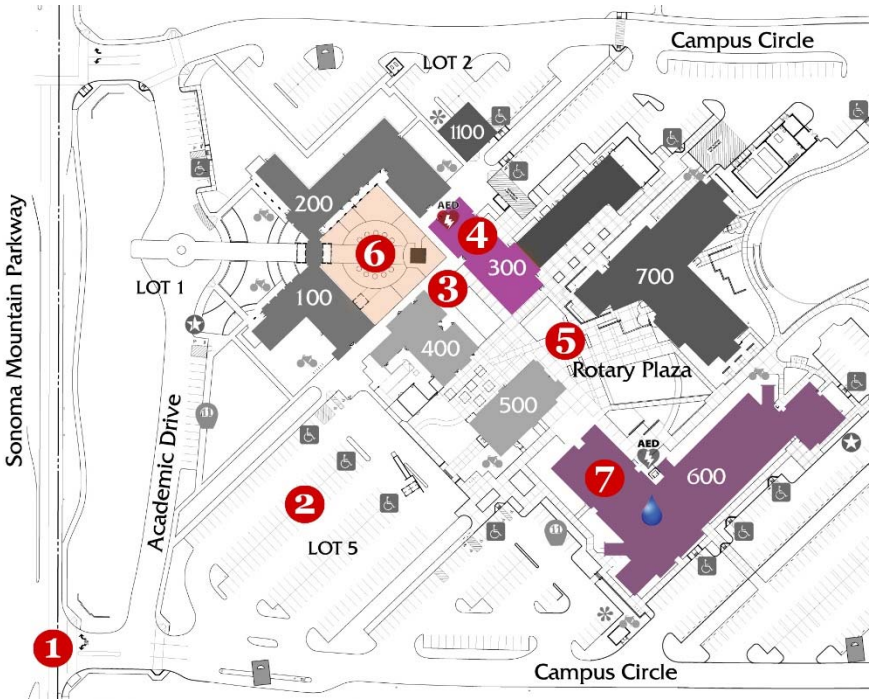
Sector: Retail, Hospitality, & Tourism (CALL 696)
Moderator: Joy Hermsen, Sector Navigator

**Hot Topic: Data to Support Creating New CTE Programs
(CALL 697)**
Moderator: Jill Leufgen, CCCCO, &
John Carrese, Centers of Excellence
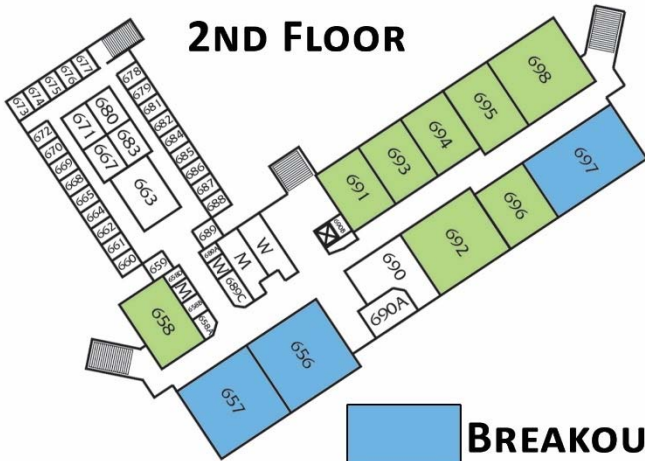
CAMPUS MAP

