



Absolute Priority 1: Supporting Effective Teachers.

Center for Collaborative Education is on a mission to transform schools to ensure that all students succeed. Founded in 1994, Center for Collaborative Education (CCE) is fueled by a passion to attain educational equity, the creation of belief systems and educational policies, practices, and programs necessary to:

- Provide barrier-free cultures for any student group particularly students within historically underserved groups, in which respect and dialogue are the norm
- Provide equitable educational opportunities along with differentiated support and resources to ensure that every student, in all subgroups, demonstrates competency of rigorous standards for academic performance.

To achieve these goals, The Center for Collaborative Education has partnered with Rio Hondo Community College, El Camino Community College, and Cerritos Community College, three of eleven California community colleges as members of the Teach Los Angeles Regional Collaborative who has been working to scale up teacher preparation programs since 2016, in urban Los Angeles to create a Collective Ownership Model to increase equity and opportunity in schools and communities. The model focuses on the following key drivers:

1. Engaging Community to build voice and ownership
2. Leveraging the community through an asset based approach
3. Building Capacity through Applied Leadership



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Aligned to Maslow's Hierarchy of Needs for a Community¹, the Collective Ownership Model allows CCE to effectively identify bright spots and potential resources within the community, and ensures community needs are identified through an ongoing needs assessment process, and met with training and support².

Across the United States, the percentage of students of color in urban, suburban, and rural schools outpace the percentage of teachers of color. A Washington Post analysis of school district data from 46 states and the District of Columbia finds that only one-tenth of one percent of Latinx students attend a school system where the portion of Latinx teachers equals or exceeds the percentage of Latinx students. Only seven percent of Black students were enrolled in a district where the share of Black teachers matches or exceeds that for students. For white students, however, 99.7% attended a district where the faculty was as white as the student body.³ Research shows that the mismatch between student and teacher demographics matters. Studies find that having a same-race teacher significantly increases math and reading test scores⁴ while reducing suspensions⁵ and increasing school attendance.⁶ This is a challenge that Los Angeles feels deeply.

Leveraging the research-based **Collective Ownership Model**, CCE and partnering community colleges will design and implement a robust teacher pipeline that recruits and supports aspiring educators from the local community to meet the local need. With a comprehensive **Enhanced Advisory Mentorship** program and **stipends for participants**, the model aligns to the What Works Clearinghouse Educators Practice

¹ [Striving for group agency: Threat to personal control increases the attractiveness of agentic groups](#), J Stollberg, I Fritsche, A Bäcker. *Frontiers in psychology*, 2015. frontiersin.org

² Heath, C., & Heath, D. (2011). *Switch: How to change things when change is hard*. Waterville, Me: Thorndike Press.

³ <https://www.washingtonpost.com/graphics/2019/local/education/teacher-diversity/>

⁴ Egalite, A J, B Kisida and M A Winters (2015), "Representation in the classroom: The effect of own-race/ethnicity teacher assignment on student achievement," *Economics of Education Review* 45: 44–52.

⁵ Holt, S B and S Gershenson (2017), "The impact of demographic representation on absences and suspensions," *Policy Studies Journal*.

⁶ Tran, L and S Gershenson (2018), "Experimental estimates of the student-attendance production function," IZA, Discussion Paper 11911.



Guide strategy, “Implement comprehensive, integrated, and long-lasting support programs,” supported by

Moderate Evidence.⁷

Strategy with Moderate Evidence	CPTP Alignment
<p>Require or incentivize regular participation in enhanced advising activities.⁸</p>	<ol style="list-style-type: none"> 1. Required and incentivized in-person advisory meetings 2. Required and incentivized frequent meetings with advisors over a longer period of time. <p>Through the Enhanced Advisory Mentoring program, students will meet with mentors at least 30 hours over each semester. Students will receive stipend incentives for full participation.</p>
<p>Offer students performance-based monetary incentives.⁹</p>	<ol style="list-style-type: none"> 1. Distribute payments incrementally, according to specific desired performance benchmarks. 2. Target incentives to low-income students 3. Provide student support services, in conjunction with performance-based monetary incentives. <p>Students will receive a portion of their stipend at the mid-point, and conclusion of the semester, aligned to the performance benchmarks of an overall B- average or greater in all education courses, and at least 15 hours of mentoring completed. Participants will be strategically recruited from QOZs, increasing the likelihood that they are low-income. EAM mentors and Success Coaches will work with students to design customized wrap-around service access plans to fully support their attainment of successful college completion.</p>
<p>Implement comprehensive, integrated, and long-lasting support programs.¹⁰</p>	<ol style="list-style-type: none"> 1. Develop a strong, collaborative organizational structure that uses data to inform practice. 2. Clearly communicate expectations to students. 3. Design course enrollment strategically. <p>CCE and partnering community colleges will implement the Collective Ownership Model, leveraging real-time data to inform programming and recruitment strategies and drawing on a community coalition to align training needs to the diversity gaps among local schools. CPTP course pathways will be clearly communicated, and Success Coaches will work with each CPTP student to develop a unique academic plan that enables on-time attainment of</p>

