



Fresno K-16
Collaborative

**FRESNO
HIGHER ED
FOR ALL**

PROGRESS REPORT, DECEMBER 2021

About the Cover Artist – ***Tony Xiong***

Talented illustration artist, Tony Xiong, is a Fresno State student in the Bachelor of Fine Arts Graphic Design program with an emphasis in Illustration in the Department of Art and Design, College of Arts and Humanities. He is a Hmong American born in the Central Valley of Fresno County. His goals as an illustrator consists of creating his own Graphic Novels and inspiring his peers. On his free time, he enjoys meditating, journaling, spending time with family, and Illustrating stories.

In regard to the design, Tony shared, “The story behind my illustration is heavy with the theme of hope and inspiration. With research and heavy emphasis on symbolism I chose to use stars and a ray of light to symbolize the interaction between us humans. The individual stars on the sides symbolize people who inspire and spark others dreams and passion. The ambiguous figure in the middle represents a human who has found their passion through interactions with aspiring leaders. The Blue that surrounds the figure symbolizes these dark times such as COVID-19, I wanted to also emphasize that we aren't alone and we are all connected to each other by having the glowing line elements connected to each star. From one person to another, mentor to student, we all inspire each other.”

On behalf of the Fresno K-16 Collaborative,
thank you, Tony, for sharing your art inspiration with us!



Fresno K-16
Collaborative

**FRESNO
HIGHER ED
FOR ALL**

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I. EXECUTIVE SUMMARY

Progress Report 2 – December 2021 covers the Fresno K-16 Collaborative's (Collaborative) work-to-date through the beginning of September 2021 building upon the work reported in [Progress Report 1 - April 2021](#). This report is intended to showcase intersegmental partner work and program outcomes-to-date.

In July 2021, the Collaborative was granted a no-cost extension extending the time of performance for the grant from December 31, 2021, to March 31, 2022. In response to the no-cost extension, a third report is planned for release in June 2022 summarizing overall program outcomes, achievements and data through Spring 2022.

Fresno K-16 Collaborative Inaugural, Intersegmental Partners



II. ACHIEVEMENT OVERVIEW

As shared in the previous progress report, in July of 2020, amid the COVID-19 pandemic, the 15 pilot partners of the Fresno K-16 Collaborative managed unimaginable disruptions to be successful in the planning and implementation of the initial phases of the Collaborative's two-year pilot program to reimagine race equity and inclusion in education through four pilot dual enrollment pathways. The K-16 intersegmental, systems change work of the Collaborative partners continues to model adaptive resiliency and work towards education and career pathways providing student equity, upward mobility and prosperity.

The Collaborative has foundationally begun developing a cross-sector system for our region that is critical to improving student outcomes. The Collaborative's systems change work was borne out of the need to tackle student race equity, inclusion and success with an agreed upon mission and vision to confront systemic educational inequities. Operating with integrity, honesty, and transparency has helped the partners build trust with one another and regional stakeholders and collectively achieve encouraging results.

Through dual enrollment and dual enrollment pathways leading to careers offering living wage jobs within our region, the Collaborative works to set the standard to create sustained, accessible equity. The Collaborative's intended impact focuses on outcomes that are inclusive, equitable and prosperous for our Fresno County region's students and where race, place, and socioeconomic status are no longer predictors of educational and future economic attainment.

Reflective of recommendations originated by the Governor's Council for Post-Secondary Education convened Recovery with Equity Taskforce in their report, [Recovery with Equity: A Roadmap for Higher Education After the Pandemic](#), the Collaborative's work is intersegmentally strengthening systemic change with projects, programs, services and attitudes that overlay with the pathways and support the Collaborative's overarching Design Principles and Key Elements to re-envision equitable education. Furthermore, the Recover with Equity Taskforce invited the Collaborative to be represented on their Intersegmental Collaboration Working Group to help develop, vet and present recommendations to the Taskforce for consideration and subsequent inclusion in their report.

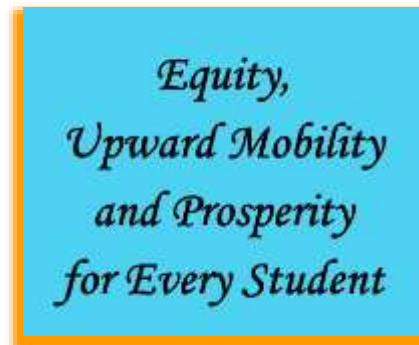
From its inception, the Fresno K-16 Collaborative has recognized the need to address the lack of college and career readiness for low income and under-represented populations. Current and historical studies, such as recently released [CalEnviroScreen 4.0 Report](#) reported on by The Fresno Bee in their October 20, 2021, article, [West Fresno ranks highest in California for pollution burden and health vulnerability](#), Fresno regional neighborhoods that are a majority Black or Hispanic residents are disproportionately burdened by pollution and health risks with some of the neighborhoods ranking the highest in the state. Education should not be an added cause of these inequities that further burden the health, welfare and socioeconomics of these neighborhoods.

With collective efficacy, the Collaborative believes that this work makes a difference. Education supports inclusive economic growth and increase prosperity. Accessible and equitable dual enrollment opportunities are key to moving the needed in a positive direction. The October 2021 reports from PPIC ([Dual Enrollment in California](#)) and UC Davis Wheelhouse ([A Foot in the Door](#)), both underscore the benefits of equitable dual enrollment supported by data showing students who take dual enrollment classes are more likely to attend college. Although California and the Fresno region are increasing dual enrollment offerings, there are vast opportunities for growth.

The difference between wanting to make a change and making change happen is ACTION. The

Collaborative actionably cares about creating opportunity and programs to:

- Better align secondary and postsecondary programs and increase postsecondary capacity;
- Reduce achievement gaps by furthering student success for all students, regardless of race, gender, age, disability, or economic circumstances;
- Create a multi-generational culture of educational attainment by focusing on strategies to improve students' successful completion of degree and certification programs, increasing students future earning potential, and ending the cycle of poverty that many students, and subsequently their children may experience.



With laudable and adaptive resiliency, Fresno K-16 Collaborative Partners have learned to pivot and overcome COVID hurdles to support student success, increase early college credit opportunities, and upskill adult learners to increase their employability and upward socioeconomical mobility

Qualitative and quantitative outcomes demonstrate only a sliver of the transformative and foundational work that is underway and will continue beyond the pilot as a result of the creation of new, intersegmental working relationships and the pioneering of education re-envisioned. The Collaborative Partners have committed to maintain working together to continue to develop a variety of strategies to benefit student success in our pathway work, testing new practices, creating new supports, and focusing intently on diversity, equity, and inclusion. Working together helps to support the pursuit of broad goals that cannot be achieved in siloed work.

As details of each of the institutional projects' achievements and on-going work can be found in **Section V-Detailed Collaborative Partner Progress and Outcomes**, the following provides a high-level overview of hope-inspiring, equity-building program achievements to-date:

- Starting each project with asking "how does this create accessible equity."
- Providing high-touch, wraparound services for student success.
- Streaming pathways to certificates and degrees with the development of navigational advising tools, such as the Collaborative's Pathway Crosswalks, to help guide and retain students.
- Race, Equity and Inclusion professional development opportunities for faculty, staff, administrators and community leaders on anti-racist training, supporting racial equity, inclusivity, and healing.
- Foundational systems change by establishing programs and relationship, and revisioning of what could be possible.
- Process-analysis study conducted by JFF of the Engineering Pathway.
- Innovative, out-of-the box creation of high-tech and inclusive equitable learning opportunities such as the Virtual Dual Enrollment Hub to lead to improved college affordability and quicker pathway completion.
- Collaborative-wide support of the Virtual Dual Enrollment Hub with the signing of a Virtual Dual Enrollment Hub Vision Statement.
- Career Ladders Project-led dual enrollment project management of the Virtual Dual Enrollment Hub, counselor convenings, project team meetings, and multiple meetings with community college department leads (e.g., Institutional Research, Dual Enrollment/Enrichment, Admissions and Records, OER teams).

- Innovative meetings with the California Virtual Campus (CCC Foundation) to envision and create a student-centered dual enrollment hub to be replicated in other community college district.
- Drafting of Fresno State Lyles College of Engineering- SCCCD Colleges Dual Admissions MOU.
- Revolutionizing tutoring services by leveraging of tutorial resources across institutions to help students be successful in math leading to Engineering, Accounting and STEM Education pathways with the development of a Tutoring Network comprised of the community colleges partners providing tutoring opportunities to high school students outside of K-12 offerings and four-year students providing mentoring and tutoring to community college students.
- Holistic review and planning for pipeline development beginning before high school to educate students on career options in living wage jobs with the region.
- Developing pipelines supporting educator diversity.
- Best practices to share pathway resources such as the creation of curated videos created and collected for the Collaborative in career pathways, especially in engineering.
- Removal of dual enrollment barriers to support students including piloting of Canvas learning management system (LMS) in several high schools to foster competency of a single LMS.
- Communities of practice identifying strategies for increasing equitable outcomes, institutional effectiveness and leadership diversity and capacity building within education and the community.
- Increase the number of successful and timely transfers from the Central Valley member community colleges with partnership transfer agreements and faculty-to-faculty collaboration, as well as the promotion and initial steps towards the implementation of Program Mapper.
- Presentations to statewide conferences, educational institutions and Community Benefit Organizations to share best practices and insight.
- Participation on the Recover with Equity Taskforce's Intersegmental Collaboration Working Group to help develop, vet and present recommendations to the Taskforce for consideration and subsequent inclusion in their report.
- Participation in the CCCApply Users Group on the redesign of the application to be more user friendly to Adult Learners and Dual Enrollment students.
- New Collaborative logo symbolizing our intersegment partnership centered around student success and equity; and a new website (January 2022) for enhanced communication.
- Impacting over 500 faculty, staff and community members by providing opportunities for professional development including trainings specific to race equity and inclusion.
- Impacting 2449 high school, community college, four-college and adult learner student.
- Impacting 119 teachers participating the Upskilling Teachers' Masters Pathway Program to obtain their Masters in Math (57), English (61) and Business (1) to meet the minimum qualifications set forth by the California Community Colleges Chancellor's Office (CCCCO) required to teach college level courses and to be eligible to apply for an adjunct faculty position to teach dual enrollment at their high schools.
- In August 2021, a meeting was held with Dr. Ajoy Lande prior to her departure from the Governor's Office to the PPIC with members of the Collaborative who were asked to share what the Collaborative believes to be "Structural Components of a Successful Collaborative."

Figure 1: Top 11 Structural and Key Components of a Successful Collaborative

highlights those elements pivotal to the success of a collaborative. A more detailed reflection can be found in ***Appendix A: Fresno K16 Collaborative: Reflection of Structural and Key Components of a Successful Collaborative***.

Figure 1: Top 11 Structural and Key Components of a Successful Collaborative

1	Timing	7	Active Chair & Vice Chair
2	Work plan	8	Established Working Groups/Communities of Practice
3	Agreement of Mission & Vision	9	Management
4	LMI Supported Pathways	10	Funding & Funding Flexibility
5	Communication	11	Accountability
6	Board Composition		



III. BACKGROUND

The Fresno K-16 Collaborative is a bold K-16 intersegmental pilot program designed to reimagine race equity and inclusion in education through four pilot dual enrollment pathways. The Collaborative is a signature initiative of the Governor's Council on Post-Secondary Education and Fresno DRIVE. Organizational and directional support has been provided by the College Futures Foundation. With race equity and inclusion at its core and leveraging existing infrastructure, the Fresno K-16 Collaborative's focus is on increasing higher education degree attainment in regional LMI-supported occupations, improving degree completion, and supporting residents in earning employment in higher-wage, higher-skill jobs.

In 2020, the Collaborative received an award of \$10 million from the California Office of Planning and Research. The fiscal sponsor is the Fresno State Foundation. The two-year pilot extends from June 2020 to June 2022. The original period of performance for the grant funding was July 1, 2020-December 31, 2021; however, in July 2021, the period of performance was extended to March 31, 2022. Currently, the Collaborative is involved in 22 funded projects and supporting numerous additional projects resulting from ideals and intersegmental partnerships inspired by Collaborative communities of practice and working groups.

With the establishment of dual enrollment educational career pathways, the pilot work is helping to create an integrated, replicable, regional K-16 educational system foundation that is intended to systemically and sustainably address race equity and inclusion of our most vulnerable student populations by improving socioeconomic mobility with increased educational attainment levels, increasing employability in high demand, living wage jobs, and in turn, lowering the poverty rate. High school students, transfer students and adult learners are the targeted types of learners.

The first two years of the pilot (2020-2022) are concentrated in four prioritized pathways:

- **Accounting and Financial Management** (certificates and Associate, Bachelor's degree)
- **Engineering** (Associates, Bachelor's)
- Education - **Single Subject Teachers** (Bachelor's and teacher credentials)
- Education – **Dual Enrollment Teachers** (Master's degrees for high school teachers to teach dual enrollment)

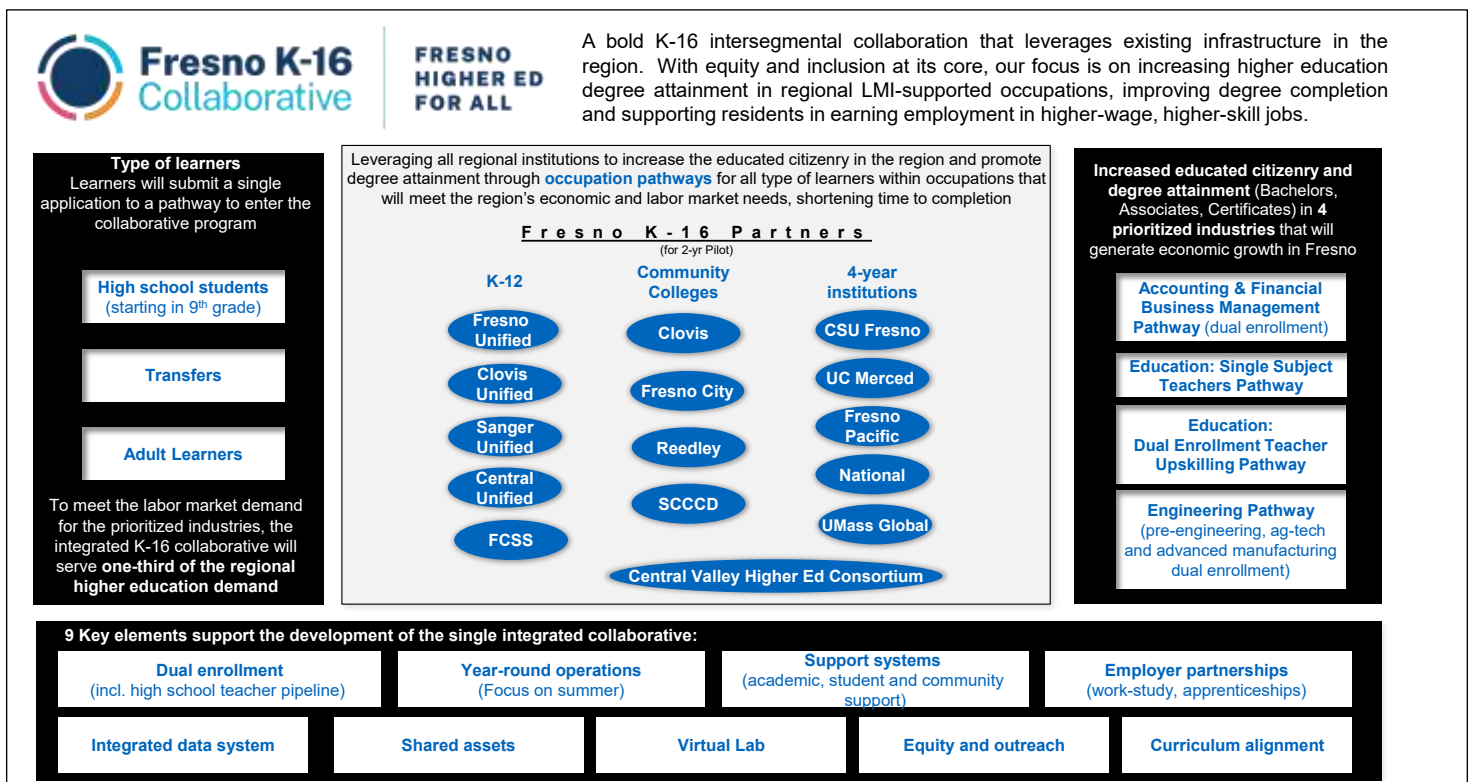
The Fresno K-16 Collaborative partners for the initial two-year pilot are:

K-12	Community Colleges	4YR Institutions
Fresno Unified School District	Clovis Community College	Fresno State
Clovis Unified School District	Fresno City College	UC Merced
Sanger Unified School District	Reedley College	Fresno Pacific University
Central Unified School District		UMass Global (formally Brandman University)
Fresno County Superintendent of Schools	State Center CCD	National University
	Central Valley Higher Education Consortium	

The Fresno K-16 Collaborative Executive Steering Committee members are:

- Fresno City College: President Carole Goldsmith, Chair
- Fresno State: Interim President Saul Jiménez-Sandoval, Vice Chair
- Fresno Unified School District: Superintendent Bob Nelson
- UC Merced: Chancellor Juan Sánchez Muñoz
- State Center Community College District: Interim Chancellor Doug Houston
- Clovis Community College: President Lori Bennett
- Fresno Pacific University: President Joseph Jones
- Reedley College: President Jerry Buckley
- Clovis Unified School District: Superintendent Eimear O'Farrell
- Sanger Unified School District: Superintendent Adela Jones
- Central Unified School District: Interim Superintendent Ketti Davis
- Fresno County Superintendent of Schools: Superintendent Jim Yovino
- UMass Global (formerly Brandman University): Chancellor Gary Brahm
- National University: President David Andrews
- Central Valley Higher Education Consortium: Executive Director Ben Duran

Figure 2: Fresno K-16 Collaborative At-A-Glance



Design Principles

The Fresno K-16 Collaborative partners reaffirm their active support of the Collaborative's collective efforts to join together to incorporate the **Design Principles** in their approaches to implementing Key Elements for goal attainment:

- **Be a bold K-16 intersegmental collaboration** that leverages existing infrastructure in the region
- **Be student-centered**, ensuring success for all student throughout K-16, and addressing pain points and barriers for the most vulnerable population(s)
- Demonstrate significant strides to **close the equity gap**
- **Eliminate institutional and transitional barriers** in the delivery of K-16 education
- **Address capacity**, expanding access to higher education at the regional level
- **Shorten time to completion and increase completion rates** for post-secondary degrees
- **Align with the region's economic and labor market needs** and promote a culture of innovation
- Incentivize students to enter and stay in the **regional labor market**
- Develop a program process that is **replicable** in regions facing similar problems

9 Key Elements

The Fresno K-16 Collaborative partners reaffirm their active support of the Collaborative's collective efforts to join together to support the development of a single integrated collaborative by incorporating the **9 Key Elements** with Design Principles to the best of their ability:

1. **Dual enrollment** (including high school teacher pipeline)
2. **Year-round operations** (focus on summer)
3. **Support systems** (academic, student & community support)
4. **Employer partnerships** (work-study, apprenticeships)
5. **Integrated data system**
6. **Shared assets** (physical & personnel)
7. **Virtual Lab**
8. **Equity and outreach** (race equity & inclusion North Stars for all work; creating connectivity with K12, CCC, 4yr and DRIVE, and other CBO efforts)
9. **Curriculum alignment**

Intersegmental Leveraging

The Collaborative's continues to be intentional and is not intended to replicate or supplant the important work that has already been done or is underway by many of the regional stakeholders. To leverage work already being done within the region, Collaborative Partners work with groups and organizations such as, but not limited to: Employer Partners, DRIVE Educational Outcome Partners, Central Valley Community Foundation, Cradle to Career, The Children's Movement, Fresno Business Council, Fresno Compact, educational and business CBOs, parent groups, College Futures Foundation, JFF, and other stakeholders to maximize outcomes and to lay a lasting foundation that will result in an integrated, replicable, regional K16 educational system that systemically and sustainably addresses equity and inclusion of our most vulnerable student populations.

Stakeholder Partners (partial list)



IV. PATHWAY AND COLLABORATIVE PARTNER OUTCOMES

Pathway Working Groups

Over the past fourteen months (July 2020-September 2021), the Pathway Working Groups/Communities of Practice, sub-working groups, and project collaboratives have held over 50 meetings meeting to collaborate and make progress on pathways and projects. The inaugural four pilot pathways were initially selected based on labor market information (LMI) supporting the need to create a student-to-career pipeline to fill in-demand, living wage jobs within the region. Overall, the Pathway Working Groups strive to:

- Build environments of educational inclusivity and accessible equity for students;
- Support student success by removing barriers and ease transitions from secondary to post-secondary education;
- Provide student supports to ensure students have access to wrap-around resources to foster success and inspire a culture where every student can see themselves as a college student with the ability to advance along a pathway leading to a career.



In the Collaborative's Progress Report 1 – April 2021, the shared objectives and outcomes of the Pathway Working Groups were identified. Collectively and collaboratively, forward progress has been made by the partners and Pathway Working Groups to meet those outcomes and objectives that have included the sharing of best practices, deliberate recruitment and inclusion efforts, progress toward an engineering dual-admissions MOU between Fresno State and the SCCC colleges, and the development of a co-curricular mapping sequences (see **Figure 3: Curricular Mapping Pathway Crosswalks, Snapshots** and **Attachment B: Curricular Mapping Pathway Crosswalks Details**).

Intersegmentally, each of the pathways' best practices have also involved variations of the following:

- 1) Establishment of communities of practice meeting regularly to discuss progress, needs and solutions, as well as to make known the Collaborative and Collaborative Partner's efforts to support pathway success.
- 2) Identification of subject area experts within each institution and network creation.
- 3) Internal and external Collaborative support.
- 4) Curated a collection pathway related outreach and work-based learning videos.
- 5) Creation of a shared, collective and live tutorial resource hub for math courses for high school and community college student in the pathways.

- 6) Deliberate communication to ensure partners are actively being heard and understood.
- 7) New collaboration on student-focused events.
- 8) Shared programming and resources.
- 9) Creation of counselor convenings to dispel dual enrollment myths and underscore the need for persistent efforts to provide accessible equity with dual enrollment.
- 10) Collaborative marketing and calendaring of events that includes a common depository for outreach materials and distribution to internal and external partners.
- 11) Curriculum alignment agreements (Pathway Crosswalks) with recognized co-curricular, course mapping sequences from high school dual enrollment to community college to four-year institutions for the DE pilot pathways bringing clarity to the student's journey and eliminating ambiguity.
- 12) Establishment of an internal Collaborative protocol to keep pathway crosswalks current.
- 13) Creation of a mentoring program for the Upskilling teacher mentees with community college faculty mentors.
- 14) Regular project report presentation to the Steering Committee.

Pathway Crosswalks

A student's educational and career journey is not always clear. To support student equity, ambiguity must be eliminated. The Collaborative is committed to helping to provide transparency and helpful tools to help students better understand their college pathway that may involve many starts and stops, and life and college changes.

Not all college and career pathways have the clarity of an Associate Degree for Transfer (ADT) program. Therefore, providing students with pathway crosswalks illustrating the co-curricular mapping sequences of programs of study will help remove barriers to student success by providing course clarity and shortening the time to completion.

These pathway crosswalks were created and extensively reviewed by the Pathway Working Groups, appropriate college faculty and staff, counselors and articulation officers. They will be reviewed 1-2 times a year by the Collaborative to ensure they are relevant and current. As this is a very labor and time intensive project, it was only done for the initial pathways. It is hopeful that tools such as Program Mapper and increased program articulation leading to increased Associate Degrees for Transfer (ADT) will eventually become widely the best practice of California colleges and universities.

Figure 3: Curricular Mapping Pathway Crosswalks, Snapshots (to see the complete set of Pathways, see *Attachment A: Curricular Mapping Pathway Crosswalks Details* or click on the hyperlinks below.)

ACCOUNTING:

[Accounting Pathway: Crosswalk to Fresno Pacific University](#)

[Accounting Pathway: Crosswalk to Fresno State](#)

[Accounting Pathway: Crosswalk to National University](#)

[Accounting Pathway: Crosswalk to UMass Global \(formerly Brandman University\)](#)



ENGINEERING:

[Mechanical Engineering Pathway: Crosswalk to Fresno State](#)

[Civil Engineering Pathway: Crosswalk to Fresno State](#)



TEACHING:

Teaching Pathway: Crosswalk to Fresno State

Teaching Pathway: Crosswalk to Fresno Pacific University

Teaching Pathway (Accelerated for Adult Learners): Crosswalk to Fresno Pacific University

Teaching Pathway: Crosswalk to National University

Teaching Pathway: Crosswalk to UMass Global



Awards and Targeted Returns on Investment

Projects prioritize one or more of the pilot's four prioritized pathways and include key element implementation. The projects are laying the foundation that is to be sustainable post pilot, and systemically and sustainably address race equity and inclusion. Projects are also intended to strengthen the overall success of the Fresno K-16 Collaborative pilot pathway proposals and address Key Element and Design Principle gaps, as well as leverage intersegmental work supporting the region.

Pathway specific projects (see **Figure 4: Collaborative Partner Project List and Projected Impacts**) have identified specific student and teacher outcomes (projects #1-15 and 18). Projects #16-17 and 19-20 are overarching, collaborative-wide projects strengthening targeted Key Element and Design Principles.

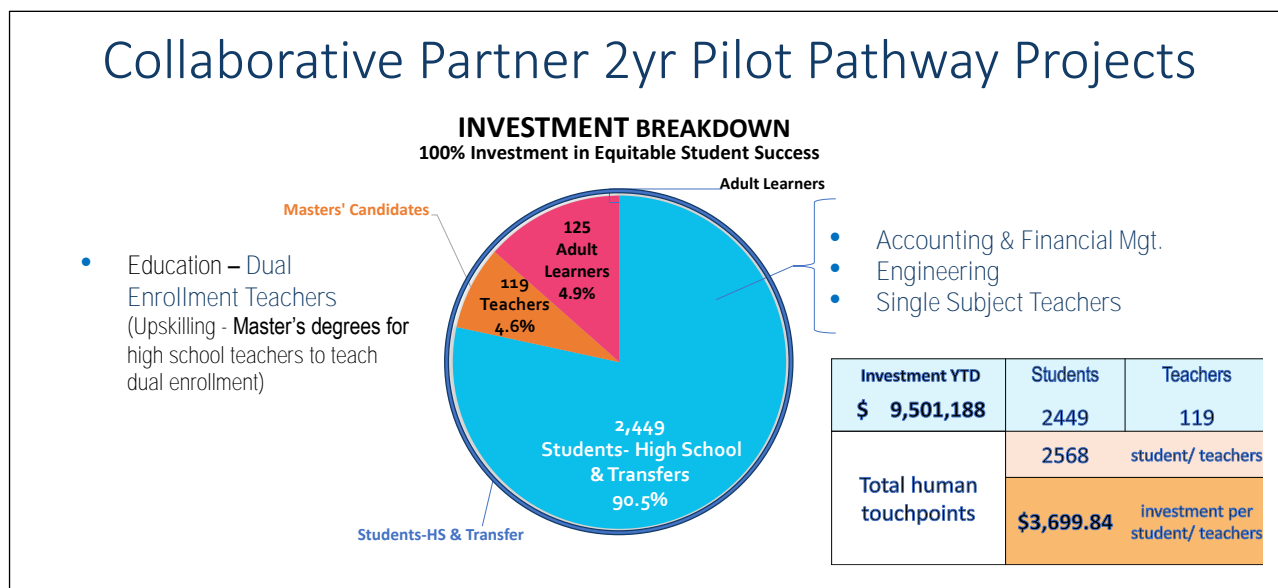
Figure 4: Collaborative Partner Project List and Projected Impacts

	Collaborative Partner	Award	Students (initial projectio n)	Revised Student Impact/ Targete d to Date (9/30/21)	Teachers (initial projectio n)	Revis ed Teache r Impact to Date (9/30/21)	Pathways		
1	Fresno Unified School District	\$ 590,000	68	161	na	na	Eng, Acctg, Teach		
2	Sanger Unified School District	\$ 590,000	200	608	na	na	Eng		
3	Central Unified School District	\$ 590,000	60	111	na	na	Teach, Acct, Eng.,MA		
4	Fresno City College	\$ 351,658	160	213	na	na	Acctg		
5	Reedley College	\$ 590,000	158	61	na	na	Eng		
6	Brandman University	\$ 349,320	105	98	na	na	Acct**		
7a	Fresno State - Acctg	\$ 590,000	60	56	na	na	Acctg		
7b	Fresno State - SS Teacher		20	20	na	na	Teach		
7c	Fresno State - Eng		97	87	na	na	Eng		
8	Clovis Community College	\$ 590,000	60	47	na	na	Teach		
9	Fresno Pacific University	\$ 590,000		9	63	70	77	Teach, Acct, MA	
10	Fresno County Superintendent of Schools	\$ 585,696	na						MA
11	Central Valley Higher Education Consortium	\$ 110,000							
12	National University	\$ 480,000							
13	Clovis Unified School District (12/4/20)	\$ 467,317	234	172	5	1	Teach, Acct, MA		
14	SCCCD - Adult Learners (SCCCD/SCAEC/FCC+FPU/NU/B U)	\$ 57,823	65	65	na	na	Acct		
15	UC Merced (4/9/21)	\$ 300,000	30	32	na	na	Eng., Acct., Teach		

16	C2C Unique ID Creation & Data Sharing (FCSS)	\$ 180,000	unlimited	unlimited	unlimited	unlimited	Key element: IT/Data
17	Overarching Race Equity Inclusion (FCC+CVHEC)	\$ 245,500	200	234 (not inc in student total)	na	na	Key element: Race Equity Inclusion & Outreach; Support Systems
18	MA Upskilling Regionally for Sustainability 2.0 (CVHEC,NU,FPU)	\$ 575,000	na	na	40	41	MA
19	Community College Transfer Project (CVHEC, UC Merced) (4/9/21)	\$143,500	25	25	na	na	Key Elements: DuE, support systems, Integrated data system; shared assets, equity & outreach/inclusion, and curriculum alignment
20	Engineering Pathways to the Future: Building Interest, Engagement & Achievement w/JFF (Reedley College) (4/9/21)	\$145,062	na	na	na	na	Eng; Key Elements: DuE; Support systems; Shared assets; Equity & outreach; curriculum alignment; replicable
21	Teachers of Color Education Pipeline (FCSS) (6/4/21)	\$ 144,745	75	30	na	na	Teach Pathway; Key Elements: Equity, DuE, Support Systems, Shared Assets
22	Virtual Dual Enrollment HUB (FCSS) (6/4/21)	\$ 1,235,567	600	600	na	na	All Pathways; Key Elements: Equity, DuE, Support Systems, Virtual Labs, Shared Assets
	Total	\$ 9,501,188	2026	2449	115	119	

Based on revised outcomes and projections from the September Partner Progress Reports as identified in Figure 4 above, the following figure below (**Figure 5: Investment Breakdown Per Student/Teacher Anticipated Quantitative Outcomes, Revised September 2021**) demonstrates the return on investment for student/teacher and the breakdown between high school students, adult learners and teachers.

Figure 5: Investment Breakdown Per Student/Teacher Anticipated Quantitative Outcomes, Revised September 2021



As of the September Partner Progress Reports, achieved outcomes inclusive of the **Anticipated Quantitative Outcomes** identified in Figures 4 and 5 can be extrapolated to provide the following chart, **Figure 6: Summary of Completers to Date**.

Figure 6: Summary of Completers to Date

Clovis Unified - 24 students (summer internship program)	Fresno Unified - 71 students (engineering internships)	Clovis Community College - 80 students in ED10 presented STEM Teacher Institute opportunities & Education pathway information; info also shared in STEM classes (e.g. Geology 9, Engineering)	Clovis Community College - over 2,800 STEM students emailed info on the STEM Teacher Institute opportunities and the Education pathway
Fresno City College (SCCCD)– 10 adult learners (earned Bookkeeping Fundamentals Certificate)	Fresno City College (SCCCD)- 14 adult learners (completed the Bookkeeping Fundamentals courses)	Fresno City College - 83 students (attended Summer Accounting Bootcamp)	Fresno City College - 75 students (attended Winter Accounting Bootcamp)
Fresno City College – 234 admin, faculty, staff (completed WHB & CHC trainings)	Reedley - 51 students (middle school students attended STEM summer camp)	Fresno State Accounting - 16 students (completed CSB 50)	Fresno State Accounting - 33 faculty (attended inclusive teaching equitable learning training)
Fresno State Engineering - 24 students (attended high school SEE Camp)	Fresno State Engineering - 23 students (attended middle school Exploring Engineering Camp)	Fresno State SST – 11 students graduated and are in a teaching credential program at Fresno State or FPU	UC Merced - 32 students (high school students attended DRIVE summer Math camp)
UMASS Global – 11 students (completed PayTrain Level 1 exam)	National University - 17 Masters of English candidates graduated from National University	FPU - 69 students (transferred to FPU Liberal Arts Science Authorization)	

Figure 7: Summary of In-Progress Status

Clovis Unified - 97 hs students (enrolled in the Personal Finance class 21/22)	Clovis Unified- 22 Clovis West & 9 Clovis High students (recruited the Fall 21/22 Future Educator program cohort)	Clovis Unified - 20 hs students (internships for Summer '22)	Clovis Unified -1 Masters of Business candidates will graduate from Fresno State
Central Unified- 62 hs students (enrolled in the Engineering Dual Enrollment Pathway 21/22)	Central Unified- 24 hs students (enrolled in the Education Dual Enrollment Pathway 21/22)	Central Unified- 25 hs students (enrolled in the Accounting Dual Enrollment Pathway 21/22)	Fresno Unified- 90 hs students (entered Business & Financial Pathway 21/22)
Sanger Unified- 392 middle school students (enrolled in Engineering, STEM Robotics & Ag Mechanics 21/22)	Sanger Unified- 66 hs students (enrolled in the Engineering, Dual Enrollment Pathway 21/22)	Sanger Unified- 20 elementary teachers are participating in the Project Lead the Way pilot program (this curriculum will give access to approx. 500 3rd - 5th graders who did not previously have access)	Fresno County Superintendent of Schools- 84 teachers in the English & Math Masters Upskilling Pathway supported
Clovis Community College - 7 community college students (recruited for Fall 21/22 Future Educator program cohort)	Clovis Community College - 40 STEM community college students (introduced to teaching as a STEM career)	Clovis Community College - tbd hs students (outreach to additional feeder hs planning underway)	Fresno City College - 35 hs students (enrolled in dual enrollment, BT 24 - Beginning Excel (Accounting Pathway; Fall 21 semester)
Fresno City College - 20 hs students (enrolled in dual enrollment, BT 24 - Beginning Excel and BT-131 (Accounting Pathway; Fall 21 semester)	Fresno City College - 150+ hs students Winter and Summer '22 Accounting Bootcamps planning underway	Fresno City College (SCCDD) – 12 adult learners (to be recruited for dual enrollment/ upskilling to earn Bookkeeping Fundamentals Certificate)	Reedley College - 10 hs students (enrolled in "Engineering Technician" dual enrollment -Engineering Pathway, 21/22)
Fresno Pacific University - 28 college students (registered as STEM Credential students, 21/22)	Fresno Pacific University - 29 community college transfers from SCCDD colleges (enrolled in Liberal Arts Science, Education Pathway, 21/22)	Fresno Pacific University - 6 college students (newly registered into Accounting Program, Accounting Pathway, 21/22)	Fresno Pacific University- 57 Masters of Math candidates to graduate from FPU
Fresno State Accounting - 30 college students (Fresno Metro Black Chamber of Commerce micro-internships).	Fresno State SST – 9 college students (are completing teaching credential program at Fresno State or FPU	National University - 44 Masters of English candidates will graduate from National University	UMASS Global – 28 students anticipated to take CompTIA A+ Core 1 Exam 220-1001 for Certification

V. DETAILED COLLABORATIVE PARTNER PROGRESS AND OUTCOMES

This section provides a detailed accounting of each of the Collaborative Partner Program and Outcomes curated from their submitted progress reports. To go directly to an institution, click on the appropriate box below.

<u>Central Unified School District</u>	<u>Clovis Unified School District</u>	<u>Fresno Unified School District</u>
<u>Sanger Unified School District</u>	<u>Fresno County Superintendent of Schools</u>	<u>Clovis Community College</u>
<u>Fresno City College</u>	<u>Reedley College</u>	<u>State Center Community College District</u> (see Fresno City College)
<u>Fresno Pacific University</u>	<u>Fresno State</u>	<u>National University</u>
<u>UC Merced</u>	<u>UMass Global (formerly Brandman University)</u>	<u>Central Valley Higher Education Consortium</u>



Fresno K-16 Collaborative – Central Unified School District

Central Unified School District has been active in participating in the Single Subject Teacher, Accounting and Financial Management, Engineering and Upskilling Teachers' Masters' pathway working groups. They have been meeting with Collaborative partners to strengthen and establish intersegmental partnerships.

PROJECT AWARD TITLE: Central Unified K16 Collaborative

Highlights

ACHIEVED

- 82 students enrolled in Early College Program
- Dual Enrollment Pathways Fall 2021: 62 Engineering, 24 Education, 25 Accounting
- Culture and Equity completed: 95% High School Admin, 90% High School Counselors & Teachers

IN PROGRESS & ON GOING

- Continue to recruit incoming 9th grade students to be a part of the Early College Program and AA Track
- New counselors are currently being trained in relation to dual enrollment offerings and CTE classes
- Collaborating regularly with FCC regarding graduation credits, transcripts, student placement, future college and career options, and parent/student communications
- 4 teachers are currently in the MA programs at FPU and NU.
- Continue to recruit students of color and non-traditional student groups to enroll in dual enrollment classes.

Central Unified School District has worked to expand pathways available at their existing and new high school to bridge labor market gaps in the prioritized industries: accounting and financial management, engineering, and education. In addition, they have committed to their Board of Trustees and community that they will develop an early college that promotes the advancement of typically underserved populations. Although the timeline is aggressive, they believe the timing is right for the expansion of programs.

Their work is to help break the cycle of poverty by recruiting and supporting traditionally underrepresented students to enroll and succeed in a pathway that can prepare them for employability in high-demand, living-wage jobs. It is important that dual enrollment figures mirror the overall demographics in their district to ensure equity of access and balance of those involved in dual enrollment possibilities and career pathways.

Single Subject Teacher, Accounting and Financial Management, Engineering, Upskilling Teachers' Masters' Pathways

- In Central Unified, they continue to be involved in the Single Subject Teacher, Accounting, Engineering, and Master's Degree areas. They have district representation and attend the respective collaboration meetings, curriculum planning meetings, as well as the K-16 steering committee meetings. In August 2021, Central Unified's one comprehensive high school split into two schools and they added a third new high school. All their high schools are part of the K-16 Collaborative in various forms. Central High School is a school of choice containing an early college program. A Careers in Education pathway for future teachers will be housed at CHS. Accounting is taking place at Justin Garza High School. Engineering pathway classes are taking place at both Justin Garza High School and Central East High School. Four teachers from at least one of the high schools are in the MA programs through Fresno Pacific University and National University and they are actively recruiting to increase that number.
- Central Unified has district administrators attending each of the pathway task force and curriculum meetings and teachers in the pathways have been consulted regarding the purchasing of necessary equipment to enhance and improve each program. They also have collaborated with other K-12 school districts in Fresno County to review best practices in dealing with the continued implementation of their dual enrollment courses. They have ongoing collaborative meetings with the dual enrollment coordinator and a counselor from Fresno City College and the CTE dual enrollment coordinators from FCSS.
- Central Unified is committed to the aforementioned pathways and increasing the equity of course offerings, as well as post-secondary exposure and opportunities for students. They are exploring a teacher residency program in partnership with FCSS that will seamlessly fit into their Careers in Education pathway at CHS. This will also provide the opportunity to recruit students of color into a teaching pathway with the ultimate goal of producing elementary and secondary teachers in their area.
- Current high school counselors have been trained in the specifics of course offerings and career pathways, specifically in relation to their dual enrollment and Career Technical Education classes. New counselors will be trained this fall.
- As mentioned in Progress Report 1, a survey was sent last year to all high school teachers to discover who had master's degrees and to solicit interest in the possibility of teaching dual enrollment classes. Many were interested in pursuing teaching college level dual enrollment courses, and they are actively recruiting those teachers as they move forward in this endeavor. Counselors and teachers continue to actively recruit students to be involved in career pathways that pertain to the grant in addition to other career pathways of interest.
- With their early college model, they have embarked on creating wonderful opportunities for their students. They have a consistent group comprising high school counselors, district and site administration who meet and plan on a regular basis with their partners from Fresno City College. These meetings allow them to brainstorm and streamline topics such as graduation credits, transcripts, student placement, future college and career options, and parent/student communications.
- Participation in fall 2021: Concentrator and capstone classes:
 - 62 Engineering
 - 24 Education
 - 25 Accounting/Finance

* Most students are in Introduction and Concentrator classes and will filter into capstone classes after this year. With the opening of a new high school containing only freshmen and sophomores in 2021-2022, they must wait until fall 2022 to introduce dual enrollment capstone courses in Engineering/Robotics and Accounting/Finance. They have an Introduction

to Teaching course at Central High School and will introduce an ROP Careers in Education capstone class in fall 2022.