1 <u>Campus Entrance</u>

2 <u>Academy Parking Lot</u>

3 <u>Academy Registration</u>

4 <u>Ellis Auditorium (Opening and Closing Sessions)</u>

5 <u>Rotary Plaza (Breakfast, Lunch, & Coffee)</u>

6 <u>Clock Tower Courtyard (Group Photo)</u>

7 <u>Call Building (All Breakouts & Affinity Discussion Groups)</u>

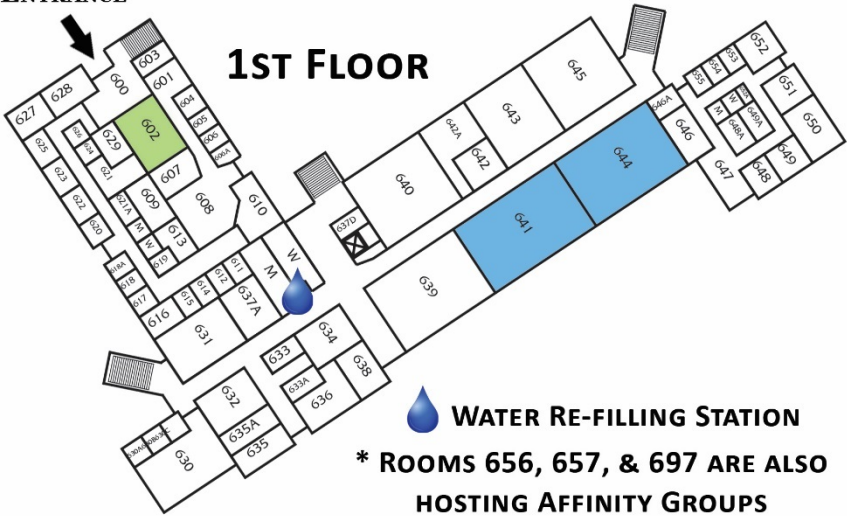💧 <u>Water Bottle Filling Station on Ground Floor</u>

CALL BUILDING BREAKOUTS & AFFINITY DISCUSSION GROUPS

2ND FLOOR

Rooms (2nd floor): 674, 676, 678, 679, 681, 682, 684, 686, 687, 688, 685A, 685B, 685C, 672, 671, 667, 680, 683, 663, 670, 669, 668, 666, 665, 664, 662, 661, 660, 659, 658, 658A, 658B, 658C

698, 695, 694, 693, 691, 692, 696, 697, 690, 690A, 656, 657

M, W, M, W

■ **BREAKOUTS***

■ **AFFINITY GROUPS**

602 ENTRANCE

1ST FLOOR

Rooms (1st floor): 603, 600, 601, 604, 605, 606, 645, 653, 652, 654, 655, 651, 650, 628, 627, 625, 626A, 626, 629, 602, 607, 640, 642A, 643, 642, 646A, 646, 648A, 646A, 649, 648, 647, 623, 622, 621, 627A, 620, 609, 608, 610, 637D, 641, 644, 639, 618A, 618, 617, 611, 612, 615, 637A, 616, 631, 633, 634, 638, 632, 633A, 636, 630, 635A, 635B, 635C, 630A, 635

M, W

💧 **WATER RE-FILLING STATION**

* **ROOMS 656, 657, & 697 ARE ALSO HOSTING AFFINITY GROUPS**

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Affinity/Discussion Groups
(Continued from Page 11)

Hot Topic: Noncredit CTE (CALL 602)
Moderator: Raine Hambly, North Orange Continuing Education

Hot Topic: Measuring CTE Impact at Small/Rural Colleges (CALL 693)
Moderator: Svetlana DePlazes, Antelope Valley College

Hot Topic: The "Tyranny of the Completion Agenda" (CALL 694)
Moderator: Nick Kremer, Work Force Specialist

Hot Topic: Why Aren't We Marketing Our Outcomes?! (CALL 656)
Moderator: Kit O'Doherty, BACC

Hot Topic: Using CTEOS to Inform Decisions, Plan, and Improve Program Outcomes (CALL 698)
Moderator: Rock Pfotenhauer, BACC

Hot Topic: Online Career Education (CALL 657)
Moderators: Lisa Beach, SRJC, & Renah Wolzinger, Power Minds

Thursday Post-Academy:
Meet up & network at the Lagunitas Brewery Group Room for no-host local beers, pub food, and live music! See insert for other recommendations.