⁷ Bailey, T., Bashford, J., Boatman, A., Squires, J., Weiss, M., Doyle, W., Valentine, J. C., LaSota, R., Polanin, J. R., Spinney, E., Wilson, W., Yeide, M., & Young, S. H. (2016). Strategies for postsecondary students in developmental education – A practice guide for college and university administrators, advisors, and faculty. Washington, DC: Institute of Education Sciences, What Works Clearinghouse

⁸ Cousert, D. (1999). The effects of a mentoring intervention program on retention of students in a community college (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 304550777)

⁹ Patel, R., & Valenzuela, I. (2013). Moving forward: Early findings from the performance-based scholarship demonstration in Arizona. New York, NY: MDRC.

¹⁰ Scrivener, S., Weiss, M. J., Ratledge, A., Rudd, T., Sommo, C., & Fresques, H. (2015). Doubling graduation rates: Three-year effects of CUNY’s Accelerated Study in Associate Programs (ASAP) for developmental education students. New York, NY: MDRC.



an Associate’s Degree and seamless transfer to a four-year certification program at CSU.

To meet the need in Los Angeles for a diverse teacher workforce, CCE will partner with Rio Hondo Community College, El Camino Community College, and Cerritos Community College (REC), all serving QOZs in urban Los Angeles, to pilot and document a comprehensive teacher pipeline strategy that recruits and retains teachers of color in the community college environment.

To attain educational equity, it is crucial to support efforts that bridge the gap of demographic representations between students and their educators. When examining this pressing issue, the US Department of Education concluded that substantial changes must be made to the entire education pipeline.¹¹ There is no question that the traditional pipeline to educational degrees “leaks” for students of color, and that systemic challenges in recruiting and retaining pre-service and certified teachers of color are difficult to overcome.¹² CCE has designed a multi-pronged approach to address this multifaceted challenge

a desperately-needed undertaking that will ultimately **provide teachers from nontraditional preparation and certification routes or pathways to serve in traditionally underserved Local Educational Agencies**. CPTP recruitment will focus on individuals who are already committed to the teaching profession, those who are exploring the teaching profession, and those who have not yet considered teaching or committed to any particular profession pathway with potential to be an effective teacher candidate.

Competitive Preference Priority

CPP1 - Promoting Science, Technology, Engineering, or Math (STEM) Education, With a Particular Focus on Computer Science (up to 3 points)

¹¹ U.S. Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service. (2016).

¹² Putman, H, M Hansen, K Walsh and D Quintero (2016), “High hopes and harsh realities: The real challenges to building a diverse workforce,” Brookings Institution.



Students will be eligible to participate in the Summer STEM Academy, designed to provide future educators with real world experiences while offering academic support and wrap-around services during their first semester as college students. Participants complete classroom science instruction, building background and content knowledge in the sciences. Content aligns to Next Generation Science Standards, and includes Physics, Life Science, Earth Science, and Chemistry. Participants then plan lessons and teach these modules to middle school students in local schools. One day each week is dedicated to professional development relevant to each science module. Participants practice evidence-based instructional strategies proven to build student competency in the sciences. They are guided as they discuss the purpose of each module and the importance of connecting each science lesson to the Next Generation Science Standards. Participants work together to design and implement authentic, hands-on lesson components, engaging middle school students in active learning.

All program participants will be encouraged to complete the Computer Systems Certificate to boost content knowledge in Computer Sciences and prepare educators to teach this high-demand subject. The Certificate of Achievement in Computer Information Technology: Computer Systems requires successful completion of 23 credit hours of courses in Computer Sciences, emphasizing programming language C++ or Java. Students complete coursework as well as fieldwork to gain real-world experience.