- They currently have 82 enrolled at Central High School in the Early College Program and 13 are slated to complete an Associate of Arts degree upon graduation from high school. They also have students who will take dual enrollment classes in agriculture, athletic training, welding, CADD and drafting that will take place in the spring 2022 semester.
- As a school of choice, Central High School will continue to recruit incoming 9th grade students to be a part of the Early College Program and AA track. Each year, students in both programs will continue to take dual enrollment classes fulfilling both local high school graduation and college course/major requirements.
- They currently have 117/82 enrolled (duplicated/unduplicated count) at Central High School in the Early College Program. They also have students who will take dual enrollment classes in agriculture, athletic training, welding, CADD and drafting that will take place in the spring 2022 semester. In addition, they have students enrolled in English 1A, CIT 15, BT 24, BT 131, BT 10, CLS 11, DS 21, Spanish 1, Geog 4B, Art 2, Soc 1A, and Math 11 at Fresno City College.
- The Early College enrollment:
 - 30 students enrolled in English 1A;
 - 56 enrolled in Spanish 1 College; and
 - 31 in Counseling 53 (college preparation class offered by Fresno City College).
 - 0% African American students in English 1A
 - 7% African American students in Spanish 1 College
 - 9% African American students in Counseling 53
 - 57% female students in English 1A
 - 68% female students in Spanish 1 College
 - 74% female students in Counseling 53
- They will continue to recruit students of color and non-traditional student groups to enroll in dual enrollment classes. The career center teachers and counselors are well-versed in all course offerings as well as dual enrollment and career technical education opportunities. Sites host a variety of college and financial aid workshops in addition to CTE showcases as well as student participation in field trips to industry partners and college campuses.
- English 11 for Future Educators and ROP Careers in Education were approved by the governing board and were offered in fall 2021. There are 25 students at Justin Garza High School enrolled in Accounting 1 who moved to Accounting 2 in fall 2021. Those students will then enroll in an Accounting Capstone in fall 2022. We have 24 students enrolled in Introduction to Teaching at CHS. Those students moved to English 11 for Future Educators in fall 2021 and ROP Careers in Education in fall 2022. We will have approximately 15 students who will enroll in a dual enrollment CADD class in spring 2022 at Central East HS and Fresno City College.
- Students currently enrolled in Introduction to Teaching will take English 11 for Future Educators and ROP Careers in Education to complete their Education career pathway.
- Culture and Equity Training Outcome:
 - High School Admin-- 95%
 - High School Counselors--90%
 - High School Teachers--90%

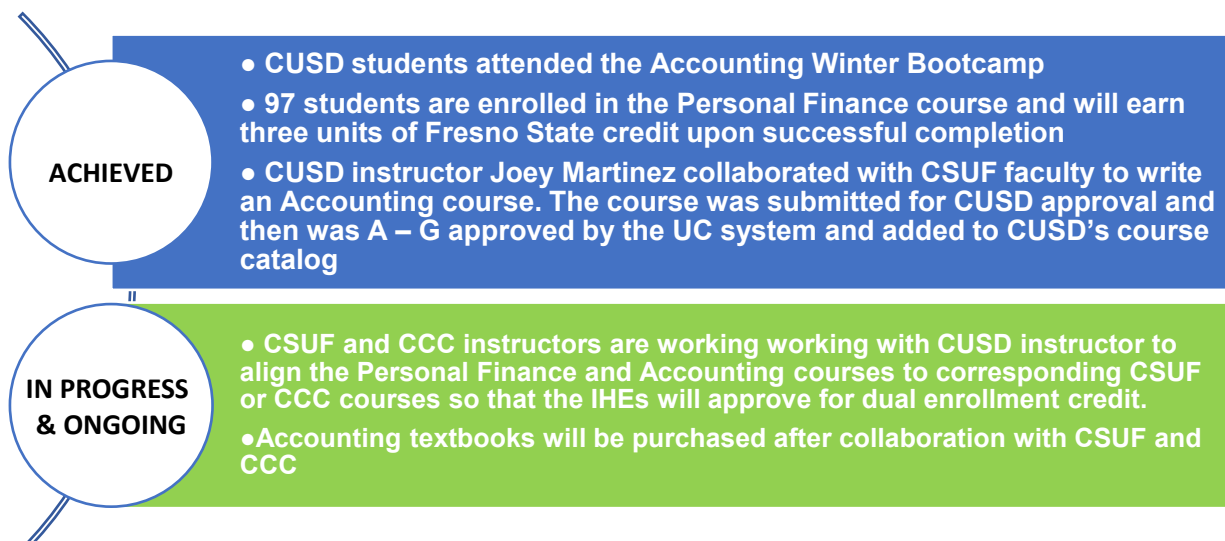


Fresno K-16 Collaborative – Clovis Unified School District

Clovis Unified School District (CUSD) has been active in participating in the Single Subject Teacher, Accounting and Financial Management and Upskilling Teachers' Masters' pathway working groups. They have been meeting with Collaborative partners to strengthen and establish intersegmental partnerships.

PROJECT AWARD TITLE: Clovis Unified Business and Finance Pathway

Highlights



Clovis Unified School District with the Collaborative partners executed their proposal to continue their strong established Business and Finance CTE Pathway. Courses in this pathway include Financial Literacy and a Business and Finance Internship through which students are trained as tellers in an on-campus full-service credit union. Clovis Unified also offers English 1A as a dual-enrolled course on all five campuses. This pathway will be strengthened by adding dual enrollment courses that serve as initial courses in an Accounting Degree and/or general education requirements for an associate degree. The scope of the K – 16 Collaborative is to support programs that better align secondary and post-secondary education, to reduce achievement gaps and to create a multi-generational culture of educational attainment. Through our dual enrollment partnership with community college partners and Fresno State, we have begun to address the large equity gaps of college access among underserved populations in the Central Valley.

Accounting and Financial Management Pathway

- The work the Accounting/Finance instructor completed to gather the required documents to obtain Unitrack credit for students taking the Financial Literacy course in 2021 – 2022 was successful. Currently, 97 students are enrolled in the Personal Finance course and will earn three units of Fresno State credit upon successful completion.
- Six students enrolled in Accounting course that was written and approved by the U-C Articulation as A – G approved: however, when dual credit was not secured with Unitrack or otherwise through Fresno State, the students withdrew, and the class will not be offered this year. CUSD believes that with further collaboration between Clovis Unified and Fresno State and/or Clovis Community College, this course will be able to be offered as a dual enrollment opportunity once the Accounting/Finance instructor has earned his master's in business administration which is expected in May of 2022.
- During the next several months, CSUF and CCC instructors will be compensated for their time in order to work with CUSD instructor Joey Martinez to align the Personal Finance and Accounting courses to corresponding CSUF or CCC courses so that the IHEs will approve for dual enrollment credit.
- Accounting textbooks will also be purchased after collaboration with CSUF and CCC.
- Participation in the Collaborative has yielded opportunities for our students such as the Accounting Bootcamp and other Collaborative offerings.
- While we initially partnered with Brandman University to offer Payroll Certification test preparation and testing for students in the Financial Services/Accounting pathway at Clovis West, CUSD was not able to recruit a student cohort due to lack of interest in a payroll certification program.

PROJECT AWARD TITLE: CUSD Single Subject STEM Teacher Pathway

Highlights

ACHIEVED

- Two new cohorts at Clovis West (22 students) and Clovis High (9 students) were added for the Fall 2021 Future Educator program cohort. These cohorts are led by two teachers and have participated in monthly on-campus meetings as well as field trips to Clovis Community College and Fresno Pacific University. The cohorts will continue to meet through the spring semester of 2022.
- 24 students completed 90 hours in Summer 2021 as educational interns in Clovis Unified elementary and secondary summer learning programs.
- Pathway students had the opportunity to participate in Summer Saturday Academies offered by Fresno State which included anti-racist workshops.

IN PROGRESS & ONGOING

- CUSD is working with CA Teaching Fellows Foundation to develop at Clovis East an additional Teaching Pathway pipeline program to introduce students to teaching through mentorship and professional development.
- The education intern program will be offered again in Summer 2022 (20).
- Fresno State Summer Saturday Academies will be offered to students November 2021 through May 2021.

Clovis Unified School District with the Collaborative partners executed their proposal to support the Single Subject Teachers pathway. Prior to the Collaboration, Clovis Community College had begun working with Fresno Pacific University to develop and support a seamless, guided pathway into careers in education. The pathway is designed as a cohort model, with protected course schedules which allow CCC students the opportunity to work. California Teaching Fellows Foundation (CTFF) was invited to partner with Clovis Community College in order to provide those work opportunities. The partnership with CTFF provides opportunities for CCC future and current students to earn an income, receive leadership training, and work with students in after-school programs as well as assistants to teachers during the school day. While the Clovis Community and Fresno Pacific proposals have targeted Clovis West and Clovis High for their first cohorts, the Clovis Unified proposal expands those targets to all five Clovis Unified high schools. CTFF and CUSD are developing an additional Teaching Pathway building pipeline program at Clovis East to introduce students to teaching through mentorship and professional development.

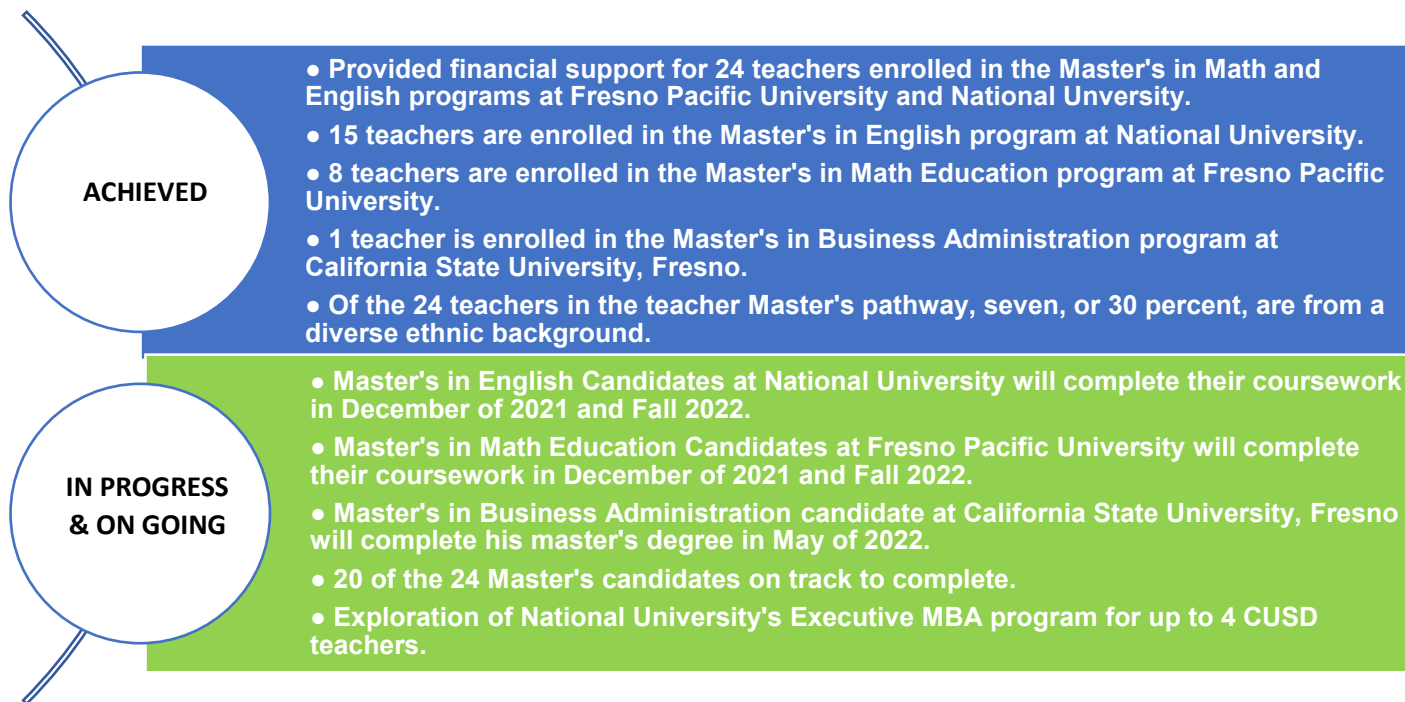
This Fresno K-16 Collaborative grant builds on this foundation by providing the capacity for CCC, FPU and Clovis Unified to design guided pathways leading to careers as middle and high school teachers. The project focused on STEM teaching pathways, one of the areas of greatest need across the state. Guided Pathways require the development of curriculum maps that clearly outline the course plans across the pathway into becoming a credentialed science or math teacher. This requires that the K12 course plans, which include selected dual enrollment courses, align clearly with STEM majors. The alignment is designed to be efficient and to lead to the Associate of Arts or the Associate Degree for Transfer into the selected major at Fresno Pacific or another Institution of Higher Education. Enrollment in a post-BA credential program completes the pathway. These carefully designed curricular pathways provide K12 students and community college students with clear guidance regarding the courses they need to complete to become a teacher.

Single Subject Teachers Pathway

- The program CUSD had planned for summer of 2021 did not transpire as they were only able to recruit one student. Clovis Community counselors worked with their high school counseling partners to promote the program, but high school counselors were stretched very thinly last spring with distance learning and return-to-campus protocols and simply did not have the time to devote to this project. While Megan Bennett and Karen Boone jumped in and tried to recruit students as well, the obstacles of distance learning proved too difficult to surmount.
- Megan Bennett of Clovis Community College has worked to redesign the summer program as a fall offering. CUSD secured a teacher at Clovis West who recruited 22 interested students and a teacher at Clovis High who recruited 9 additional students. As schools respond to new protocols from the Public Health Department, they may have to modify the current plan as they move forward with its implementation. Currently the students have participated in monthly meetings on their home campus attended by Clovis Community representatives and two field trips, one to CCC and one to FPU.
- Funds earmarked for the Future Educators Summer program, personnel and transportation have been reimagined for the fall program.
- 24 students spent approximately 90 hours during the summer of 2021 working as education interns in Clovis Unified elementary and secondary summer learning programs. This opportunity will be offered again during the 2022 summer (20).
- Students in the education pathway had the opportunity to participate in Saturday academies offered by Fresno State, some of which focused on anti-racist training. This opportunity will be offered again November 2021 through May 2022.

PROJECT AWARD TITLE: Clovis Unified Collaboration to increase MA degrees for High School English, math and business teachers to improve the delivery of dual enrollment

Highlights



Clovis Unified School District with the Collaborative partners executed their proposal to partner with three Collaborative University partners to offer our teachers a 12 – 18 month master's degree that will enable teachers to meet minimum qualifications to teach dual enrolled courses in English, Math and Business:

- National University: English
- Fresno Pacific University: Math Education
- California State University, Fresno: Business Administration

Once teachers have earned their master's in English, Math Education and Business Administration, they will be able to teach the following dual enrolled courses:

English: English 1A (Reading and Composition) and 1B (Introduction to the Study of Literature)

Mathematics: Mathematics 3A (College Algebra), 4B (Precalculus), 5A (Math Analysis I) or 5B (Math Analysis II)

Business: Accounting 4A (Financial Accounting), Business 30 (Personal Finance), Business 39 (Finite Mathematics for Business)

All courses listed above meet CSU requirements for transfer credit. All courses listed above with the exception of Business 30 are accepted by the University of California for transfer credit. Additionally, Accounting 4A and Business 39 meet the requirements for an Associate in Science degree in

Accounting, Accounting 4A is a prerequisite for all business majors in the California State University system and Business 30 (Personal Finance) meets the breadth requirement for an undergraduate degree in the California State University system.

Attention was given to recruiting teachers for these programs who are either African-American or Hispanic/Latino or who work primarily with those populations and/or in low opportunity zones.

One of the top challenges to increasing offerings of Dual-Enrollment in high schools is the need for more instructors qualified to teach college-level courses. Currently, in Clovis Unified, there are five teachers who meet the minimum qualifications to teach English 1A, and English 1A is offered on all five comprehensive sites. There are no teachers who meet the minimum qualifications to teach college-level mathematics courses, and no teachers who meet the minimum qualifications to teach accounting or finance courses.

The K–16 Collaborative has placed a priority on both increasing dual enrollment in the Accounting and Financial Business Management Pathway and upskilling teachers to meet minimum qualifications for teaching those dual enrolled courses.

Upskilling Teachers' Masters' Pathway

- In Cohort 1, Clovis Unified has 13 teachers enrolled in master's programs and continuing their programs with Collaborative partners:
 - 9 teachers are enrolled in the Master's in English program at National University. These teachers will complete their coursework in December of 2021 and be eligible to begin the qualification process with community college partners to teach English as a dual enrolled course on our high school campuses.
 - 3 teachers are enrolled in the Master's in Math Education program at Fresno Pacific University. These teachers will complete their coursework in December of 2021 and be eligible to begin the qualification process with community college partners to teach math as a dual enrolled course on our high school campuses.
 - 1 teacher is re enrolled in the Master's in Business Administration program at California State University, Fresno. This teacher will complete his master's degree in May of 2022 and be eligible to begin the qualification process with community college or Fresno State to teach Accounting or other business courses as a dual enrolled course on our high school campuses.
- In Cohort 2, an additional 11 Clovis Unified teachers enrolled in master's programs with Collaborative partners.
 - 6 teachers are enrolled in the Master's in English program at National University (an additional teacher withdrew after taking two classes). These teachers will complete their coursework in the fall of 2022 and be eligible to begin the qualification process with community college partners to teach English as a dual enrolled course on our high school campuses.
 - 5 teachers are enrolled in the Master's in Math Education program at Fresno Pacific University. These teachers will complete their coursework in the fall of 2022 and be eligible to begin the qualification process with community college partners to teach math as a dual enrolled course on our high school campuses.
- Between cohorts 1 and 2, CUSD has lost four teachers from the English program; three dropped out before the 2nd week of classes, and one recently withdrew after two months of classes. The barriers cited by the teachers were the demand on their time and the virtual learning format. Neither of these barriers could be avoided.
- Of the 24 teachers involved in the teacher master's pathway, seven, or 30 percent, are from a diverse ethnic background.



Fresno K-16 Collaborative – Fresno Unified School District

Fresno Unified School District (FUSD) has been active in participating in the Single Subject Teacher, Accounting and **Financial** Management, Engineering and Upskilling Teachers' Masters' pathway working groups. FUSD has been instrumental in the Virtual Dual Enrollment Hub. They have been meeting with Collaborative partners to strengthen and establish intersegmental partnerships.

PROJECT AWARD TITLE: Expanding Opportunities in High-Quality Pathways

Highlights

ACHIEVED

- 6 cohorts of 15 students each started in 2021 in the Business and Financial Pathway (90).
- FCC and FUSD designed curriculum maps for Accounting and Financial Business Management.
- Winter and Summer Accounting Boot Camps have been extensively attended by FUSD students.
- 71 virtual internship opportunities for engineering students during the summer with professors at both Fresno State and Fresno Pacific University.
- 25 Math and English FUSD teachers attaining their Masters at Fresno Pacific University or National University.

IN PROGRESS & ON GOING

- Staff is continuing to meet with strategic district partners to identify groups of students who have historically been marginalized.
- Efforts to begin dual enrollment (DuE) offerings of Math and English 1A lay the foundation for an Associate's Degree-Transfer (ADT) in Education/Liberal Studies.
- Targeting 3-5% growth in all pathway enrollments

Fresno Unified School District (FUSD) is supporting the success of guided pathways that lead to seamless student transitions, dual enrollment credit, work-based learning opportunities, and aligned education with regional workforce needs. This support is leveraged with robust curriculum and instruction, shared professional learning with high school and post-secondary educators, integrated programs of study that effectively communicate the required wrap-around services for students in transition, and student-centered opportunities designed to provide high quality experiences for students in the Fresno Unified School District. Key partners, shared in the Collaborative Partner section above, are instrumental in various roles, including: guest speaking, industry-specific summer camps on college campuses, industry tours, mentoring, job shadowing, design thinking professional learning and innovative approaches to teaching and learning, advisory board support and shared best practices for curriculum development and alignment. Career pathway students are being mentored by individuals that have knowledge and skills that are important to a balanced and robust education. Identified pathways within STEM related fields, including: engineering, agriculture, education, advanced manufacturing, finance, and technology offered students unique opportunities. The key elements directly reflect student needs when addressing our community's

demographics, including a focus on disproportionately impacted students. It is necessary to expand this specific support to offer the highest quality career pathway experiences to our students and to meet the priorities and metrics of our region.

Accounting and Financial Management

- Business and Financial Planning cohorts are on their way to obtaining an associate degree and transfer to a university. Students will complete over 15 units in this pathway prior to graduating high school. The new, cohorted pathway began in Spring 2021 with two cohorts of 15 students (McLane and Bullard High Schools). Four additional cohorts added at FUSD high schools in Fall 2021.
- FCC and FUSD have collaborated in the design of a curriculum maps (course sequencing) for accounting and financial business management minded students starting with DuE and leading to a certificate of completion. In addition, there is also an added option of obtaining an American Payroll Association certification.

This dual enrollment project designed to attract students who traditionally may not be thinking of attending college post-high school. Goal is to encourage students to follow a bachelor's degree pathway, but provide programming that will allow students to earn an entry-level certificate in accounting Bookkeeping Fundamentals before high school graduation.

The following courses will help students complete a certificate of completion while still in high school:

- BA-10 Intro to business
- CIT-15 Computer Concepts
- BT-24 Beginning Excel
- BT-131 Applied accounting

Students will take at least one of the accounting/business classes and will add a general education course to their schedule as part of the pathways. The student should have completed the certificate pathway courses, and about 12 additional general education units along with the certificate. This will allow the students to be almost one year into their Accounting degree at Fresno City College. English will be taken during their senior year and our goal is to offer mathematics the summer after high school graduation.

- Winter and Summer Accounting Boot Camps have been extensively attended by FUSD students seeking additional assistance to prepare for transition to FCC. ACCTG 4A – Financial Accounting is a challenging entry-level course that is often advised for the second-year Business student. Students successfully completing dual enrollment courses and boot camp will have a strong foundation to be prepared to take Accounting 4A in their first year of studies.
- English 1A, Communications 4, Ethnic Studies (Chicano/Latino Studies and/or African American Studies), and other general education courses along with the business and accounting classes that are related to this pathway. Students will have an opportunity to take pathway classes and English and Math before they start their first year of college.
- Virtual internship opportunities specific to technology and start-up elements associated with Accounting/Business.
- Staff is continuing to meet with strategic district partners to identify groups of students who have historically been marginalized. Our goal is to expand their participation so that students become better self-advocates for their education and receive relevant and meaningful experiences.
- Current students enrolled in Accounting and Financial/Business Planning Pathway – 3-5% growth target, plus increased or introduction of DuE courses: Patino HS: 267 students; McLane HS: 353 students; Bullard HS: 200 students; Roosevelt HS: 73 students. (3-5% growth= 27-45)

Engineering Pathway

- Expanded STEM experiences and opportunities will broaden a student's understanding of specific career paths available in local colleges and create an understanding of employment opportunities in STEM.
- Extensive coordination and communication with FCC engineering faculty to prepare students for engineering pathways.
- Virtual internship opportunities for approximately 71 students specific to engineering which provided students time with professors at both Fresno State and Fresno Pacific University during the summer
- Current students enrolled in **Engineering Pathway** – 3-5% growth target, plus increased or introduction of DuE courses: Edison HS: 231 students (3-5% growth= 7-12)

Collaborative-level Engineering Pathway Working Groups/Communities of Practice Work:

Outreach Subcommittee

- FUSD Invited all partners to attend FUSD virtual college/career fair that was held April 2021
- FUSD provided all contacts for K12 counselors, principals, job developers, CTE coordinators, etc.
- FUSD shared and distributed K16 Collab flyers for camps, opportunities, etc. with district
- FUSD representatives have participated in subcommittee meetings

Curriculum Subcommittee

- FUSD reviewed and provided course info for Engineering crosswalks for FUSD
- FUSD representatives have participated in subcommittee meetings
- FUSD has mapped out with FCC 9-12 curriculum maps for engineering minded students at Sunnyside, Hoover, Fresno, Duncan, CART, Bullard High Schools

Guided Pathways Subcommittee

- FUSD representatives have participated in subcommittee meetings and provided info where needed.

Tutoring Subcommittee

- No participation as of yet

Single Subject Teaching

- Efforts to begin dual enrollment (DuE) offerings of Math and English 1A lay the foundation for transferable General Education (GE) necessary for and an Associate's Degree-Transfer (ADT) in Education/Liberal Studies.
- Current students enrolled in **Education Pathway** – 3-5% growth target, plus increased or introduction of DuE courses: Sunnyside HS: 100 students; McLane HS: 60 students; Roosevelt HS: 60 students; EdisonHS: 20 students (3-5% growth= 7-12)
- Enseñamos counselors are embedded in reg-to-go and other college outreach activities as a direct resource for students to speak with if they are interested in teaching as an educational path.

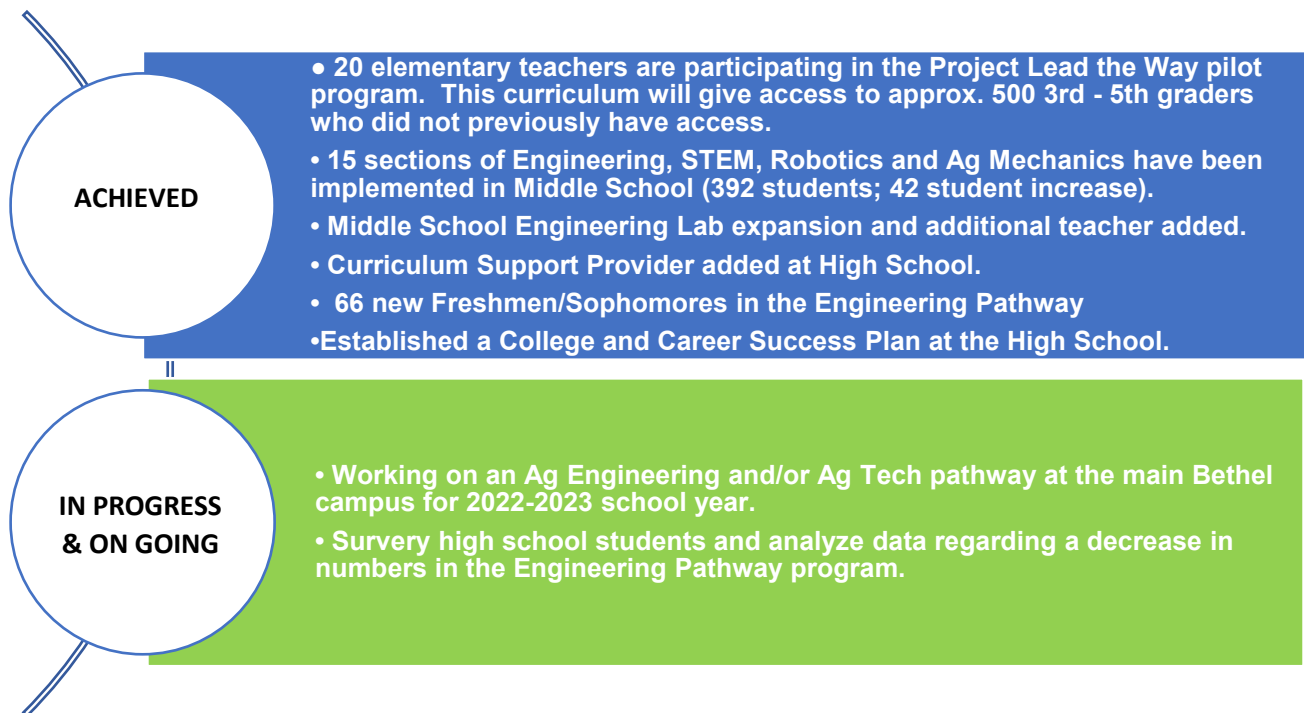


Fresno K-16 Collaborative – Sanger Unified School District

Sanger Unified School District (SUSD) has been active in participating in Engineering and Upskilling Teachers' Masters' pathway working groups. They have been meeting with Collaborative partners to strengthen and establish intersegmental partnerships.

PROJECT AWARD TITLE: Engineering Pathways to the Future - Building Interest, Engagement and Achievement

Highlights



Sanger Unified School District (SUSD) with the Collaborative partners executed their proposal to support the "Engineering Pathways to the Future" project. This project increased the number of students entering an engineering-related pathway to obtain skills certification, associate and bachelor degrees. First, by integrating and enhancing community efforts for STEM outreach and recruitment in elementary and middle school students. These outreach efforts increased access by under-served students and provided equitable recruitment and support for disproportionately impacted students. The agriculture and engineering pathways supported by their proposal are:

- Mechanical

- Electrical
- Civil
- Geomatics
- Biomedical
- Environmental
- Agriculture
- Engineering Tech

Curriculum alignment has taken place in consultation with Reedley College, Fresno State and the other universities. Pre-engineering curriculum has been expanded at Sanger USD to include middle school STEM courses, dual enrollment and concurrent enrollment opportunities, resulting in accelerating student movement through these pathways. Expansion of the current Fairmont School AG-STEM program and the partnership with Fairmont and the Fresno State SmartFarm University will be provided to all elementary students in the district.

Support for student retention and success within this pathway came from the formation of success teams that share resources with Reedley College, including cross-trained counselors, faculty and special services such as parent/student advocates and math tutoring at high school and middle school. Student mentors and advisors will also be trained and deployed.

Professional development will be used to cross-train participants in this pilot program, offering an opportunity to build a common understanding and mission among counselors, teachers and staff, while also providing an engineering pathway context and reinforce skills, such as collaboration, creativity, critical thinking and communication within this pathway. Training of the elementary teachers to support the project-based learning units from Fairmont AG-STEM and SmartFarm University will take place. Also, increasing opportunities for high school teachers in the engineering pathway to earn a Master's in order to teach the dual enrollment courses is a goal.

In order to increase opportunities for K-8 students to learn about and be interested in engineering activities, robotics teams will be formed at all sites with an opportunity to compete with each other. The comprehensive middle school currently provides classes in Engineering, Ag Mechanics & Woodshop or STEM to over 345 students. Deepening and expanding the project-based learning instructional program will support the ability to recruit and retain more students for the future Engineering pathway. SUSD will increase the student participation in STEM activities at the K-8 level by extending the pilot integrated

AG-STEM program at Fairmont School (500 students) to students throughout the district (5,000 students).

Also, a female club, Femineers, is established at 3 sites and a goal is to expand that club to promote more women in engineering.

Technology, including mobile computer laptop stations with engineering software, 3-D printers, robotics hardware, FarmBot, drone and Agriculture technology will be provided to ensure that all students will have access to engineering and STEM educational programming including our underrepresented students.

Engineering Pathway

- Sanger Unified has moved forward with the implementation of the K-16 Engineering Pathways to the Future grant at the three levels of our K-12 system. The next level stages of the implementation at the elementary level have progressed with the start of the school year. The elementary focus consisted of the expansion of the Fairmont School AG-STEM and SmartFarm University to other elementary schools in the district. They identified three pilot schools: Jackson, Jefferson, and Wilson Elementary Schools with the support of their principal to engage in the engineering PLTW units. They targeted 3rd, 4th, and 5th grade teachers and have

identified 20 teachers from the pilot schools that have volunteered for the pilot program. The first training day has been established for the teachers to be on September 15th. The training will be hosted by three grade level teachers, two curriculum support providers, and one elementary agriculture teacher. The goals of the training will be to provide the teachers access to the Project Lead the Way (PLTW) curriculum, receive the classroom supplies to implement the units, join a grade level Ag-STEM Professional Learning Community with other sites, and each teacher will become a certificated PLTW Launch Teacher. Through the 3 elementary schools they have identified 20 teachers that will participate in the pilot program and give access to the new curriculum to approximately 500 students. They are on the way to meeting their target for the pilot program and will need to foster and develop the unit implementation to expand to the entire district 3rd, 4th, and 5th grade teachers and students in the following years.

- The Middle School implementation is in full swing with 15 sections of Engineering, STEM, Robotics, and Ag Mechanics. The additional teacher provided by district funds has expanded the elective opportunities for students in more year-long courses instead of the quarterly elective wheel courses. The expansion of an additional Engineering lab will provide more opportunities for hands on learning as well as exposure to career fields in STEM. The grant funding and the additional district funds have provided the ability to purchase additional PLTW units and classroom materials. They anticipate more students will also participate in the co-curricular activities related to Robotics and Agriculture. In addition, the programmatic changes have opened the opportunity for all students from diverse backgrounds to participate in elective courses. The 2021-22 enrollment at the Washington Academic Middle School Engineering, STEM, Robotics and Ag Mechanics courses based on student groups include the following: 33% (129) Females, 48% (188).

Socio-Economically Disadvantaged, English Learners currently at 29% (113 Ever-ELs), and 1% (4) for Students with Disabilities based on SUSD current demographics.

- The high school implementation has increased the level of support and focus on the Engineering Pathway. The addition of the Curriculum Support Provider that was a former pathway Engineering teacher and former Engineer in the industry has provided more depth in the development of the program. In addition, she has been replaced by a former Engineer in the industry that has also injected new energy to the program. Sanger High School has established a College and Career Success Plan that includes a focus on: monitoring the attrition for all pathways; dual credit course completion; expanding services to students to increase enrollment; Middle School Outreach; modernize/support pathway facilities; and a goal for the CTE pathways to increase the College and Career Indicator of the California Department of Education by 10%.
- Barriers to Success - One of the more significant metrics to analyze is the number of students completing the Engineering Pathway program. Although the number of seniors is greater than last year, only 31 of the students in the program are seniors. They will need to dig deeper into the data to analyze the reason for the small number. They will include a transcript analysis to determine if a side-by-side course such as Math has been a barrier. They will survey and interview current and former students and collect the "student voice" as well as the teachers to ensure they can retain all the students in the program. In addition, they did not reach our goal of 100 freshman, but have maintained the 3 sections of Introduction to Engineering. One of the drawbacks to the COVID pandemic was the lack of in-person outreach to students in a widespread manner for all 8th grade students to personally hear the opportunities for the Engineering Pathway. Although they had a parent outreach night, the level of participation was not as strong as in the past years. They anticipate more robust outreach due to our new Curriculum Support Provider and the opportunity to conduct more outreach for both students and parents. Another possible barrier has been the placement of the Engineering Pathway exclusively on the Sanger High School West Campus. Currently the freshman and sophomore students are on the West campus and the juniors and seniors are on the main Bethel campus. They will need to explore through student surveys and interviews for possible explanations. However, they will be working on a complimentary Ag Engineering and/or Ag Tech pathway at the main Bethel campus for the 2022-23 school year to capture as many students as possible that are interested in the Engineering/STEM fields.

- The number of students participating in the Engineering program in the Engineering Pathway at

Sanger West is 66. The goal of 100 was not attained for the 2020-21 school year. All students in the freshman and sophomore grade levels must attend the West campus at the present time. They believe that opening up an additional Engineering branch at the Bethel campus will provide more opportunities for students in Sanger Unified.

- Enrollment for the Washington Academic Middle School (WAMS) for the 2021-22 School year increased to 392 students currently enrolled at 7th and 8th grade level in Engineering, Ag Mechanics & Woodshop or STEM classes at the comprehensive middle school. Not only has the number of students increased, but also the programmatic scheduling changes have enabled the students to participate in year-round courses rather than a quarter of the year due to a wheel of electives.
- The Career Technology Education Curriculum Support Provider for the 2021-22 school year is in the process of developing marketing strategies to recruit and retain students. She is also currently in the process of completing outreach to expand the relationships with industry partners. The additional Engineering/STEM teacher hired through district funds at the large comprehensive middle school has resulted in increased enrollment. They have identified the pilot schools and teachers for the elementary students to participate in the enhanced STEM/Ag units for 2021-22 and have identified a date for the training and implementation of the curriculum.



Fresno K-16 Collaborative – Fresno County Superintendent of Schools

The Fresno County Superintendent of Schools (FCSS) has been active in participating in the Upskilling Teachers' Masters' Pathway, Single Subject Teachers Pathway, Data Sharing to Foster Equity and Intersegmental Collaboration and Accessible Equity to Dual Enrollment: Virtual Hub.

PROJECT AWARD TITLE: Dual Enrollment -FCSS support for High School Teachers to complete Masters in English and Mathematics

Highlights

ACHIEVED

- 63 Master's candidates supported.
- Hired program coordinator.
- Active engagement with FCSS Executive Leadership Coach to outreach to high school to encourage the addition of Dual Enrollment courses.
- Intersegmental collaboration.

IN PROGRESS & ON GOING

- Active recruitment of 20 additional Master's candidates to also be supportive.
- K-16 Collaborative Spring Convening.
- Sustained support of FCSS program coordinator and data collection.
- Dual Enrollment advocacy and intersegmental collaboration.
- Fall 2022 - All 16 High Schools within the 4 Partner Districts will offer at least one section of DuE English 1A, as well as mathematics during the regular instructional school day.

Upskilling to Support Equity

FCSS with the Collaborative partners have been executing their proposal to support increased dual enrollment (DuE) community college courses in high schools. The positive benefits of educational degree attainment to support socioeconomic mobility are well researched. Given that Fresno

County student demographics include many students of poverty, first-generation college-goers, and English learners, the attainment of a Bachelor's degree or even an Associate's degree is a challenge. Enabling students to enroll and complete DuE while still in high school provides the support and confidence to motivate students to complete an Associate's degree, move onto a four-year institution and ultimately a highly skilled career. The higher education level contributes to raising the economic level of the entire Fresno community.

Dual Enrollment: What do we know?

Benefits:

- Increased success of enrolling and persisting in college
- Shortened time to earn a bachelor's degree

Mechanisms:

- Provides high school students with advanced (and expansive) coursework options
- Promotes student engagement and motivation
- Early identification of belonging and identify as a college student

Yet, access to dual enrollment opportunities remain unequal by student demographics, and across school type and geography



One of the top challenges to increase DuE courses in high schools is the need for more instructors qualified to teach college math and English. This project has developed a partnership to provide streamlined programs for high school faculty to earn their Master's degree in these two high need disciplines. This has enabled participating high school faculty to meet the minimum qualifications set forth by the State Chancellor's office required to teach college-level courses and offer the opportunity to teach DuE courses during the regular high school instructional day. FCSS has been actively collaborating with Fresno Pacific University (FPU), National University (NU), Central Valley Higher Education Consortium (CVHEC) and the four focus and surrounding high school districts of the Collaborative.

The dynamic outcomes include: a) Enabling high school students (especially disproportionately impacted students) the opportunity to successfully complete transferable college English and math courses in high school, thus accelerating their timeline to college completion and overall success in college; b) Enabling high school English and math teachers to increase their knowledge and skills, for the benefit the students;

c) Providing salary advancement opportunities for these teachers and increase opportunities to teach college courses on community college campuses; and d) Providing community colleges with an increased pool of adjunct English and math professors from which to draw.

In addition to the initial support provided by National and Fresno Pacific Universities, FCSS is also currently providing additional support to 64 high school teachers within the FCSS service area working to attain their Masters in English (27) and their Masters in Mathematics (37) in Cohorts 1 and 2 (with cohort starts in January and July of 2021). Cohort 3 (October 2021) of 20 additional teachers (English-8; Math-12) is also being provided support for a total of 84 teachers being supported by FCSS. Additionally, FCSS is providing professional development to all teachers participating in the Upskilling Master's Program (119 total). The Clovis USD is providing support for their teachers (25). This is a demonstration project that can be replicated throughout communities in California; however, it is heavily dependent on fiscal resources.

The Districts' commitment is to offer DuE courses in English and mathematics at their comprehensive high schools, starting with the 2022-23 school year and increasing sections each semester as the demand from students increases. Districts have also been encouraged by FCSS to offer release time to their teachers participating in these Master's programs (i.e., one full day every three weeks to allow for cohort support and course completion).

A FCSS program coordinator has been hired to manage the project and will be sustained through 2030 to continue to support cohorts of teachers attaining Masters in English, mathematics and other majors that help meet the goals of the K-16 Collaborative, as well as collect and report data. The project goal will be to graduate 125 teachers with Masters in the next 10

years to meet DE needs of the K-16 enhanced system.

Collectively, the Collaborative initially enrolled 124 teachers in Masters programs and is currently on target to graduate 119 teachers with Masters by 2023.

Upskilling Teachers' Masters' Pathway

From March 2021 to September 2021, FPU began Cohort 2 in April and NU began Cohort 2 in July. Currently, FCSS is supporting two cohorts, for a total of 64 students.

NU Cohort 1:

- o As of September 2021, Cohort 1 (17) with NU has completed eight out of the ten classes. This cohort will complete their final course in November 2021. They are finishing out the remainder of their program with online readings; no additional book orders or deliveries will be needed for this cohort. Through the book deliveries, FCSS has developed deeper partnerships with Clovis Unified, Fresno Unified College and Career Readiness Program, Sanger High School, and Central Unified School District.
- o FCSS has had many opportunities to talk directly with several students enrolled in Cohort 1 with NU, and they have shared their appreciation for this opportunity to obtain their MA for little to none out of pocket expenses. They have expressed their appreciation for having a mentor, but in the same sentiment, they wish that they had support from former students that have been in this program. One student shared "I am so thankful for my



mentor, but my mentor has not been a student and a teacher during a pandemic, so there are some areas they are unable to provide support. I also think they forget how much we have on our plates, and it is probably because they are not in our shoes." FCSS has discussed with NU the potential to create a support network for past and current students.

- o There have been several conversations about students' interest in continuing their education through an Administrative Credential, so this could potentially be an area to explore upon completion of this program. Some students have expressed the challenges of working full-time, during a pandemic, while maintaining the rigor of NU's fast paced program. Because of this, it is important to highlight the laudable, high retention rate across both FPU and NU with Cohort 1.

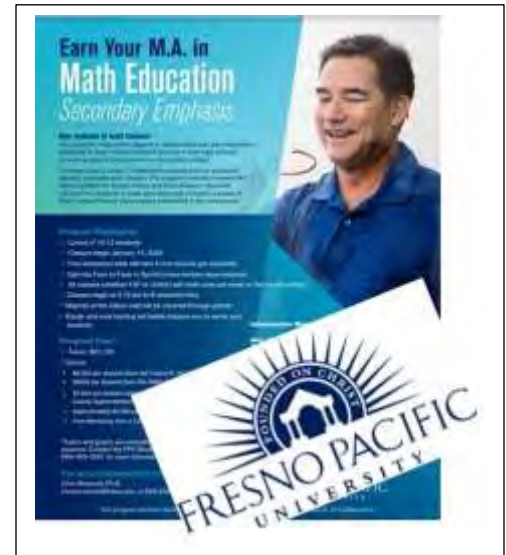
NU Cohort 2:

- o At the start of Cohort 2 in July, NU started with 24 students, plus the students from outside the Partner districts. Three Clovis students dropped from the program within the first week of starting. One student dropped from the program in August 2021 after completing the first two courses. NU had a Clovis student that was going to start Cohort 3, but due to the attrition in Cohort 2, the student was able to be included in Cohort 2 for an August start.
- o The current 21 students enrolled in this cohort include representation across three of the four Collaborative Partner districts. There is no representation from Central Unified in this current cohort.
 - 7 Teachers from Clovis USD
 - 2 Teachers from Sanger USD
 - 12 Teachers from Fresno USD
 - Teachers were also supported from Sanger (1), Parlier (2) and Dinuba (2) USDs.
- o As of September 2021, 26 teachers supported by FCSS have completed the first two courses and they are on track to be done in June 2022.