FRIDAY, AUGUST 2ND

8:00 - 9:00 AM — Breakfast & Networking

Location: Rotary Plaza

9:15 - 10:30 AM — Breakout Session 3

Increasing the Superpowers of CTEOS Data Visualizations (CALL 644)
KC Greaney, CTEOS (Santa Rosa Junior College)
Laura Coleman, Centers of Excellence

In this hands-on workshop, participants will access CTEOS data from the extensive data visualizations on the CTEOS project website (https://cteos.santarosa.edu/). Curious what the data looks like for your college, or sector, or region? Or a particular program at a particular college? Or how outcomes vary for Skills Builders versus Completers, or by demographics such as gender and ethnicity? We will also solicit recommendations and requests for improving the data visualizations on the CTEOS project website, including those coming from the Centers of Excellence.

Employment Outcomes, Data, and Intersegmental Paths (CALL 641)
Kathy Booth, WestEd

Too few community college students earn a living wage immediately after leaving community college. How can colleges help more students strengthen their economic mobility? For both guided pathways and K12 SWP implementation, ***(continued on next page)***

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it's important to understand the relationship between students' educational and career pathways. This session give you ideas for how you can better integrate data about likely and actual economic outcomes into program planning and student advising efforts.

Middle Skills in the Life Sciences/Biotech (CALL 656)
Terri Quenzer, Sector Navigator
John Carrese, Centers of Excellence

Taking an approach that was novel in 2013/14 to generate a Middle Skills Report for the Life Sciences/Biotech sector, the research team generated both labor market demand and college supply data for the original report using multiple data sources and methods, then compared the demand and supply data to determine if California Community Colleges with related courses/programs were meeting the labor market demand for biotechnicians. The 2017 report later compared how the labor market data evolved since the first report in 2014 and provided an opportunity to "benchmark" what was happening in the Biotech sector over time. With the start of SWP funding in 2016, the supply/demand gap analysis in the 2017 report would serve to drive decision making on how to invest SWP funds across colleges related to the Biotech sector. The next revision of this report is scheduled for release in 2020, and in addition to updated labor market data and supply/demand gap analyses to determine how the Biotech sector has evolved, it will add a deep dive into CTEOS data to explore how Community College students are finding success and closing employment gaps in Life Sciences industries. Another addition will be identification of job titles in other sectors that utilize skills common to biotech. In this audience-interactive presentation, we will discuss the data sources and methods used in generating these reports and brainstorm how to best utilize CTEOS data given challenges of CTEOS data in this sector.

ED Code 78016 Made Easy with CTEOS and Launchpad (CALL 657)
Dr. Javier Ayala, Grossmont College
Erika Arangure, Grossmont College

Every year each college is to provide information to its governing board about the impact related to jobs and student success for its CTE programs. Grossmont College through a collaborative venture using LaunchPad, CTEOS, and Regional Center of Excellence Data integrated new reporting components related to ED Code 78016 in a seamless fashion. This presentation will show you what to consider and how to populate data using these tools.

BONUS

Slicing the Fruitful Pie: Income Inequality, Pareto Optimality, and Implications for the Student Centered Funding Formula (CALL 697)
Terrence Willett, Cabrillo College

The Vision for Success (VfS) goals require colleges to address equity not only in academic outcomes such as completion of transfer level English and Math and graduation but also post-college employment and wages. When faced with income inequities among our former students we are pressed to determine reasons for these inequities to inform solution strategies. While it is tempting to blame social and historical forces out of a college's control, we still have an imperative to identify what is in our ability to influence. A fundamental question of income inequality is can we find a path where we can increase the incomes of lower earners without taking from those earning more (Pareto efficient) or is the size of the wage pie fixed in a given year so that attaining equity necessitates the wages of some to decline in order for others to increase? To what extent are wage differences by demographics influenced by choices (continued on next page)

in program of study, the types of jobs students apply for, pay differentials by employers, or other factors? This session will explore data from CTEOS and other sources to define and examine wage inequity followed by discussion of possible strategies.

10:45 - 12:00 PM — Breakout Session 4

Improving CTEOS Response Rates (CALL 657)
Virginia Rapp, El Camino College
Jeremy Smotherman, El Camino College
Blair Lamb, CTEOS (Santa Rosa Junior College)

After reviewing CTEOS response rates by college, a panel will discuss strategies for improving response rates to the CTEOS.