CPP2 - Fostering Knowledge and Promoting the Development of Skills That Prepare Students to Be Informed, Thoughtful, and Productive Individuals and Citizens (up to 2 points)

The **Community Partnerships for Teacher Pipeline (CPTP)** program will provide required mentoring, comprehensive advising, and participation in career development activities to all participants. Research shows that these strategies have promoted a dramatic effect on academic achievement, increased persistence, the average number of credits earned, and graduation rates.¹³ CPTP will provide enhanced

¹³ <https://files.eric.ed.gov/fulltext/ED546636.pdf>



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advisory mentoring (EAM), defined as comprehensive academic and interpersonal support. This one-on-one support and participation in EAM will provide opportunities for CPTP participants to build positive personal relationships and develop employment knowledge and skills. Participants will be growing in knowledge about teaching, which will ultimately elevate the teaching profession. For the participants who do not have a well-developed understanding of teaching before starting the program, this will allow them to increase their knowledge as informed citizens. CPTP participants will be required to meet with their EAM at least twice a month, achieving a minimum of 30 hours per semester.

CPP3 - Spurring Investment in Qualified Opportunity Zones (up to 5 points)

Partnering community colleges serve Qualified Opportunity Zones. Student enrollment is drawn from the following eligible communities:

Compton	06037542502	Pico Rivera	06037501803	
	06037542501	Norwalk	06037550000	
	06037541604	El Monte / So. El Monte	06037433403	
	06037542106		06037433901	
	06037542105		06037433302	
	06037541601		06037433403	
	06037541400		06037433501	
Lennox	06037601801	La Puente	06037408138	
	06037601700	Bell Gardens	06037532304	
	06037601700	Buena Park	06059001801	
	06037601202	Lakewood	06037570603	
	06037601801		06037555001	
			06037555002	
	Los Angeles	06037535102	Long Beach	06037570603
				06037571704
		06037571600	06037576401	
		06037540202	Lynwood	06037540202
06037242000		06037540201		
06037242300		06037541801		
06037239330		Montebello	06037532304	
06037239202		Norwalk	06037550000	
06037234600	Paramount	06037542106		
06037600100	Santa Fe Springs	06037550000		
06037600202	South Gate	06037540202		



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	06037600304		06037540201
	06037602801		06037534301
	06037232500	Whittier	06037501803
	06037600202	Torrance	06037292000
	06037602801		06037293201
	06037602801		06037292000
	06037237202		06037604100
	06037243100	Gardena	06037292000
	06037540400	Hawthorne	06037602505
	06037243000	Inglewood	06037601202
	06037242000	Lawndale	06037604100
	06037239330		

CCE and partnering colleges will provide outreach, recruitment, comprehensive coursework and ongoing support for students of color pursuing, considering, and being introduced to teaching career in these neighborhoods. College students will also be placed in public schools in these QOZ neighborhoods, conducting field placement opportunities as they work alongside EAM, providing enhanced advising.

Quality of the Project Design (35)

(1) The extent to which the proposed project represents an exceptional approach to the priority or priorities established for the competition.

Center for Collaborative Education, in collaboration with Rio Hondo Community College, El Camino Community College, and Cerritos Community College, (hereafter known as REC), will develop and scale a teacher preparation pipeline designed to build a workforce that is representative of the community – increasing student success and wellness by identifying, training, and supporting prospective teachers through an Enhanced Advisory Mentorship (EAM) program serving prospective teachers in Los Angeles. Efforts will address the Absolute Priority 1, working to **provide teachers from nontraditional preparation and certification routes or pathways to serve in traditionally underserved Local Educational Agencies**. Ultimately, the Community Partnerships for Teacher Pipeline (CPTP) program will address two separate but interconnected challenges preventing schools from achieving demographic equity between educators and students.



Challenge 1: A smaller proportion of Black and Latinx populations earn college degrees

Research: While the racial distribution of students enrolling in college coursework seems to mirror population distribution, students of color disproportionately fail to persist in college for a variety of reasons.^{14 15} Academic preparation plays a key role. In 2019, 40% of African American students and 30% of Latinx students at community colleges were enrolled in both remedial math and English. As a result, these students have, at a minimum, two additional courses they must enroll in, complete and pay for as part of their postsecondary education, negatively impacting completion rates among students of color.¹⁶

CPTP Strategy: As CPTP participants pursue a comprehensive selection of courses in education, they will benefit from ongoing personalized support. The Enhanced Advisory Mentorship (EAM) program will pair students with a Mentor, resulting in at least 30 hours of one-one-one guidance each semester. EAM Mentors will be teachers working in the community. Mentors will complete extensive training, including:

- Academic planning for transfer goals, college completion and career goals
- Sustained Strategic Integrative Intrusive Personalized Advising
- Planning and time management skills
- Networking to build collegial and professional advising relationships for long-term
- Resources to drive good decision-making
- Early warning system to recognize warning signs and offer immediate support

¹⁴ One of the reasons for low college-completion rates among Hispanic students is their lower academic preparation (Cardenas, V., & Kerby, S. 2012).