FPU Cohort 2:

- o At the start of Cohort 2 in April, FPU recruited 26 students for Cohort 2. Thirteen students were supported by FCSS (Central, Cutler Orosi, Fowler, Reedley, Sanger, Washington and Yosemite USDs).
- o FCSS is also continuing to gather information on the DuE courses taught at each of the four focus districts. Baseline information was gathered for the school year 2019-2020, so growth in the courses can be determined on a year-by-year basis. Clovis Unified has prioritized increasing DuE classes offered in 2020-2021, in part due to the conversations and focus brought about by the

K-16 Collaborative work. The community colleges have been stellar working with the high schools to provide more DuE courses, providing instructors from the community colleges to meet the immediate need. The project goal is to have all high schools in the four focus districts with DuE qualified teachers in both English and mathematics by the start of school in 2023. The COVID-19 pandemic has created admission barriers for students at the community college, which has decreased enrollment and has had a direct effect on hiring needs. Because of this, there is a need to begin discussions with the districts and community colleges to determine what hiring needs are anticipated for the 2022-2023 school year for DuE courses/adjunct slots.



Cohort 3:

- o Several meetings with the Collaborative, NU and FPU were held between August and September to plan and underwrite a Cohort 3.
- o NU Cohort 3 of eight Master's candidates started at the end of September 2021.
- o FPU Cohort 3 of up to 12 Master's candidates to start January 2022
- o Focused and strategic recruitment efforts in Central Unified for this cohort, as well in the regions surrounding and rural districts. FCSS will work with the district and university to support recruitment efforts.

Spring Convening:

- o In collaboration with university partners, FCSS will host a K-16 Collaborative Spring Convening for all cohorts, including Cohort 3. FCSS is in the planning stages of this, but plan to have a final agenda by December. FCSS will be partnering with State Center Community College District for panel participants. Fresno City College's Dr. Ray Ramirez will be the Keynote speaker with a focus on equity, and a focus on navigating the new hire challenges as a DE teacher/adjunct faculty.

High school teachers who complete the program will have a broader and deeper knowledge of English and Math which they can provide in their high school classes, and from which all of their high school students can benefit.

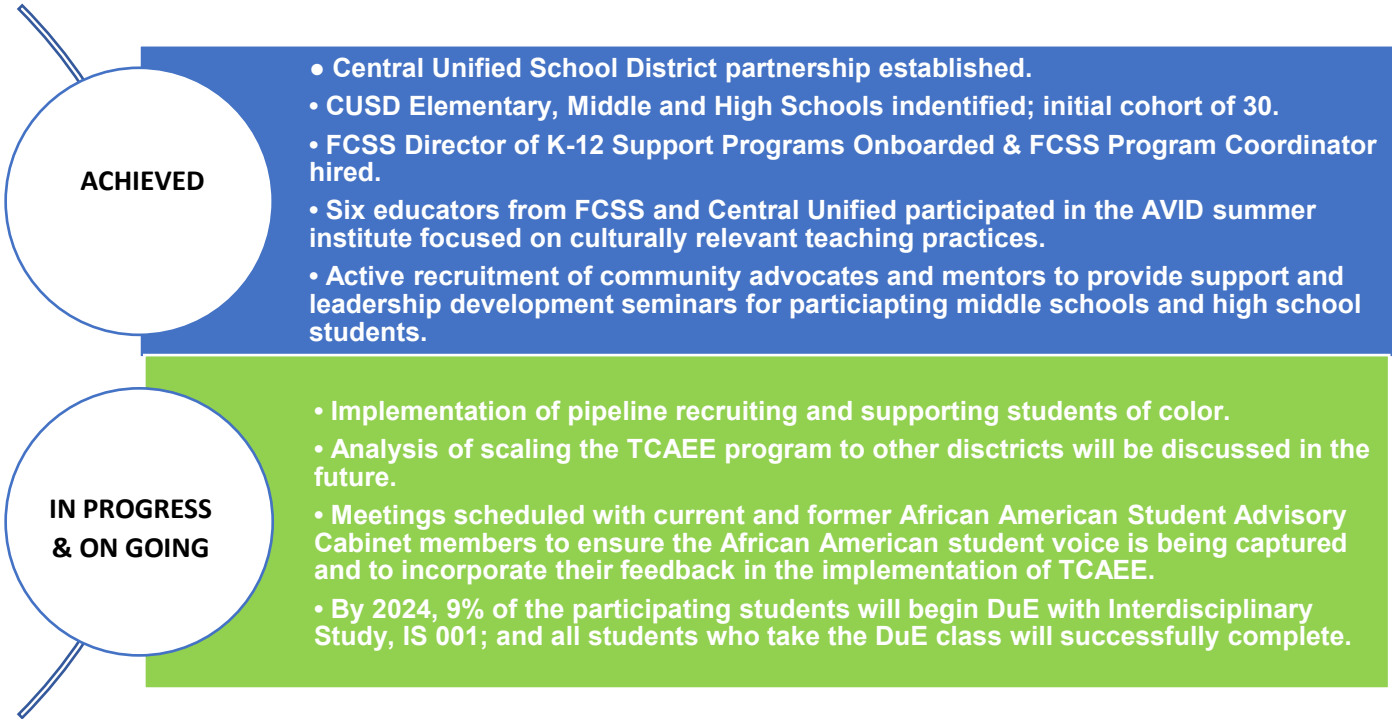
The collaboration between high school and college instructors will increase the understanding of the roles of the college and high school instructors, increasing their understanding of and empathy with each other.

As more high school students take college English and math classes while in high school, they will have a strong foundation of writing and critical reading skills, enabling them to take and succeed in college courses related to their career, associate's degree, and/or eventual bachelor's degree.

As high school students take their advanced mathematics course, i.e., trigonometry, calculus, the instruction who will have earned their Master's in Mathematics will be more skilled to help their students understand the concepts and thus have students be more successful. Having completed their college gateway course in college English and mathematics, students will be able to advance toward enrolling in other courses and completing their certificates and/or degrees more quickly. It will most benefit accounting, engineering and allied health pathways.

PROJECT AWARD TITLE: Teachers of Color – Alliance of Educational Empowerment (TCAEE)

Highlights



Single Subject Teachers Pathway and Equity

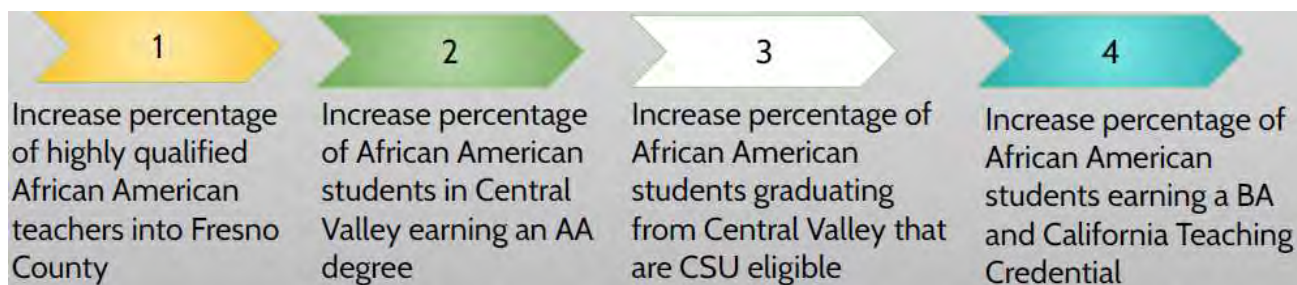
FCSS is creating a pipeline of recruiting and supporting students of color starting in middle school through high school and college, to completion of a teaching credential. Research has suggested that teachers of color are more motivated to work with minority students (Gay, 2002), and our current teacher demographics do not mirror the student population.

Working to achieve equity, FCSS is building a system that supports minority students to become teachers. An important research-based positive support practice is to have culturally proficiently trained teachers, who will be ensuring the success of selected students of color (Junior Teacher Academy) to focus on student academic success, cultural competence, and socio-political consciousness, plus most effective practices for supporting students of color.



FCSS continues to be excited to establish a foundation for a pipeline of recruiting and supporting students of color in the field of education, specifically in teaching. The TCAEE project is beginning within one district. Further analysis of scaling the TCAEE program to other districts will be discussed in the future. FCSS has secured a partnership with Central Unified School District to implement the TCAEE program. Central Unified has a diverse student population with the second highest percentage of African American students in Fresno County and third highest number of African American students when compared to other Fresno County districts.

The goals of implementing TCAEE at Central Unified will to be:



Timeline:

- During July 2021, the FCSS staff met with the Acting Superintendent of Central Unified School District to learn about the various programs that exist within the district that would complement the mission of TCAEE. Central Unified implements AVID and is establishing a teacher pathway at the high school level. FCSS will continue to collaborate with Central Unified to identify one elementary school, one middle school, and one high school that will participate in establishing the teacher pipeline as part of TCAEE.
- Toward the end of July 2021, FCSS onboarded the Director of K-12 Support Programs to support the TCAEE implementation. The Director of K-12 Support Programs was tasked with hiring a FCSS Program Coordinator for continued implementation of the TCAEE program. At the end of August 2021, FCSS hired the Program Coordinator who will collaborate with Central Unified School District for successful implementation of the TCAEE program.
- In August 2021, six educators from FCSS and Central Unified participated in the AVID summer institute focused on culturally relevant teaching practices. Further discussion will be had to determine which teachers will lead the elementary level implementation of AVID and first phase of TCAEE.
- Currently, the FCSS Director of K-12 Support Programs and Program Coordinator in partnership with the FCSS Program Specialist for Student Equity & Empowerment are arranging for a virtual meeting with former senior African American Student Advisory Cabinet members and in-person meeting with current African American Student Advisory Cabinet members. The focus of this meeting will be to capture the African American student voice and incorporate their feedback in the implementation of TCAEE.
- Meeting to be scheduled to introduce the new FCSS Program Coordinator to the Acting Superintendent of Central Unified School District and collaborate on next steps. FCSS Deputy Superintendent of Educational Services is also actively recruiting community advocates and mentors to provide support and leadership development seminars for participating middle school and high school students.

The implementation of the TCAEE will be the first of its kind in the region creating a system that supports minority students to become teachers by creating an important researched-based positive support practice, which is to have culturally proficiently trained teachers, who will be ensuring the success of selected students of color. The program will also increase the social emotional and academic support for minority students resulting in a more positive K-12 experience, including dual enrollment while in high school.

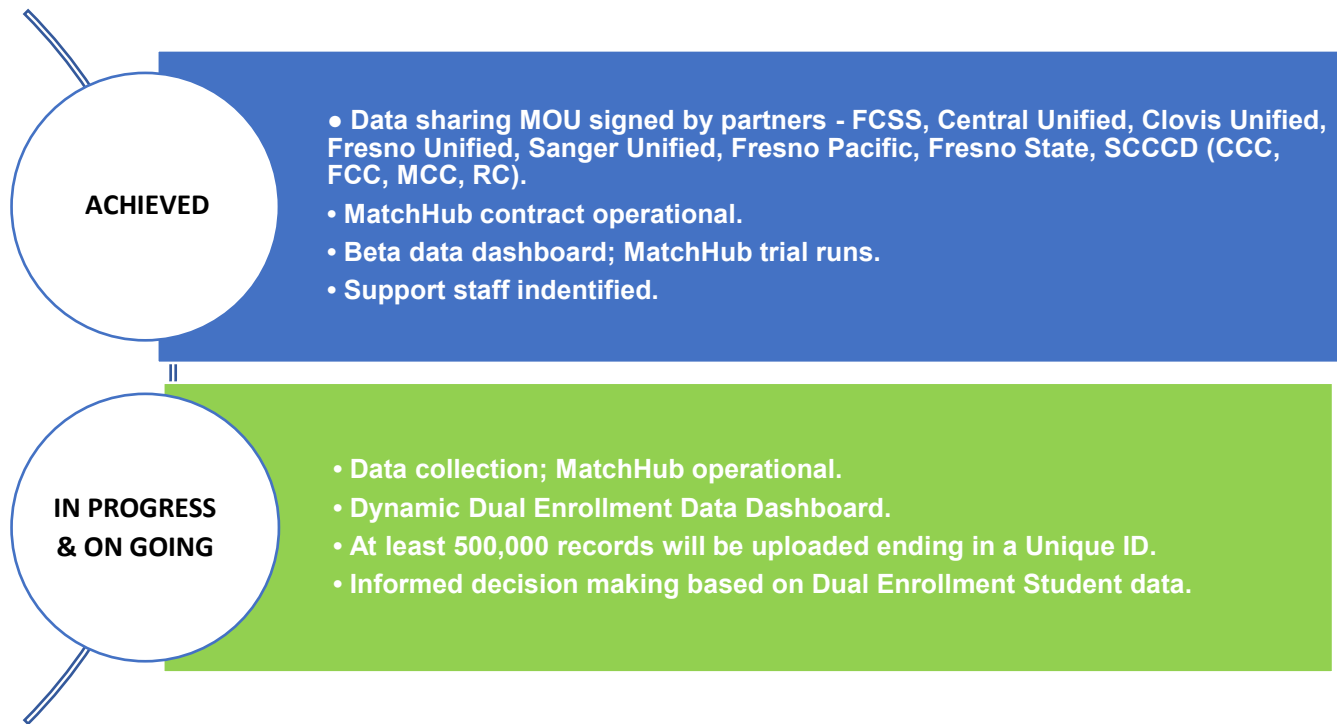
Targeted Quantitative Outcomes

With the first cohort of 30 and subsequently 25 each for a total of 75 students to initially be impacted. These students would begin dual enrollment (DuE) in the summer after completing their 9th grade year, and continue with dual enrollment through the regular and extended school year.

In the summer of 2024, 90% of students will begin DuE with Interdisciplinary Study, IS 001. ALL students who take the DuE class will successfully complete. (FCSS staff will be supporting and monitoring.) Students would continue through a DuE program during regular high school and summers, with at least 75% of students who were continually in the program from 7th grade through 12th grade, earning their Associate Transfer Degree in Education at the completion of high school. With continued support from FCSS in mentoring the cohort, we anticipate a 60% success rate of students going from 9th grade to a CA teaching credential in 7 years.

PROJECT AWARD TITLE: Cradle to Career Unique ID Project: intersegmental support of the FresnoK-16 Collaborative’s data sharing key element

Highlights



Data Sharing to Foster Equity and Intersegmental Collaboration

The ability to connect data at the student level, K-12 to higher education, is a foundational element to support the work of the Fresno K-16 Collaborative and is one of the guiding key elements of the pilot program’s work plan.

The biggest technical barrier to connecting data across systems - K-12, higher education, health, social services, etc. - is the matching of person level data across systems. Based on some of the work occurring at the State level, it’s possible that in several years there might be a common ID in both K-12 and higher education data systems to facilitate matching of data, but at this time, there are no concrete plans in the near future to do so. This means that research analysts in K-12 and higher

education spend hours matching data before any research and/or analytics can take place. Additionally, processes used for matching are often rudimentary in nature, matching only when names, addresses, etc. match precisely. The system needs a more robust approach that automates the matching process. The P16 Data Collaborative,

comprised of analysts across K-12 and higher education is one such entity that would benefit from a more systematized approach to matching data.

Championed by Cradle-to-Career (C2C), the P16 Data Collaborative, funded by a two-year (2016-18) College Futures Foundation grant, was formed to increase the rate of bachelor's degree completion among California student populations who are low-income and have had historically low college success rates through data sharing agreements between UC Merced, CSU Fresno, State Center Community College District (SCCCD), and Fresno Unified School District. (Fresno Pacific University and University High School joined the collaborative in 2020.)



To achieve that goal, the collaborative adopted a student-centered strategy with the following three outcomes aimed at removing barriers to college success:

1. Successful Transitions: Institutions ensure student readiness and effective transitions from secondary school to college, and from community college to four-year colleges and universities;
2. Aligned Institutions: Inter-segmental partnership aligns leaders, resources and decision-making among school districts, colleges, and their partners to advance student progress toward bachelor's degrees; and
3. Improved Policy & Practice: Policymakers and practitioners address gaps between policies and practices at all levels affecting student success.

The six (6) essential goals of this endeavor are:

1. To increase the number of university and college eligible graduates at Fresno Unified.
2. To increase the number of Fresno Unified graduate enrollments into post-secondary education;
3. To increase the number of students that matriculate and are appropriately placed in courses leading to their successful transfer from SCCC to Fresno State and UC Merced;
4. To provide targeted counseling and academic support services for successful course completion at SCCC for Fresno Unified students that graduate A-G off-track and enroll at their colleges;
5. To increase student transfer rates from SCCC to post-secondary institutions; and
6. To increase the number of Fresno Unified graduates that complete a bachelor's degree.

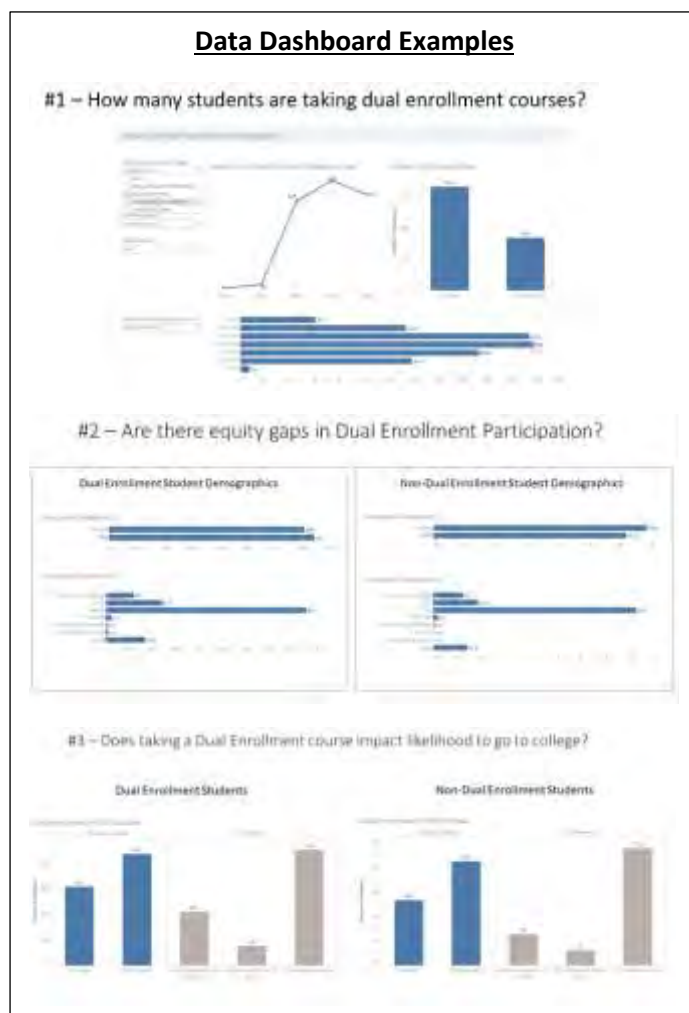
All Pathways

- FCSS/C2C has hired and on-boarded the staff person who will support the dual enrollment data dashboards and identified the data projects to be completed over the next year. By the end of this performance period of the grant, FCSS/C2C plans to have a dynamic data dashboard that provides information about dual enrollment participation by all K-12 districts in Fresno County, similar to what was developed in Oakland, CA. Envisioned is one additional dashboard that would build off the one built by Fresno State, and would include data from the four districts participating in the

K-16 Collaborative, as well as Fresno State, Fresno Pacific and State Center; and accessing this data will take time and will extend beyond the timeline of this grant. There is a new data sharing agreement that was developed specifically for this project. Implementing a new data sharing agreement vs adding on to the existing MOU utilized by Fresno State, State Center, Fresno Pacific and Fresno Unified caused an unanticipated delay in our process. At this time, all the partners have signed the MOU and will allow the sharing of data to develop the second dashboard. MatchHub can now be utilized to match data between K-12 and the higher education institutions, allowing for a better understanding of the impact of dual enrollment on college enrollment/success.

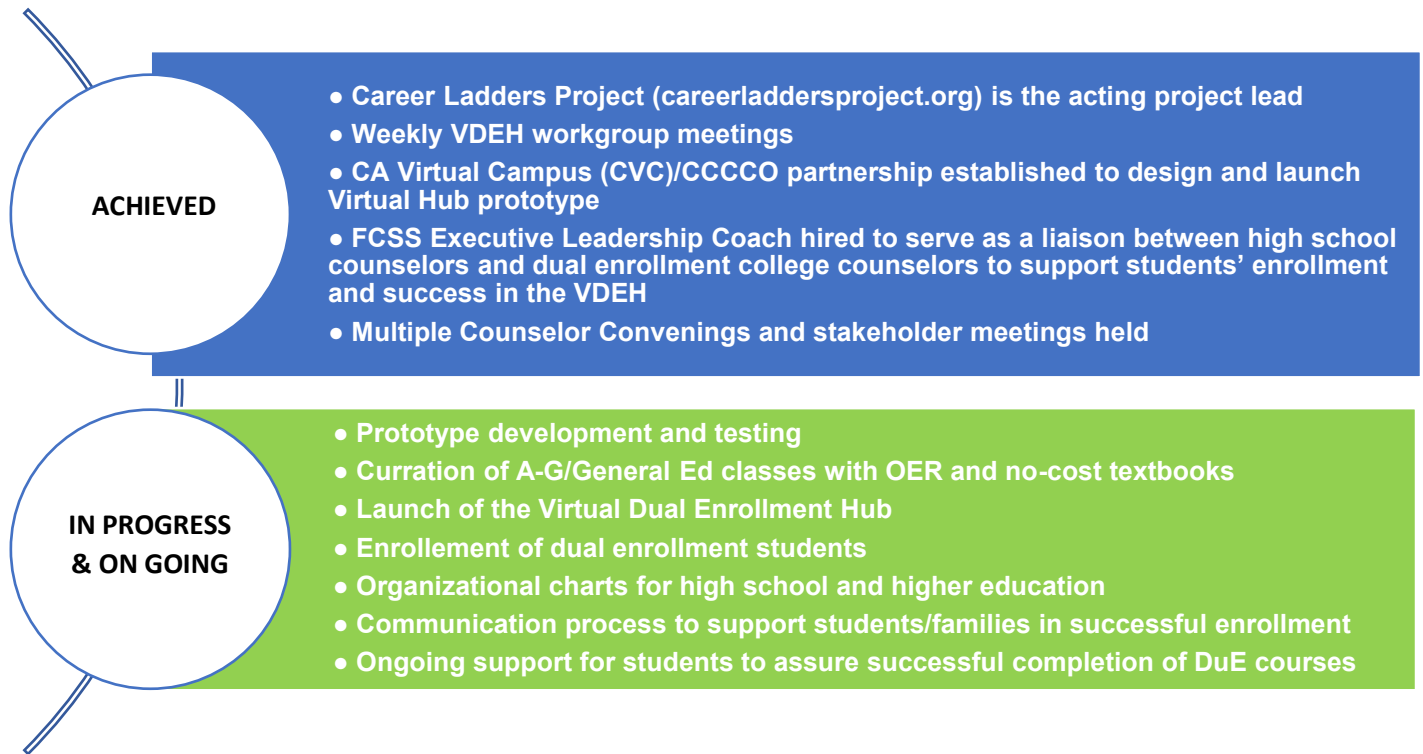
- Using MatchHub, collected student level data from each institution is being used to build the 2nd dashboard
- The completed data sharing agreement allows for work in partnership to begin collecting student level data to update the current dashboard built by Fresno State with additional data from these new partners. (The current dashboard includes only data from Fresno State, State Center and Fresno Unified and hasn't been updated in two years)
- MatchHub has been fully developed and we are in the final stages of testing with partners. This tool which supports matching of data across K-12 and higher education institutions (where we have no unique, shared IDs) will be fully vetted and ready for use by early to mid-October.
- As the testing is finalized and use begins, FCSS/C2C will collect "ease of use" and data quality information to adjust along the way.
- Link to Data Sharing Agreement : https://drive.google.com/file/d/1GtuobOQ5h_8Tk4ob0uMU6ZqldSab7Jx/view?usp=sharing

Prior to the signed Data Sharing Agreement, there was a paucity of inter-agency collaboration requiring matched data sets due to the technical challenge of matching individuals across siloed data systems. The expertise and capacity to match records across disparate data sets was limited to 2-3 of the largest partners. With a dynamic and robust dashboard with multiple partner data, the ease of utilizing and quality of matching as compared to prior methods will support the ability to make informed decisions and support scale.



PROJECT AWARD TITLE: Virtual Dual Enrollment Hub (VDEH)

Highlights



Accessible Equity to Dual Enrollment and Pathways: Accounting and Financial Management, Engineering, and Single Subject Teachers.

FCSS with the Collaborative partners are executing their proposal to support Accessible Equity - Shorten time to completion. Increase educational attainment. Increase transfer. Increase employability. Reduce and erase race equity gaps. Reduce regional gaps.

Every student should succeed in school, the workplace and life. The FK16C's collective impact focuses on building through Dual Enrollment and Dual Enrollment career pathways an inclusive, equitable and prosperous Fresno County where race, geographic location and socioeconomic status is no longer a predictor of educational and future economic attainment.

Fresno K-16 Collaborative was established to implement Dual Enrollment (DuE) pathways as a strategy for equity and degree attainment. DuE research has shown multiple benefits for student success when students take dual enrollment classes. DuE can help to shorten time to degree completion; increase educational attainment; increase transfer; increase employability; reduce and erase equity gaps; and reduce regional gaps.

However, there are disparities in access to dual enrollment for Latinx and African American students, as well as socioeconomically disadvantaged students. The Collaborative has been charged to make a difference, close race equity gaps and lay the foundation for systemic change.

The Virtual DuE Hub (VDEH) is about changing the narrative and creating accessible equity so that all public Fresno County high school students within the service area of the FCSS have an opportunity to successfully take and complete DuE classes for both A-G high school and General Education college credit (SCC CD colleges) and be supported in their journey.

The VDEH project involves the wholesale creation of the Hub ranging from extensive outreach and engagement to the development of the application and process of the hardware and software for the portal Hub to the creation and support of College Connection Specialist positions to the student support services and college/high school integration.

Unlike other on-line DuE opportunities, the Hub seeks to provide an opportunity designed with equity and student success at the forefront. Funding being sought for this proposal will be leveraged by utilizing LMS and platforms already being used by the community colleges to forgo the need to have new, expensive, proprietary systems created.

FCSS is the project sponsor lead and Career Ladders Project (CLP) is the acting project manager. CLP helps to organize collaboration with in-house IT, the CA Community College Chancellors Office (CCCCO)'s CA Virtual Campus, interaction with students and stakeholders (i.e., high school and college counselors, parent groups such as GO Public Schools Fresno) and others in the design of the user interface to make the Hub user friendly and effective.

FCSS, the CLP consulting team, and SCCC colleges are working to collaborate with Fresno school districts in this pilot project to develop counselor trainings and student/parent outreach, as well as wraparound services and early alert for student success specific to the needs of VDEH students. This will include the creation of a community of practice with high school counselors and SCCC DuE coordinators; and, FCSS has created and hired an Executive Leadership Coach (ELC) position to support the VDEH. FCSS will institutionalize the ELC post-grant.

In addition, three school districts (Kerman USD, Washington Union USD, and Fresno USD) are piloting the Canvas LMS at key high schools to help eliminate barriers of high school students to learn multiple management systems between their respective high schools and their DuE classes. It is also anticipated this will help to lessen the use of bandwidth which is already comprised in many of our broadband deficient areas. SCCC colleges and Fresno State use the Canvas LMS. The SCCC colleges are also anticipated to pilot Program Mapper which clearly maps out curricular pathways for students choosing their pathway and for students needing help to stay on their pathway. It currently being piloted by CVHEC colleges (Bakersfield College, CSU Bakersfield, UC Merced).

Platform development and IT related infrastructure will be developed to be sustainable and modifiable as needed to continue to address accessible equity and in response to data.

The VDEH workgroup meets weekly and is working with the California Community Colleges Chancellors Office's California Virtual Campus (CVC) to help design the backend IT work for the VDEH portal. CVC has affirmed the VDEH does align with the DuE strategy and workplan. From a landing page to successful course completion, the student journey is anticipated to be easy to navigate and infused with student support.

Virtual Dual Enrollment Hub



- Non-cohorted students accessing courses at their home college
- Courses meet A-G high school requirements and college general education requirements
- Streamlined application and enrollment process
- Student supports are easily accessed, including a virtual community of support

Virtual Dual Enrollment Hub

Highly structured

Less structured

Early College	Middle College	CCAP at HS	Non-CCAP at HS	Individual
<ul style="list-style-type: none"> - Integrated structure - AA/AS - Focus - high achieving students - A building 	<ul style="list-style-type: none"> - Integrated structure - AA/AS - Focus - middle achieving students - May or may not be a building 	<ul style="list-style-type: none"> - Pathway - Closed - Embed - Focus - not coll - or underrepr -Data sharing agreements 	<ul style="list-style-type: none"> - non-cohorted - pathway is A-G and gen ed (curated list of classes) - student supports - integrated into early alert system & community of support 	<ul style="list-style-type: none"> - "also "concurrent enrichment" - cross the - end - hout - e - ge."

Virtual Dual Enrollment HUB YTD Highlights (10/21/21)

- Leading Dual Enrollment authority, Career Ladders Project (careerladdersproject.org) is the acting project lead
- Weekly VDEH workgroup meetings are held with Career Ladders Project (CLP) management team (Naomi Castro (Senior Director), Sherry Shojaei (Director), Eder Flores (Program Associate)), Fresno County Superintendent of Schools Rebecca Aguila (Director of K-12 Support Programs & Accountability) and Karina Rodriguez (Executive Leadership Coach), Fresno City College (FCC) Robert Pimentel (Vice President, Educational Services & Institutional Effectiveness), Fresno Unified School District Tressa Overstreet (Executive Director of College & Career Readiness), Reedley College (RC) Emily Berg (K-16 Collaborative Coordinator) and Natalie Culver-Dockins (Dean, Student Success and Achievement), and FK16C Karri Hammerstrom (Executive Director).

- Early on Hammerstrom reached out to the CA Virtual Campus (CVC) to see if they would be interested in partnering to create a DuE Hub for our region. CVC/CCCCO determined that we fit into their mission and have made us a priority. The ultimate outcome is to be replicable for other CCC districts.
- In July 2021, FCSS onboarded the Director of K-12 Support Programs to support the VDEH implementation. The Director of K-12 Support Programs was tasked with hiring a FCSS Executive Leadership Coach to serve as a liaison between high school counselors and dual enrollment college counselors to support students' enrollment and success in the VDEH. At the end of July 2021, FCSS hired the Executive Leadership Coach (ELC) who will collaborate with all partners implementing VDEH and will support high school counselors and dual enrollment college counselors
- VDEH workgroup has been meeting regularly with CVC, CCCCCO representatives, and their IT vendor Quottly developing the student experience and workflow.
- VDEH workgroup has had two meetings with Admission and Records representatives from FCC, Clovis Community College (CCC) and RC, the VDEH work group and CVC to review and troubleshoot the workflow draft.
- Meetings have been held with the FCC, CCC, RC and SCCC Financial Aid departments, and have been scheduled with their Dual Enrollment teams (10/27/21).
- VDEH workgroup is working on items to be addressed with Quottly in regard to layout, copy and overlay with CCCApply.
- VDEH work group has met with SCCC, FCSS and FUSD Institutional Researchers to strategize about data to be collected and tracked.
- VDEH workgroup is shooting for VHUD to be operational for the Spring 2022; Summer 2022 semester at the latest
- FCSS, the project sponsor and official lead, has hired an Executive Leadership Coach to be the point of contact to assist the high school counselors.
- CLP and FCSS held counselor convenings for high school on 10/12/21 and are planning convening with community college DuE counselor too providing professional development regarding the HUD, as well as DuE in general (including early alert and support services for student success). Protocols are to be developed to help support the student that their success by providing both high school and community college support. In addition, a draft A-G to General Education course equivalencies is being shared for individual school district consideration to help support dual credit for the high school student. This will tie into the Tutoring network created by the FK16C for high school students needing help with math-related courses who can now receive tutoring from FCC, CCC and RC.
- CLP is preparing collateral for various audiences regarding the Hub (i.e., superintendents, parents and counselors)
- FK16C Exec Director is researching outreach opportunities with community networks to share info regarding DuE and the VDE Hub
- Parallel efforts to help support student success include the use of learning management systems Canvas at the high school level. Canvas contracting is underway and being piloted in three USD in 3-4 high schools (Kerman, Washington, and two FUSD high schools)
- The FK16C website site will have a link to the HUB and, likewise, all partners can also have a link that will take students to the Hub.
- The VDE Hub Vision Statement was presented to the Executive Steering Committee for support and has been signed by all the partners. VDE Hub Vision Statement can be found at: <https://tinyurl.com/2p874n3u>.
- VDEH workgroup is scheduled to meet with FCC, RC, and CCC OER leads (10/27/21). For sustainability, the desire is to target A-G/GE courses that are OER, no textbook or low-cost textbook. Will be exploring current offering and opportunities to engage faculty to develop OER for their courses.
- On August 5, 2021, CLP presented the VDEH Vision Statement to the K-16 Collaborative Executive Steering Committee for feedback and support.
- During September 2021, the FCSS ELC began working on building a coherent counselor network with all Fresno County school districts identifying one contact person per high school site to assist in supporting their students through the VDEH process.
- In collaboration with CLP, the VDEH working group will develop marketing tools to promote the VDEH.

The pioneering efforts to create a Virtual DuE Hub will be the first in the nation of its kind and will be a model to be replicated across the State of California. Initial efforts are to circulate a list of A-G/GE dual credit DuE courses with zero textbook costs (ZTC) or limited to open education resources (OER). The Hub is targeting 150 students enrolled by first semester operational, targeting Summer 2022 or Fall 2022 at the latest. At full operational status, it is anticipated that greater than 450 students will enroll on a semester basis.



Fresno K-16 Collaborative – Clovis Community College

Clovis Community College (CCC) has been active in participating in the Single Subject Teacher and Engineering pathway working groups. They have been meeting with Collaborative partners to strengthen and establish intersegmental partnerships.

PROJECT AWARD TITLE: Keys to Dynamic Guided Pathways: Intersegmental Success Teams

Highlights

ACHIEVED

- Recruitment for a diverse cohort from Clovis High, Clovis West and Clovis Community College was successful with 22 students from Clovis West, 9 from Clovis High, and 6 from CCC.
- CCC education faculty and FPU STEM coordinator has met with the cohorts to share the goals and plans for the semester.
- Field trip to Fresno Pacific University took place on Sept. 30th with all three cohorts attending.
- STEM Teacher Institute opportunities & Education pathway information presented in the Ed 10 classes (approx. 80 students) and STEM classes (ex: Geology 9- 85 students, Engineering -35)
- STEM Teacher Institute opportunities and the Education pathway information also emailed out to over 2,800 STEM students

IN PROGRESS & ON GOING

- CCC students have been assigned a STEM instructor mentor and regularly meet.
- California Teaching Fellows will be presenting to both CUSD and CCC cohorts in Nov. which will lead to greater employment opportunities and will in turn grow their experience and interest in teaching STEM in K12.
- Participation in Engineering Dual Admissions MOU meetings.
- Partner in the Homework Help! Math Tutoring program with Reedley College & Fresno City College.

Clovis Community College (CCC) is supporting the capacity for CUSD, CCC, and FPU to design guided pathways leading to careers as middle and high school teachers. The project is focusing on STEM teaching pathways, one of the areas of greatest need across the state. Guided Pathways require the development of curriculum maps that clearly outline the course plans across the pathway into becoming a credentialed science or math teacher. This requires that the K12 course plans, which include selected dual enrollment courses, align clearly with STEM majors at CCC. The alignment is designed to be efficient and to lead to the Associate of Arts or the Associate Degree for Transfer into the selected major at Fresno Pacific or another Institution of Higher Education. Enrollment in a post-BA credential program completes the pathway.

These carefully designed curricular pathways provide K12 students and community college students with clear guidance regarding the courses they need to complete to become a teacher. This grant has provided resources to develop and staff a collaborative Student Success Team in support of Guided Pathways at Clovis Community College, consisting of departmental

staff, academic advisors, counselors, recruiters, success coaches, peer mentors, and financial aid staff. The power of the Student Success Team will be substantially increased by including intersegmental partners. These education pathways have included key personnel from Clovis Unified School District and Fresno Pacific University, thereby building a holistic framework of support along the entire pathway.

One of the central directives of this partnership is to focus recruitment and support on students living in lowopportunity zones and a diverse student population. CCC will initially partner with Clovis High School and Clovis West High School.

Single Subject Teacher Pathway

- As shared in Clovis Community College's previously submitted budget review for carryover funds, their originally planned Summer 2021 STEM Academy was canceled due to low enrollment. They feel this occurred on account of several factors. One, their summer program was similar to a few othersummer STEM offerings at Clovis. Two, the participating high schools were still virtual and therefore it was more challenging to strategically recruit and provide outreach opportunities to targeted groups. With high school counselors not physically on campus with students, it was muchmore difficult connecting with individual students. Clovis' education academic counselor and dual enrollment counselor, student success coach, and education instructor attempted to recruit students by communicating and collaborating with high school academic counselors, high school club advisors, and individual STEM teachers. Another factor could have been the fact that our recruiting and planning efforts lacked CUSD high school teachers on ground partnering with CCC. Unfortunately, due to these factors and other COVID-related factors, they did not receive interest from students. In alignment with the goals of the K16 Collaborative, Clovis now plans to establish two Fall 2021 cohorts with the same purpose: collaborate with intersegmental partners to support and produce more STEM teachers in the Central Valley.
- Overview of plan: A variety of intersegmental STEM teaching activities will occur in September through December. These activities will include field trips to Clovis Community College and FresnoPacific University. These STEM-focused activities will include demonstration lessons from STEM faculty, campus tours, financial aid presentations, and STEM teaching pathway presentations. In addition to these activities, students will receive one-on-one outreach and support from both Clovis Community and Fresno Pacific academic counselors and success coaches. They will also receiveone-on-one mentoring from STEM faculty. Intersegmental partners will all play an active role in theimplementation and monitoring of this plan.
 - High School Cohort: This diverse cohort would include at least 15 freshman and sophomores from Clovis High and 15 freshman and sophomores from Clovis West interested in teaching K12 STEM. The onboarding and recruiting process is currently underway. A high school teacher leader at each site has been named and is helping with the recruiting and onboarding of students as well as Clovis Community College counselorsand student success coaches. This will be a CUSD collaborative cohort partnering with CCC and FPU. Funds will be needed in the following areas: CCC academic counselor, student success coach and instructors, stipends for high school teacher partners (one fromClovis High and one from Clovis West), instructional materials, a guest speaker, food, promotional and marketing materials, and transportation to and from Clovis Community College and Fresno Pacific University. In addition to CCC and FPU fieldtrips, CUSD students will also participate in a variety of lunchtime activities with their assigned STEM high school teacher leader.
 - CCC Cohort: This cohort will include 15 current STEM majoring students interested in teaching in K12. The onboarding and recruiting process is currently underway. In additionto attending the above mentioned CCC and FPU activities, these students will be partnered with a CCC STEM instructor who will provide mentorship and support on their journey to becoming a STEM teacher. Funds will be needed in the following areas: CCC academic counselor and instructors, stipends for participating STEM instructor mentors, instructional materials, a guest speaker, food, and transportation for a field trip to FPU.
 - STEM Teacher Institute opportunities & Education pathway information presented in the Ed 10 classes (approx. 80 students) and STEM classes (ex: Geology 9- 85 students, Engineering -35)
 - STEM Teacher Institute opportunities and the Education pathway information also emailed out to over 2,800 STEM students
- As the cohorts have been established, CCC education faculty and FPU STEM coordinator has begun meeting with the cohorts to share the goals and plans for the semester. In addition, CCC students will be assigned a STEM instructor mentor and begin regularly meeting. The first event took place at Fresno Pacific on September 30. Link to Event Agenda:

<https://docs.google.com/document/d/1hpFYpGNPw6deL79ZSjdu1qPkPak2Zl6/edit?usp=sharing&oid=100978122508524135722&rtpof=true&sd=true>

- Our success team has been coordinating efforts in a variety of ways. Counselors have been holding group and individual counseling sessions with cohort members, attending our outreach events, and strategically contacting students during the recruitment process. Student success coaches have been doing similar work as the counselors. In addition, they have helped with the communicating, organizing, and implementation of our outreach events, including STEM and campus tours, providing one-on-one student support, and are helping to coordinate and implement upcoming events and enrichment activities.
- After the conclusion of the K16 Collaborative, CCC and FPU are developing plans to continue long-term support of these students along their academic journey as dual enrollment students, CCC students, and ultimately FPU students.
- CCC is working toward establishing protocols to code these students so that tracking of progress long-term is possible. Once implementation of such protocols occurs, then CCC can institutionalize these practices and continue to analyze data and provide further support to these cohort members.
- California Teaching Fellows Foundation (CTFF) is a collaborative partner with both Clovis Community College and Fresno Pacific University. At their culminating event in November, CTFF will be presenting to both CUSD and CCC cohorts which will lead to greater employment opportunities and will in turn grow their experience and interest in teaching STEM in K12.

Engineering Pathway

- Representation at all pathway meetings.
- Assisting with pathway crosswalks for Civil and Mechanical Engineering
- Participation in the Dual Admissions MOU meetings
- Signed on to be part of the Homework Help pilot tutoring program

Fresno K-16 Collaborative – Fresno City College (FCC)

FCC has been successful in engaging and supporting both high school students and adult learners in their pursuit of taking DuE courses and introducing them to career pathways in accounting and fiscal management.

For the high school students, over 200 have been introduced to the accounting pathway participating in either DuE courses (55) or the Winter and Summer Bootcamps (158). For adult learners, 53 students have participated in the DuE courses that comprise the Bookkeeping Fundamentals Certificate designed to upskill students by learning fundamentals of Excel and bookkeeping. They were also offered the opportunity to take additional courses to apply towards an additional certificate, One-Person Office

Project Highlight – FK16's CVHEC's Equity, Race and Social Justice Ad hoc Committee Preliminary Survey Findings – Consists of three workgroups: Equitable Recovery Workgroup, Framework and Integration Workgroup, and Regional Scan Workgroup. Survey went to the colleges within the region; data still being reviewed. Work done to date demonstrates a pulse of what's currently being done. Plans for the FK16C to work with FCC and K12s to develop a survey for K12s.

PROJECT AWARD TITLE: Dual Enrollment Accounting and Financial Management Project

HIGHLIGHTS

ACHIEVED

- Winter '21 Bootcamp had 75 high school students attend.
- Summer '21 Bootcamp: Intro Accounting & Personal Finance - Want to be a Millionaire? had 83 high school students attend.
- Spring 21 semester, 35 high school dual enrollment students registered cohorts for BT 24 - Beginning Excel.
- Fall 21 semester, 20 high school dual enrollment students enrolled in BT-24 and BT-131

IN PROGRESS & ON GOING

- Winter Accounting Bootcamp is currently being prepared with collaborative partners.
- HS DuE - Bookkeeping Fundamentals Certificate: Fall 24
- FCC Dual Enrollment Coordinator and Dean of Business Ed continue to work with K12 partners to identify additional schools and interested students for Dual Enrollment opportunities.