From Data to Action (CALL 644)
Kathy Booth, WestEd

Colleges have more employment and earnings data than ever, but it can be difficult to figure out how to take action on this information. Starting from a single data point, this session will model the inquiry process, including how to handle questions about data validity, student goals, and college missions. You will practice how to develop action hypotheses and set up 90-day cycles where you can test these hypotheses to identify your broader course of action.

Using CTEOS to Triangulate Employment Data (CALL 656)
Renah Wolzinger

CTEOS data can be used alongside data from the NACE Salary Survey, Supply and Demand Tables from the Centers of Excellence, the CCCCO Launchboard, and other sources to conduct a deep, well-rounded analysis of a specific topic such as an industry sector. In this session, attendees will see examples of such rich analysis for the Global Trade and Advanced Transportation and Logistics sectors.

Creating Streamlined CTEOS College Data Sets for Multiple Year Analysis (CALL 641)
James Clifton, MiraCosta College
Megan Rhodes, CTEOS (Santa Rosa Junior College)

The Career and Technical Education Outcomes Survey (CTEOS) is a rich data set that provides meaningful insights into career choices and workforce outcomes of California community college students. In this presentation, we'll look at how individual researchers from colleges can harness the full potential of their CTEOS data in a manner that allows for reliable, consistent, and accurate within- and between-college comparisons. We will first give an overview of how the CTEOS team cleans up and analyzes the data, and then will dive into hands-on work using your own college's data to focus on several important methodological considerations exclusive to individual colleges. We'll look at missing data and incongruent response patterns in the CTEOS, ways in which we may structure local CTEOS data that allows for reliable within- and between-college statistical comparisons, and approaches for aggregating CTEOS data across multiple years to bolster statistical power. Participants will have a chance to work through several important (continued on next page)

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data cleaning problems, with data problems experienced at MiraCosta college presented as examples. We will end the session brainstorming possible solutions to these issues as a group and offer suggestions on how to improve the CTEOS in the future.

12:00 – 12:30 PM — Closing Session & Raffle

Location: Ellis Auditorium

*Reconvene in Ellis Auditorium to say farewell. Turn in your name badge to be entered into the raffle! Prizes include SRJC Shone Farm Wine, Olive Oil, and Conference Schwag. **Grand prize is a Samsung Galaxy Tab A Tablet!** Must be present to win.*

12:30 PM — Box Lunches

Location: Rotary Plaza

THE SRJC OIR SUPERHEROES!

Left to right:

Greg Drukala, "Viz Master" & Tableau Strongman (Research Analyst)

Jeanne Fadelli, the "Brainiac" & Party Prodigy (Research Analyst)

Michael Pham, the "Invisible Man" (Former CTEOS Director)

KC Greaney, the "Wiz" aka "The Boss" aka "The Woman with a Master Plan" (Executive Director CTEOS)

Blair Lamb, "Champion of Equity for All" (Research Analyst)

Karen Maddux, "Super Glue" Who Keeps Us All Together (Administrative Assistant)

& **Megan Rhodes** (not pictured), "Brilliant Sidekick" (Research Technician)

THANK YOU FOR BEING HERE!

ABOUT THE SURVEY

The California Community College Career & Technical Education Employment Outcomes Survey (CTEOS) began as a pilot project in 2012. Spearheaded by the Bay Area Region, colleges desired to pool their resources to develop a multi-college employment outcomes survey, modeled after the successful program at Cabrillo College. Working with the RP Group, the CTEOS was born.

Initially, colleges provided funding to cover the costs of the survey, which started with fifteen colleges in 2012 but grew every year with greater voluntary participation. In 2017, the survey was so widespread that the Chancellor's Office decided to underwrite the costs so that all colleges statewide can participate and benefit.

The survey provides actionable data to answer important questions: Do our CTE students find employment? Is it in the field of study, and do they realize increased wages? These outcomes are more meaningful to CTE programs than the standard community college outcomes of transfer or completion, and the CTEOS is the sole source for some of this information.

For more information, please visit the project website at cteos.org

ACKNOWLEDGEMENTS

THANK YOU!

SRJC❀PETALUMA

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