¹⁵ Among black students, their family and work responsibilities, as well as their lower academic preparation and financial constraints impacts their college completion rate (Rawlston-Wilson, V., Saavedra, S., & Chauhan, S. 2014).

¹⁶ <https://www.the74million.org/article/alarmed-statistics-tell-the-story-behind-americas-college-completion-crisis-nearly-a-third-of-all-college-student-still-dont-have-a-degree-six-years-later/>



- Metacognitive skills
- Teacher talk

Success Coaches will provide on-campus support and guidance as CPTP participants access available resources and prepare for transfer to a four-year program. Success Coaches will be current CSU students pursuing an education or counseling degree. Together, these strategies will result in a multiphase academic and career advising program over a prolonged period of time, modeling the “developmental” approach to advising that is proven to enhance student outcomes, including academic and career success.¹⁷ Enhanced Advisory Mentorship, resulting in a comprehensive, integrated and long-lasting support program, is a proven strategy, documented by Moderate Evidence by the What Works Clearinghouse.¹⁸

Participation in EAM will be required and incentivized through a stipend. This is aligned to What Works Clearinghouse recommendations to “Incentivize Students to Attend Enhanced Advising,” and the study documenting Moderate Evidence meets WWC Group Design Standards Without Reservations.¹⁹ All CPTP participants are matched with an EAM, recruited from local school districts. REC will provide coursework in teacher preparation, workforce development certificate programming, stipends for EAM participants, on-campus resources, and individualized support to students in the Enhanced Advisory Mentorship program. CPTP is designed to foster relationships and build a system of support in which students develop soft skills and career readiness that leads them to be informed, productive individuals.

¹⁷ <https://ccrc.tc.columbia.edu/media/k2/attachments/designing-a-system-for-strategic-advising.pdf>

¹⁸ Scrivener, S., Weiss, M. J., Ratledge, A., Rudd, T., Sommo, C., & Fresques, H. (2015). Doubling graduation rates: Three-year effects of CUNY’s Accelerated Study in Associate Programs (ASAP) for developmental education students. New York, NY: MDRC

¹⁹ Scrivener, S., & Pih, M. (2007). Enhancing student services at Owens Community College: Early results from the Opening Doors Demonstration in Ohio. New York, NY: MDRC.



While the program coursework will be “fluid,” offering opportunities for students to meet Associate Degree requirements or simply fill electives, complete participation will prepare students to enter the workforce as an educator in a position that demands a two-year degree, or will allow students to transfer to a four-year program for teacher certification. CPTP coursework options can lead to Childhood Education Major, an Early Childhood Education Certificate, an Early Intervention Certification, a Special Education Assistant Certificate, and a STEM Certificate. Face-to-face recruitment at campus, local, and regional events will focus on minority candidates, including those who are pursuing, considering, and being introduced to the teaching profession and particularly those living in Quality Opportunity Zones (QOZ). Regional awareness campaigns will promote teaching as a viable career pathway for students of color.

Implemented at three community colleges, CPTP will seek to engage 300 students in the Teacher Pipeline program, offering personalized levels of support beyond strategic introductory classroom instruction through the EAM, Success Coaches, group activities, and internship placement. With no more than two students per mentor, CPTP participants will benefit from at least 30 hours of meaningful guidance, encouragement, and support each semester. While some students will earn certificates that prepare them for immediate entrance into the workforce, all CPTP coursework will be designed to prepare students for transfer to a four-year school for teaching certification. CCE and partnering community colleges have designed and will formalize a streamlined transfer procedure with California State University, smoothing transition barriers for admission into a credential program. All program graduates will have access to a teacher mentoring network to support their progress.

Challenge 2: Interest in teaching careers among minority college students and graduates is lower than among whites.



Research: Nationwide, student selection of college major contributes to the demographic gap between students and teachers in America's schools. While 7% of white college students are currently majoring in education, just 4% of Black and Latinx college students are pursuing this trajectory.²⁰ In many instances, this is a self-sustaining challenge. Students of color, who have never had a teacher of color, often do not envision teaching as a desirable or achievable career pathway due to lack of examples or models of people of color in this profession.