Accounting and Financial Management Pathway

Fresno City College (FCC) is supporting their feeder K-12 school districts by building a dual enrollment program focused on the Accounting and Financial Management pathway. FCC cohorts began with McClane High School (Fresno Unified), Central High School and West Park Charter Academy. Working with the Fresno Unified School District (FUSD) Administrative team, Fresno City College administrators and faculty are developing a pathway that will begin during the junior year in high school. The first cohort was initially delayed and began Spring 2021; future cohorts will begin during the summer or fall semester of the students' junior year. FCC is working with FUSD counselors to identify students who have an interest in the field of Accounting and Financial Management and allow them the opportunity to begin college classes early so they can complete a certificate of achievement while in high school and be on a pathway to a bachelor's degree at one of the surrounding universities.

FCC has worked closely with the Accounting and Fiscal Management /Dual Enrollment Pathway Working Group to map the Associate Degree for Transfer in Business with Accounting Emphasis to Fresno State, Fresno Pacific, UMass Global (formally Brandman), and National University resulting in the Collaborative's program and curriculum crosswalk. FCC will actively promote the new Accounting Pathway models to help students accelerate their studies. FCC also continues to reach out to High School populations to assist students identify desired career and educational path goals.

Additional Accounting and Financial Management Pathway Outcome Highlights:

- **Accounting Bootcamps, Outreach, and Recruitment**
 - Winter Bootcamp SP 2022, (January 2022) (1 day)
 - Winter Spotlight for Accounting Careers
 - FCC is in the process of planning a special High School outreach event: Winter Spotlight for Accounting Careers. They have set a tentative date for Tuesday, January 4th, 2022, 10:00 am to Noon. The Zoom event will feature local business leaders sharing about their educational and career paths. There will be a student panel to share their experiences, and the event will conclude with an Accountant serving as an FBI Special Agent sharing his experiences in using accounting and forensic skills in chasing down and catching criminals.
 - Summer Bootcamp SU 2021, (4 days)
 - Intro to Accounting & Personal Finance: Want to be a Millionaire?
 - Attendance: 83 High School Students
 - The Summer Accounting Bootcamp (June 14-17, 2021) was an absolute success! 83 students received a Certificate of Completion (70 students from Fresno Unified and 13 students from other surrounding school districts). FCC instructors Richard Tuttrup and Monique Kelley dove into career exploration and basic accounting activities. Students



participated in hands-on activities in exploring careers, working with financial statements (Income, Retained Earnings, Balance Sheet), defining and interpreting the Accounting Equation ($\text{Assets} = \text{Liabilities} + \text{Equity}$), Financial Statement Analysis (Profit Margin, Return on Assets, Debt Ratio, Equity Ratio). Reedley College instructors Eunji Seo and Sarah Maokosy helped attendees explore personal finance and investing concepts. The first day ended with a student panel from Fresno Pacific University (FPU) sharing their experiences, advice, and career plans/situations.

o Development Activities: Summer Bootcamp (4-Day) and Fundamental Payroll Certification (FPC)

- Faculty Richard Tuttrup, Keith Mizner, Terre Stricker and the Dean of Business Education worked with Collaborative Partners to plan for the Accounting Summer Bootcamp. The summer bootcamp was promoted to both existing Dual Enrollment and new students. This 4-Day event provided fun, interactive hands-on activities such as journaling, and understanding financial forms (e.g., Balance Sheets, pro formas, and journaling).
- Richard Tuttrup met with Reedley Accounting Faculty Eunji Seo to discuss adding finance principles/activities into the event. Part of the event covered personal budgeting. Part two covered personal investments (Roth IRA etc.). There were no prerequisite of accounting or finance knowledge. The event was aimed to attract students who were not initially interested in the Accounting Pathway.
- FCC coordinated with UMass Global (formally Brandman) University (Ricardo Lorenzana, Dean and Reagan Forlenzo, Director of Corporate Training) to have students take a special summer 30-hour course covering the American Payroll Association's entry level certification, Fundamental Payroll Certification (FPC). The FPC is designed for: Entry-level payroll professionals, Sales professionals/ consultants serving the payroll industry, Systems analysts/engineers supporting payroll systems, Payroll service provider client representatives. Final Dates: June 14-17, 2021

o Winter Bootcamp SP 2021, (2 days)

- Attendance: 1st day - 46 students, 2nd day - 29 students; 75 students' total
- The Accounting Winter Bootcamp (January 5-6, 2021) was a success. Accounting Department Chair Richard Tuttrup, faculty Keith Mizner, Terre Stricker, Jim Makofske, and Dean of Business Education developed a two-day workshop designed to inspire high school students to introduce the Accounting Pathway. Topics included: Why accounting was the language of business, career opportunities in accounting, matching the Accounting Pathway to entry points into the accounting profession. A panel discussion was held by FPU accounting students sharing advice to help the high school students remain successful on the Accounting Pathway. The theme of their second day was "Dream Big!" They discussed how the Accounting Pathway could lead to jobs such as Controller, Chief Financial Officer and Chief Executive Officer. One of their guest speakers, Bradley Low, explained how his accounting education helped him attain his position as a Chief Financial Officer. They concluded our second day with Special Agent Dan Rodriguez from the FBI. He told their participants that the FBI needs more forensic accountants. Special Agent Rodriguez spoke about the FBI's Teen Internship program. He also explained how to apply for internships and jobs at the FBI.

o Outreach and Recruitment

- Developed new flyers and social media graphics to promote sections for the Bookkeeping Fundamentals certificate for both HS and Adult Learners for the Spring 21 and Fall 21 Semesters.

- o High School Dual Enrollment (DuE) – Bookkeeping Fundamentals Certificate

Spring 2021: Long-time Business and Technology Adjuncts Sylvia De Soto and Beatrice Knaapen are teaching Beginning Excel for students coming from McLane, Central, Kerman, and Westpark High Schools.

- 35 HS students enrolled in BT 24 Beginning Excel; students will be taking BT 131 Applied Accounting to complete the certificate in FA21

Fall 2021 (in-progress):

- Special sections were set up for High School Dual Enrollment (DuE) students. Robyn Hart is teaching a 9-week Beginning Excel (BT-24) from 8/9/21 to 10/8/21. Marc Haskell is teaching BT-131.
- 20 HS DuE students enrolled in BT-24 and BT-131

- **Guided Pathways Accounting and Business/Finance (Projects 4 & 5)**

- o Mappings and Alignment

- Fall 2021: Final drafts for the Accounting Pathway Curriculum Crosswalks from Fresno City, Clovis or Reedley to Fresno State, Fresno Pacific, Brandman, or National have been submitted by our 4-year partners in August 2021. FCC Business Counselor Lori Swain, Faculty members Richard Tuttrup and Ron Dustin, and the Business Education Dean, Tim Woods are reviewing the crosswalks with current FCC major sheets and Guided Pathways documents and mappings
- Spring 2021: FCC Business Counselor Lori Swain, faculty members Richard Tuttrup and Ron Dustin, and the Business Education dean Tim Woods reviewed current State and CSU changes. FCC ADT Guided Pathway Mappings have been completed.
- CSU, Fresno, Fresno Pacific, Brandman, and National University developed a program and curriculum crosswalk assisted by the K-16 Collaborative Staff. FCC Counselor Lori Swain and the Business Education Dean have been working with CSUF to update and align advising sheets. Next Steps: Once crosswalks are completed, all advising and promotional materials will be updated. Special Outreach Events to highlight these pathways will be held for FCC students.

- **Degree Completion and Acceleration**

- o Fresno Pacific University has developed a 3-year Bachelor's degree in Business Administration. The new path saves a year of education.
- o FPU has also developed an affordable tuition cost program through offering special scholarship and grant programs for students. In partnership with FCC, students transferring with an Associate's Degree of Transfer (ADT) will save an additional year and will complete their FPU studies in 2-years. We are currently promoting this program to our students.

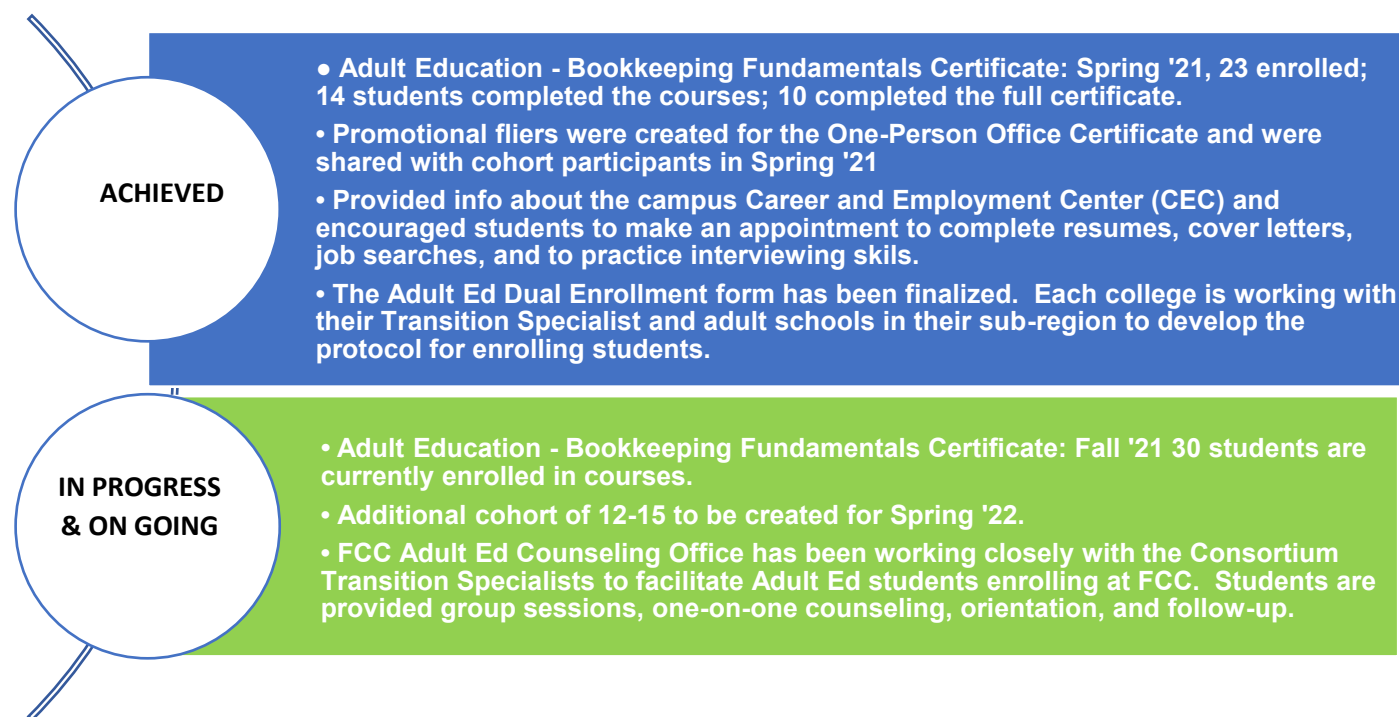
- **Challenges**

- o The COVID-19 pandemic has had a significant effect on program recruitment and student

persistence. Ever changing Federal, State, Local governmental regulatory restrictions have driven institutional responses in striving to meet compliance requirements. They have observed a decline in new enrollments. Schools have worked to promote Dual Enrollment opportunities. However, given the uncertainties created by the current environment students have been reluctant to sign up for college-level course work. Families have expressed how technological barriers still exist for students even though institutions had endeavored to create technology check-out resources. The demand is simply greater than available resources. The resurgence with the Delta variant has also caused more students and families to go into quarantine. Some schools have opted to hold off on expanding DuE during this current phase of the COVID pandemic. Given the early success of the DuE model, they are confident that as the health environment changes, the program will grow.

PROJECT AWARD TITLE: Adult Learners – Fresno K-16 Collaborative

Highlights



Fresno City College and State Center Community College District/State Center Adult Education Consortium with the Collaborative partners are supporting adult learners in obtaining education in a Fresno K-16 Collaborative's pilot pathway to increase employability, educational attainment and socioeconomic mobility; as well as promote prior learning assessment/credit for prior learning (PLA/CPL) to recognize previously acquired education or vocational experiences.

The region's vision is to intersegmentally provide adult learners with the skills needed for employment, continuing education, career advancement and personal growth.

Working intersegmentally, the Fresno K16 Collaborative along with community partners, have direct efforts to strengthen adult education and ensure students have access to high quality programs leading to their success in college and career.

In the pilot pathway Accounting and Financial Management, Collaborative partner State Center Community College District (SCCCD) through State Center Adult Education Consortium (SCAEC) and Fresno City College (FCC) have offered two cohorts (Spring 2021 and Fall 2021) of Bookkeeping Fundamental which is a 4.5-unit certificate program either dual enrollment (SB 554) and/or general college credit.

This collaborative work has solidified adult education's importance and place in our region. The SCAEC has identified the need for more short-term courses aligned with local workforce needs to increase the employability of adult students in the region, as well as creating stronger career pathway development connecting adult schools to college and career.

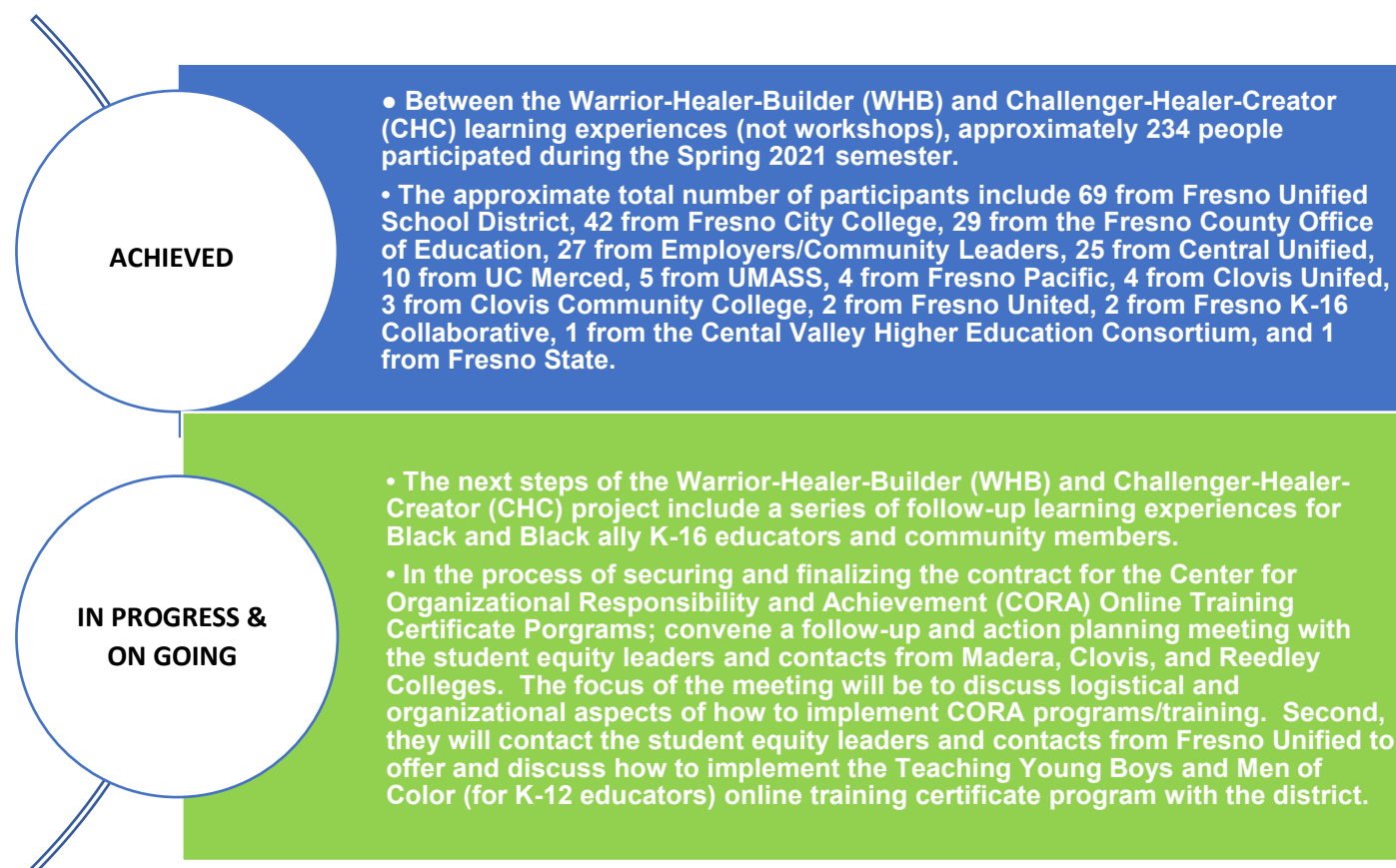
Accounting and Financial Management Pathway

- The first Adult Learner cohort enrolled in BT-24 and BT-131 (Spring 2021). They completed the two-course certificate in May 2021. Of the original 24 who enrolled, 10 completed the full certificate, 4 are taking the second course (BT 131) this fall, 10 dropped one or both classes and did not re-enroll.
- The second Adult Learner cohort started the two-course certificate in August 2021. There are currently 24 students enrolled in the BT 24 class (all new) and 30 students enrolled in the BT 131 class (4 from the SP21 cohort).
- Provided info about the campus Career and Employment Center (CEC) and encouraged students to make an appointment to complete resumes, cover letters, job searches, and to practice interviewing skills. Next steps are to invite CEC and Workforce Connection to share videos about their resources and share with the instructors for use in the class.
- Promotional fliers for the One-Person Office Certificate were shared with cohort participants in the SP21. The certificate program was identified as a next step after completing the bookkeeping fundamentals certificate. Students who did not complete initially opted to focus on completing the Bookkeeping certificate courses in FA 21.
- The FCC Adult Ed Counseling Office have been working closely with the Consortium Transition Specialists to facilitate adult Ed students enrolling at FCC. Students are provided group sessions, one-on-one counseling, orientation, and follow-up.
- The Adult Ed Dual Enrollment form has been finalized. Each college is working with their Transition Specialist and adult schools in their sub-region to develop the protocol for enrolling students. FCC will continue to follow the current enrollment process for Adult Ed students in collaboration with the Transition Specialists and will integrate the SB554 dual enrollment form into the onboarding process. Next steps are to ensure that all adult schools in the region are familiar with the new form and how to access it. LINK TO FORM:

https://drive.google.com/file/d/1GtuobOQ5h_8Tk4ob0uMU6ZqldSab7Jx/view?usp=sharing

PROJECT AWARD TITLE: Overarching Race Equity & Inclusion - Equitizing the Experience and Outcomes of Boys and Students of Color in the Central Valley K-16 and CVHEC Equity, Race, and Social Justice Ad Hoc Committee

Highlights



Fresno City College with the Collaborative partners have executed their proposal to support racial equity and outreach for educators throughout the region. In the Central Valley Region, outcomes for individuals of color are challenging. For example, unemployment rates are 2.5 times higher for Black/African Americans, while poverty rates are 3x higher for Black/African Americans compared to their White counterparts. The region also ranks last (59th/59) on racial and economic inclusion when compared to other large urban areas (Retrieved from www.FresnoDrive.org). The project has focused on equitable educational outcomes for students of color. With most educational institutions being Hispanic-Serving Institutions in our Central Valley, it is incredibly important for racial equity to be a priority so we can ensure the success of our students. In the Central Valley, and throughout the nation, students of color are not completing their educational goals at the same rates as their White peer counterparts. Therefore, the work from this proposal has focused exclusively on closing equity gaps for students of color and more specifically, Black and African American, Latinx, Native American and Southeast Asian students.

CVHEC, in collaboration with FCC, have brought educators together from across the K-16 pipeline to work on closing educational equity gaps for students of color in the region.

#3 Support systems: academic, student & community support; #8 Equity and Outreach (race equity & inclusion North Stars for all work; creating connectivity with K12, CCC, 4yr and DRIVE, and other CBO efforts).

- Between the Warrior-Healer-Builder (WHB) and Challenger-Healer-Creator (CHC) learning experiences (not workshops), approximately 234 people participated during the spring 2021 semester. The success of this effort was attributed to the dedication and leadership of Dr. Ray Ramírez, Dr. Robert Pimentel, and President Carole Goldsmith, Angie Barfield (Fresno County Office of Education), Lindsay Callahan (United Way Fresno), who played an essential role in the development and implementation of the WHB and CHC learning experiences (not workshops). They are looking forward to the next phase of the WHB and CHC project, including a series of follow-up sessions in the fall 2021 or spring 2022 semester. The primary purpose of the follow-up sessions is to provide past participants with an opportunity to dive deeper into individual and collective learning experiences, reflections, and applications of these items.
- The approximate total number of participants include 69 from Fresno Unified School District, 42 from Fresno City College, 29 from the Fresno County Office of Education, 27 from Employers/Community Leaders, 25 from Central Unified, 10 from UC Merced, 5 from UMASS, 4 from Fresno Pacific, 4 from Clovis Unified School District, 3 from Clovis Community College, 2 from Fresno United, 2 from the Fresno K-16 Collaborative, 1 from the Central Valley Higher Education Consortium, and 1 from Fresno State.
- The feedback and discussions reported and discussed at each of the WHB and CHC sessions were meaningful, and the resounding theme was, people have been longing for space and time where they can reflect on their own identities, experiences and values concerning personal and external forms of oppression, racism and trauma. This resounding sentiment was echoed by numerous exclamations of “healing,” especially for our Black educators, community organization leaders, and community members. It is noteworthy to mention that they intentionally did not administer any session surveys and assessments at the consultation and conferment of Wekesa. It was essential for them to foster a safe and authentically engaging atmosphere where participants felt they could speak their truths and realities that just can be captured in traditional forms of assessment and evaluation.
- The next steps of the Warrior-Healer-Builder (WHB) and Challenger-Healer-Creator (CHC) project include a series of follow-up learning experiences for Black and Black ally K-16 educators and community members. The series of follow up learning experiences will likely be limited to people who participated in the previous WHB and CHC learning experiences to allow for a deeper dive into dialogue, learning, reflection and application of these items.
- Securing and finalizing the contract for the Center for Organizational Responsibility and Advancement (CORA) Online Training Certificate Programs the other colleges in the district has taken a lot longer than it should have. Fortunately, they have received information that gives them confidence that the contract between FCC/State Center Community College District and CORA will be completed no later than October 22, if not sooner. Early, in the fall 2021 semester, they organized and facilitated a meeting with the student equity leaders and contacts from each of the other colleges in the State Center Community College District to talk about the purpose and intended participants of each of the CORA training modules. They also discussed ways to market the program at their respective colleges and potential ways to incentivize participation. Once the contract is completed, they will convene a follow-up meeting with the student equity leaders and contacts from Clovis Community College, Madera Community College, and Reedley College to discuss logistics, implementation actions, and ways to monitor and track user data.

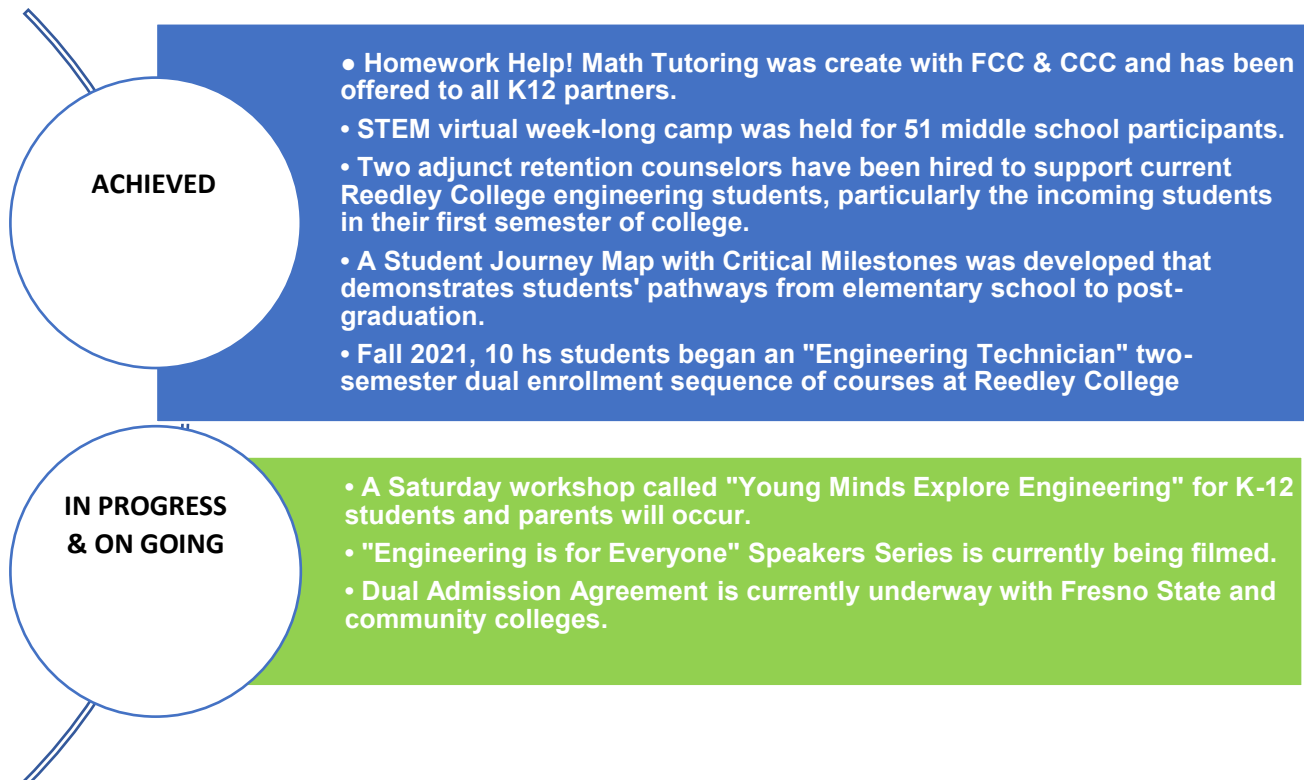


Fresno K-16 Collaborative – Reedley College

Reedley College has been active in participating in the Engineering, Single Subject Teacher and Accounting and Financial Management pathway working groups. They have been meeting with Collaborative partners to strengthen and establish intersegmental partnerships.

PROJECT AWARD TITLE: Engineering Pathways to the Future - Building Interest, Engagement and Achievement

Highlights



California and the Greater Fresno region suffers from a lack of professional engineers. Recent national data shows that universities are meeting only 45% of the demand for engineers across many specialties, including industrial engineering. Further, there is a lack of diversity among engineers, particularly gender diversity. Our initiative will increase the number and diversity of students entering engineering-related pathways to obtain skills certification, associate and bachelor's degrees using a Guided Pathways model. This initiative will enhance outreach to our Fresno area schools where up to 83% of students are ethnically diverse, and where up to 56% of community college students are female.

Phase one focused on integration of regional efforts for STEM outreach and engagement activities in our elementary, middle and high school populations. These outreach efforts were intentionally designed to increase access by our under-served

populations and provide equitable recruitment and support for disproportionately impacted students. Students were recruited into dual enrollment high school classes where they will experience career exploration within the STEM and engineering fields, be provided with practical experience using role models and industry partners, and learn about engineering disciplines, job skills and salaries.

The following engineering pathways are being developed:

- Manufacturing
- Geomatics
- Mechanical
- Electrical
- Civil
- Computer
- Biomedical
- Environmental

Phase two is to develop an engineering pathway in Geomatics, an emerging engineering field that combines aspects of civil engineering with surveying, geographic information systems (GIS), and drone technology. Reedley College will partner with Fresno State to offer both lower and upper division courses on the Reedley campus to promote local completion of this baccalaureate degree program.

Phase three is working on curriculum alignment resulting in enhanced associate-level transfer degrees in the seven remaining pathways, created in consultation with Fresno State and UC Merced. Pre-engineering curriculum will be expanded to include additional dual enrollment and concurrent enrollment opportunities, resulting in accelerating student movement through multiple engineering pathways at community colleges within the State Center Community College District. Support for student retention and success within these pathways will come from expansion of success teams, sharing resources across high schools, colleges and universities, including cross-trained counselors, faculty and special services such as tutoring. Student mentors and advisors will be trained and deployed to create high levels of engagement among pathway students. Professional development will be used to cross-train faculty and staff that participate in this program, offering an opportunity to build a common understanding and mission among counselors, faculty and staff, while also providing a Guided Pathways context and re-enforce the principles of culturally responsive pedagogy, and help build an anti-racist framework of education within these pathways.

Engineering Pathway

The Engineering Pathway has broken into four workgroups. The actions of each work group are summarized below.

Outreach/Awareness Building Group Progress to Date

- Multiple outreach events to be held throughout the region with 2-4 events planned for fall 2021, both in person and virtually. Plans to post events on the K-16 Collaborative website to help with advertising. Events include a collaboratively planned Saturday workshop called “Young Minds Explore Engineering” for K-12 students and parents; Fresno State, along with SCCC college contributions, presented engineering information for prospective students, in addition to a SCCC engineering student field trip to Fresno’s Pi Shop, a design shop for engineering and technology innovation. STEM Ambassadors led a Halloween themed Sci Fri event to bring in K-12 students to the campus.
- **Homework Help** began in late August with participating tutors from Reedley College Fresno City College and Clovis Community College’s Math Centers; subjects the tutors can help with include Math (starting at Algebra through Calculus) in addition to Engineering, Computer Science, and Physics. Hours will be held Monday through Sunday throughout the semester, and both in person at Reedley College’s Math Center and virtually through Fresno City College and Clovis Community College will be held. At the beginning of the pilot launch, the tutoring will be advertised for high school students enrolled in high schools with engineering pathways; plans are in place to offer services to a larger number of high schools in the near future.



- **Engineering Engagement Events** will take place monthly during tutoring hours where RC STEM professors and current STEM Ambassador students lead middle school and high school students in hands-on engineering projects such as VEX robotic arms and Arduino kit projects.
- **Bootcamp summer events** held throughout the region for K-12 student population.
 - With Reedley College's STEM virtual week-long camp held mid-July, a free week-long engineering camp was held for 51 middle school participants (incoming sixth to eighth graders, with students attending from Visalia to Kerman and everywhere in between. 83 total applications were submitted, indicating much interest. Focusing on introducing students to electrical and computer engineering, workshops included an introduction to Arduino circuit boards and Scratch programming taught by community college instructors. Six community college tutors from throughout the SCCC served as camp counselors, helping in breakout rooms and offering fun STEM-based activities during the break time between workshops. Training was held to help tutors be better prepared to work with minors more successfully. 100% of the attendees said they would attend again, and many commented that the hands-on aspect to the activities was much appreciated. Many indicated that they were anxious to have additional engagement opportunities such as this in the future, and several respondents indicated that another aspect they appreciated from this camp was the opportunity to spend time with engineering instructors and community college engineering students.
 - The Lyles College of Engineering at Fresno State held a week-long virtual **Summer Engineering Experience** and **Explore Engineering Program** mid-June for both high school and middle school participants. The hands-on sessions focused on engineering topics including construction management, robotics, and electronics. The high school aged camp received 33 applications and a total of 24 high school student participants, and the middle school program received 27 applications with 23 students enrolling.



CAMPAMENTO DE VERANO VIRTUAL
12 - 16 DE JULIO DE 2021

¿Está buscando diversión educativa para su hijo o hija este verano?

Reedley College ofrecerá un campamento de verano virtual de STEM (ciencia, tecnología, ingeniería y matemáticas) de una semana para los estudiantes que ingresarán a los grados 6-8. El campamento se reunirá virtualmente de 9:30 am a 12 pm todos los días. El campamento de este año se enfocará en ingeniería e informática. Cada día, los participantes participarán en dos sesiones en inglés donde serán guiados en diferentes proyectos que involucrarán la construcción y programación de circuitos con placas Arduino y el aprendizaje de la programación de computadoras usando el lenguaje Scratch.

Para obtener más información, comuníquese con la Coordinadora de STEM, Yuliana Martinez, yuliana.martinez@reedleycollege.edu

REGISTRO:

¡Este campamento será GRATUITO! Los estudiantes interesados en participar deberán escribir un párrafo que explique su interés en STEM, lo que esperan obtener de esta experiencia y por qué sienten que deberían ser elegidos para participar en el campamento. La fecha límite para enviar inscripciones es el 18 de junio. Se contactará a los participantes seleccionados para que recojan su kit Arduino y se les permitirá quedárselo (un valor de \$45). Su hijo/a puede completar el formulario de interés y el párrafo aquí: <https://forms.gle/jjonN63TK3zYyCym?>

¡El espacio es limitado!



- **“Engineering is For Everyone” Speakers Series.** A local videographer with a passion for education has been contracted for the creation of five to six short video biopics featuring diverse local engineers from a variety of engineering disciplines who have inspiring stories. Current engineering students, including those racially minoritized in the field, women, and first-generation, will also be featured. The biopics will be shared widely with K-12 partners to allow for instructors to show these in their classes or with their clubs. The subjects for the videos will be collaboratively identified to have diverse and inspiring backgrounds, and the videographer has started filming with four subjects.
- **“Robotics Is For Everyone” workshop series.** A survey was sent out to form an interest list for a fall workshop series for K-12 potential or current coaches, and over 50 instructors responded from a wide range of locations in the area, representing elementary, middle, and high school campuses. Plans are underway, working with Valley ROP, to host a series of workshops held at Reedley College in the fall, one in early October for potential robotics club advisors and/or instructors from the K-12 partners; the second workshop will be held in early December to include both the robotics instructors in addition to a small student team. Approximately 46 potential robotics instructors predominately from the southern rural Fresno County will attend the coaches’ clinic in October, and approximately 140 instructors and student teams will attend the December workshop. Experienced instructors with long-standing robotics programs from Sanger High School and Orange Cove High School will lead the workshops. Equipment necessary for these workshops has been purchased. Plans are also underway to host a robotics competition in spring. Fresno State and UC Merced will be invited to collaborate in sharing resources with the student participants at these camps.
- **Dual Enrollment Engineering Pathway.** Fall 2021, 10 students began an "Engineering Technician" two-semester dual enrollment sequence of courses at Reedley College that provide engineering pathway students with an introduction to design utilizing SOLIDWORKS software in the first semester and then, in the second semester, learning how to fabricate the widget they designed, using CNC or similar technology with safety and skill building on the use of various tooling machinery.
- **K-16 Retention Counselors.** Two adjunct counselors have been hired through Reedley College to support current Reedley College engineering students, particularly the incoming students in their first semester of college. Other important work will include collaborating with counselors throughout the K-16 service area with an emphasis on districts with engineering pathways at the high schools to inform them of opportunities and resources for future engineering students. They will work with counselors, administration, and instructors at these institutions to help advertise and recruit students for outreach events and student support opportunities such as tutoring. Currently, they are planning to begin hosting a regular “Engineering Networking Hour” for engineering students based on student feedback, with plans to bring in guest speakers from industry and four-year universities.

Barriers to Success: Setting mechanisms in place to be sustaining efforts beyond the end date of the grant will be a challenge, one that the recommendations for the design prototype to be developed collaboratively with Jobs for the Future will help with. Reedley College will also apply for an RP group Leading from the Middle Academy that would provide consultant support from October 2021 to December 2022 to help build a sustainable model for this regional pathway.

Tutoring/Academic Support Group Progress to Date

- **Homework Help.** Work with SCCCD tutoring centers and math centers to expand tutoring evening hours at centers throughout the district specifically for K-16 Collaborative partners. Tutors would be trained and assigned hours for 9-12th grade students enrolled in higher level math courses; tutoring centers can elect to invite students to attend in person and/or virtually. Plans are in place to open the Homework Help program in fall semester, with Reedley College’s Math Center providing Homework Help in person two afternoons and evenings a week, and Fresno City College’s Math Center providing online help Mondays through Thursdays from 3pm to 9pm and Clovis Community College on Sundays.

- To sustain and expand Homework Help, ongoing work will need to be done to:
 - Develop a sustainable projection for the number of mentors and tutors required to support the K16 engineering pathway.
 - Work with partners to standardize tutor training and identify needs that arise for ongoing support
 - Develop, train and assign a pool of tutors to support students in STEM courses, especially math courses.
 - Work with **California Teaching Fellows** to identify tutors in their tutoring pool who could teach higher level math at the participating high schools with engineering pathways; California Teaching Fellows already has an on-campus after school general math presence in the four school districts named in the K-16 Collaborative.
 - Work with California Teaching Fellows to develop **tutor pipeline program** and work with the K-16 Collaborative to identify districts interested in piloting such a project. California Teaching Fellows is interested in partnering with the Collaborative to create a future teacher pipeline between elementary, middle school, high school, and postsecondary institutions in our region, with students at each level of institution tutoring students younger than them.
 - Assessing sustainable funding opportunities involved with dual enrollment in noncredit tutoring courses for students as young as middle school.

HOMEWORK HELP for HIGH SCHOOL STUDENTS

FREE DROP-IN HOMEWORK HELP!

STEM classes and Engineering are hard, but we have you covered with help in:

- Math courses from Algebra through Calculus
- Integrated and Advanced Math courses
- Math 1-3 courses
- Physics
- Computer Science
- Engineering

Face to face or Zoom options

IN-PERSON HOMEWORK HELP:
 Reedley College Math Center
 Tuesdays & Thursdays, 3pm-8pm
 (559) 494-3711

VIRTUAL HOMEWORK HELP:
 Fresno City College Math Center
 Mondays-Thursdays, 3pm-9pm
<https://fresnocitycollege.zoom.us/j/91919191919>

VIRTUAL HOMEWORK HELP:
 Clovis Community College Tutorial Center
 Sundays, 2pm-6pm
 Meeting ID: 559 325 9248
<https://cloviscc.zoom.us/j/5593259248>

Reedley College Math Center is located in MBEI building

Fresno K-16

Contact Dr. Emily Berg,
emily.berg@reedleycollege.edu
 regarding Homework Help for Engineering Pathway advising and additional student resources, contact Gonzalo Rodriguez,
gonzalo.rodriguez@reedleycollege.edu

- **Lending Library for Engineering Students.** Set up a textbook lending library for all engineering classes at Reedley College to reduce burden on student basic needs.
- **Laptops.** An engineering grade laptop lending program for engineering students at Reedley College will be developed to

reduce barriers to success in engineering classes.

Barriers to Success: Sustaining work beyond the end date of K-16 Collaborative will be a challenge and recruiting enough skilled tutors able to work the hours needed to meet demands will be a challenge.

However, the initial pilot project will show what is possible and what the challenges are and allow tutoring centers to learn more about non-credit options for sustainability. Reedley College has applied for a RP group Leading from the Middle Academy that would provide consultant support and leadership development from October 2021 to December 2022 to help build a more sustainable model for this regional pathway. Jobs for the Future's recommendations for the design prototype to be developed collaboratively will help with process, structure, and design components to leverage and sustain co-curricular support and intersegmental cooperation.

Curriculum Group Progress to Date

- **Course Alignment.** Mechanical and civil engineering departments at Fresno State are adjusting some of their requirements to align with the SCCCDC course offerings. The Mechanical Engineering department is changing the circuits requirement to align with what the SCCCDC circuit course offers. The Civil Engineering department has modified the curriculum in the introduction to civil engineering and programming courses to align the curriculum to the community colleges, thereby reducing the students' time for degree completion.
- **Dual Admission Agreement.** Working with the Collaborative working group to firm up/implement the draft dual admissions agreement between Fresno State and each community college. The privileges associated with dual admissions which may include:
 - Student access to 4-year institution library and software. Affording other "special privileges" should also be considered, including Rec Center access and Fresno State events, in addition to tutoring privileges at the university.
 - The Collaborative may want to provide an "engineering grade" laptop for those entering the pathway.
 - Financial assistance for engineering pathway students.
 - Dual enrollment of high school students in community college courses could save hundreds of dollars in enrollment fees.
 - Dual admission to SCCCDC colleges and Fresno State University could save thousands of dollars in tuition.
- **Canvas.** Deploy Canvas as the learning management system in all classes in the engineering pathway at any level, since students in this field will likely need access to the same Learning Management System currently utilized by all post-secondary institutions in the region.
- **Best Practices.** Document proficiency standards and top ten best practices used to develop effective K12 engineering pathways to allow for replication and scaling
- **Curriculum Maps.** Modify the existing curriculum maps to use generic course descriptions not linked to any particular college's numbering system. Extend existing curriculum maps further "upstream" to account for middle school math and science classes.
- **Webpage.** Agree upon the ongoing operability requirements for a "host" webpage to support providing and maintaining the curriculum maps (existing K-16 Collaborative web page development efforts may not be sufficient to support the level of detail necessary for a useful curriculum resource).
- **Expanding Curriculum Maps.** Consider expansion of pathway curriculum maps to the region to encompass feeder high schools in western Fresno, Kings, Tulare, and Madera counties

- **Dual Enrollment.** Create dual enrollment arrangements between high schools and CCs, highschools and Fresno State/UC Merced and CCs and Fresno State/UC Merced
- **Shared Course Offerings.** Assess whether Fresno State/UC Merced want to offer engineering courses at partner CCs to increase access and serve to transition students to their institutions
- **Geomatics.** Reedley has met with Fresno State's Geomatics department to discuss mutual interests in enhancing offerings associated with this pathway. Faculty also discussed the technology needed to bring Reedley's current surveying classes (offered in Natural Resources) upto date, including new GPS units and more modern "home" stations for surveying
- **Certificates.** In addition to degree programs, related certificate programs (engineering technology, fabrication, maintenance, and related fields) will be described and publicized to enhance understanding of how such programs relate to degree programs and how existing or newly created certificates can serve students with strong "hands on" skills.

Barriers to Success: Finalizing the dual admission agreement with the institutions and their boards will be the focus of work in the short term. Then getting the word out to the students that this incredible opportunity exists will be the next challenge. Recruitment and networking events between SCCC engineering programs and Fresno State in which students can meet with counselors and professors to learn about these opportunities would help with advertising of this benefit for students.

Supporting the Student Journey Strategies @ Reedley College

In a Guided Pathways framework each student is supported holistically with personalized support strategies. This is a menu of support strategies based on equity minded design principles. The goal is to support each student in completing their educational goals and advancing to a transfer institution or living wage job.

CONNECTING	ENTRY	COMPLETION	ADVANCEMENT
<ul style="list-style-type: none"> • Engaging with Pathways <ul style="list-style-type: none"> ◦ Attend College Events related to pathways ◦ Student Ambassador/Navigator Visits ◦ College Tours • Registration/Application <ul style="list-style-type: none"> ◦ Connect with College (Outreach, Counseling) ◦ Connect with Pathway (Success Teams) • Communication <ul style="list-style-type: none"> ◦ Checklists for processes ◦ Welcome Email ◦ Constant and Consistent Communication • Career Exploration <ul style="list-style-type: none"> ◦ Career Coach ◦ Integration in Dual Enrollment • Dual Enrollment Opportunities <ul style="list-style-type: none"> ◦ Courses Aligned to Pathways ◦ Dual Enrollment Orientation ◦ Educational Plan • College Readiness <ul style="list-style-type: none"> ◦ Workshops ◦ Counseling Classes (Dual Enrollment) 	<ul style="list-style-type: none"> • Workshops (in person and online) <ul style="list-style-type: none"> ◦ College Goals and Expectations Application ◦ Financial Aid • Onboarding <ul style="list-style-type: none"> ◦ Tiger Preview ◦ Pathways Orientations ◦ Upward Bound ◦ Dual Enrollment ◦ Special Programs (DSPS, EOPS, CalWORKS, SSS, Honors) • Success Teams <ul style="list-style-type: none"> ◦ Canvas Courses ◦ Student Education Plans (SEP) ◦ Engagement Activities ◦ Proactive student supports ◦ Program Maps • Career and Transfer Opportunities <ul style="list-style-type: none"> ◦ Career Coach ◦ Transfer Center ◦ Career Center ◦ Career Exploration in Courses • Credit for Prior Learning Assessment <ul style="list-style-type: none"> ◦ Military Credit ◦ Industry Certification ◦ Prior Education • Basic Needs Assessment <ul style="list-style-type: none"> ◦ Food Pantry ◦ Technology Loan ◦ Transportation ◦ Housing 	<ul style="list-style-type: none"> • Support Services <ul style="list-style-type: none"> ◦ Counseling ◦ Library ◦ Tutorial, Math, Reading Writing Centers • Pathways Engagement <ul style="list-style-type: none"> ◦ Pathways Months ◦ Guest Speakers ◦ Student Navigators ◦ Clubs/Programs ◦ Celebrate Successes • Starfish <ul style="list-style-type: none"> ◦ Kudos ◦ Early Alert ◦ Progress Tracking • Success Team Support <ul style="list-style-type: none"> ◦ Single Points of Contact (SPOCs) ◦ Forum for Support ◦ Proactive support • Enrollment Management <ul style="list-style-type: none"> ◦ Strategic Scheduling ◦ Support student Education Plans • Equity Mindedness <ul style="list-style-type: none"> ◦ Culturally Relevant Curriculum ◦ Decolonizing Curriculum and Syllabi ◦ Personalized Student Support 	<ul style="list-style-type: none"> • Career/Transfer Research <ul style="list-style-type: none"> ◦ Job Fairs ◦ Transfer Fairs ◦ Pathways Months ◦ Career Center ◦ Career Coach ◦ Transfer Center • Applied Learning <ul style="list-style-type: none"> ◦ Internships ◦ Service Learning ◦ Research Projects ◦ Civic Engagement • Visits <ul style="list-style-type: none"> ◦ College or University ◦ Job or Employer • Application Assistance <ul style="list-style-type: none"> ◦ Transfer Workshops ◦ Financial Aid Workshops ◦ Job Skills Workshops ◦ Applications/Resume Workshops • Mentorship <ul style="list-style-type: none"> ◦ Job Shadowing ◦ Returning Students ◦ Student Ambassadors/Navigators • Personal Connection <ul style="list-style-type: none"> ◦ Warm handoff for student from one institution to the other (SPOC) ◦ Job assistance

Supporting the Student Journey Design Principles

CONNECTING	ENTRY	COMPLETION	ADVANCEMENT
Students will know about their college options and be connected to their local higher education institutions	Students will have guided onboarding support into college (Community College, 4 Year or through Dual Enrollment)	Student will be celebrated for completing milestones toward their goal	Students will have the opportunity to engage in transfer and career opportunities and a college or career visit
Students will engage in Career Exploration	Students will have a meeting with a counselor to set their educational goal (SEP)	Students will have the courses they need when they need them to complete their goals.	Students will have an opportunity to apply learning from their classroom (internships, projects, service learning)
Students will be supported in understanding Financial Aid options	Students will have assistance in applying for college and financial aid and be assisted in basic needs	Students will understand the support services available to them (library, tutorial, counseling) including basic needs	Students will be supported in applying to transfer (including financial aid) or applying for employment
Students will have an opportunity to take a college tour and speak to college outreach/counselors	Students will understand the career and transfer opportunities aligned with their goals.	Students will have the opportunity to engage in college pathways, programs, activities and clubs	Students will be able to interact with students in their designated transfer or career pathways
Students will interact with peer mentors or ambassadors	Students will engage in an onboarding activity (Tiger Preview, Pathways Connect)	Students know who is on their success teams and will be provided proactive information to help them achieve their goals	Students will get a warm handoff from each institution to another with consistent information and contact persons
Students will have dual enrollment opportunities and support	Students will be welcomed into their pathway and introduced to their success team.	Students will receive kudos and early alert notifications to keep them on track	Students will understand the salary range, educational experience required and job opportunities in their pathway
Students will have consistent and ongoing communication from higher education partners	Students will have clear communication from the institution and updated information online	Students will have a way to track their progress and ask for assistance	
Students and their families will understand the benefits of college and the expectations	Students will be aided in attaining credit for any prior learning, military service or industry certificates		

PROJECT AWARD TITLE: JFF Facilitated: Engineering Pathways to the Future: Building Interest,Engagement and Achievement

Highlights

ACHIEVED

- Jobs for the Future (JFF) has met with the pathway leaders and has held a series of design meetings to determine the scope of work in providing horizontal integration and shared resources.
- Vision Statement for Intersegmental Integration has been drafted.
- A Student Journey Map with Critical Milestones draft was developed that demonstrates students' pathways from elementary to post-graduation.

IN PROGRESS & ON GOING

- Role-alike groups are meeting; the groups are - Recruitment and Outreach, Math Teachers and Tutors, Counseling/Building a Culture of STEM.
- Movement from Individual Projects to Aligned Pathways is currently in the works.
- Prototype work will occur in November and December with the Collaborative Design Session workshop to review integration opportunities indentified by the role-alike groups and provide feedback on draft prototype.

Fresno K-16 collaborative's first pilot pathways project, Engineering Pathways to the Future: Building Interest, Engagement and Achievement. This project would be overseen by Reedley College as the co-lead of the Engineering Pathway. JFF proposed design and facilitation services to build out the horizontal and vertical integration design across the 4 working groups that have been formed to develop the core pathways components for this system.

The engineering pathway has set a goal of increasing associate's and bachelor's degree completion rates by 50% in two years, and transferring 100 more students per year through State Center CCD. The pathway plans to increase the ethnic and gender diversity of engineering students by 40% over two years, with increases in participation from Asian/ Pacific Islander, African American, and female students. This work will focus on building the collaborative infrastructure needed to meet these goals, with objectives related to the key elements of academic and student support, IT platforms, and shared assets.

In our approach, JFF has applied the principle of dual transformation—a strategy that simultaneously incorporates both the technical elements of horizontal integration as well as the systems-change principles and key leadership characteristics that are critical for addressing entrenched equity gaps. JFF has partnered with the established working groups for 6 collaborative design sessions to produce a workplan and guide for the horizontal integration needed to design a seamless, student-centered pathway.

Participants will include key administrators focusing on instruction and student support across the key partner institutions involved in the pilot, as well as frontline student support and instructional staff including counselors, outreach staff, tutors, mentors, and faculty.

At the conclusion of the project, JFF will produce a report outlining recommendations and provide a final presentation for the Fresno K-16 Collaborative leadership on the process, findings, and recommendations for this pathways prototype. This report will model the guided pathway approach to intersegmental cooperation that can be shared and replicated across the state with other programs of study across the curriculum.

The successful launch of an equity-oriented, seamless K-16 engineering pathway for Fresno-area students will have a far-reaching impact that advances the larger goals of the DRIVE initiative and integrates the work of the Race and Equity Subcommittee. The work of the K-16 collaborative in establishing seamless pathways across the educational segments in the Fresno region serves as a key mechanism for creating a workforce that can increase the economic competitiveness of the region, attract businesses to the area and provide new pipelines to economic mobility for students who have previously not had access to such opportunities. JFF has learned that inclusive growth requires broad-based stakeholder engagement across the spheres of human capital, economic development, and place-based conditions. Our approach focuses on building leaders' skills in incorporating diverse perspectives on regional challenges and co-designing strategies for increasing students' economic and social well-being.

Engineering Pathway

"Guided Pathways" Group Progress to Date

- Collaborative Design Meetings. Jobs for the Future (JFF) has met with the pathway leaders and has held a series of design meetings to determine the scope of work in providing horizontal integration and shared resources.
- The Charge of JFF. During the "Laying the Foundation" stages of the project in July, the planning team and JFF has developed their charge for the project:
 - Engage leaders in developing a first-of-its-kind prototype for horizontal integration across an aligned engineering pathway that spans from K-12 through community college, transfer, and bachelor's degree completion.
 - Unpack the barriers that contribute to equity gaps in engineering programs and degree completion and design intersegmental solutions.
 - Leverage current efforts and map resources across institutions and develop a strategy for utilizing shared assets and aligned academic and student supports.

- **Vision Statement for Intersegmental Integration.** Drafts of mission statements for the “NorthStar” intersegmental work were developed by the planning team and revised by the Collaborative Design Sessions workgroups. The North Star Statement is the following:
 - Students in the Fresno region—particularly those from groups underrepresented in engineering fields—have the engagement, role modeling, support systems, financial resources, math instruction and work-based learning experiences to meet critical milestones from K-12 through bachelor’s degree completion and see that engineering is for people of all backgrounds. This set of co-curricular supports is co-designed by K-12, community college, and university partners, with shared responsibility for key pathway assets, addressing institutional barriers, and increasing student achievement.
- **A Student Journey Map with Critical Milestones** draft was developed that demonstrates students’ pathways from elementary school to post-graduation (See Attachment 1). In the student journey map, two critical milestones were identified as having the highest impact on students’ success:
 - algebra readiness in middle schools
 - calculus readiness by the end of senior year in high school.
- **Role-alike Groups.** Role-alike groups are scheduled to be launched beginning in September and October to continue the process of resource mapping and design; many different role-alike groups were considered with three groups identified to meet. Role-alike groups include a leader from the design team and teams of:
 - Recruitment and Outreach
 - Math Teachers and Tutors
 - Counseling/Building a Culture of STEM
- **Movement from Individual Projects to Aligned Pathways.** Horizontal integration will look like moving FROM:
 - Isolated recruitment and outreach efforts TO a shared strategy for attracting students from underrepresented groups to the K-16 engineering pathway
 - Mapped course sequences beginning at community college level TO middle school and high school math and science curriculum aligned with engineering transfer pathways
 - Each institution taking its own approach to defining the baseline and identifying pathway students TO intersegmental data sharing and common data definitions allow partners to track pathway students across institutions
- **Creating the Prototype.** Prototype work will occur in November and December with the Collaborative Design Session workgroup to review integration opportunities identified by the role-alike groups and provide feedback on draft prototype.
- **Barriers to Success:** While fully implementing recommendations beyond the end date of the JFF consultation will be a challenge, the project will yield a workplan for horizontal integration and the leveraging of shared resources and assets that can be replicated and applied to any K16 pathway. Reedley College has also applied for a RP group Leading from the Middle Academy that would provide consultant support and leadership development from October 2021 to December 2022 to help build a more sustainable model for this regional pathway in order to carry out the process, structure, and design components from Jobs for the Future and continuing the work of the shared “success teams” recommended in the prototype.

Fall 2021 Updates:

- The number of students overall enrolled in engineering throughout the district has taken a sharp decline from 164 in fall 2019 to 145 in fall 2021 at Reedley College; this decline is in keeping with the overall decline of students at Reedley College during the same time frame, from 7295 to 5054 (See Table 1). Clovis Community College’s total student enrollment remained about the same from fall 2019 of 8,557 to fall 2021 to 8,044, but enrollment in engineering fell from 321 to 132 (See Table 4). Enrollment at Fresno City College also fell from 23,548 in fall 2019 to 19,569 in fall 2021, with overall enrollment in engineering also in decline, with 557 total students enrolled in fall 2019 to 435 in fall 2021 (See Table 3).
- Student declines in enrollment in both the program and the colleges had an effect of the disproportionately impacted student groups as well of females; Asian/Pacific Islander; and African-Americans. Reedley College met its 40%

increase goal for African-Americans, and saw a rise in females from 13% in fall 2019 to 17.9% in fall 2021, just below the target of 19%. At Fresno City College, there was also a slight rise in female engineering students from 13.3% in fall 2019 to 14.5% in fall 2021, still shy of the 18.6% growth goal. Asian/Pacific islander engineering students grew from 16.3% in fall 2019 to 22.8% in fall 2021, very close to the 23% growth goal. At Clovis Community College, female engineering students rose from 15.9% in fall 2019 to 18.2% in fall 2021, falling short of the growth goal of 22%. Similarly, enrollment of Asian/Pacific islander engineering students rose from 15% in fall 2019 to 22% in fall 2021, exceeding the growth goal. (See Tables 1-4)

- Two collaborative design sessions have been held by Jobs for the Future to establish common working objectives and finalize plans for the next steps. A North Star statement was shared and feedback gathered to create a revised statement. The development of a student journey map with critical milestones was created with feedback (See Attachment 1 for the draft). In the student journey map, two critical milestones were identified as having the highest impact: 1) algebra readiness in middle schools, and 2) calculus readiness by the end of senior year in high school.
- Role alike groups to be launched in the next few months to focus on key topics and roles identified as critical from the previous collaborative design sessions. A final Collaborative design session will be held in late fall to present drafts of recommendations for next steps to ensure engagement in the engineering pathway and success at milestones.

Table 1: Reedley College Program Growth Data, 2019-2021

	Fall 2019 Overall RC students	Fall 2019 Engineering AS Program Students	Fall 2020 Overall RC students	Fall 2020 Engineering AS Program Students	Fall 2021 Overall RC students	Fall 2021 Engineering AS Program Students	50% Program Growth	Difference between Growth Goal and Fall 2021 Actuals
Total Unduplicated Students	7295	164	6910	172	5054	145	270	-125
Gender								
Male	55%	138 (84%)	41.40%	144 (83.7%)	42.80%	116 (80%)	221	-105
Female	43%	22 (13%)	57.00%	24 (14%)	55.80%	26 (17.9%)	35	-9
Ethnicity								
Hispanic	75%	129 (79%)	74.50%	137 (79.7%)	75.60%	119 (82.1%)	209	-90
White (Non-Hispanic)	15%	24 (15%)	15.70%	28 (16.3%)	15.80%	16 (11.0%)	41	-25
Asian/Pacific Islander	5%	5 (3%)	4.60%	5 (2.9%)	3.00%	3 (2.1%)	8	-5
Multi-Ethnicity	2%	3 (2%)	2.20%	2 (1.2%)	2.30%	3 (2.1%)	5	-2
African-American	2%	2 (1%)	1.90%	0 (0.0%)	2.40%	3 (2.1%)	3	0
California Promise Recipient	62%	114 (70%)	57.40%	114 (66.3%)	58.80%	79 (54.5%)	189	-110

Table 2: Reedley College Goal Growth Data, 2019-2021

	Fall 2019 Overall Reedley College students	Fall 2019 Engineerin g AS Program Students	Fall 2020 Overall RC students	Fall 2020 Engineerin g AS Program Students	Fall 2021 Overall RC students	Fall 2021 Engineerin g AS Program Students	40% Increase Goal	Difference between Growth Goal and Fall 2021 Actuals
Total Unduplicated Students	7295	164	6910	172	5054	145		
Gender								
Male	55%	138 (84%)	41.40%	144 (83.7%)	42.80%	116 (80%)		
Female	43%	22 (13%)	57.00%	24 (14%)	55.80%	26 (17.9%)	31 (19%)	-5
Ethnicity								
Hispanic	75%	129 (79%)	74.50%	137 (79.7%)	75.60%	119 (82.1%)		
White (Non-Hispani c)	15%	24 (15%)	15.70%	28 (16.3%)	15.80%	16 (11.0%)		
Asian/Pacific Islander	5%	5 (3%)	4.60%	5 (2.9%)	3.00%	3 (2.1%)	7 (4%)	-4
Multi-Ethnici ty	2%	3 (2%)	2.20%	2 (1.2%)	2.30%	3 (2.1%)		
African-Ame rican	2%	2 (1%)	1.90%	0 (0.0%)	2.40%	3 (2.1%)	3 (2%)	0

Table 3: Fresno City College Goal Growth Data, 2019-2022

	Fall 2019 Overall Fresno City College students	Fall 2019 Engineerin g AS Program Students	Fall 2020 Overall FCC students	Fall 2020 Engineerin g AS Program Students	Fall 2021 Overall FCC students	Fall 2021 Engineerin g AS Program Students	40% Increase Goal	Difference between Growth Goal and Fall 2021 Actuals
Total Unduplicated Students	23,548	557	21,099	473	19,569	435		
Gender								
Male	41.40%	468 (84%)	38.20%	377 (79.7%)	37.30%	368 (84.6%)		
Female	27.00%	74 (13.3%)	60.20%	84 (17.8%)	60.90%	63 (14.5%)	104 (18.6%)	-41
Ethnicity								
Hispanic	60.70%	305 (54.8%)	60.90%	250 (52.9%)	60.70%	231 (53.1%)		
White (Non-Hispani c)	16.40%	102 (18.3%)	16.70%	80 (16.9%)	17.70%	64 (14.7%)		
Asian/Pacific Islander	12.30%	91 (16.3%)	12.20%	89 (18.8%)	11.30%	99 (22.8%)	128 (23%)	-29
Multi-Ethnici ty	3.60%	23 (4.1%)	3.70%	22 (4.7%)	3.80%	22 (5.1%)		
African-Ame rican	5.50%	27 (4.8%)	4.80%	25 (5.3%)	5.20%	17 (3.9%)	38 (7%)	-21

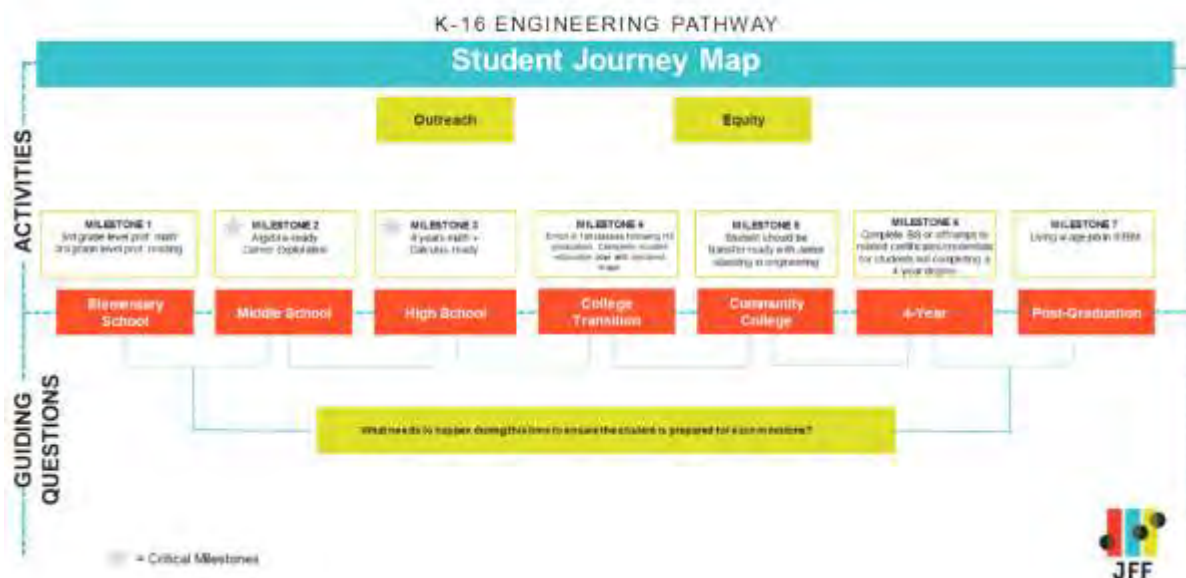
Table 4: Clovis Community College Goal Growth Data, 2019-2021

	Fall 2019 Overall Clovis Communit y College students	Fall 2019 Engineerin g AS Program Students	Fall 2020 Overall CCC students	Fall 2020 Engineerin g AS Program Students	Fall 2021 Overall CCC students	Fall 2021 Engineerin g AS Program Students	40% Increase Goal	Difference between Growth Goal and Fall 2021 Actuals
Total Unduplicated Students	8,557	321	9,004	205	8,044	132		
Gender								
Male	40.00%	267 (83.2%)	37.50%	169 (82.4%)	39.10%	106 (80.3%)		
Female	58.30%	51 (15.9%)	60.90%	33 (16.1%)	59.40%	24 (18.2%)	71 (22%)	-47
Ethnicity								
Hispanic	2.50%	128 (39.9%)	46.70%	96 (46.8%)	46.60%	50 (37.9%)		
White (Non-Hispani c)	34.60%	112 (34.9%)	31.60%	63 (30.7%)	31.70%	42 (31.8%)		
Asian/Pacific Islander	12.20%	48 (15%)	12.10%	33 (16.1%)	11.80%	29 (22.0%)	67 (21%)	-38
Multi-Ethnici ty	3.60%	23 (4.1%)	5.20%	4 (2.0%)	6.00%	8 (6.1%)		
African-Ame rican	2.50%	24 (2.2%)	2.90%	6 (2.9%)	2.70%	3 (2.3%)	7 (2.2%)	-4

Table 5: Total Number of Engineering Degrees and Certificates Earned by SCCC Students, 2019-2021

	2019-2020	2020-2021
Clovis Community College	11	70
Fresno City College	17	15
Reedley College	14	15
Total in SCCC	42	100

Attachment 1: Engineering Pathway Student Journey Ma (Draft)



Key Element	Relevant Objectives by 2030	Relevant Targets for Pilot Period
Academic and Student Support	<ul style="list-style-type: none"> Adequate counseling support Adequate academic support and tutoring Basic needs support Intentional cohort-based community building Social-emotional support 	<ul style="list-style-type: none"> Lower student-to-counselor ratio from 500:1 to 400:1 Establish a student-to-tutor ratio of 30:1 70% attendance rate at tutoring sessions
IT Platforms	<ul style="list-style-type: none"> Build intersegmental data system, including use of unique student IDs to support longitudinal tracking of students 	<ul style="list-style-type: none"> Drive CCGI adoption and use to provide actionable data for K-12 institutions
Shared Assets	<ul style="list-style-type: none"> For engineering pathway: <ul style="list-style-type: none"> Defined set of partner institutions for each pathway Defined pool of faculty, facilities, and academic support Centralized pool of counselors 	<ul style="list-style-type: none"> For engineering pathway: <ul style="list-style-type: none"> 35% centralized administrative processes Define partner institutions Establish faculty pool Establish pathway tutors Start building central pool of counselors exclusively for K-16



Fresno K-16 Collaborative – Fresno Pacific University

Fresno Pacific University (FPU) has been active in participating in the Single Subject Teacher, Accounting and Financial Management and Upskilling Teachers' Masters' pathway working groups. FPU has also been instrumental in building the Fresno K16 Collaborative website with JSA. They have been meeting with Collaborative partners to strengthen and establish intersegmental partnerships.

PROJECT AWARD TITLE: Building Pathways for Degree Attainment

Highlights

ACHIEVED

- 19 math teachers were recruited in Cohort 1 and are currently enrolled in the Master's program. Teachers who started the program in Spring 2021 will finish by July 2022.
 - 26 math teachers were recruited in Cohort 2 and are currently enrolled in the Master's program. Teachers who started the program in May 2021 will finish in December 2022.
 - Enrolled 69 new transfer Liberal Arts Science Authorization students.
 - Fall 2021 registration of 28 STEM Credential students
- Fall 2021 181 students enrolled in the Liberal Arts with Science Authorization program.
- Enrolled 6 new students into Accounting program Fall 2021.

IN PROGRESS & ON GOING

- Cohort 3: Current outreach to 12 teachers occurring Fall 2021. They will start their program in January 2022 and finish their program in July 2023.
- FPU faculty developed a 3-year BA program in STEM fields. Next steps will be to launch a message to K12 partners in the collaborative to share this opportunity with their college-going seniors.
- Progress on the K-16 Collaborative website is full speed ahead. Launch of the website should be by December 2021.

Fresno Pacific University (FPU) has supported 3 pathways.

Dual Enrollment: Master of Arts Degrees in Mathematics

Fresno Pacific has offered an 18-month MA in Math Education to 45 high school math teachers that will qualify them to teach math Dual Enrollment classes. In order to do this, we offered affordable and efficient MA degrees in the School of Education

that, when combined with BA degrees in math, qualify high school teachers for community college employment. Key features:

- Cohort model (15+/cohort)
- These are five-semester, 18-month, 30-unit MA degrees.
 - \$21,000 tuition: resources provided by the Federal Teach Grant, the AIMS grant, Fresno County Superintendent of School K-16 Grant Funds, and a modest student contribution.
 - Targeted recruitment to K-12 Fresno districts based on long-term relationships between these districts and our teacher education program faculty.
 - a. Specific recruiting focus was on teachers employed in high schools within the K-16 collaborative region that have the highest percentages of African American students. The collaborative team prioritized recruiting high school math teachers of color who teach in low opportunity zones and will connect effectively with local students who come from traditionally marginalized communities.
 - b. Equity training for math teachers who enroll in the program. We purchased certificated trainings for community college faculty on bias and culturally responsive pedagogy which is focused on teaching African American men.
 - c. FCSS will provide professional learning seminars for all math and English teachers enrolled in the K-16 Dual Enrollment/ MA programs. Seminar topics: preparation to teach Dual Enrollment courses and transition to the professional role and expectations of teaching at community colleges.

Upskilling Teachers' Masters' Pathway

- The Following Students began their journey towards this master's degree in January 2021 and are scheduled to complete it in July 2022. These first 20 are all from eligible districts: Clovis, Fresno, and Sanger USD
- Of the 48 who enrolled and matriculated into the MA in Mathematics Secondary Emphasis program, 46 remain enrolled. Two have dropped and one has requested and received a Leave of Absence for one semester due to family health concerns.
- Next steps for project completion will be to sustain the enrollment of all current students through graduation. Dr. Brownell states that of 48 enrolled students, at this time 46 remain enrolled. This speaks well to a high expectation for program success.
- Cohort 3 has yet to launch marketing. Funding through grants shows \$15,000 per student. TEACH grant will bring the funding to a very high level. Thus, the only barrier to completion for this cohort would be marketing and enrollment support so that the teachers can begin their coursework in January 2022.
- Cohort 1: teachers who started the program in Spring 2021. They will finish in July 2022.
- Cohort 2: teachers who started the program in May 2021. They will finish in December 2022.
- Cohort 3: Current outreach to 12 teachers from the Central valley – expanded outreach to Central Unified and beyond, will start their program in January 2022 and finish their program in July 2023.

Earn Your M.A. in Math Education Secondary Emphasis

Now available to math teachers:
who possess a bachelor's degree in mathematics and are interested in qualifying to teach dual-enrollment courses in their high schools or work as adjunct instructors in a community college.

Courses cover a range of mathematics topics such as advanced algebra, geometry and calculus. The program includes courses like Teaching Math for Social Justice and Data Science. Students will read the research in math education and complete a series of three comprehensive exam papers embedded in the coursework.

Program Highlights:

- Cohort of 10-12 students
- Classes begin January 10, 2022
- Five semesters total with two 3-unit courses per semester
- Opt-into Face-to-Face or Synchronous-remote class sessions
- All classes (whether F2F or Online) will meet once per week on the same evening
- Classes begin at 5:15 pm to fit teachers' lives
- Majority of the tuition cost will be covered through grants*
- Equity and race training will better prepare you to serve your students

Program Cost**

- Tuition: \$21,300
- Grants:
 - \$6,000 per student (from the Fresno K-16 Collaborative)
 - \$5,000 per student (from the AIMS Center at FPU)
 - \$3,000 per student tuition reimbursement (from the Fresno County Superintendent of Schools)
 - Approximately \$4,500 per student (from Federal Teach Grant)
 - Free Mentoring from a Community College Instructor

Information Meetings: at 4:00 PM
Any of these Wednesday dates:
October 26, 27 or November 3

Register here for any of these free meetings:
<https://bit.ly/MAA-MathEdCo-2021>

Fresno K-16 Collaborative

Fresno Pacific University

*Tuition and grants are estimates and available for qualifying students. Contact the FPU Student Financial Services Office at 559-453-2041 for more information.

For more information contact:
Clara Brownell, Ph.D.
clara.brownell@fresno.edu or 559-453-2046

This program has been made available in part by the funds and efforts of the Fresno K-16 Collaborative.

Accounting Pathway

The School of Business at Fresno Pacific University worked with our community college partners to support an Accounting pathway. Our CC partners focused on identifying cohorts of students to begin this pathway during their junior year of high school. Upon high school graduation, pathway students will earn a certificate of achievement and will be positioned to continue their students at a community college, ultimately transferring to Fresno Pacific University to complete the requirements for an accounting bachelor's degree.

FPU currently offers an accounting degree to traditional undergraduate students and offers a two-year graduation degree for students transferring with an Associate Degree for Transfer and a four-year graduation degree for students beginning our program without any transfer credit. With these guarantees, FPU has committed to ensuring classes are offered and seats are available to students. Additional marketing opportunities with accounting specific advertising and promotional materials will be developed so that students beginning the accounting pathway in high school know about our transfer guarantee and see FPU as a viable option.

An additional component of this project included developing a year-round accelerated accounting program offered in the evenings for students that need to work during the day to support their families.

- The following events/partnership meetings were held since Progress Report 1 was submitted:
 - March 10 Live Platform Q Presentation on FPU's ACCT/BUSN
 - March 11 Clovis Unified K-16 collaboration and outreach meeting
 - March 12 Clovis CC collaboration and outreach meeting
 - April 6 Fresno City College Outreach
 - April 30 ACCT Presentation to Business class at Reedley CC
 - April 26 Fresno City ACCT Transfer collaboration/outreach meeting
 - May 3 ACCT Presentation to Business CTE class at Clovis West
 - May 6 Career Services & Accounting Pathway Collaborative
 - June 15 Freshman Registration Business & Accounting Discussion with Students
 - June 16-17 ACCT Camp with Fresno City College
 - July 15 Clovis Community College Roadmap discussion and future projects
 - July 16 Freshman Registration Business & Accounting Discussion with Students
- FPU enrolled 6 new students into our ACCT program as of Fall 2021.
 - 5 Freshmen
 - 1 transfer (FPU readmit)
- This represents a decrease in new enrollment of 2 students when compared to Fall 2020:
 - 5 Freshmen
 - 3 transfers
- FPU recognizes that recruiting more STEM teachers or accountants begins with recognizing the barriers students encounter in considering these pathways. Time to complete a program and cost are consistent challenges for valley students. For this reason, the 3-year degrees were developed for both programs. This was a big effort! By the time these pathways were completed and "wired into" institutional documents (e.g.: Catalogues, marketing, etc.), the optimal recruiting season for undergraduates (early fall for the following year) was long past. Thus, our numbers of incoming traditional STEM majors and business/accounting majors are not strong. They expect to see the effectiveness of this approach in the numbers of students that are attracted to FPU Fall, 2022.



FPU'S ACCELERATED 3-YEAR BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION

The path to a career in business is now easier than ever. By saving a year of education, paired with FPU's affordable tuition cost and generous scholarship and grant programs, your bachelor's degree in business administration is now more accessible than ever. Through our 3-Year Bachelor's Degree Program, courses are scheduled so students have the option to receive their BA degree in 3 years or in 2 years if transferring with a completed ADT (AS-T), saving you one year of time and money. If the accelerated 3 year option is not for you, you can still complete the degree at our standard 4 year pace.

MAJORS IN THE 3-YEAR BUSINESS PROGRAM

Incoming Freshmen:	B.A. Business Administration
3 year BA	B.A. Business Administration – Finance
Transfer Students With	B.A. Business Administration – Marketing
Completed ADT or AS-T:	B.A. Business Administration – Management
2 year BA	B.A. Business Administration – Software Development



BECOME A STEM TEACHER WITH FPU'S 3-YEAR TEACHER PREP PROGRAM

The path to a teaching career in Math, Biology, or Chemistry is now easier than ever. Through our 3-Year STEM Teacher Prep program, courses are scheduled so students have the option to receive their BA/BS degree in 3 years or in 2 years if transferring with a completed ADT (AS-T). This way, students can jumpstart their teaching career and work towards a credential in their final year of study, saving time and money. Saving a year of education, paired with FPU's affordable tuition cost and generous scholarship and grant programs, will help make your dream of teaching more accessible than ever.

MAJORS IN THE STEM TEACHER PREP PROGRAM

Incoming Freshmen:	BA/BS in Biology: Secondary Teaching
3 year BA + 1 year STEM	BA in Math: Secondary Teaching
credential program	BA in Chemistry
Transfer Students With	BA/BS Biology: Secondary Teaching
Completed ADT or AS-T:	BA in Math: Secondary Teaching
2 year BA + 1 year STEM	BA in Chemistry
credential program	

STEM Single Subject Teachers Pathway

For the last two years, Fresno Pacific University has worked closely with Clovis Community College (CCC) to develop and support a seamless, guided pathway into careers in education. An MOU describing the launch of this pathway for future elementary teachers was vetted and approved at both institutions. During the 2019-20 academic year, administrators and faculty at CCC introduced this pathway to education majors.

The pathway is designed as a cohort model, with protected course schedules which allow CCC students the opportunity to work. CA Teaching Fellows Foundation (CTFF) was invited to partner with CCC and the MOU between CTFF and CCC has also been vetted and approved. The partnership with CTFF provides opportunities for CCC students to earn an income, receive leadership training, and work with students in after-school programs as well as assistants to teachers during the school day.

The Fresno K-16 Collaborative grant built on this foundation by providing the resources for three critically important additional features to the K-16 education pathways offered through the institutional collaboration:

(1) The inclusion of K12 partners and Fresno Pacific University with CCC in the holistic design of the pathway and, (2) the expansion of the Student Success Team which CCC will convene regularly and (3) the launch of a comprehensive guided pathway for STEM majors seeking to become high school teachers.

This grant provided resources to develop and staff a collaborative Student Success Team in support of Guided Pathways at CCC, consisting of departmental staff, academic advisors, counselors, recruiters, success coaches, peer mentors, and financial aid staff. The power of the Student Success Team will be substantially increased by including intersegmental partners. The collaboration among the members of the Student Success Teams will facilitate the process of identifying new dual enrollment courses that would benefit students seeking careers in education as STEM teachers.

Single Subject Teaching - STEM Pathway: Liberal Arts with Science Authorization

- FPU enrolled 69 new transfer Liberal Arts Science Authorization students (Collaborative Partner institution students: 29)

<u>Name of Institution</u>	<u># of Transfer Students</u>
College of the Sequoias	19
Fresno City College	17
Bakersfield College	8
Clovis Community College	5
Porterville College	5
West Hills College	4
Reedley College	3
California State University, Fresno	3
Taft College	2
Madera Community College	1
Grand Canyon University	1
University of Phoenix	1

Total: 69 Students (Collaborative Partner institution students: 29)

- For Fall 2021 we have a total of 181 students enrolled in the Liberal Arts with Science Authorization program.
- Fall, 2021 registration of STEM Credential students: 28 students.
- Fall enrollment:
 - Biology-secondary teaching: 1
 - Mathematics – secondary teaching: 2 new, 6 returning
 - BS Biology – secondary teaching: 1 new, 6 returning
 - BS Liberal studies, math concentration: 2
- Next steps: The most innovative initiative FPU faculty developed in year 1 was to create 3-year BA programs in STEM fields. By the time this work was created, the primary season for recruitment was over. Next steps will be to launch a clear message to K12 partners in the collaborative to share this opportunity with their college-going seniors.



Fresno K-16 Collaborative – Fresno State

Fresno State has been active in participating in the Accounting and Financial Management, Engineering and Single Subject Teacher pathway working groups. They have been meeting with Collaborative partners to strengthen and establish intersegmental partnerships.

PROJECT AWARD TITLE: Fresno State Accounting/ Finance Pathways

Highlights



The "Fresno State Accounting/Finance Pathways" project created an ecosystem to support student success to earn bachelor's degrees in Business Administration, with Accounting or Finance Options. To achieve this, the program has four activities:

(1) providing DEI training tailored to social issues of high relevance to business and then integrating this training into the

curriculum and advising

- (2) providing more clarity and specificity for the ADT in business,
- (3) developing a micro-internship program that allows far more students to participate in this high impact experience, and
- (4) offering an "Introduction to Craig School of Business" (1 credit) during the summer to narrow the equity gap by boosting the preparedness of transfer students.

Transfer students make up a significant portion of Fresno State's Craig School of Business student body. For example, in fall 2019, the Craig School had 276 new freshmen and 273 new undergraduate transfer students. In fall 2018, the Craig School enrolled 297 new freshmen and 252 new undergraduate transfer students. In fall 2017, the Craig School enrolled 307 new freshmen students and 338 new undergraduate transfer students. The three Fresno area community colleges provide the majority of transfer students to the Craig School of Business, for example 68.8% of all transfer students in fall 2019. A CSU systemwide ADT exists in business, but students who arrive at the Craig School of Business with the ADT are not positioned to finish up at the Craig School with only 60 units. The system wide ADT needs increased clarity and specificity to work well for students on our specific campuses. The Fresno K16 Collaborative program addresses this high need: providing clarity and specificity to the ADTs, and improving advising about ADT pathways to enable students to make key choices so they only have to earn 60 units when they transfer to the Craig School.

The Craig School student body like that of the university's service area is majority-minority, with the three largest groups being Hispanic (40.8%), White (27.9%), and Asian (12.1%) in fall 2019. Moreover, 59.7% were PELL Grant eligible and 65.2% were first generation students in fall 2019. The Craig School recently established a Task Force on Inclusion and Social Impact to address the needs of its majority-minority, first generation, and/or low-income student body, a need also reflected in new AACSB accreditation standards and in the Craig School's participation in the United Nations Global Compact. For this project, the Craig School brought in DEI experts to deliver an on-going DEI training series to faculty and staff. Faculty aligned their courses with equity needs and best practices as well as advisors aligned their work more with equity needs and incorporated best practices. The Task Force on Inclusion and Social Impact evaluated and gave direction to the work of DEI undertaken by faculty and advisors. Moreover, the Craig School offered the "Introduction to CSB" one-credit course during the summer to further narrow the equity gap for boosting preparedness for transfer students.

Finally, funds were used to create a micro-internship program that opened up the internship experience to a broader range of students at varying levels of preparedness, especially during the pandemic and its recovery that has placed stress on many regional employers. Internships have been proven to create job offers for our students. The university's Career Center conducts an "Outcomes Survey." The results show an internship resulted in a job offer for 37.5% (2019) and 30.6% (2018) of all bachelor degree recipients.

The results are even better for the Craig School. This summer, our students on internship had an 85% fulltime placement rate (22/26).

Accounting & Financial Management Pathway

● DEI Training & Curricular Alignment

Craig School entered into a partnership with Association of College and University Educators (ACUE) to provide customized training on "Inclusive Teaching for Equitable Learning" to 90+ of their faculty members. They will be launching the pilot cohort of 33 faculty the first week of September and the last two cohorts will be conducted in early spring (to conclude on or before the end of March). The training measure is in development for this fall semester which will be used to evaluate the effectiveness of the training with respect to learning. In addition, they are in the review process (Institutional Review Board) to gather pre and post data from their students that measures belongingness and the extent to which students observe inclusive practices in the classroom. Finally, they are developing a DEI program for their staff to launch this fall semester.

- **Micro-Internships**

In fall 2021, they have expanded their pre-experience course to two sections (in-person and virtual) to increase access for students who will be preparing for experiential learning opportunities.

Through the Solutions Hub they have retained two CSB faculty experts to create consulting modules for the Canvas course for Micro-Internships. They have identified ten students to start working on micro-internships during the fall 2021 semester. Student Experiences and the Solutions Hub have secured a partnership with the Fresno Metro Black Chamber of Commerce (FMBCC) to be a part of the "Betting Big" entrepreneurial training program for 30 clients. FMBCC clients will be providing 30 micro-internships for CSB students to gain experience and provide a service to new businesses in the Central Valley. This pilot program (and course) will be used to scale up this opportunity for students in future semesters. They have a growing interest in the business community to offer micro-projects and they also have a proposal with the Fresno Chamber of Commerce to provide micro-internships for businesses who access PPP funds later on in the fall.