CPTP Strategy: Recruitment will be conducted through multiple strategies. Posters and flyers advertising CPTP courses and opportunities will be designed, featuring students of color. Well-publicized events will be held throughout the year, encouraging students to consider pursuing a teaching career. Some events will feature guest speakers who are educators of color, others will showcase employment opportunities available within the teacher pipeline. Available coursework options will be displayed and promoted, and current students will be encouraged to attend and share their positive experiences. All events will offer new opportunities for students to gather, building awareness of the teacher pipeline through exposure. Face-to-face recruitment will focus on minority candidates, including any and all students who are pursuing, considering, and being introduced to teaching as a career option, particularly those living in QOZs. A wide net awareness campaign throughout the region and particularly in QOZ will promote teaching as a viable career pathway for students of color.

Community Partnerships for Teacher Pipeline seeks to address the national demographic disparity in the public schools of Los Angeles, recruiting and retaining teachers of color to serve in their communities. Through community coordination, CCE will “implement comprehensive, integrated and long-lasting support programs” to bolster student recruitment and retention. At all points in the process, course

²⁰ Based on 2012-13 bachelor's degree recipients. Snyder, T.D., de Brey, C., & Dillow, S.A. (2016). Table 322.30.



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enrollment will be designed strategically in alignment with the through-line requirements and coursework, ensuring program participants having a clear and understandable pathway to certification. The program model has been intentionally designed to align with the What Works Clearinghouse IES Practice Guide *Strategies for Postsecondary Students in Developmental Education*. The following strategies align directly to programs with demonstrated “Moderate Evidence”:

Strategy with Moderate Evidence	CPTP Alignment
Require or incentivize regular participation in enhanced advising activities. ²¹	3. Required and incentivized in-person advisory meetings 4. Required and incentivized frequent meetings with advisors over a longer period of time. Through the Enhanced Advisory Mentoring program, students will meet with mentors at least 30 hours over each semester. Students will receive stipend incentives for full participation.
Offer students performance-based monetary incentives. ²²	4. Distribute payments incrementally, according to specific desired performance benchmarks. 5. Target incentives to low-income students 6. Provide student support services, in conjunction with performance-based monetary incentives. Students will receive a portion of their stipend at the mid-point, and conclusion of the semester, aligned to the performance benchmarks of an overall B- average or greater in all education courses, and at least 15 hours of mentoring completed. Participants will be strategically recruited from QOZs, increasing the likelihood that they are low-income. EAM mentors and Success Coaches will work with students to design customized wrap-around service access plans to fully support their attainment of successful college completion.
Implement comprehensive, integrated, and long-lasting support programs. ²³	4. Develop a strong, collaborative organizational structure that uses data to inform practice. 5. Clearly communicate expectations to students. 6. Design course enrollment strategically. CCE and partnering community colleges will implement the Collective Ownership Model, leveraging real-time data to inform programming and recruitment strategies and drawing on a community coalition to align training needs to the diversity gaps among local schools. CPTP course pathways will

²¹ Cousert, D. (1999). The effects of a mentoring intervention program on retention of students in a community college (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 304550777)

²² Patel, R., & Valenzuela, I. (2013). Moving forward: Early findings from the performance-based scholarship demonstration in Arizona. New York, NY: MDRC.

²³ Scrivener, S., Weiss, M. J., Ratledge, A., Rudd, T., Sommo, C., & Fresques, H. (2015). Doubling graduation rates: Three-year effects of CUNY’s Accelerated Study in Associate Programs (ASAP) for developmental education students. New York, NY: MDRC.



	<p>be clearly communicated, and Success Coaches will work with each CPTP student to develop a unique academic plan that enables on-time attainment of an Associate’s Degree and seamless transfer to a four-year certification program at CSU.</p>
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(2) The extent to which the training or professional development services to be provided by the proposed project are of sufficient quality, intensity, and duration to lead to improvements in practice among the recipients of those services.

The CPTP community college partners, Rio Hondo Community College, El Camino Community College, and Cerritos Community College (REC), provide program participants six unique teaching pathways: Early Childhood Education; Elementary; Secondary; Career Technical Education; Special Education; and STEM with a focus on Computer Science. This program will enable students to enroll in coursework at any point in their community college journey. This approach will allow an increase of participants and the likelihood that they will be inspired to continue their pursuit of a teaching certificate through the EAM program. Coursework options can lead to Childhood Education Major, an Early Childhood Education Certificate, an Early Intervention Certification, a Special Education Assistant Certificate, and a STEM Certificate.