- **CSB 50**

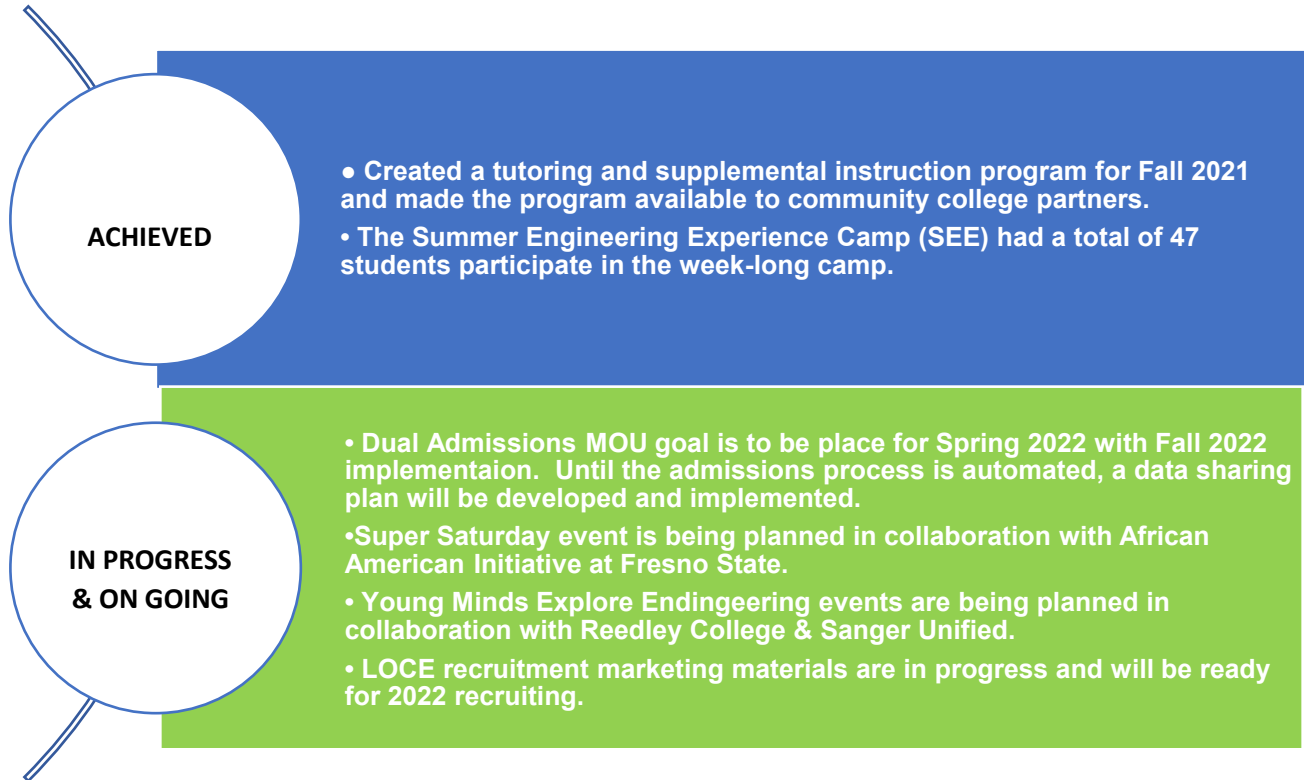
Two summer sessions of CSB 50 were offered to newly admitted transfer students. In these two sessions, they were able to dive deeply into the academic and career expectations for Accountancy and Finance, which allowed students to plan for their careers and start the fall semester with a focused sense of purpose. They also provided workshops relevant to what these particular students needed, including resume writing and networking. Students expressed gratitude for the opportunity to use CSB 50, and feel prepared to begin the fall semester with clear direction. Initial enrollment (16) was not as large as originally anticipated and was likely attributable to the Zoom modality of the class. However, the possibility of offering a third section, face-to-face, is being explored for early spring of 2022.

- **Business Advisor Network**

They have had continued meetings with Clovis Community College to discuss a transfer agreement between our campuses. After discussing with their director of Outreach and VP for Enrollment Management it was decided that we will pursue the University Transfer Scholars Program in lieu of the previously planned transfer agreement. The University Transfer Scholars Program (UTSP) allows students to be advised every semester by either Clovis Community College or Fresno State to stay on track with the necessary coursework for transfer. This also allows transfer students to build a connection to the campus community early on in their academic career. As long as students follow the plan, maintain an agreed upon GPA, and attend advising meetings, they will be guaranteed admission to Fresno State and the Business program. They are also organizing plans to broaden the discussion with other campuses and begin the formal Business Advisor Network this fall.

PROJECT AWARD TITLE: Broadening Participation and Success in Engineering and Construction Management Education and Careers

Highlights



Fresno State - Engineering with the Collaborative partners executed their proposal to support a great need for diverse engineers and construction managers in the profession. Our regional student pipelines and efforts are not producing adequate numbers of students who pursue engineering in college resulting in missed opportunities that could in many cases be life-changing. Only a tiny fraction (less than 1.5% in Fall 2020) of high school graduating classes from our regional school districts in any given year end up enrollingas freshmen in engineering and construction management programs at Fresno State.

Only 27 students who identified as African American are enrolled in engineering and construction management programs in the Lyles College of Engineering. This comprises only 2% of our students, even though African Americans constitute 5.8% of the Fresno County population. This is of special concern because African American students are not only minorities as engineering and construction management students but are also severely underrepresented in the corresponding professions. By leveraging the assets of the greater Fresno region, we will work to broaden the participation and success of students pursuing engineering and construction management education and careers. The project has a strong focuson African American as well as other under-represented students.

Our approach is focused on outreach, fostering access to participation in engineering education, assisting with academic readiness of students entering the university as first-time freshmen, regional coordination of articulation, dual enrollment and admissions, K-12 teacher professional development in engineering related topics, and overall student support.

Engineering Pathway

- Dual Admissions MOU
 - Further discussions with Fresno State Enrollment Management Office and K-16 partners have taken place. The group learned about Norco College's implementation of Dual Admissions. It was decided that there will be a broad MOU with SCCC with appendices describing customized processes for each community college. A pending decision is whether Fresno State will mandate specific course requirements for transfer students. This matter will be discussed at the LCOE college level with faculty, and if this is the direction they will proceed, Fresno State will need to set up public hearings to share the information with the community. A decision on this will be made in October 2021. The goal is to have the MOU in place for Spring 22/Fall 22 implementation. A draft of a college-based process (with Fresno City College) has been prepared and will be shared with all parties for review and further (customized) adoption by all colleges. For the first two years, it is very likely that the dual admissions process will not be automated; a data sharing plan will be developed and implemented. The CSU Chancellors Office will implement system wide solutions (via PeopleSoft) at some point of time after the state legislature / governor mandate the dual admissions for the CSU and Community Colleges. This will then allow for 'dual admitted' students to be in the CSU 'system' making it easier for issuance of email IDs, student IDs, tracking, etc.
 - Dual / Cross Enrollment
 - Fresno State Registrar has reviewed our goals with regards to Cross Enrollment of SCCC students in select LCOE courses. They are looking to pilot this in Fall 2022 (possibly Spring 22 if the protocols are finalized in the next 6-8 weeks).
 - K-12 Outreach Programs
 - October 23: Super Saturday @ Fresno State in collaboration with African American Initiative at Fresno State
 - Young Minds Explore Engineering: October 30: Reedley area schools (arranged with Reedley College)
 - Young Minds Explore Engineering November 13: Sanger area schools (planning pending with Sanger Unified; Initial contacts made)
- ** They had a meeting with Fresno Unified School District's Office of African American Academic Acceleration (A4) leadership to discuss how they can partner with them to develop and offer outreach programs for students, and their families/other supporters. The A4 group is interested in partnering, and will get back to them in about 4 weeks with some specific ways that they can collaborate. It may be helpful to have some senior FUSD leadership be made aware of this process so that they can if they choose to make this a priority for A4.**
- Student Support Services
 - They began their tutoring and supplemental instruction program for Fall. The program will be available to K16 community college partners. This program is separate from the Learning Center programs offered in the Lyles College of Engineering. They have shared events information with the K16 partners (e.g., LCOE Tech Talks, Industry Expo, etc.).
 - Summer Programs
 - They offered two summer engineering experience camps for middle school and high school students. They also offered

FRESNO STATE
Lyles College of Engineering

LCOE TECH TALKS

Hannah graduated with a Bachelor's Degree in Civil Engineering with an emphasis in Water Resources Engineering. The strong community at LCOE provided opportunities to work paid Engineering Internships from the summer of her freshman year, through Senior year. After graduating in 2016, Hannah was offered a job at the Sonoma County Water Agency to be an Energy Resources Engineer - a position that offered the opportunity to learn both Electrical and Civil Engineering. In 2019, Hannah earned her California license as a Professional Electrical Engineer. She is now working towards dual licensure with the goal of becoming a licensed Civil and Electrical Engineer. Hannah is extremely thankful for the incredible education she received at the Lyles College of Engineering. The knowledge base and support of the professors, paired with the strong camaraderie of the students and local Engineers in the community created an amazing educational environment. Go Bulldogs!

September 17 2021
Friday
12:00 PM

Register at:
<https://bit.ly/3hmbzjr>

Join Hannah Salafia, dual licensed professional working in both electrical and civil engineering, as she discusses her roles in both fields of work

a set of enrichment courses covering topics such as Matlab, Python, Calculus for incoming freshmen, transfer students, and continuing LCOE students.

- The Lyles College of Engineering at Fresno State held a week-long virtual Summer Engineering Experience and Explore Engineering Program (SEE) mid-June for both high school and middle school participants. The hands-on sessions focused on engineering topics including construction management, robotics, and electronics. The high school aged camp received 33 applications and a total of 24 high school student participants, and the middle school program received 27 applications with 23 students enrolling. The summer camps were held the week of June 14-18, 2021, virtually through Zoom. The high school program was held from 9am to 12pm and the middle school program from 1pm to 4pm. The numbers were lower than in the past when they had held the camps in person and from the previous year, when they were also held as virtual camps.

FRESNO STATE
Lyles College of Engineering

High School - Summer Engineering Experience

Schedule

Monday, June 14 - 9am to 12pm
Cybersecurity - Dr. El-Razouk

Tuesday, June 15 - 9am to 12pm
Cybersecurity - Dr. El-Razouk

Wednesday, June 16 - 9am to 12pm
Engineering Robotics - Dr. Kulhandjian

Thursday, June 17 - 9am to 12pm
Civil Engineering (Water Filtration) - Cordie Qualle

Friday, June 18 - 9am to 12pm
Engineering Robotics - Dr. Kulhandjian

Zoom Link (Jun 14 2021, 8:55 am):
<https://bit.ly/3x0EjDI>

FRESNO STATE
Lyles College of Engineering

HIGH SCHOOL VIRTUAL SUMMER CAMP APPLICATIONS NOW OPEN!

Two Date Options:
June 14 to 18 – 9 a.m. to 12 p.m.
June 21 to 25 – 9 a.m. to 12 p.m.

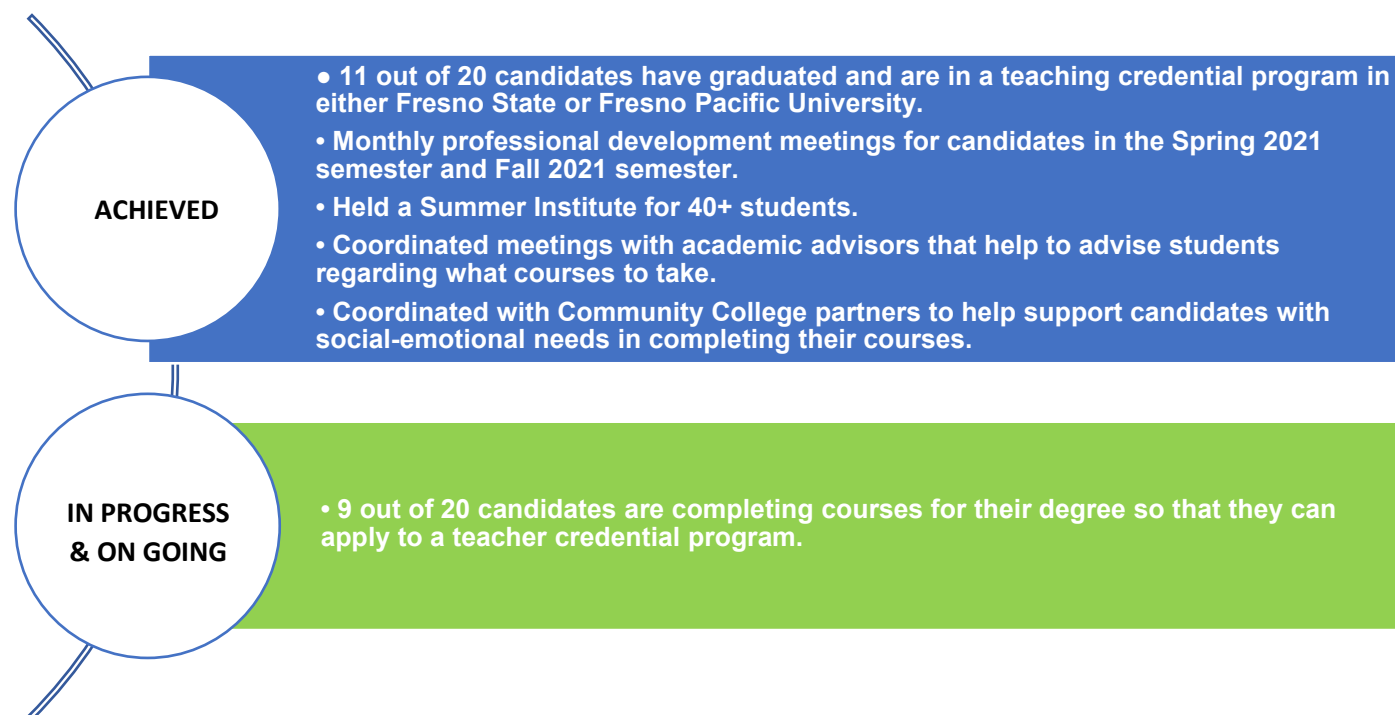
Deadline to apply:
Friday, May 14
5 p.m. (PST)!

For more information and to apply :
<http://bit.ly/lcoesummer21>

- Marketing
 - The goal is to have new LCOE related marketing materials ready by late October / early November – just in time for Fall 2022 applications for admissions for new freshmen and transfer students.

PROJECT AWARD TITLE: “Pathways for Teachers and Equitable Access to STEM Resources in the COVID Era”

Highlights



Fresno State – Single Subject Teacher project aimed to provide STEM teachers to areas of high underrepresentation in STEM by identifying prospective teachers who have self-identified as interested in teaching and interested in STEM but who have encountered significant barriers to completing current certification requirements of the State of California. Some of these barriers include economic opportunities, achievement scores, access to higher education advising and mentorship, unaligned programs and course trajectories between community colleges and universities, and support for those experiencing continued economic and other trauma during an era of attending school during a global pandemic. We aimed to successfully shepherd more than two dozen underrepresented STEM teachers through their single subject certification and place them in schools that need strong, highly qualified, and committed teachers while also filling the call for equity in schools and providing successful mentors and role models for future STEM students.

We supported a cohort of para-professionals who are currently working in schools of diverse communities who have expressed interest in math, physics, and biology and have also worked within the educational system and would like to complete teacher certification. These teachers have already been identified within the Fresno Unified School District as para-professionals of education operating and serving in this district without a teaching certificate. We will provide stipends to these teachers for attending college courses, books, and fees while attending Fresno City College or Clovis Community College. We will also coordinate their offerings by streamlining and aligning their trajectories in direct consultation with representatives of STEM departments as well as administration. During their coursework we will also provide working opportunities coordinated within Fresno Unified as employees to assure their fiscal stability and minimize the need for work outside the school as we have in our shared Residency programs. We will also provide monthly support through workshops and meetings throughout the year which may complement the content preparation they are receiving. This will include academic support for tutoring, exam-preparation, and other academic support as needed. Courses will be developed and modularized for this cohort and for future cohorts and provide ubiquitous access to excellent resources to protect and assure the success if the COVID era is unpredictably prolonged as we know that online and virtual offerings meet the gap in educational opportunities given the proper support. Finally, mentors will also be identified in STEM fields from among this cohort to both recruit and support the learning of underrepresented STEM teachers.

Single Subject Teacher Pathway

- As per the original agreement with their partners, they have 20 candidates that are paraprofessionals of Fresno Unified. They also have a back pool in case of relocation or attrition. They will continue to support the drafted pathways across Clovis, Fresno Pacific, Reedley and Fresno State.
- 11 out of 20 candidates have graduated and are in a teaching credential program in either Fresno State or Fresno Pacific University.
- 9 out of 20 candidates are completing courses for their degree so that they can apply to a teaching credential program.
- They have conducted monthly professional development meetings for candidates in the Spring 2021 semester and Fall 2021 semester. Candidates have also been given the opportunity to request topics for professional learning for the monthly meetings. They facilitate learning experiences in the monthly meetings in accordance with the candidate's requests, as well as, in relation to the FUSD meetings for professional development that they attend.
- They continue to engage candidates in reflecting upon their own math and science experiences and connect them through both a web-based learning community and in-person experience during a summer institute.
- This included providing resources that they can use both in their courses earning their degrees and credential as a student and in their jobs during their learning to teach as a paraprofessional and future STEM teacher. The summer institute included the following:
 - experiencing STEM related lessons using real world experiences with outside activities and classroom technology/apps
 - familiarizing and using various classroom technology and apps
 - reflecting & discussing their learning in STEM related topics as a student
 - reflecting and discussing their learning in STEM specific pedagogy STEM as a paraprofessional currently and a future teacher credentialed teacher in STEM
 - discussions centered around topics in education such as, engagement, culturally responsive teaching, content-specific pedagogy
 - Agenda for summer institute: <https://drive.google.com/file/d/1FQPKO7iqQR9BgyPZGJASdHC3gUPjiomu/view?usp=sharing>





- They have coordinated meetings with academic advisors that help to advise students regarding what courses to take. Additionally, they coordinated with Community College partners to help support candidates with social-emotional needs in completing their courses.



**NATIONAL
UNIVERSITY**

Fresno K-16 Collaborative – National University

National University (NU) has been active in participating in the Upskilling Teachers' Masters' and Accounting and Financial Management pathway working groups. They have been meeting with Collaborative partners to strengthen and establish intersegmental partnerships.

PROJECT AWARD TITLE: Dual Enrollment Teach Upskilling Pathway – MA degrees for English HighSchool Teachers

Highlights

ACHIEVED

- Recruitment of 38 English teachers in Cohort 1.
- Recruitment of 15 English teachers in Cohort 2.
- Recruitment of 8 English teachers in Cohort 3.
- All students have been placed with a community college professor mentor.

IN PROGRESS & ON GOING

- Attend and collaborate at all the workgroup meetings.
- Partnering with FCC for the Winter Accounting Showcase event.

National University with the Collaborative partners addressed the need to develop a pool of high school teachers who hold master's degrees to teach community college dual enrollment English courses on local high school campuses.

National University offered a flexible rigorous online master's degree program which, when completed, enabled high school English teachers to achieve California community college minimum qualifications.

National University offered to Central Valley high school English teachers an online Master of Arts degree program in English. National has earned accolades for the strength of its respective well-established program. CVHEC requested funding from the Fresno K-16 Collaborative for this project to increase the number of high school English teachers qualified to teach dual

enrollment English courses on their campuses.

The National online program was offered in such a way as to provide flexibility for high school teachers, who already have extensive responsibilities, while at the same time providing a rigorous program in English. CVHEC further worked with National University and the K-16 Collaborative K-12 partners to find ways to: (1) Create cohorts of master's candidates of approximately 15 to 20 students who would go through the program at the same time; (2) Reduce the cost of tuition (which is already by nationwide standards reasonable) through various options, including, but not limited to, tuition reduction scholarships and fellowships; (3) Encourage master's candidates to contribute to the cost of their tuition in such a way as to show commitment to the programs without putting undue financial strain on themselves or their families.

Finally, CVHEC proposed to work with member institutions to commence these online programs within the next 6 months.

Upskilling Teachers' Masters' Pathway

- All 17 Fresno-area high school teachers in Cohort 1, which started in January 2021 in National University's online program leading to an M.A. degree in English, are on track to complete the program and earn their master's degree in December 2021. This means they would then have the minimum qualifications to teach community college dual enrollment English courses.
- All 21 Fresno-area high school teachers in Cohort 1, which started in July 2021 in National University's online program leading to an M.A. degree in English, are on track to complete the program and earn their master's degree in July 2022. This means they would then have the minimum qualifications to teach community college dual enrollment English courses.
- All 38 students in cohort 1 continue to connect with their community college English professor mentors, and their collaborative relationships remain strong.
- Cohort 1, 38 teachers – January 2021 and July 2021 starts
 - 16- Clovis USD
 - 2 - Central USD
 - 6- Sanger USD
 - 14 - Fresno USD
- Cohort 2, 15 teachers – July 2021 start
 - 1 - Sanger USD
 - 1 - Livingston Union School District
 - 1 - Immanuel Schools
 - 1 - Delhi USD
 - 2 - Parlier USD
 - 2 - Dinuba USD
 - 2 - Los Banos USD
 - 5 - Merced Union High School District
- Cohort 3, 8 teachers - October/November 2021 start
 - 1 – Kingsburg JUHSD
 - 1- Selma USD
 - 2-Kings Canyon JUSD
 - 2 - Visalia USD
 - 2- Madera USD
- CVHEC has begun to alert colleges in the State Center Community College District that 17 new potential adjunct instructors would be available in January. It is then up to the individual colleges to connect with the M.A. graduates to work through the process of interviewing them and potentially hiring and scheduling them to teach dual enrollment courses.
- National University is on track to have 38 teachers who will have earned their master's degrees in English by June 2022. We were 2 students short due to the attrition in cohort 1 which ultimately enabled the ability to have a third cohort.

Earn Your M.A. in English
Specialization in Rhetoric

Now available to Central, Clovis, Fresno, and Sanger Unified School District English teachers

For Single Subject credential holders who are interested in earning their Master's degree in English with a Specialization in Rhetoric and want to qualify to teach dual-enrollment courses in their high schools or work as adjunct instructors in a community college.

The program assists students in developing the advanced critical reading, writing, and research skills necessary to participate comfortably and meaningfully with other English studies scholars and professionals, and to apply Secondary knowledge beyond the field of English studies.

Program Highlights

- Classes begin July 2021
- 12 months or less to complete program
- 10 courses, 48 quarter units
- Fully online, asynchronous instruction
- One course per semester format
- Cohort of 15-20 students
- Approximately 70% of the tuition cost will be covered through grants and fellowships

Program Cost*

Tuition: \$13,800
Grant: \$2,000 per student (from the K-16 Collaborative)
Scholarship: \$2,000 + 10% wage/salary tuition reduction per student from the Fresno County Superintendent of Schools education package
* \$2,000 - up to 20% tuition reduction per student (from the National University Fall Tuition Scholarship)

Total cost of the program with grant and scholarships is approximately \$5,118
*Grant and scholarships are available and available to qualifying students.

This program has been implemented in part by the funds and efforts of the Fresno K-16 Collaborative

Fresno K-16 COLLABORATIVE

Contact Us: gradstudy@fresno16.org | (559) 968-1885
jane@fresno16.org | (559) 968-4882

NATIONAL UNIVERSITY
National University, San Diego

L. DANN MOORE

Virtual Information Meetings

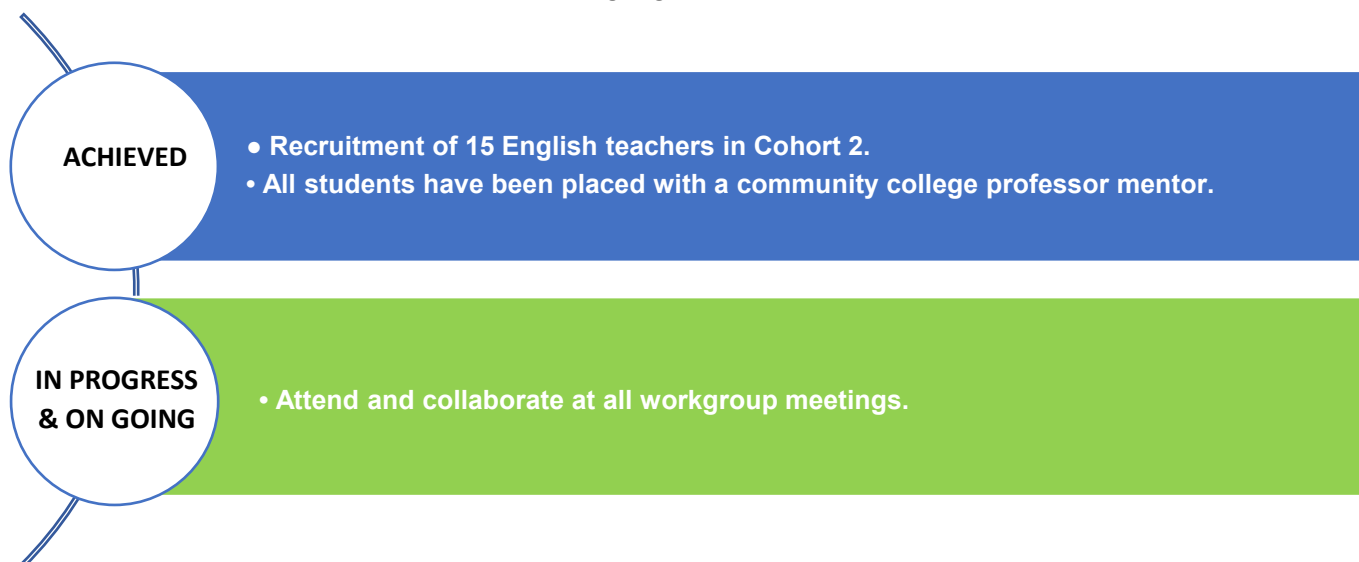
- Tuesday, April 13, 2021 at 5:00 p.m.
- Wednesday, April 14, 2021 at 5:30 p.m.
- Tuesday, May 4, 2021 at 5:00 p.m.
- Wednesday, May 19, 2021 at 5:30 p.m.

Please scan the QR code to see previous meeting notes
Or visit www.fresno16.org/gradstudy

Agreement deadline by June 1, 2021

PROJECT AWARD TITLE: Dual Enrollment Teacher Upskilling Pathway – MA degrees for English High School Teachers and MA degrees for Math High School Teachers 2.0

Highlights



National University's proposal recognized the design principles in the two initial proposals from CVHEC/National University and Fresno Pacific to deliver Master's degrees in English and mathematics opportunities to high school teachers from partner K-12 districts to develop faculty who can teach dual enrollment courses on their home campuses. The project addressed the need to develop a pool of high school teachers who hold master's degrees to teach community college dual enrollment English and math courses on local high school campuses. This project expanded the geographic reach of the initial CVHEC, Fresno Pacific and National University projects to include feeder high schools to Merced College, Madera College, Reedley College and the two colleges of the West Hills Community College District (West Hills College Coalinga and West Hills College Lemoore).

National University and Fresno Pacific University prepared flexible rigorous online master's degree programs which, when completed, enable high school math and English teachers in these areas to achieve California community college minimum qualifications. National University offered high school English teachers in these areas an online Master of Arts degree program in English. Fresno Pacific offered high school teachers in these areas with a bachelor's degree in mathematics an online Master of Arts degree program in mathematics education.

Upskilling Teachers' Masters' Pathway

- 15 students in Expanded Cohort 2, which started in July 2021, are enrolled in National University's online program leading to an M.A. degree in English are on track to complete the program and earn their master's degree in June 2022. This means they would then have the minimum qualifications to teach community college dual enrollment English courses.
- The 15 Central Valley high school teachers in Cohort 2 are from the expanded Central Valley area (into Merced, Madera, and Kings Counties).
- All 15 graduate students have been assigned and are connected with a community college English professor mentor; their collaborative relationships are in the early stages.
- If all students successfully complete their program, community colleges in the Fresno and adjacent areas would have 15 new potential adjunct instructors in July 2022. It would then be up to the individual colleges to connect with the M.A. graduates to work through the process of interviewing them and potentially hiring and scheduling them to teach dual enrollment courses.

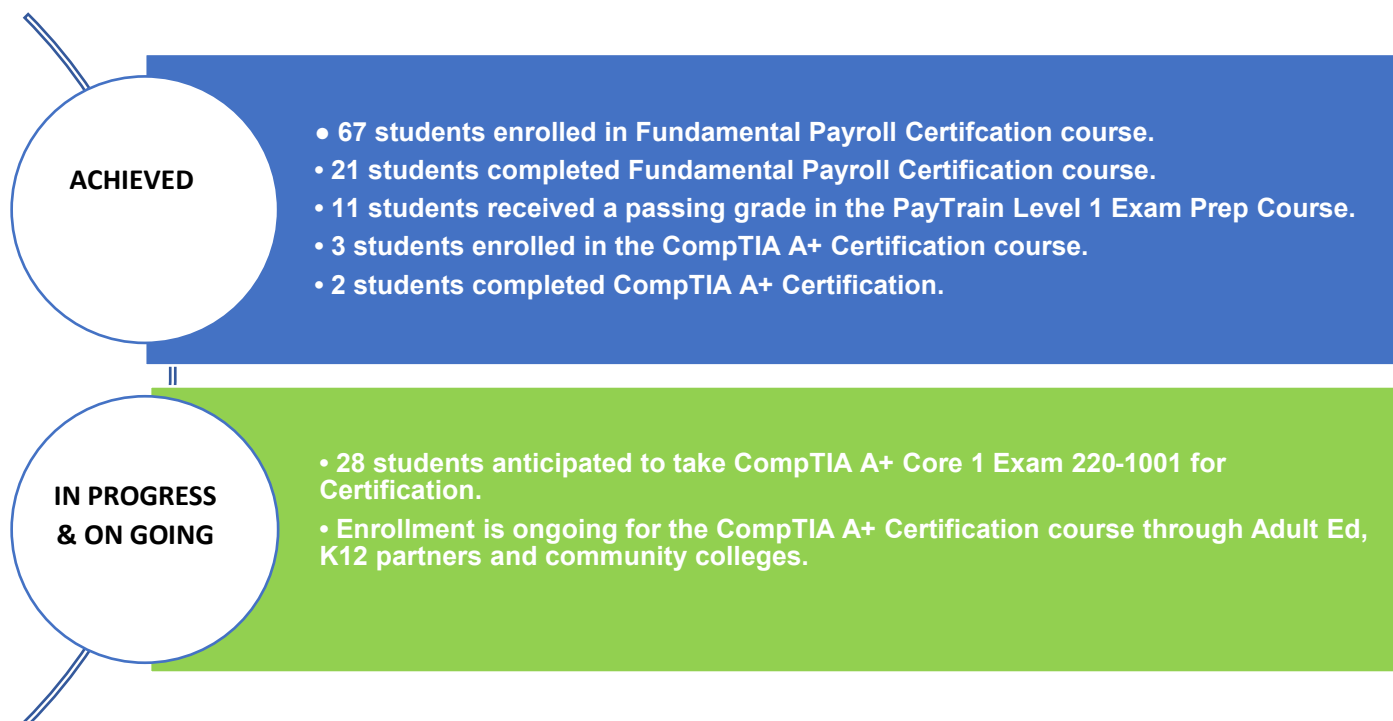


Fresno K-16 Collaborative – University of Massachusetts Global (formerly Brandman University)

The University of Massachusetts Global (UMASS) has been active in participating in the Accounting Pathway Working Groups and meeting with Collaborative partners to strengthen and establish intersegmental partnerships. UMASS has been working to offer dual enrollment opportunities for upskilling to both adult learners and high school students.

PROJECT AWARD TITLE: Accounting and Financial Management – Adult Learners and Dual Enrollment

Highlights



UMASS with the Collaborative partners has been executing their proposal to support collaborative, intersegmental work directed at supporting adult learners, high school, and community college students obtaining education through Fresno K-16 Collaborative's pilot pathway to increase employability, educational attainment, and socioeconomic mobility; as well as promoting prior learning assessment/credit (PLA/CPL) to recognize previously acquired education or vocational experiences.

UMASS's proposal supported both adult learners and dual enrollment/dual credit students in collaboration with State Center, Fresno City College (FCC), local school districts and others.

Adult Learning:

The region's vision is to intersegmentally provide adult learners with the skills needed for employment, continuing education, career advancement and personal growth. The Fresno K16 Collaborative, along with community partners, directed efforts to strengthen adult education and ensure students have access to high quality programs leading to their success in college and careers.

UMASS provided certification test preparation and test opportunities which provided demonstration of entry-level and next point career path knowledge mastery. The American Payroll Association's Fundamental Payroll Certification is recognized in the payroll industry as a demonstration of the entry level skills required for payroll servicing career paths. It is also recognized by the American Council on Education and many universities as academic credit applicable to degree or credential completion.

UMASS offered fully online, instructor supported instruction as dual enrollment and provided dual credit, general college credit, and certification preparation. Timing was aligned with the APA testing schedule. UMASS also concurrently provided two cohorts of CompTIA A+ preparation and test opportunities yielding entry-level knowledge as recognized by the IT industry. Additional certifications may be added following outreach and survey efforts.

UMASS participated in the Collaborative's Adult Learners Working Group . UMASS further worked with the State Center Adult Education Consortium (SCAEC) to provide education and training coaching and advising, articulation pathways from Adult Education members through and to undergraduate degrees, certificates and certifications, and assist in outreach to the supported communities in order to provide awareness of the resources available.

Dual Enrollment:

UMASS, working collaboratively with Fresno City College (FCC) and Collaborative high school districts, provided APA's Fundamental Payroll Certification to Spring and Fall 2021 cohorts working through the FCC Accounting Pathway. They provided preparation courses and certification exam opportunities. Description of the courses, timing and credit opportunities are noted in the adult learner project description above.

Recognizing that high school students need different wraparound support than adult learners, the high school students remained in their own cohorts allowing for additional coordination of payroll curriculum and the FCC bookkeeper certificate accounting curriculum.

Through the certification opportunity, UMASS assisted the Collaborative in addressing the large equity gaps facing minority students. Providing the entry-level certification addresses employability of students through demonstrable industry recognized knowledge. Attaining academic credit through these opportunities, students earned credit usable toward high school and college degree completion, both requirements to advance along several career paths. Including employer partners and various associations as stakeholder advisors on program outcomes further aligns education opportunities with employer needs, providing employers with talent pools for hire.

Accounting & Financial Management Pathway

- **Overview:** UMASS prepared Adult Education learners and Dual Enrollment students to sit for the American Payroll Association's (APA) Fundamental Payroll Certification (FPC) exam to support the Collaborative's Accounting & Financial Management pathway. In addition to the exam prep course, students received course materials and an exam voucher.

- **10-week Summer 2021 Program**

- In order to prepare students to test in the next available testing window through the APA,UMASS offered ORGU 0013, PayTrain Level 1 over the summer. This 10-week, online course was originally offered on Wednesdays with a two-hour virtual session from

6:30-8:30 p.m. each week. Due to increased demand, UMASS added a Thursday classoption as well. The program ran from June 16-August 18 on Wednesdays and June 17-August 19 on Thursdays.

- Partner-specific flyers were created for:
 - Adult Ed
 - FCC Dual Enrollment students
 - Colleges
 - Clovis Community College
 - Fresno City College
 - Fresno Pacific University
 - Fresno State
 - Reedley College
 - High Schools
 - Central Unified School District
 - Clovis Unified School District
 - Fresno Unified School District
 - Sanger Unified School District
- To further support student success, they held “Zero Week” June 7-16. During Zero Week, coordinators from UMASS scheduled 30-minute one-on-one virtual meetings with students toachieve the following:
 - Activate their UMASS account
 - Log in to their UMASS email
 - Access the learning management system
 - Confirm they've received the course materials
- The student activation sessions ensured that all students could access the course technologiesso they are prepared to start their course on day one.
- PayTrain Level 1 materials were ordered for all students that scheduled an activation session.

- **Student Outcomes**

- Students needed to score a 75% or above on their post-test to pass the class. Eleven out of sixty-seven, or 16% of students, received a passing grade in the PayTrain Level 1 ExamPrep Course.
- Like many math-based areas of study, content builds on previous information. Students who consistently attended class and completed weekly assignments were those that passed the class. Despite weekly emails from the instructor as well as individual outreach,many students did not persist.
- Reasons given include:
 - Registered for the class because it's free but it's too hard
 - Taking multiple courses with Collaborative partners and workload is too much
 - Work/family commitments
 - I thought I would be able to handle work, classes and the training but it wastoo much for me.
 - I have a lot on my plate right now and it's been hard to focus on the lecturesand assignments.
 - Unable to attend last few classes due to change in jobs and the schedule hishas completely changed
 - Family emergency

Fundamental Payroll Certification (Adult Learner)

Metrics: 67 students enrolled

Wednesday Course: 32 enrolled

- 31% (10 of 32) completed course
- 19% (6 achieved passing score)

Thursday Course: 35 enrolled

- 31% (11 of 35) completed course
- 14% (5 achieved passing score)

Fundamental Payroll Certification (dual enrollment/dual credit-FCC)

Student Demographics:

- Adult School: 24 students
- Colleges: 41 students (dual enrolled)
- High School: 2 students (Fresno Unified)
 - Summer session was minimal dual enrollment due to K12 summer break.
 - FCC Dual Enrollment flyer was created, but students in their Summer Bootcamp did not enroll



PAYTRAIN CERTIFICATION EXAM PREPARATION

Increase your marketability to employers with a Fundamental Payroll Certification (FPC)

This course is for individuals new to payroll supporting the payroll industry and preparing for the Fundamental Payroll Certification (FPC) exam. This course focuses on payroll calculations and provides the basic knowledge and skills required to maintain payroll compliance and prevent costly penalties.

As a student you will:

- Understand payroll calculations and applications
- Learn payroll accounting, management and administration
- Learn basic knowledge and skills required to maintain payroll compliance and prevent costly penalties

Online Course Format:

- Weekly virtual Zoom sessions with your instructor and classmates
- Expect to spend another 2-3 hours per week on reading, online assignments and forums in addition to class sessions
- Orientation: 30 minute Zoom session with University staff to set up your technology

\$1,320 VALUE FOR EXAM PREP COURSE, MATERIALS & EXAM FEE

COURSE SCHEDULE
June 9-10: Orientation sessions
June 17-August 19 (10 weeks)
Class meets Thursday, 6:30-8:30 p.m.

EXAM DATES
Take the Fundamental Payroll Certification exam between September 13-October 4

COST - \$0
This course is funded by a grant through the Fresno K-16 Collaborative

QUESTIONS?
Contact Arleen Lumb at 549-341-5863 or arleenlumb@fresnok16.edu

SPACE IS LIMITED. CLICK HERE TO REGISTER - bit.ly/2BqMxqH
Registration ends 10:00pm on July 31st

BRANDMAN UNIVERSITY **Fresno K-16 COLLABORATIVE**

- **20-week Fall 2021/Winter 2022 Program**

- UMASS was planning to offer a 20-week program over the fall and winter to prepare students to test in the spring of 2022. Since this program will take place during the school year, UMASS wanted to modify the pacing of ORGU 0013 from 10 weeks to 20 weeks to allow students, especially dual enrollment students, more time to learn and synthesize the content.
- The tentative schedule for this 20-week, online course is October 2021 to March 2022. The first 10 weeks will run October-

December 2021. They will break for the holidays and then continue with the remaining 10 weeks of the course from January-March 2022. The instructor will offer a 1-hour virtual session each week. Exact program dates and the day and time of the weekly synchronous session is still TBD. This program would also include individual activation sessions during Zero Week.

- This schedule was developed to meet the needs of the Career Technical Education (CTE) at Clovis Unified, however after reevaluating their students' normal schoolwork loads, working in the bank, and any extra-curricular activities, Clovis has opted out of offering the Fundamental Payroll Certification for their students as it could not be articulated into their Get Focus Stay Focused course as initially thought possible.
- **Fresno Community College (FCC)**
 - After meeting multiple times with Robert Pimentel, Dr. Tim Woods and Dr. Richard Tuttrup from FCC, UMASS anticipated that some of their Bookkeeping Fundamentals Certificate and Dual Enrollment students from Fresno Unified would register in the summer payroll course. They scheduled the PayTrain Level 1 course immediately following the boot camp and hosting Zero Week during boot camp.
 - Of the sixty-seven students enrolled, only four self-identified as FCC students and two self-identified as Fresno Unified students.
- **Overview:** UMASS is preparing Adult Education learners and Dual Enrollment students to sit for the CompTIA A+ Core 1 Exam 220-1101 and Core 2 Exam 220-1102.
- **CompTIA A+ Course Structure**
 - The CompTIA A+ courses are provided on their competency-based, self-paced platform. Students learn content, submit milestone assignments, and receive feedback from their instructor. Students move through the course in this fashion until they have completed all the content.
 - Students have six months to complete their content and sit for the associated exam. Once a student completes the course content they are issued a voucher to take the exam. Passing the exam is also the final exam in the course. Once students complete and pass CompTIA A+ 1 they will be enrolled in CompTIA A+ 2.
 - Due to the self-paced structure of the course, enrollment is ongoing.
- Partner-specific flyers were created for:
 - Adult Ed
 - Edison High School (Fresno Unified)
 - Colleges
 - Clovis Community College
 - Fresno City College
 - Fresno State
 - Reedley College
 - High Schools
 - Central Unified School District
 - Clovis Unified School District
 - Fresno Unified School District
 - Sanger Unified School District
- Edison High School - After receiving the course flyer, Troy Odell, the CTE Pathway Coordinator from Edison High School reached out regarding the students in their computer science program. They met with Troy and the two computer



science teachers regarding the CompTIA A+ courses. They wanted to provide this opportunity to students over the summer and also plan to offer it as an afterschool club in the Fall. UMASS provided them with an Edison High School specific flyer. Fourteen students registered for the course in May. So far one of the Edison High School students has completed all the course content and is ready to sit for the exam. We expect more students to enroll this Fall.

- Student Outcomes
 - Students are 50% through their 6-month access. Emails are sent every two weeks to encourage students to complete milestone activities and make progress through the content.

CompTIA A+ certification (Adult Learner) Course Dates: 6 months access

Students enrolled in mid-May-June and currently 50% through their access period.

Metrics: 30 students enrolled

To date, 2 students have completed the course content and are ready to take the Core 1 Exam 220-1101.

Student Demographics:

- Adult School: 16 students
- Colleges: 0 students
- High School: 14 students (Fresno Unified - Edison High School)

Fresno K-16 Collaborative – UC Merced

UC Merced has been instrumental in participating on transfer path working groups, as well as deep involved in the CVHEC Equity, Race, and Social Justice Ad Hoc Committee led by Central Valley Higher Education Consortium.

PROJECT AWARD TITLE: UC Merced

Highlights

ACHIEVED

- 32 - 7th grade students from Parlier Unified attended the DRIVE Summer Math Academy.
- The 32 project participants revealed an increase of 17% from 46% in the pre-test (baseline data) to 66% in the post-test.
- Mapped majors have been loaded into a database tool to make transparent the course requirements for selection into a major at UC Merced.

IN PROGRESS & ON GOING

- Summer Academy participants are currently taking Math 7 Honors course. This placement strategy aims to build students' confidence and performance in their math coursework in a cohort setting.
- The position for an on-site recruiter is currently being hired.
- Faculty continue work between the university and the community colleges to align ADTs.

UC Merced's overarching plan is to decrease institutional barriers for historically under-represented populations and increase transfer pathways to UC Merced. The barriers addressed through this effort include awareness of college admission and transfer requirements, access to information on college affordability, and alignment of coursework and transfer selection criteria between the community colleges and the four-year universities. Their proposal confronted the barriers from three fronts: support for dual enrollment as a mechanism for on-track A-G completion, physical presence and familiarity to the campus by the presence of a UC Merced staff and students to share information, and curricular alignment by bringing together faculty from UC Merced and Fresno area community colleges to align transfer requirements.

The first element of their proposal was to partner with high school districts to increase college readiness. The plan included the use of dual enrollment for summer school to assist with A-G completion rates. Using the data sharing agreements in place with Fresno area school districts and UC Merced's Center for Educational Partnership, a focused outreach and use of dual enrollment strategies was deployed to close A-G completion gaps. Looking at raising 11th and 12th grade students who may be off track with A-G completion, targeted communication will encourage the students to enroll in a dual enrollment summer course offered through Reedley College. Students should complete English 1A, earn college credit, and free up room in their schedule to take the required coursework to complete their A-G course pattern before high school graduation, thus

increasing the number of students graduating who are eligible for admission.

For those high school students with plans to start their postsecondary journey at a California community college (CCC), the program also supported their educational goals. An intersegmental Bridge Program was offered for CCC-bound high school graduates providing Math and ELA readiness to ensure their successful transition to a CCC. Additionally, planning conversations occurred during the bridge program to assist with the development of a transfer plan, including the exploration of Transfer Admission Guarantee (TAG) with the UC.

The second part of their proposal is an effort to increase transfer pathways from Fresno area community colleges. The UC Outreach initiative hoped to address the access barriers that are attributed to low familiarity with UC Merced, perceptions about UC affordability, and clarity around the transfer application and selection process. The program will place a transfer coordinator from UC Merced in the transfer center at Fresno City College to create a physical presence in the area and help support transfer exploration for community college students interested in completing a four-year degree. To align with the collaborative's focus, there is a specific effort to increase transfer pathways in engineering, management and natural science teacher preparation.

The coordinator will spend time between Fresno City, Reedley, and Clovis Community Colleges. With the presence of a full-time coordinator, this staff member will organize and spearhead the UC Outreach that occurs and work with student staff ambassadors who are current students at UC Merced to increase the presence and familiarity for Fresno area community college students. The coordinator will implement case management services for individual applicants and plan and oversee events held throughout the year.

Additionally, the coordinator will ensure a streamlined and efficient flow of student information and program information among the participating institutions.

A unique feature of the outreach initiative is leveraging a data-sharing agreement with Fresno Unified, UC Merced and SCCC to identify potential transfer interested students during their senior year of high school. An additional step is to create a UC team of outreach counselors who will focus on these students to conduct any ancillary services such as application workshops, UC Personal Insight Question workshops, outreach presentations, student panels and field trips.

The third component is connected to aligning coursework expectations and selection criteria. The curricular pathway effort would develop and recruit faculty convenings between UC Merced and Fresno County community colleges in an effort to align the Associate Degrees for Transfer (ADT)/Transfer for Admissions Pathways (TAP) four-year plans. Ultimately this effort will create not only a streamlined process, but introduce automated technology solutions to support this work. This work will assist to manage academic approvals of transfer initiatives, prioritizing engineering, teacher preparation and credentialing, management, and agriculture technology. Examples of the efforts include understanding course requirements for selection into a major that are not regularly taught at area community colleges and prevent transfer admissions or disconnects between course content expectations in particular fields of study. The administrative support will assist with the coordination of faculty from the institutions to explore curricular alignment and develop a clear transfer map. Partnering with the Central Valley Higher Education Consortium, (CVHEC), the hope will be to expand that conversation broader and create clear pathways and strong curriculum alignment for community colleges throughout the region.

Engineering, Education, and Accounting and Financial Management

- **PATHWAY 1: College Readiness:**
 - In Spring 2021, the University of California, Merced, Center for Educational Partnerships convened administrators from the Parlier Unified School District and Reedley College to discuss intrusive student academic interventions for summer and fall of 2021. Collectively partners concurred on the need to coordinate student-centered programs that support students' seamless transition from high school to and through the community college system, increasing transfer rates for students in the San Joaquin Central Valley. The first consideration was to provide comprehensive services to English Learner Parlier High School graduates who were Reedley College-bound to ensure their successful

matriculation and the completion of the Fall 2021 semester. Unfortunately, despite multiple recruitment efforts, only two students responded to the outreach conducted.

- o The second consideration was an early intervention for Parlier students to be college-ready by the time they graduate by offering them access to intrusive academic interventions. Thus, the implementation of the DRIVE Summer Math Academy. The partnership launched a four-week math academy at Fresno Pacific University from July 6-30, 2021. Instruction was held Monday through Friday, from 8:45 am to 3:25 pm. The academy served 32 7th-grade students from the Parlier Unified School District. Students from the following elementary schools were served: Cesar E. Chavez, John C. Martinez, Matthew J. Brletic, and S. Ben Benavidez.
 - o Fifty-seven (57) participants were identified based on multiple measures: 6th-grade math grades, most recent state assessment results, and instructor recommendation. Of the 32 students who participated in the math academy, 17 were male, and 15 were female. In addition, ten students were English Learners, 12 students were English only, nine students were Redesignated Fluent English Proficient, and one was Initially Fluent English Proficient (I-FEP).
 - o The post-test results for the 32 project participants revealed an increase of 17% from 47% in the pre-test (baseline data) to 66% in the post-test. Further, the district agreed to place academy participants with their academy peers and summer academy instructor in their fall math course, Math 7 Honors course. This placement strategy aims to build students' confidence and performance in their math coursework in a cohort setting. In addition, during the fall, efforts will be made to continuously monitor students' performance in their sequential math course to ensure they complete the course with a grade of "C" or better and exceed the C a-g subject requirement in math. This performance outcome supports Parlier students' postsecondary readiness for four-year institutions and supports their transition to community colleges and transfer readiness.
 - o Conversations are underway to launch intrusive academic supports to English Learner Parlier graduates currently enrolled at Reedley to support their successful completion of English 1 during their first semester at the community college.
- PATHWAY 2: Increased access and familiarity:
 - o With the late start to the funding, the position for an on-site recruiter is currently being hired. This will help with regular daily presence on the community college campuses of a UC Merced transfer admission advisor. Events for the fall semester are scheduled to bring Fresno City, Reedley, and Clovis Community College students to campus.
 - PATHWAY 3: Clear curricular pathways:
 - o Faculty continue work between the university and the community colleges to align the ADTs. Those mapped majors have been loaded into a database tool to make transparent the course requirements for selection into a major at UC Merced.



Fresno K-16 Collaborative – Central Valley Higher Education Consortium

Central Valley Higher Education Consortium (CVHEC) has been active in participating in the Upskilling Teachers' Masters' pathway working group and Overarching Race Equity & Inclusion project. They have been meeting with Collaborative partners to strengthen and establish intersegmental partnerships.

PROJECT AWARD TITLE: Dual Enrollment Teach Upskilling Pathway – MA degrees for English HighSchool Teachers

Highlights



Central Valley Higher Education Consortium (CVHEC) with the Collaborative partners addressed the need to develop a pool of high school teachers who hold master's degrees to teach community college dual enrollment English courses on local high school campuses.

As partners, National University and Fresno Pacific University have offered flexible rigorous online master's degree programs which, when completed, enable high school math and English teachers to achieve California community college minimum qualifications. Fresno Pacific offered a program to Central Valley high school teachers with a bachelor's degree in mathematics, an online M.A. degree program in mathematics education. Funding for this project came from a different proposal.

National University offered to Central Valley high school English teachers an online Master of Arts degree program in English. National has earned accolades for the strength of its respective well-established program. CVHEC requested funding from the Fresno K-16 Collaborative for this project to increase the number of high school English teachers qualified to teach dual enrollment English courses on their campuses.

The National online program was offered in such a way as to provide flexibility for high school teachers, who already have extensive responsibilities, while at the same time providing a rigorous program in English. CVHEC further worked with National University and the K-16 Collaborative K-12 partners to find ways to:

Create cohorts of master's candidates of approximately 15 to 20 students who would go through the program at the same time.

Reduce the cost of tuition (which is already by nationwide standards reasonable) through various options, including, but not limited to, tuition reduction scholarships and fellowships.

Encourage master's candidates to contribute to the cost of their tuition in such a way as to show commitment to the programs without putting undue financial strain on themselves or their families.

Finally, CVHEC proposes to work with member institutions to commence these online programs within the next 6 months.

Upskilling Teachers' Masters' Pathway

- All 17 Fresno-area high school teachers in Cohort 1, which started in January 2021 in National University's online program leading to an M.A. degree in English, are on track to complete the program and earn their master's degree in December 2021. This means they would then have the minimum qualifications to teach community college dual enrollment English courses.
- All 21 Fresno-area high school teachers in Cohort 1, which started in July 2021 in National University's online program leading to an M.A. degree in English, are on track to complete the program and earn their master's degree in July 2022. This means they would then have the minimum qualifications to teach community college dual enrollment English courses.
- All 38 students in cohort 1 continue to connect with their community college English professors and mentors, and their collaborative relationships remain strong.
- CVHEC has begun to alert colleges in the State Center Community College District that 17 new potential adjunct instructors would be available in January. It is then up to the individual colleges to connect with the M.A. graduates to work through the process of interviewing them and potentially hiring and scheduling them to teach dual enrollment courses.
- CVHEC is on track to have 38 teachers who will have earned their master's degrees in English by June 2022. We are 2 students short due to the attrition in cohort 1.

Earn Your M.A. in English
Specialization in Rhetoric

Now available to Central, Clovis, Fresno, and Sanger Unified School District English teachers

For Single Subject credential holders who are interested in earning their Master's degree in English with a Specialization in Rhetoric, and want to qualify to teach dual enrollment courses in their High Schools or work as adjunct instructors in a community college.

The program enables students to develop the advanced critical reading, writing, and research skills necessary to participate confidently and meaningfully with other English studies scholars and professionals and to apply disciplinary knowledge beyond the field of English studies.

Program Highlights:

- Classes begin July 2021
- 18 credits per year for one-year program
- 10 classes, 45 quarter units
- Fully online, asynchronous instruction
- One-on-one personal attention
- Cohort of 15-20 students
- Approximately 70% of the tuition cost will be covered through grants and scholarships

Program Cost:

Tuition: \$18,000
Grant: \$10,000 per student (from the K-16 Collaborative)
Scholarship: \$2,000 - 15% variable tuition reduction paid directly from the Fresno County Superintendent of Schools' allocation (performance)

Net Cost: \$10,000 - \$18,000 (tuition reduction per student) (from the National University Foundation Scholarship)

Real cost of the program with grant and scholarship assistance is only \$1,000

*Grant and scholarships are automatic and available to qualifying students.

This program has been made available in part by K-16 funds and efforts in the Fresno K-16 Collaborative

Fresno K-16 COLLABORATIVE

Contact Us: info@fresnok16.org | (559) 281-1000
www.fresnok16.org | (559) 281-4000

LEARN MORE

Virtual Information Meetings

- Wednesday, April 9, 2021 at 9:00 a.m.
- Wednesday, April 11, 2021 at 9:30 a.m.
- Tuesday, May 4, 2021 at 9:00 a.m.
- Wednesday, May 19, 2021 at 9:30 a.m.

Please email the QR code to your principal to request to host a virtual information meeting.

Or visit www.fresnok16.org/EnglishMAs

Application deadline by June 1, 2021

NATIONAL UNIVERSITY
National University | Springfield

PROJECT AWARD TITLE: Dual Enrollment Teacher Upskilling Pathway – MA degrees for English High School Teachers and MA degrees for Math High School Teachers 2.0

Highlights

ACHIEVED

- Assisted in recruitment of 15 English teachers in Cohort 2.
- All students have been placed with a community college professor mentor.

**IN PROGRESS
& ON GOING**

- Will make contact with colleges in the SCCCD regarding potential adjunct instructors that will be available in July 2022.

Central Valley Higher Education Consortium (CVHEC) has supported a collaboration of two CVHEC member universities with CVHEC member community colleges and high schools in the Central Valley. Their proposal recognized the design principles in the two initial proposals from CVHEC/National University and Fresno Pacific to deliver Master's degrees in English and mathematics opportunities to high school teachers from partner K-12 districts to develop faculty who can teach dual enrollment courses on their home campuses. The project addressed the need to develop a pool of high school teachers who hold master's degrees to teach community college dual enrollment English and math courses on local high school campuses. This project expanded the geographic reach of the initial CVHEC, Fresno Pacific and National University projects to include feeder high schools to Merced College, Madera College, Reedley College and the two colleges of the West Hills Community College District (West Hills College Coalinga and West Hills College Lemoore).

National University and Fresno Pacific University prepared flexible rigorous online master's degree programs which, when completed, enable high school math and English teachers in these areas to achieve California community college minimum qualifications. National University offered high school English teachers in these areas an online Master of Arts degree program in English. Fresno Pacific offered high school teachers in these areas with a bachelor's degree in mathematics an online Master of Arts degree program in mathematics education.

Upskilling Teachers' Masters' Pathway

- 15 students in Expanded Cohort 2, which started in July 2021, are enrolled in National University's online program leading to an M.A. degree in English are on track to complete the program and earn their master's degree in June 2022. This means they would then have the minimum qualifications to teach community college dual enrollment English courses.
- The 15 Central Valley high school teachers in Cohort 2 are from the expanded Central Valley area (into Merced, Madera, and Kings Counties).
- All 15 graduate students have been assigned and are connected with a community college English professor mentor; their collaborative relationships are in the early stages.
- If all students successfully complete their program, community colleges in the Fresno and adjacent areas would have 15 new potential adjunct instructors in July 2022. It would then be up to the individual colleges to connect with the M.A. graduates to work through the process of interviewing them and potentially hiring and scheduling them to teach dual enrollment courses.

PROJECT AWARD TITLE: Overarching Race Equity & Inclusion - Equitizing the Experience and Outcomes of Boys and Students of Color in the Central Valley K-16 and CVHEC Equity, Race, and Social Justice Ad Hoc Committee

Highlights

ACHIEVED

- Regional Scan Workgroup has created and distributed a survey tool intended to provide a regional scan of the Central Valley.
- Equitable Recovery Workgroup undertook a comprehensive review of readily available research in its pursuit to answer the question, Which students were pushed out during the pandemic and how do we bring them back?
- An executive summary of this lit review research has been finished and has been instrumental in assisting in focusing the equity work on the educational goals set by the CVHEC Board.

IN PROGRESS & ON GOING

- Framework and integration Workgroup is currently developing the Central Valley Equity Statement and Operational Definition of Equity in Higher Education.
- File report to be completed and presented to Fresno K-16 Collaborative in addition to the CVHEC.

Central Valley Higher Education Consortium with the Collaborative partners executed their proposal to support racial equity and outreach for educators throughout the region. In the Central Valley Region, outcomes for individuals of color are challenging. For example, unemployment rates are 2.5 times higher for Black/ African Americans, while poverty rates are 3xs higher for Black/African Americans compared to their White counterparts. The region also ranks last (59th/59) on racial and economic inclusion when compared to other large urban areas (*Retrieved from www.FresnoDrive.org*).

The project focuses on equitable educational outcomes for students of color. With most educational institutions being Hispanic-Serving Institutions in our Central Valley, it is incredibly important for racial equity to be a priority so we can ensure the success of our students. In the Central Valley, and throughout the nation, students of color are not completing their educational goals at the same rates as their White peer counterparts. Therefore, the work from this proposal will focus exclusively on closing equity gaps for students of color and more specifically, Black and African American, Latinx, Native American and Southeast Asian students.

CVHEC, in collaboration with FCC, used this proposal to bring educators together from across the K-16 pipeline to work on closing educational equity gaps for students of color in the region.

The CVHEC Equity, Race, and Social Justice Ad Hoc Committee has been established with

intersegmental representation including Clovis Community College, Fresno City College, Reedley College, Fresno Pacific University, Fresno State University, CSU Stanislaus, UC Merced, Foundation of California Community Colleges (Guided Pathways) and K-16 Collaborative. The ad hoc committee has divided its work into three workgroups: (1) Regional Scan Workgroup, (2) Equitable Recovery Workgroup, (3) Framework and Integration Workgroup. Integral to this work will be a collection of pertinent data to drive the findings.

As the regional convener, CVHEC convened and managed the work of the ad hoc committee, but also recognized the effort is a heavy lift for the region and anticipated outcomes to be presented at the CVHEC Regional Equity Summit as part of the CVHEC Higher Education Spring 2022 Summit Series.

The purpose of the Regional Scan Workgroup was to identify best practices and barriers currently occurring in the Central Valley around Equity, Race, and Social Justice in Higher Education. An outcome of this workgroup was to design and implement a regional scan tool (i.e., survey) for the region.

The purpose of the Framework and Integration Workgroup was to develop a Central Valley Equity Statement and Operational Definition of Equity in Higher Education and the pursuit of a regional framework for addressing equity, racial, and social justice.

The purpose of the Equitable Recovery Workgroup was to explore the question, What does Higher Education in the Central Valley look as we move out of 2020? This effort focused on equity and equitable outcomes for Central Valley students and the implementation of new policies and practices for this purpose. An outcome collected and disaggregated regional data (and creation of data visualizations) to help highlight current gaps and needs in our combined systems. (who did we lose during the pandemic ... and how do we get them back?)

As part of the CVHEC Regional Data Dashboard, institutional research directors contributed to the development of regional data visualizations to inform on the impact of policies and practices on the student success rate for students of color in the region.

The culminating work of the above workgroups informed the Regional Planning Committee development of the CVHEC Regional Equity, Race and Social Justice Summit as part of the CVHEC Higher Education Spring 2021 Summit Series.

- The **Regional Scan Workgroup** has created and distributed a survey tool intended to provide a regional scan of the Central Valley. Specifically, the tool will identify best practices and barriers currently occurring in the Central Valley around Equity, Race, and Social Justice in Higher Education. A roster of appropriate respondents was developed in May and June and released in early July. The survey tool has been out for completion and responses from all 29 CVHEC member institutions is expected by mid-September. A barrier in completing the survey is the break over summer and return to campus still dealing with the pandemic uncertainties. Once the survey responses have been complete, an analysis of the responses will be developed by the workgroup and shared with the Framework and Integration Workgroup and Equity Recovery Workgroup before it is compiled as part of the final report. Link to survey: https://drive.google.com/file/d/11EPV7gVN7515h1meXDKQ0_wmZJM4_rCh/view?usp=sharing
- The **Framework and Integration Workgroup** is currently developing the Central Valley Equity Statement and Operational Definition of Equity in Higher Education. A draft of this statement is being reviewed and finalized by the workgroup; however, in order for the statement to serve as a reflection of the Central Valley it will not be considered complete until the Regional Scan Workgroup analysis is made available to inform the Central Valley values and best practices for equity.
- The **Equitable Recovery Workgroup** undertook a comprehensive review of readily available research in its pursuit to answer the question, *Which students were pushed out during the pandemic and how do we bring them back?* The workgroup reviewed 20 existing reports conducted in the midst of the pandemic (at the beginning and as late as early Fall 2020) or shortly before the pandemic. The research provided student survey responses on the impacts of COVID on their educational experience during the pandemic, the state of higher education for Black and Latina/o/x students, transfer outcomes for the Central Valley students, and the state of education in the Central Valley in general. The research provides insights on postsecondary students at the community college, CSU, UC, and private institutions. While the intent was to identify the students who were pushed out, the review more adequately identified the factors that created challenges for re-enrolling. This data has implications for how we draw students back and retain them. An executive summary of this lit review research has been made available to both Regional Scan Workgroup and Framework and Integration Workgroup teams and has been instrumental in assisting in focusing the equity work on the educational goals set by the CVHEC Board of ensuring equity is at the root of the recovery efforts

PROJECT AWARD TITLE: UC Merced / CVHEC Community College Transfer Project

Highlights

ACHIEVED

- Collaborative community colleges, Reedley College and Clovis Community College, along with Porterville College and West Hills College have agreed to begin working on implementation of the Transfer Pathways project
- Collaborative university Fresno State has also agreed to begin implementation of the Transfer Pathways project and Program Mapper
- Program Mapper Fall Convening held at UC Merced

IN PROGRESS & ON GOING

- Continued efforts to add additional colleges and universities to the Transfer Pathways project and implementation of Program Mapper.

Central Valley Higher Education Consortium is making steady progress on the implementation of new Transfer Pathway agreements between our CVHEC community colleges and UC Merced. On November 4, 2021, UC Merced hosted a fall convening to kick-off their commitment to full implementation across the Central Valley. This event was well-attended by representatives from our CVHEC colleges which includes CSU Fresno and CSU Stanislaus.

As a result of the UC Merced kick-off event, four more of our community colleges have agreed to begin working on implementation of the Transfer Pathways project. Additionally, CVHEC has Fresno State and Stanislaus fully committed to joining the project as well. CVHEC has enlisted the leadership of Tom Burke, recently retired Chancellor of KCCCD, to serve as our coordinator for the ongoing efforts to complete this project.

CVHEC continues to work hand-in-hand with Dr. James Zimmerman of UC Merced as CVHEC supports and assists the second round of community colleges to engage in the processes created by Bakersfield College and Merced College who lead the way for us by completing their project as part of the 2020 pilot.

The four latest colleges to jump onboard include Porterville, Reedley, Clovis and West Hills College, Lemoore. Two of the four are in the Collaborative service area and have been supported by the Collaborative's efforts. These colleges have formed their resource teams to hold two convenings this academic year where they will engage in the collaborative process with fellow CC folks and UC Merced faculty to review the alignment of their ADTs with the upper division requirements at UC Merced for a variety of discipline majors. CVHEC is working with the Fresno K-16 Collaborative, and our own grant resources for those outside the serving area, to ensure that the four latest colleges have financial support needed to subscribe to Program Mapper and compensate the faculty who step forward to help work on this project. The Collaborative also has funding for Madera and Fresno City Colleges to support them in their Program Mapper efforts.

The spring semester of 2022 should prove fruitful for these four colleges to conclude their convenings and the successful completion of Transfer Pathway agreements to UC Merced aligned with their ADT's. This will result in six of CVHEC CCs (two within the Collaborative, plus Fresno State) completing this process and opening direct lines for their students to complete their ADTs at the community college and transfer directly to UC Merced. Looking ahead CVHEC hopes to support another group of willing community colleges from our region to start the process and make this opportunity a reality for their students as well.

Additionally, CVHEC is building capacity to support/assist Fresno State and Stanislaus to form their resource teams and following the lead of CSU Bakersfield in providing the same Transfer Pathway agreements to our regional CSUs.

Once the project is fully implemented, it is anticipated that Central Valley students will have access to a clear and easy-to-understand, single source to identify pre-approved transfer pathways to participating public universities. In addition, independent universities will be invited to consider participating to provide one more pathway for Valley students. Consistent with the current rise in the number of CC students engaging in ADTs for successful transfer through their Student Education Plan, it is anticipated that the number of Central Valley CC students benefiting will dramatically increase.

APPENDIX A: FRESNO K16 COLLABORATIVE: REFLECTION OF STRUCTURAL AND KEY COMPONENTS OF A SUCCESSFUL COLLABORATIVE

**Fresno K16 Collaborative:
Reflection of Structural and Key Components
of a Successful Collaborative**

**Top 11
Structural and Key Components
of a Successful Collaborative**

1.	Timing
2.	Work plan
3.	Agreement of Mission & Vision
4.	LMI Supported Pathways
5.	Communication
6.	Board Composition
7.	Active Chair & Vice Chair
8.	Established Working Groups/Communities of Practice
9.	Management
10.	Funding & Funding Flexibility
11.	Accountability

Illumination of the Top Structural and Key Components of a Successful Collaborative

1. Timing - ripeness and passion to tackle Student Race Equity, Inclusion and Success
2. Vetted work plan
 - Long-term commitment
 - Support for the recruitment of students from historically underrepresented communities into DuE Career Pathway programs
 - Active race equity and inclusion work across and within our institution and student body.
 - Continuous processes to stay relevant as circumstances change
 - Work plan should be foundationally based in the analysis of the current educational and employment conditions in the region, and identification of the pathways that lead to high wage, in-demand jobs in the future within the region.
 - Helpful to initially engage with third-party consultant to develop a data-supported work plan and facilitate collaborative planning.
 - Work plan needs to have clear, target outcomes both quantitative and qualitative.
 - Realistic timeline with achievable milestones
3. Agreed to mission and vision
 - Larger vision and to confront systemic educational inequities.
 - Trust in the direction, trust in the partners to uphold
 - Shared vision and goals among the participating educational entities
 - Clear establishment of goals
 - Striving to change the college going culture so that every student sees it as a possibility
 - Understanding that work is foundational, leading to sustainable
 - Recognition of the evolutionary process of change
4. Regional LMI-supported career pathways
 - Seek out ways to continue to collaboratively design and implement innovative education and training programs that will accelerate education and training of the target population to meet specific industry needs
 - Establish new, LMI-supported dual enrollment career pathways, if additional funding were made available.
 - Local jobs with living wage
 - Collaboration with local business and industries
5. Communication
 - Effective communication among the partners; frequent and relevant

- Willingness to listen to other partners
 - Relationships built upon trust and communication
 - Willing “messengers” to talk about the Collaborative
 - Identification and planning for clear, consistent communication with students, families and the community regarding DuE opportunities
 - Highlighting success and recognizing a job well done
6. Board composition - top leaders; high-level representatives
- Careful selection of inaugural, intersegmental K-16 partners
 - Commitment; doers
 - Mutual trust and respect
 - Collegial relationships
 - Unending commitment to race equity and inclusion
 - Appreciation of and respect for differences between the partners
 - Sustained energy and energy generating leaders
 - Regular meetings at Executive level
 - Occasions for partners to share their efforts, discuss ideas, and discover common issues on which they can collaborate are needed
 - Elimination of territorial barriers and mutual interaction that results in interdependency
 - Shared responsibility and accountability
 - Leaders’ assignment of project leads who are active “boots on the ground”
7. Active Chair and Vice Chair
- Respected leaders
 - Committed
 - Ability to run political interference
 - Identification of obstacles and solution seekers
 - Willingness to be uncomfortable
 - Advocates for change
 - Exemplars of race equity and inclusion in action
8. Established Working Groups and Communities of Practice
- Intersegmental cooperation amongst K-16 administration, staff and faculty across institutions and the Pathway Communities of Practice in the form of regular planning meetings and professional development
 - Inclusive
 - Appreciation of and respect for differences between the institutions; flexibility in ways of working together
 - Established Working Groups -sustained and progressive growth and collaboration amongst the Engineering, Accounting & Business Management

and Single Subject Teaching Dual Enrollment Pathways and Collaborative Projects such the Virtual DuE Hub and Teachers of Color Education Pipeline

- Regular Working Groups and Communities of Practice meetings; active engagement of interested parties in the achievement of mutually agreed upon goals that benefit each entity individually and collectively.
- Assignment of roles and tasks, and challenging partners
- Identification of obstacles and solution seekers
- Willingness to be uncomfortable; be visionary.

9. Management - Active Lead Agitator and Caretaker

- Execution of an appropriate organizational model
- Administrative support and organization
- Commitment at all levels
- Mutual trust and respect
- Ability to run political interference (or know who can)
- Transparency
- Actively seeks mentorship and research
- Lead advocate of Mission, Vision, work plan Design Principles and Key Elements; and the need for project replication
- Compliance, responsiveness and cooperation with the funder
- Regular project check-in and interaction at all levels
- Relationship builder

10. Funding and funding flexibility for student success supports

- Adequate resources to implement partnership activities
- Sufficient time to develop and execute projects, and strengthen relationships
- Leveraging resources
- Prompt invoice payment
- Promote efficient and effective use of resources around shared institutional goals.
- Award methodology that includes project application and review process

11. Accountability

- Accountability, milestones, metrics – awarded projects with clearly defines statements of work.
- MOU/contracts
- Continuous evaluation and constant use of data to improve effectiveness
- Required project progress reports
- Project lead check-ins; periodic formative evaluation
- Budget monitoring
- Outcome sharing

ATTACHMENT B: CURRICULAR MAPPING PATHWAY CROSSWALKS DETAILS

- [Accounting Pathways](#)
- [Engineering Pathways](#)
- [Teaching Pathways](#)

ACCOUNTING:

Accounting Pathway: Crosswalk to Fresno Pacific University

Accounting Pathway: Crosswalk to Fresno State

Accounting Pathway: Crosswalk to National University

Accounting Pathway: Crosswalk to UMass Global (formerly Brandman University)



Accounting Pathway



CROSSWALK FRESNO PACIFIC UNIVERSITY

These are a specific set of courses students must complete in this major in sequential order to complete their degree program and get one step closer to a career in Liberal Studies.

Talk to your counselor for further guidance and academic support.

MORE INFORMATION

FresnoHigherEdForAll.com

Fresno.edu

ReedleyCollege.edu

ClovisCollege.edu

FresnoCityCollege.edu

LAST UPDATED 11/01/2021

Complete courses at your community college to earn an Associate's Degree with the goal of transferring to Fresno Pacific University.

STEP 1: Complete Associate Degree for Transfer – Business Administration at Clovis Community College (CCC), Reedley College (RC) or Fresno City College (FCC)

FALL YEAR 1	SPRING YEAR 1
ENGLISH 1A OR 1AH (ALL)	ENGL 3 OR 3H (ALL), ENGL 2 (RC) OR COMM 25 (ALL) OR COMM 25H (RC) OR PHIL 2, 6 (ALL) OR PHIL 4 (CCC, RC) OR PHIL 2H (FCC) OR COMPUTER SCIENCE 1 (CCC) OR SOCIOLOGY 1B (CCC) OR CRIMINOLOGY 13 (FCC) OR POLITICAL SCIENCE 13 (FCC)
DECISION SCIENCE 23 (FCC) MATH 11 OR STAT 7 (CCC, RC)	ECONOMICS 1A (CCC, RC) ECONOMICS 50 OR 50H (FCC)
INFORMATION SYSTEMS 15 (CCC, RC) COMPUTER INFORMATION TECHNOLOGY 15 (FCC)	BUSINESS ADMINISTRATION 39 (CCC, RC) DECISION SCIENCE 21 (FCC)
ART 2, 5, 6, OR 6H (ALL) OR ART 26 (CCC, RC) OR ART 10 (FCC, RC) OR ART 3, 5H, 7, 9, 11, 12A, 14, 15, 17, 55, 60, 70 (FCC) OR COMM 12 (ALL) OR FILM 2A, 2B (ALL) OR FILM 1 (CCC, FCC) OR FILM 1A, 6 (RC) OR MUS 12, 16 (ALL) OR MUS 3, 13, 15 (FCC) OR MUS 16A (CCC) OR MUS 12H (RC) OR PHOTOGRAPHY 1 (CCC, RC) OR PHOTOGRAPHY 5 (FCC) OR AFRICAN AMERICAN 3, 8, 15 (FCC) OR ASIAN AMERICAN 55 (FCC), CHICANO LATINO STUDIES 17A, 22, 27B (FCC) OR DANCE 17A, 27B, 30 (FCC) OR THEATER ARTS 12, 30, 44A (FCC)	BIOL 3 (CCC, FCC) OR BIOL 10 & 10L (CCC, RC) OR BIOL 5 (ALL) OR BIOL 4, 6, 7 (FCC) OR BIOL 2, 10H & 10L (RC)
	HISTORY 11 OR 12 OR 12H (CCC, FCC, RC)** **STUDENTS ATTENDING FRESNO CITY COLLEGE WILL NEED TO MEET WITH THEIR COUNSELOR TO DISCUSS ADDING AN ADDITIONAL CSU GE AREA C1/C2 COURSE TO THEIR STUDENT EDUCATIONAL PLAN
FALL YEAR 2	SPRING YEAR 2
ACCOUNTING 4A (ALL)	ACCOUNTING 4B (ALL)
ECONOMICS 1B (CCC, RC) ECONOMICS 40 OR 40H (FCC)	BUSINESS ADMINISTRATION 1B (ALL)
POLITICAL SCIENCE 2 OR 2H (CCC, FCC, RC)	CHEM 3A(L) (ALL) OR CHEM 1A(L) (CCC, RC) OR ASTRO 10(L) (FCC, RC) OR GEOGRAPHY 1, 15 (CCC) OR GEOGRAPHY 1(L), 7(L), 8(L) (FCC) OR GEOGRAPHY 5, 9 (RC) OR GEOL 1(L) (ALL) OR GEOL 2 (FCC, RC) OR GEOL 9(L) (CCC, RC) OR GEOL 2WL(L) (CCC) OR GEOL 10 (RC) OR GEOL 4, 5, 12 (ALL) OR SCIENCE 1A(L) (CCC) OR SCIENCE 1A (RC) OR NATURAL SCIENCE 1A(L) (FCC) OR PHYSICAL SCIENCE 11 (FCC)
COMM 1, 4, 8 (ALL) OR COMM 1H, 25 (CCC, RC) OR COMM 2 (CCC, FCC) OR COMM 8H (FCC) OR COMM 25H	ANTHROPOLOGY 13 (CCC) OR ART 26 (CCC) OR AMERICAN SIGN LANGUAGE 1, 2, 3, 4 (ALL) OR AMERICAN SIGN LANGUAGE 5, 7, 8 (FCC) OR CHINESE 1, 2 (CCC, FCC) OR ENGLISH 1B, 44A, 44B, 46A, 46B, 47 (ALL) OR ENGLISH 1BH, 43A, 43B, 49 (CCC, RC) OR ENGLISH 36 (FCC, RC) OR ENGLISH 12, 14, 15A, 15B, 17, 40, 42, 45, 48A, 48B (FCC) OR FILM 2A, 2B (ALL) OR FILM 1, 3 (FCC) OR FRENCH 1, 2, 3 (ALL) OR FRENCH 4 (CCC, RC) OR HISTORY 1, 2 (ALL) OR HISTORY 20 (CCC, RC) OR HISTORY 22 (RC) OR HISTORY 23, 31, 33 (CCC) OR GERMAN 1, 2 (CCC, FCC) OR GERMAN 3, 4 (CCC) OR LINGUISTICS 10 (ALL) OR LINGUISTICS 10H (FCC) OR LINGUISTICS 11 (RC) OR MUSIC 16A (CCC) OR PHILOSOPHY 1 (CCC, RC) OR PHILOSOPHY 1C, 1CH, 1D, 3A (ALL) OR PHILOSOPHY 3 (CCC) OR PHILOSOPHY 3B (FCC, RC) OR PHILOSOPHY 1A, 1AH, 1B, 5 (FCC) OR SPANISH 1, 2, 3, 3NS, 4, 4NS (ALL) OR SPANISH 15, 16 (CCC, RC) OR SPANISH 5 (FCC, RC) OR SPANISH 2NS 5, 6, 7, 9, 41, 42 (FCC) OR AFRICAN AMERICAN 17 (FCC) OR ARMENIAN 1, 2 (FCC) OR ASIAN AMERICAN 8 (FCC) OR CHICANO LATINO STUDIES 21 (FCC) OR HMONG 1, 2 (FCC) OR HUMANITIES 10, 11, 42 (FCC) OR JAPANESE 1, 2 (FCC) OR POLITICAL SCIENCE 3 (FCC) OR PORTUGUESE 1, 2 (FCC) OR THEATER ARTS 32 (FCC) OR WOMAN'S STUDIES 36 (FCC) OR ENGLISH AS A SECOND LANGUAGE 14, 15 (RC)

Accounting Pathway



CROSSWALK FRESNO STATE

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MORE INFORMATION

FresnoHigherEdForAll.com

FresnoState.edu

ReedleyCollege.edu

ClovisCollege.edu

FresnoCityCollege.edu

LAST UPDATED 11/01/2021

Complete courses at your community college to earn an Associate's Degree with the goal of transferring to Fresno State.

STEP 1: Complete Associate Degree for Transfer – Business Administration at Clovis Community College (CCC), Reedley College (RC) or Fresno City College (FCC)

FALL YEAR 1	SPRING YEAR 1
ENGL 1A or 1AH (ALL)	ENGL 3 or 3H (ALL), ENGL 2 (RC) or COMM 25 (ALL) or COMM 25H (RC) or PHIL 2, 6 (ALL) or PHIL 4 (CCC, RC) or PHIL 2H (FCC) or COMPUTER SCIENCE 1 (CCC) or SOCIOLOGY 1B (CCC) or CRIMINOLOGY 13 (FCC) or POLITICAL SCIENCE 13 (FCC)
DECISION SCIENCE 23 (FCC) or MATH 11 (CCC) or STAT 7 (CCC, RC)	ECONOMICS 1A (CCC, RC) or ECONOMICS 50 or 50H (FCC)
INFORMATION SYSTEMS 15 (CCC, RC) or COMPUTER INFORMATION TECHNOLOGY 15 (FCC)	BUSINESS ADMINISTRATION 39 (CCC, RC) or DECISION SCIENCE 21 (FCC)
ART 2, 5, 6, or 6H (ALL) or ART 28 (CCC, RC) or ART 10 (FCC, RC) or ART 3, 5H, 7, 9, 11, 12A, 14, 15, 17, 55, 60, 70 (FCC) or COMM 12 (ALL) or FILM 2A, 2B (ALL) or FILM 1 (CCC, FCC) or FILM 1A, 6 (RC) or MUS 12, 16 (ALL) or MUS 3, 13, 15 (FCC) or MUS 16A (CCC) or MUS 12H (RC) or PHOTOGRAPHY 1 (CCC, RC) or PHOTOGRAPHY 5 (FCC) or AFRICAN AMERICAN 3, 8, 15 (FCC) or ASIAN AMERICAN 55 (FCC), CHICANO LATINO STUDIES 17A, 22, 27B (FCC) or DANCE 17A, 27B, 30 (FCC) or THEATER ARTS 12, 30, 44A (FCC)	BIOL 3 (CCC, FCC) or BIOL 10 & 10L (CCC, RC) or BIOL 5 (ALL) or BIOL 4, 6, 7 (FCC) or BIOL 2, 10H & 10L (RC)
	HISTORY 11 or 12 or 12H (CCC, FCC, RC)** **STUDENTS ATTENDING FRESNO CITY COLLEGE WILL NEED TO MEET WITH THEIR COUNSELOR TO DISCUSS ADDING AN ADDITIONAL CSU GE AREA C1/C2 COURSE TO THEIR STUDENT EDUCATIONAL PLAN
FALL YEAR 2	SPRING YEAR 2
ACCTG 4A (ALL)	ACCTG 4B (ALL)
ECON 1B (CCC, RC) or ECON 40 or 40H (FCC)	BA 18 (ALL)
POLITICAL SCIENCE 2 or 2H (ALL)	CHEM 3A(L) (ALL) or CHEM 1A(L) (CCC, RC) or ASTRO 10(L) (FCC, RC) or GEOGRAPHY 1, 15 (CCC) or GEOGRAPHY 1(L), 7(L), 8(L) (FCC) or GEOGRAPHY 5, 9 (RC) or GEOL 1(L) (ALL) or GEOL 2 (FCC, RC) or GEOL 9(L) (CCC, RC) or GEOL 2WL(L) (CCC) or GEOL 10 (RC) or GEOL 4, 5, 12 (ALL) or SCIENCE 1A(L) (CCC) or SCIENCE 1A (RC) or NATURAL SCIENCE 1A(L) (FCC) or PHYSICAL SCIENCE 11 (FCC)
COMM 1, 4, 8 (ALL) or COMM 1H, 25 (CCC, RC) or COMM 2 (CCC, FCC) or COMM 8H (FCC) or COMM 25H	CSU GENERAL EDUCATION AREA F – ETHNIC STUDIES **MEET WITH COUNSELOR TO DISCUSS OPTIONS
FOOD AND NUTRITION 35, HEALTH 1, PSYCHOLOGY 2, or 2H, 25, 38 (ALL) or COUNSELING 53, EARLY CHILDHOOD EDUCATION 2, 14 (CCC, RC) or INTERDISCIPLINARY STUDIES 50 (CCC) or CHILD DEVELOPMENT 38, 39, FOOD AND NUTRITION 40, PE (CHECK WITH FCC COUNSELOR), PSYCHOLOGY 33, 39 (FCC) or COMMUNICATION 2, SOCIOLOGY 1A, 32 (RC)	

STEP 2: Transfer to Fresno State for your Bachelor's Degree

FALL YEAR 3	SPRING YEAR 3	FALL YEAR 4	SPRING YEAR 4
BA 105W	MGT 110	MKTG 100S	GE ID
ACCT 120A	ACCT 120B	FIN 120	ACCT 187
DS 123	ACCT 132	ACCT ELECTIVE	MGT 124
GE IB	GE IC	ACCT ELECTIVE	ACCT ELECTIVE
IS 130			

** Each semester select one course per row**

Accounting Pathway



CROSSWALK NATIONAL UNIVERSITY

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MORE INFORMATION

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ReedleyCollege.edu

ClovisCollege.edu

FresnoCityCollege.edu

LAST UPDATED 11/01/2021

Complete courses at your community college to earn an Associate's Degree with the goal of transferring to National University.

STEP 1: Complete Associate Degree for Transfer – Business Administration at Clovis Community College (CCC), Reedley College (RC) or Fresno City College (FCC)

FALL YEAR 1	SPRING YEAR 1
ENGLISH 1A or 1AH (ALL)	ENGL 3 or 3H (ALL), ENGL 2 (RC) or COMM 25 (ALL) or COMM 25H (RC) or PHIL 2, 6 (ALL) or PHIL 4 (CCC, RC) or PHIL 2H (FCC) or COMPUTER SCIENCE 1 (CCC) or SOCIOLOGY 1B (CCC) or CRIMINOLOGY 13 (FCC) or POLITICAL SCIENCE 13 (FCC)
DECISION SCIENCE 23 (FCC) MATH 11 or STAT 7 (CCC, RC)	ECONOMICS 1A (CCC, RC) ECONOMICS 50 or 50H (FCC)
INFORMATION SYSTEMS 15 (CCC, RC) COMPUTER INFORMATION TECHNOLOGY 15 (FCC)	BUSINESS ADMINISTRATION 39 (CCC, RC) DECISION SCIENCE 21 (FCC)
ART 2, 5, 6, or 6H (ALL) or ART 26 (CCC, RC) or ART 10 (FCC, RC) or ART 3, 5H, 7, 9, 11, 12A, 14, 15, 17, 55, 60, 70 (FCC) or COMM 12 (ALL) or FILM 2A, 2B (ALL) or FILM 1 (CCC, FCC) or FILM 1A, 6 (RC) or MUS 12, 16 (ALL) or MUS 3, 13, 15 (FCC) or MUS 16A (CCC) or MUS 12H (RC) or PHOTOGRAPHY 1 (CCC, RC) or PHOTOGRAPHY 5 (FCC) or AFRICAN AMERICAN 3, 8, 15 (FCC) or ASIAN AMERICAN 55 (FCC), CHICANO LATINO STUDIES 17A, 22, 27B (FCC) or DANCE 17A, 27B, 30 (FCC) or THEATER ARTS 12, 30, 44A (FCC)	BIOL 3 (CCC, FCC) or BIOL 10 & 10L (CCC, RC) or BIOL 5 (ALL) or BIOL 4, 6, 7 (FCC) or BIOL 2, 10H & 10L (RC)
	HISTORY 11 or 12 or 12H (CCC, FCC, RC)** **STUDENTS ATTENDING FRESNO CITY COLLEGE WILL NEED TO MEET WITH THEIR COUNSELOR TO DISCUSS ADDING AN ADDITIONAL CSU GE AREA C1/C2 COURSE TO THEIR STUDENT EDUCATIONAL PLAN

FALL YEAR 2
ACCOUNTING 4A (ALL)
ECONOMICS 1B (CCC, RC) ECONOMICS 40 or 40H (FCC)
POLITICAL SCIENCE 2 or 2H (CCC, FCC, RC)
COMM 1, 4, 8 (ALL) or COMM 1H, 25 (CCC, RC) or COMM 2 (CCC, FCC) or COMM 8H (FCC) or COMM 25H
FOOD AND NUTRITION 35, HEALTH 1, PSYCHOLOGY 2, or 2H, 25, 38 (ALL) or COUNSELING 53, EARLY CHILDHOOD EDUCATION 2, 14 (CCC, RC) or INTERDISCIPLINARY STUDIES 50 (CCC) or CHILD DEVELOPMENT 38, 39, FOOD AND NUTRITION 40, PE (CHECK WITH FCC COUNSELOR), PSYCHOLOGY 33, 39 (FCC) or COMMUNICATION 2, SOCIOLOGY 1A, 32 (RC)

SPRING YEAR 2
ACCOUNTING 4B (ALL)
BUSINESS ADMINISTRATION 18 (ALL)
CHEM 3A(L) (ALL) or CHEM 1A(L) (CCC, RC) or ASTRO 10(L) (FCC, RC) or GEOGRAPHY 1, 15 (CCC) or GEOGRAPHY 1(L), 7(L), 8(L) (FCC) or GEOGRAPHY 5, 9 (RC) or GEOL 1(L) (ALL) or GEOL 2 (FCC, RC) or GEOL 9(L) (CCC, RC) or GEOL 2WL(L) (CCC) or GEOL 10 (RC) or GEOL 4, 5, 12 (ALL) or SCIENCE 1A(L) (CCC) or SCIENCE 1A (RC) or NATURAL SCIENCE 1A(L) (FCC) or PHYSICAL SCIENCE 11 (FCC)
ANTHROPOLOGY 13 (CCC) or ART 26 (CCC) or AMERICAN SIGN LANGUAGE 1, 2, 3, 4 (ALL) or AMERICAN SIGN LANGUAGE 5, 7, 8 (FCC) or CHINESE 1, 2 (CCC, FCC) or ENGLISH 1B, 44A, 44B, 46A, 46B, 47 (ALL) or ENGLISH 18H, 43A, 43B, 49 (CCC, RC) or ENGLISH 36 (FCC, RC) or ENGLISH 12, 14, 15A, 15B, 17, 40, 42, 45, 48A, 48B (FCC) or FILM 2A, 2B (ALL) or FILM 1, 3 (FCC) or FRENCH 1, 2, 3 (ALL) or FRENCH 4 (CCC, RC) or HISTORY 1, 2 (ALL) or HISTORY 20 (CCC, RC) or HISTORY 22 (RC) or HISTORY 23, 31, 33 (CCC) or GERMAN 1, 2 (CCC, FCC) or GERMAN 3, 4 (CCC) or LINGUISTICS 10 (ALL) or LINGUISTICS 10H (FCC) or LINGUISTICS 11 (RC) or MUSIC 16A (CCC) or PHILOSOPHY 1 (CCC, RC) or PHILOSOPHY 1C, 1CH, 1D, 3A (ALL) or PHILOSOPHY 3 (CCC) or PHILOSOPHY 3B (FCC, RC) or PHILOSOPHY 1A, 1AH, 1B, 5 (FCC) or SPANISH 1, 2, 3, 3NS, 4, 4NS (ALL) or SPANISH 15, 16 (CCC, RC) or SPANISH 5 (FCC, RC) or SPANISH 2NS 5, 6, 7, 9, 41, 42 (FCC) or AFRICAN AMERICAN 17 (FCC) or ARMENIAN 1, 2 (FCC) or ASIAN AMERICAN 8 (FCC) or CHICANO LATINO STUDIES 21 (FCC) or Hmong 1, 2 (FCC) or HUMANITIES 10, 11, 42 (FCC) or JAPANESE 1, 2 (FCC) or POLITICAL SCIENCE 3 (FCC) or PORTUGUESE 1, 2 (FCC) or THEATER ARTS 32 (FCC) or WOMAN'S STUDIES 36 (FCC) or ENGLISH AS A SECOND LANGUAGE 14, 15 (RC)



**NATIONAL
UNIVERSITY**





Accounting Pathway



CROSSWALK NATIONAL UNIVERSITY

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MORE INFORMATION

FresnoHigherEdForAll.com

NU.edu

ReedleyCollege.edu

ClovisCollege.edu

FresnoCityCollege.edu

LAST UPDATED: 10/01/2021

Complete courses at your community college to earn an Associate's Degree with the goal of transferring to National University.

STEP 2: Transfer to National University for your Bachelor's Degree

FALL YEAR 3
BIM 400
MGT 309C
FIN 310
MKT 302A or IBU 430 or MNS 407

SPRING YEAR 3
ACC 410A
ACC 410B
ACC 410C
ACC 431

FALL YEAR 4
ACC 432A
ACC 432B
ACC 433
ACC 434
ACC 436

SPRING YEAR 4
ACC 515
ACC 555
ACC 435A
ACC 435B



NATIONAL
UNIVERSITY



Accounting Pathway



CROSSWALK UNIVERSITY OF MASSACHUSETTS GLOBAL

These are a specific set of courses students must complete in this major in sequential order to complete their degree program and get one step closer to a career in Liberal Studies.

Talk to your counselor for further guidance and academic support.

MORE INFORMATION

FresnoHigherEdForAll.com

UMassGlobal.edu

ReedleyCollege.edu

ClovisCollege.edu

FresnoCityCollege.edu

LAST UPDATED 11/01/2021

Complete courses at your community college to earn an Associate's Degree with the goal of transferring to University of Massachusetts Global.

STEP 1: Complete GE classes at Clovis Community College (CCC), Reedley College (RC) or Fresno City College (FCC)

FALL YEAR 1	SPRING YEAR 1
ENGLISH 1A or 1AH (ALL)	ENGL 3 or 3H (ALL), ENGL 2 (RC) or COMM 25 (ALL) or COMM 25H (RC) or PHIL 2, 6 (ALL) or PHIL 4 (CCC, RC) or PHIL 2H (FCC) or COMPUTER SCIENCE 1 (CCC) or SOCIOLOGY 1B (CCC) or CRIMINOLOGY 13 (FCC) or POLITICAL SCIENCE 13 (FCC)
DECISION SCIENCE 23 (FCC) MATH 11 or STAT 7 (CCC, RC)	ECONOMICS 1A (CCC, RC) ECONOMICS 50 or 50H (FCC)
INFORMATION SYSTEMS 15 (CCC, RC) COMPUTER INFORMATION TECHNOLOGY 15 (FCC)	BUSINESS ADMINISTRATION 39 (CCC, RC) DECISION SCIENCE 21 (FCC)
ART 2, 5, 6, or 6H (ALL) or ART 26 (CCC, RC) or ART 10 (FCC, RC) or ART 3, 5H, 7, 9, 11, 12A, 14, 15, 17, 55, 60, 70 (FCC) or COMM 12 (ALL) or FILM 2A, 2B (ALL) or FILM 1 (CCC, FCC) or FILM 1A, 6 (RC) or MUS 12, 16 (ALL) or MUS 3, 13, 15 (FCC) or MUS 16A (CCC) or MUS 12H (RC) or PHOTOGRAPHY 1 (CCC, RC) or PHOTOGRAPHY 5 (FCC) or AFRICAN AMERICAN 3, 8, 15 (FCC) or ASIAN AMERICAN 55 (FCC), CHICANO LATINO STUDIES 17A, 22, 27B (FCC) or DANCE 17A, 27B, 30 (FCC) or THEATER ARTS 12, 30, 44A (FCC)	BIOL 3 (CCC, FCC) or BIOL 10 & 10L (CCC, RC) or BIOL 5 (ALL) or BIOL 4, 6, 7 (FCC) or BIOL 2, 10H & 10L (RC)
	HISTORY 11 or 12 or 12H (CCC, FCC, RC)** **STUDENTS ATTENDING FRESNO CITY COLLEGE WILL NEED TO MEET WITH THEIR COUNSELOR TO DISCUSS ADDING AN ADDITIONAL CSU GE AREA C1/C2 COURSE TO THEIR STUDENT EDUCATIONAL PLAN

FALL YEAR 2
ACCOUNTING 4A (ALL)
ECONOMICS 1B (CCC, RC) ECONOMICS 40 or 40H (FCC)
POLITICAL SCIENCE 2 or 2H (CCC, FCC, RC)
COMM 1, 4, 8 (ALL) or COMM 1H, 25 (CCC, RC) or COMM 2 (CCC, FCC) or COMM 8H (FCC) or COMM 25H
FOOD AND NUTRITION 35, HEALTH 1, PSYCHOLOGY 2, or 2H, 25, 38 (ALL) or COUNSELING 53, EARLY CHILDHOOD EDUCATION 2, 14 (CCC, RC) or INTERDISCIPLINARY STUDIES 50 (CCC) or CHILD DEVELOPMENT 38, 39, FOOD AND NUTRITION 40, PE (CHECK WITH FCC COUNSELOR), PSYCHOLOGY 33, 39 (FCC) or COMMUNICATION 2, SOCIOLOGY 1A, 32 (RC)

SPRING YEAR 2
ACCOUNTING 4B (ALL)
BUSINESS ADMINISTRATION 18 (ALL)
CHEM 3A(L) (ALL) or CHEM 1A(L) (CCC, RC) or ASTRO 10(L) (FCC, RC) or GEOGRAPHY 1, 15 (CCC) or GEOGRAPHY 1(L), 7(L), 8(L) (FCC) or GEOGRAPHY 5, 9 (RC) or GEOL 1(L) (ALL) or GEOL 2 (FCC, RC) or GEOL 9(L) (CCC, RC) or GEOL 2WL(L) (CCC) or GEOL 10 (RC) or GEOL 4, 5, 12 (ALL) or SCIENCE 1A(L) (CCC) or SCIENCE 1A (RC) or NATURAL SCIENCE 1A(L) (FCC) or PHYSICAL SCIENCE 11 (FCC)
ANTHROPOLOGY 13 (CCC) or ART 26 (CCC) or AMERICAN SIGN LANGUAGE 1, 2, 3, 4 (ALL) or AMERICAN SIGN LANGUAGE 5, 7, 8 (FCC) or CHINESE 1, 2 (CCC, FCC) or ENGLISH 1B, 44A, 44B, 46A, 46B, 47 (ALL) or ENGLISH 1BH, 43A, 43B, 49 (CCC, RC) or ENGLISH 36 (FCC, RC) or ENGLISH 12, 14, 15A, 15B, 17, 40, 42, 45, 48A, 48B (FCC) or FILM 2A, 2B (ALL) or FILM 1, 3 (FCC) or FRENCH 1, 2, 3 (ALL) or FRENCH 4 (CCC, RC) or HISTORY 1, 2 (ALL) or HISTORY 20 (CCC, RC) or HISTORY 22 (RC) or HISTORY 23, 31, 33 (CCC) or GERMAN 1, 2 (CCC, FCC) or GERMAN 3, 4 (CCC) or LINGUISTICS 10 (ALL) or LINGUISTICS 10H (FCC) or LINGUISTICS 11 (RC) or MUSIC 16A (CCC) or PHILOSOPHY 1 (CCC, RC) or PHILOSOPHY 1C, 1CH, 1D, 3A (ALL) or PHILOSOPHY 3 (CCC) or PHILOSOPHY 3B (FCC, RC) or PHILOSOPHY 1A, 1AH, 1B, 5 (FCC) or SPANISH 1, 2, 3, 3NS, 4, 4NS (ALL) or SPANISH 15, 16 (CCC, RC) or SPANISH 5 (FCC, RC) or SPANISH 2NS 5, 6, 7, 9, 41, 42 (FCC) or AFRICAN AMERICAN 17 (FCC) or ARMENIAN 1, 2 (FCC) or ASIAN AMERICAN 8 (FCC) or CHICANO LATINO STUDIES 21 (FCC) or HMONG 1, 2 (FCC) or HUMANITIES 10, 11, 42 (FCC) or JAPANESE 1, 2 (FCC) or POLITICAL SCIENCE 3 (FCC) or PORTUGUESE 1, 2 (FCC) or THEATER ARTS 32 (FCC) or WOMAN'S STUDIES 36 (FCC) or ENGLISH AS A SECOND LANGUAGE 14, 15 (RC)



Accounting Pathway



CROSSWALK UMASS GLOBAL

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MORE INFORMATION

FresnoHigherEdForAll.com

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ClovisCollege.edu

FresnoCityCollege.edu

LAST UPDATED 11/01/2021

STEP 2: Transfer to UMass Global for your Bachelor's Degree

CORE COURSES

LBSU 302	ACCU 360	OLCU 425	ACCU 401
LBSU 304	COMU 410	MGU 410	ACCU 439
MGU 301	FINU 305	ACCU 301	ACCU 452
MGU 400	MGU 315	ACCU 302	ACCU 460
MKTU 301	OLCU 350	ACCU 325	



ENGINEERING:



Mechanical Engineering Pathway

CREDENTIALS FREQUENTLY ASKED QUESTIONS

There are a variety of ways to earn your credential. You can earn your credential by completing all the required courses and exams, or you can earn your credential by completing a degree program that includes all the required courses and exams.

2100 K: Computer-Aided Design (CAD) and Drafting (CADD) Certificate

Course	Prerequisites	Corequisites
MECH 101	None	None
MECH 102	MECH 101	None
MECH 103	MECH 101	None
MECH 104	MECH 101	None
MECH 105	MECH 101	None
MECH 106	MECH 101	None
MECH 107	MECH 101	None
MECH 108	MECH 101	None
MECH 109	MECH 101	None
MECH 110	MECH 101	None
MECH 111	MECH 101	None
MECH 112	MECH 101	None
MECH 113	MECH 101	None
MECH 114	MECH 101	None
MECH 115	MECH 101	None
MECH 116	MECH 101	None
MECH 117	MECH 101	None
MECH 118	MECH 101	None
MECH 119	MECH 101	None
MECH 120	MECH 101	None
MECH 121	MECH 101	None
MECH 122	MECH 101	None
MECH 123	MECH 101	None
MECH 124	MECH 101	None
MECH 125	MECH 101	None
MECH 126	MECH 101	None
MECH 127	MECH 101	None
MECH 128	MECH 101	None
MECH 129	MECH 101	None
MECH 130	MECH 101	None
MECH 131	MECH 101	None
MECH 132	MECH 101	None
MECH 133	MECH 101	None
MECH 134	MECH 101	None
MECH 135	MECH 101	None
MECH 136	MECH 101	None
MECH 137	MECH 101	None
MECH 138	MECH 101	None
MECH 139	MECH 101	None
MECH 140	MECH 101	None
MECH 141	MECH 101	None
MECH 142	MECH 101	None
MECH 143	MECH 101	None
MECH 144	MECH 101	None
MECH 145	MECH 101	None
MECH 146	MECH 101	None
MECH 147	MECH 101	None
MECH 148	MECH 101	None
MECH 149	MECH 101	None
MECH 150	MECH 101	None
MECH 151	MECH 101	None
MECH 152	MECH 101	None
MECH 153	MECH 101	None
MECH 154	MECH 101	None
MECH 155	MECH 101	None
MECH 156	MECH 101	None
MECH 157	MECH 101	None
MECH 158	MECH 101	None
MECH 159	MECH 101	None
MECH 160	MECH 101	None
MECH 161	MECH 101	None
MECH 162	MECH 101	None
MECH 163	MECH 101	None
MECH 164	MECH 101	None
MECH 165	MECH 101	None
MECH 166	MECH 101	None
MECH 167	MECH 101	None
MECH 168	MECH 101	None
MECH 169	MECH 101	None
MECH 170	MECH 101	None
MECH 171	MECH 101	None
MECH 172	MECH 101	None
MECH 173	MECH 101	None
MECH 174	MECH 101	None
MECH 175	MECH 101	None
MECH 176	MECH 101	None
MECH 177	MECH 101	None
MECH 178	MECH 101	None
MECH 179	MECH 101	None
MECH 180	MECH 101	None
MECH 181	MECH 101	None
MECH 182	MECH 101	None
MECH 183	MECH 101	None
MECH 184	MECH 101	None
MECH 185	MECH 101	None
MECH 186	MECH 101	None
MECH 187	MECH 101	None
MECH 188	MECH 101	None
MECH 189	MECH 101	None
MECH 190	MECH 101	None
MECH 191	MECH 101	None
MECH 192	MECH 101	None
MECH 193	MECH 101	None
MECH 194	MECH 101	None
MECH 195	MECH 101	None
MECH 196	MECH 101	None
MECH 197	MECH 101	None
MECH 198	MECH 101	None
MECH 199	MECH 101	None
MECH 200	MECH 101	None
MECH 201	MECH 101	None
MECH 202	ME	

Mechanical Engineering Pathway: Crosswalk to Fresno State

Civil Engineering Pathway: Crosswalk to Fresno State



Mechanical Engineering Pathway



CROSSWALK FRESNO STATE

These are a specific set of courses students must complete in this major in sequential order to complete their degree program and get one step closer to a career in Mechanical Engineering.

Talk to your counselor for further guidance and academic support.

MORE INFORMATION

FresnoHigherEdForAll.com

FresnoState.edu

ReedleyCollege.edu

ClovisCollege.edu

FresnoCityCollege.edu

LAST UPDATED 11/01/2021

Complete courses at your community college to earn an Associate's Degree with the goal of transferring to Fresno State.

STEP 1: Complete Major Prerequisites and General Education classes at Clovis Community College (CCC), Reedley College (RC) or Fresno City College (FCC)

FALL YEAR 1
ENGLISH 1A or 1AH (ALL)
MATH 5A (ALL)
ENGINEERING 40 or COMPUTER SCIENCE (ALL)
ENGINEERING 10 (ALL)
BIOL 10 + BIOL 10L (RC, CCC) or BIOL 3 (CCC, FCC)

SPRING YEAR 1
MATH 5B (ALL)
CHEMISTRY 1A (ALL) or CHEM 1A + 1B (FCC)
PHYSICS 4A (ALL)
ENGINEERING 2 (ALL)
HIS 11, 12 or 12H (ALL)

FALL YEAR 2
MATH 8 (ALL)
ENGINEERING 5 (ALL)
ENGINEERING 8 (ALL)
ENGINEERING 4 (ALL)
ENGINEERING 4L (RC) ; N/A (CCC, FCC)
PHYSICS 4B (ALL)
CSU GENERAL EDUCATION AREA F - ETHNIC STUDIES **MEET WITH COUNSELOR TO DISCUSS OPTIONS

SPRING YEAR 2
MATH 17 (ALL) or MATH 7 (FCC)
PHYSICS 4C (ALL)
COMMUNICATIONS 1 or 1H, 4, 8 (ALL)
ENGR 6 *ACCEPTED IN PLACE OF FRESNO STATE ENGR 91/91L WITH PETITION
PHILOSOPHY 1C or 1CH (ALL)
POLITICAL SCIENCE 2 or 2H (ALL)
TAKE ME 95 AT FRESNO STATE (RC, CCC) or ENGR 11 (FCC)

STEP 2: Transfer to California State University, Fresno for your Bachelor's Degree

FALL YEAR 3
SOCIAL SCIENCE
CE 121
ME 112
ME 115
ME 125
ME 136

SPRING YEAR 3
ME 134
ME 116
ME 118
ME 140
ME 156

FALL YEAR 4
ME 135
ME 145
ME 154
ME TECH

SPRING YEAR 4
ME PLSI 120
ME 155
ME 159
ME 166
ME TECH

** Each semester select one course per row**

FRESNO STATE
Degrees. Diversity. Determined.



Civil Engineering Pathway



CROSSWALK FRESNO STATE

These are a specific set of courses students must complete in this major in sequential order to complete their degree program and get one step closer to a career in Civil Engineering.

Talk to your counselor for further guidance and academic support.

MORE INFORMATION

FresnoHigherEdForAll.com

FresnoState.edu

ReedleyCollege.edu

ClovisCollege.edu

FresnoCityCollege.edu

LAST UPDATED 11/01/2021

Complete courses at your community college to earn an Associate's Degree with the goal of transferring to California State University, Fresno.

STEP 1: Complete Major Prerequisites and General Education classes at Clovis Community College (CCC), Reedley College (RC) or Fresno City College (FCC)

FALL YEAR 1
ENGLISH 1A OR 1AH (ALL)
MATH 5A (ALL)
COMM 1 OR 4 OR 8 (ALL) OR COMM 1H (RC, CCC) OR COMM 2 (CCC, FCC) OR COMM 8H (FCC) OR COMM 25 (RC, CCC) OR COMM 25 H (RC)
BIOL 10 + BIOL 10L (RC, CCC) OR BIOL 10H + BIOL 10L (RC) OR BIOL 3 (CCC, FCC)

FALL YEAR 2
MATH 6 (ALL)
PHYSICS 4B (ALL)
ENGINEERING 8 (ALL)
HISTORY 11 OR 12 (ALL)
POLSCI 2 OR 2H (ALL)

SPRING YEAR 1
MATH 5B (ALL)
CHEMISTRY 3A OR 1A (ALL)
PHYSICS 4A (ALL)
ENGINEERING 2 (ALL) OR CADD14/24 (FCC)
ENGR 10 (FCC) OR ENGR 110 (RC, CCC)
ENGR 5 (FCC) OR ENGR 120 (RC, CCC)

SPRING YEAR 2
MATH 17 (RC, CCC) OR MATH 7 (FCC)
ENGINEERING 6* (ALL) *ACCEPTED THROUGH PETITION WITH FRESNO STATE
GEOL 1 (ALL)
PHIL 1 (RC, CCC) OR PHIL 1A, 1AH OR 5 (FCC)
NR 17 (RC) OR ENGR 1A (FCC) OR GME 115, 15L (FRESNO STATE)
CSU GENERAL EDUCATION AREA F - ETHNIC STUDIES **MEET WITH COUNSELOR TO DISCUSS OPTIONS

STEP 2: Transfer to California State University, Fresno for your Bachelor's Degree

FALL YEAR 3*
CE 121, 121L
CE 128, 129
ME 112
CE 142
CE 150
*UPPER DIVISION WRITING REQUIREMENT

FALL YEAR 4
CE 132
CE 133
CE 180A
CE TECH
CE TECH
CE 161*
*UPPER DIVISION WRITING REQUIREMENT

SPRING YEAR 3
CE 123, 123L
CE 130
CE 124
CE 142L
GE (D3)
CE TECH

SPRING YEAR 4
CE 180B
CE 185
CE TECH
M/I
ECE 91/CE TECH

TEACHING:

[Teaching Pathway: Crosswalk to Fresno State](#)

[Teaching Pathway: Crosswalk to Fresno Pacific University](#)

[Teaching Pathway \(Accelerated for Adult Learners\): Crosswalk to Fresno Pacific University](#)

[Teaching Pathway: Crosswalk to National University](#)

[Teaching Pathway: Crosswalk to UMass Global](#)



Liberal Studies Pathway



CROSSWALK FRESNO STATE

These are a specific set of courses students must complete in this major in sequential order to complete their degree program and get one step closer to a career in Liberal Studies.

Talk to your counselor for further guidance and academic support.

MORE INFORMATION

FresnoHigherEdForAll.com

FresnoState.edu

ReedleyCollege.edu

ClovisCollege.edu

FresnoCityCollege.edu

LAST UPDATED 11/01/2021

Complete courses at your community college to earn an Associate's Degree with the goal of transferring to Fresno State.

STEP 1: Complete Associate Degree for Transfer –Elementary Teacher Education at Clovis Community College (CCC), Reedley College (RC) or Fresno City College (FCC)

FALL YEAR 1

ENGLISH 1A or 1AH (ALL)
MATH 10A (ALL)
EARLY CHILDHOOD EDUCATION 2 (CCC, RC) or CHILD DEVELOPMENT 39 (FCC)
EDUCATION 10 (CCC, RC) or EDUCATION 19 & 30 (FCC)

SPRING YEAR 1

ENGLISH 2 or 2H (RC) or ENGLISH 3 or 3H (ALL) or PHIL 2 (ALL) or PHIL 2H (RC) or COMMUNICATIONS 25 (CCC)
MATH 10B (ALL)
GEOLOGY 9 (ALL)
COMMUNICATION 1 or 1H (CCC, FCC) or COMMUNICATION 1 (RC)
GEOGRAPHY 6 (CCC, RC) or GEOGRAPHY 4A & 4B (FCC)

FALL YEAR 2

SCIENCE 1A (RC, CCC) or NATURAL SCIENCE 1A (FCC)
ENGLISH 1B or 1BH (CCC, RC) or ENGLISH 1B (FCC)
LINGUISTICS 11 (ALL)
HISTORY 11 (ALL)
POLITICAL SCIENCE 2 or 2H (ALL)

SPRING YEAR 2

BIOLOGY 3 (CCC, RC) or BIOLOGY 10 & 10L (CCC, RC) BIOLOGY 10H & 10L (RC)
ART 2 (ALL) or MUSIC 12 (ALL) or MUSIC 12H (RC) or THEATER ARTS 30 (FCC)
HISTORY 20 (ALL)
ELECTIVE: (FCC) SELECT ONE- AFRAM/ ENGL 17 or ART 7 or ART 9 or ART 10 or ART 11 or ART 12A or ART 15 or ART 17 or ART/ASMER 55 or HIST 1 or COMM/TA 12 or CLS 21 or MUS 3 or MUS 13. ELECTIVE: (CCC, RC) - MEET WITH COUNSELOR TO DISCUSS OPTIONS
CSU GENERAL EDUCATION AREA F - ETHNIC STUDIES **MEET WITH COUNSELOR TO DISCUSS OPTIONS

STEP 2: Transfer to Fresno State for your Bachelor's Degree

FALL YEAR 3

SSCI 110
COMM 114
LING 132
ENGL 117W or LS 110WS
ELECTIVE

SPRING YEAR 3

NSCI 115
IAS 108
SSCI 180 or SOC 111
MATH 100
ELECTIVE

FALL YEAR 4

KINES 152
PSYCH 169, RA 125 or SPED 120
ART 179, DANCE 136S, 137 or MUSIC 153
LS 115 or LS 120
CI 100

SPRING YEAR 4

CREDENTIAL COURSE or ELECTIVE
CREDENTIAL COURSE or ELECTIVE
CREDENTIAL COURSE or ELECTIVE
CREDENTIAL COURSE or ELECTIVE
CREDENTIAL COURSE or ELECTIVE

Liberal Studies Elementary Teacher Pathway



CROSSWALK FRESNO PACIFIC UNIVERSITY

These are a specific set of courses students must complete in this major in sequential order to complete their degree program and get one step closer to a career in Liberal Studies.

Talk to your counselor for further guidance and academic support.

Students can expand their teaching opportunities beyond K-6 with a Supplemental Authorization in a specific subject. This would allow students to teach either at the elementary level or the Authorization subject area through the ninth grade.

MORE INFORMATION

FresnoHigherEdForAll.com

Fresno.edu

ReedleyCollege.edu

ClovisCollege.edu

FresnoCityCollege.edu

LAST UPDATED 11/01/2021

Complete courses at your community college to earn an Associate's Degree with the goal of transferring to Fresno Pacific University.

STEP 1: Complete Associate Degree for Transfer –Elementary Teacher Education at Clovis Community College (CCC), Reedley College (RC) or Fresno City College (FCC)

FALL YEAR 1	SPRING YEAR 1
ENGLISH 1A OR 1AH (ALL)	ENGLISH 2 OR 2H (RC) OR ENGLISH 3 OR 3H (ALL) OR PHIL 2 (ALL) OR PHIL 2H (RC) OR COMMUNICATIONS 25 (CCC)
MATH 10A (ALL)	MATH 10B (ALL)
EARLY CHILDHOOD EDUCATION 2 (CCC, RC) OR CHILD DEVELOPMENT 39 (FCC)	GEOLOGY 9 (ALL)
EDUCATION 10 (CCC, RC) OR EDUCATION 19 & 30 (FCC)	COMMUNICATION 1 OR 1H (CCC, FCC) OR COMMUNICATION 1 (RC)
	GEOGRAPHY 6 (CCC, RC) OR GEOGRAPHY 4A & 4B (FCC)
FALL YEAR 2	SPRING YEAR 2
SCIENCE 1A (RC, CCC) OR NATURAL SCIENCE 1A (FCC)	BIOLOGY 3 (CCC, RC) OR BIOLOGY 10 & 10L (CCC, RC) BIOLOGY 10H & 10L (RC)
ENGLISH 1B OR 1BH (CCC, RC) OR ENGLISH 1B (FCC)	ART 2 (ALL) OR MUSIC 12 (ALL) OR MUSIC 12H (RC) OR THEATER ARTS 30 (FCC)
LINGUISTICS 11 (ALL)	HISTORY 20 (ALL)
HISTORY 11 (ALL)	ELECTIVE: (FCC) SELECT ONE- AFRAM/ ENGL 17 OR ART 7 OR ART 9 OR ART 10 OR ART 11 OR ART 12A OR ART 15 OR ART 17 OR ART/ASMER 55 OR HIST 1 OR COMM/TA 12 OR CLS 21 OR MUS 3 OR MUS 13. ELECTIVE: (CCC, RC) - MEET WITH COUNSELOR TO DISCUSS OPTIONS
POLITICAL SCIENCE 2 OR 2H (ALL)	CSU GENERAL EDUCATION AREA F - ETHNIC STUDIES **MEET WITH COUNSELOR TO DISCUSS OPTIONS

STEP 2: Transfer to Fresno Pacific University for your Bachelor's Degree

FALL YEAR 3	SPRING YEAR 3
ART 300 - Art for Elementary Teachers	THTR 355 - Creative Drama
LIT 465 - Literature for Children and Young Adults	HIST 440 - California History and Politics
LANG 340* - Introduction to Linguistics	LANG 310 - First and Second Language Acquisition
BIB 300 - Jesus and the Christian Community	Biblical Literature
PSY 350* - Child Development	Focus Series
LA 180* - Paths to Teaching	CONCENTRATION/MINOR
FALL YEAR 4	SPRING YEAR 4
SOC 410 - American Ethnicity and Pluralism	MUS 305 - Music in the Classroom
KIN 320 - Theory of Physical Education	LA 380 - Learning Communities
ENV 160 - Introduction to Environmental Science	CONCENTRATION/MINOR
CONCENTRATION/MINOR	CONCENTRATION/MINOR
CONCENTRATION/MINOR	ELECTIVE
	ELECTIVE

*Courses may be waived by prior community college coursework. This is an example of the path a student can take to complete degree requirements. Students should meet with their FPU Academic Advisor to develop a personalized education plan.





Liberal Arts Elementary Teacher Pathway



CROSSWALK FRESNO PACIFIC UNIVERSITY

These are a specific set of courses students must complete in this major in sequential order to complete their degree program and get one step closer to a career in Liberal Arts.

Talk to your counselor for further guidance and academic support.

MORE INFORMATION

FresnoHigherEdForAll.com
Fresno.edu
ReedleyCollege.edu
ClovisCollege.edu
FresnoCityCollege.edu

LAST UPDATED 11/01/2020

Complete courses at your community college to earn an Associate's Degree with the goal of transferring to Fresno Pacific University.

STEP 1: Complete Associate Degree for Transfer – Elementary Teacher Education at Clovis Community College (CCC), Reedley College (RC) or Fresno City College (FCC)

FALL YEAR 1
ENGLISH 1A or 1AH (ALL)
MATH 10A (ALL)
EARLY CHILDHOOD EDUCATION 2 (CCC, RC) or CHILD DEVELOPMENT 39 (FCC)
EDUCATION 10 (CCC, RC) or EDUCATION 19 & 30 (FCC)

FALL YEAR 2
SCIENCE 1A (RC, CCC) or NATURAL SCIENCE 1A (FCC)
ENGLISH 1B or 1BH (CCC, RC) or ENGLISH 1B (FCC)
LINGUISTICS 11 (ALL)
HISTORY 11 (ALL)
POLITICAL SCIENCE 2 or 2H (ALL)

SPRING YEAR 1
ENGLISH 2 or 2H (RC) or ENGLISH 3 or 3H (ALL) or PHIL 2 (ALL) or PHIL 2H (RC) or COMMUNICATIONS 25 (CCC)
MATH 10B (ALL)
GEOLOGY 9 (ALL)
COMMUNICATION 1 or 1H (CCC, FCC) or COMMUNICATION 1 (RC)
GEOGRAPHY 6 (CCC, RC) or GEOGRAPHY 4A & 4B (FCC)

SPRING YEAR 2
BIOLOGY 3 (CCC, RC) or BIOLOGY 10 & 10L (CCC, RC) BIOLOGY 10H & 10L (RC)
ART 2 (ALL) or MUSIC 12 (ALL) or MUSIC 12H (RC) or THEATER ARTS 30 (FCC)
HISTORY 20 (ALL)
ELECTIVE: (FCC) SELECT ONE- AFAM/ ENGL 17 or ART 7 or ART 9 or ART 10 or ART 11 or ART 12A or ART 15 or ART 17 or ART/ASMER 55 or HIST 1 or COMM/TA 12 or CLS 21 or MUS 3 or MUS 13. ELECTIVE: (CCC, RC) – MEET WITH COUNSELOR TO DISCUSS OPTIONS
CSU GENERAL EDUCATION AREA F – ETHNIC STUDIES **MEET WITH COUNSELOR TO DISCUSS OPTIONS

STEP 2: Transfer to Fresno Pacific University for your *Adult Accelerated* Bachelor's Degree

FPU SEMESTER 1
LA 381 Introduction To Teaching
Art 301 Art Fundamentals
Hist 421 American Ethnicity and Pluralism
Hist 441 California History and Politics
Bib 314 Jesus and the Christian Comm.
Elective course/Elective Course

FPU SEMESTER 3
Psy 352 Advanced Childhood and Dev.
Thtr 357 Creative Drama
Kin 321 Theory of Phys. Education
LA 415 Senior Research Seminar
Elective Course
Elective Course/Elective Course

FPU Semester 2
Lit 467 Childrens Literature
Lan 331 Linguistics and Modern Grammar
Lang 311 Language Acquisition and Literacy
Bib 436 Biblical Perspectives for Educators
Elective Course/Elective Course

Additional Courses for Supplemental Authorization to Expand Teaching Opportunities Beyond K-6 and also Teach Science in Grades 7, 8, & 9

GEOLOGY 1 & CHEMISTRY 3A & CHEMISTRY 3B





Liberal Studies Early Childhood Development

with an Inspired Teaching and Learning Preliminary Multiple Subject Teaching Credential Pathway



CROSSWALK NATIONAL UNIVERSITY

These are a specific set of courses students must complete in this major in sequential order to complete their degree program and get one step closer to a career in Liberal Studies.

Talk to your counselor for further guidance and academic support.

MORE INFORMATION

FresnoHigherEdForAll.com

NU.edu

ReedleyCollege.edu

ClovisCollege.edu

FresnoCityCollege.edu

LAST UPDATED 11/01/2021

Complete courses at your community college to earn an Associate's Degree with the goal of transferring to National University.

STEP 1: Complete Associate Degree for Transfer –Elementary Teacher Education at Clovis Community College (CCC), Reedley College (RC) or Fresno City College (FCC)

FALL YEAR 1	SPRING YEAR 1
ENGLISH 1A or 1AH (ALL)	ENGLISH 2 or 2H (RC) or ENGLISH 3 or 3H (ALL) or PHIL 2 (ALL) or PHIL 2H (RC) or COMMUNICATIONS 25 (CCC)
MATH 10A (ALL)	MATH 10B (ALL)
EARLY CHILDHOOD EDUCATION 2 (CCC, RC) or CHILD DEVELOPMENT 39 (FCC)	GEOLOGY 9 (ALL)
EDUCATION 10 (CCC, RC) or EDUCATION 19 & 30 (FCC)	COMMUNICATION 1 or 1H (CCC, FCC) or COMMUNICATION 1 (RC)
	GEOGRAPHY 6 (CCC, RC) or GEOGRAPHY 4A & 4B (FCC)
FALL YEAR 2	SPRING YEAR 2
SCIENCE 1A (RC, CCC) or NATURAL SCIENCE 1A (FCC)	BIOLOGY 3 (CCC, RC) or BIOLOGY 10 & 10L (CCC, RC) BIOLOGY 10H & 10L (RC)
ENGLISH 1B or 1BH (CCC, RC) or ENGLISH 1B (FCC)	ART 2 (ALL) or MUSIC 12 (ALL) or MUSIC 12H (RC) or THEATER ARTS 30 (FCC)
LINGUISTICS 11 (ALL)	HISTORY 20 (ALL)
HISTORY 11 (ALL)	ELECTIVE: (FCC) SELECT ONE- AFRAM/ ENGL 17 or ART 7 or ART 9 or ART 10 or ART 11 or ART 12A or ART 15 or ART 17 or ART/ASMER 55 or HIST 1 or COMM/TA 12 or CLS 21 or MUS 3 or MUS 13. ELECTIVE: (CCC, RC) - MEET WITH COUNSELOR TO DISCUSS OPTIONS
POLITICAL SCIENCE 2 or 2H (ALL)	CSU GENERAL EDUCATION AREA F - ETHNIC STUDIES **MEET WITH COUNSELOR TO DISCUSS OPTIONS

STEP 2: Transfer to National University for your Bachelor's Degree

FALL YEAR 3	SPRING YEAR 3
ECE 484	ECE 430
ECE 330	ECE 440
ECE 312	ECE 443
ECE 410	ECE 445
ECE 415	ECE 452
ECE 420	
FALL YEAR 4	
ECE 450	
UPPER-DIVISION ELECTIVES / ECE (400 LEVEL COURSE)	
UPPER-DIVISION ELECTIVES / ECE (400 LEVEL COURSE)	
UPPER-DIVISION ELECTIVES / ECE (400 LEVEL COURSE)	
UPPER-DIVISION ELECTIVES / ECE (400 LEVEL COURSE)	



NATIONAL UNIVERSITY



Reedley College





Liberal Studies Elementary Education Pathway



CROSSWALK UNIVERSITY OF MASSACHUSETTS GLOBAL

These are a specific set of courses students must complete in this major in sequential order to complete their degree program and get one step closer to a career in Liberal Studies.

Talk to your counselor for further guidance and academic support.

MORE INFORMATION

FresnoHigherEdForAll.com

UMassGlobal.edu

ReedleyCollege.edu

ClovisCollege.edu

FresnoCityCollege.edu

LAST UPDATED 11/01/2021

Complete courses at your community college to earn an Associate's Degree with the goal of transferring to University of Massachusetts Global.

STEP 1: Complete Associate Degree for Transfer – Elementary Teacher Education at Clovis Community College (CCC), Reedley College (RC) or Fresno City College (FCC)

FALL YEAR 1
ENGLISH 1A OR 1AH (ALL)
MATH 10A (ALL)
EARLY CHILDHOOD EDUCATION 2 (CCC, RC) OR CHILD DEVELOPMENT 39 (FCC)
EDUCATION 10 (CCC, RC) OR EDUCATION 19 & 30 (FCC)

SPRING YEAR 1
ENGLISH 2 OR 2H (RC) OR ENGLISH 3 OR 3H (ALL) OR PHIL 2 (ALL) OR PHIL 2H (RC) OR COMMUNICATIONS 25 (CCC)
MATH 10B (ALL)
GEOLOGY 9 (ALL)
COMMUNICATION 1 OR 1H (CCC, FCC) OR COMMUNICATION 1 (RC)
GEOGRAPHY 6 (CCC, RC) OR GEOGRAPHY 4A & 4B (FCC)

FALL YEAR 2
SCIENCE 1A (RC, CCC) OR NATURAL SCIENCE I 1A (FCC)
ENGLISH 1B OR 1BH (CCC, RC) OR ENGLISH 1B (FCC)
LINGUISTICS 11 (ALL)
HISTORY 11 (ALL)
POLITICAL SCIENCE 2 OR 2H (ALL)

SPRING YEAR 2
BIOLOGY 3 (CCC, RC) OR BIOLOGY 10 & 10L (CCC, RC) BIOLOGY 10H & 10L (RC)
ART 2 (ALL) OR MUSIC 12 (ALL) OR MUSIC 12H (RC) OR THEATER ARTS 30 (FCC)
HISTORY 20 (ALL)
ELECTIVE: (FCC) SELECT ONE- AFRAM/ ENGL 17 OR ART 7 OR ART 9 OR ART 10 OR ART 11 OR ART 12A OR ART 15 OR ART 17 OR ART/ASMER 55 OR HIST 1 OR COMM/TA 12 OR CLS 21 OR MUS 3 OR MUS 13. ELECTIVE: (CCC, RC) - MEET WITH COUNSELOR TO DISCUSS OPTIONS
CSU GENERAL EDUCATION AREA F - ETHNIC STUDIES **MEET WITH COUNSELOR TO DISCUSS OPTIONS

* FPU GE can be fulfilled by ADT or completion of CSU-GE

STEP 2: Transfer to University of Massachusetts Global for your Bachelor's Degree

LBSU 302	ARTU 450
LBSU 304	LBSU 310
LBSU 250	HISU 358
EDUU 551	HISU 360
LBSU 403	HISU 372
ENGU 420	PSYU 323
ENGU 450	EDUU 350
NSCU 302	EDUU 513
NSCU 304	EDUU 514



SPECIAL THANKS

Special thanks to all the Collaborative Partners for their hard work and commitment, and dedication towards the Collaborative's Pilot Program for Student Equity, Success and Upward Mobility.

Special thanks to the [Governor's Council on Post-Secondary Education](#) and the [College Futures Foundation](#) for their Vision and Support.

Special thanks to [Career Ladder Projects](#) and [California Virtual Campus-Online Education Initiative](#) teams' commitment to accessible student equity in taking us one step closer to pioneering the Virtual Dual Enrollment Hub.

Special thanks to all our Stakeholder Partners including the [Central Valley Community Foundation](#) and [Fresno DRIVE](#), [JFF](#), [United Way Fresno and Madera Counties](#), [California Teaching Fellows Foundation](#), and [Cradle to Career-Fresno County](#) and all other persons, organizations and educational institutions that support intersegmental, K-16 collaboration.

**To learn more about the Fresno K-16 Collaborative, please check out our website (December 2021) at:
<http://fresnohigheredforall.org/>**