CPTP will support students through the EAM, ensuring students meet with their mentor and work together in a classroom at least 30 hours each semester. CPTP Success Coaches, who are alumni of REC attending CSU campuses, will further support program participants as they access on-campus resources. Success Coaches will also provide guidance in their last year for those who are transferring to a four-year degree or credentialing program.

Importantly, CPTP will provide multiple opportunities for participants to gain real-world experience working directly with children. Placements will include local schools as well as after-school programs, providing ongoing opportunities for students who are pursuing, considering, and being introduced to teaching to gain work experience and “test the waters.” They will decide through the collection of



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experiences provided by the program whether a teaching career is their best option. The following classes require field placement hours for completion:

Course	Field Experience Requirement by Subject
Computer Systems Certificate	Students complete 23 credits of coursework to earn the Certificate of Achievement in Computer Information Technology: Computer Systems, preparing them for employment related to computer applications with an emphasis in programming language C++ or Java.
Special Education Internship	Students complete 30 hours of fieldwork in a special education setting, mentored by the classroom teacher and Child Development Professor.
Instructional Assistant Internship	Students assist in high school science or education classrooms, mentored by the classroom teacher and Science Professor. Students also work in the Teacher Center.
Summer STEM	Students entering college are mentored by credentialed K12 teachers in summer term, teaching two afternoons each week in local middle schools.
Child Development Practicum I	Students interact with preschool/elementary students, provide one-on-one and small group lessons and supervision, conduct observations, examine and observe California Standards for the Teaching Profession for elementary school, and NAEYC Developmental Appropriate Practices for early childhood education.
Special Education Practicum	

All program participants will complete a survey upon enrollment in a CPTP course to identify their current career aspirations and again at completion of the course to gain greater understanding of which courses and experiences that lead to increased participants' interests in teaching. All students will be placed with an Enhanced Advisory Mentor (EAM). EAM activities will be consistent for all mentor-mentee pairs and in alignment with teaching preparation best practices.

Additionally, the CCE team will facilitate monthly events on each campus and with the teacher mentor network, building the crucial community of teachers among students of color. Guest speakers who are minority educators will speak about educational equity and professional opportunities. Hands-on STEM events and mini lesson opportunities will engage program participants in authentic learning. Events will focus on teamwork, community-building, and exposure to the world of education.

(3) The extent to which the design of the proposed project is appropriate to, and will successfully address, the needs of the target population or other identified needs.



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Community Partnerships for Teacher Pipeline strives to address the root challenges preventing students of color from successfully pursuing careers in education. Strategies selected to address identified needs are described below:

Recruitment	
Need	CPTP Strategy
Students of color do not have exposure to minority educators, and do not typically see teaching as a viable career pathway.	<ul style="list-style-type: none"> ➤ Regional awareness and recruitment posters and CPTP program website will feature educators of color. ➤ Campus CPTP events will feature guest speakers who are educators of color. ➤ Enhanced Advisory Mentors will be recruited from local schools, with a strong focus on engaging educators of color. ➤ Face-to-face recruitment will focus on students of color who do not consider teaching as a viable career path in the region and particularly in the QOZ. ➤ Exploratory courses will feature hands-on learning and engaging field placement opportunities in classroom and after school settings.
Retention	
Need	CPTP Strategy
Students of color are more likely to drop out of college before degrees are earned.	<ul style="list-style-type: none"> ➤ CPTP participants will complete surveys upon enrollment, identifying career aspirations. All program participants will be matched with an EAM currently employed as an educator; EAM will support all students throughout program completion. 100% of participants will benefit from access to the teacher mentor network. ➤ All participants will have clear pathways to earn degrees and certificates that will increase their employability in schools and after school enrichment programs. ➤ Following enrollment in CPTP courses and EAM, all participants will be connected to the CPTP Success Coach on campus and will work directly with students to proactively address challenges or barriers they may encounter. Success Coaches will meet with all CPTP students at least once each semester and will reach out directly to all CPTP students who are performing below expectations in coursework. Success Coaches will leverage robust partnerships with service agencies on campus and throughout the community to support students as they address challenges such as mental health needs, childcare issues, transportation barriers, remedial academic support, or financial aid. Proactive outreach will connect participants to services before crisis levels are reached, preventing dropout. ➤ EAM and Success Coaches will provide hands-on, one-on-one support to CPTP students seeking to transfer to a four-year program following attainment of their Associate Degree. ➤ Participants in EAM will receive a stipend each semester. ➤ Through the teacher mentor network, EAM will likely continue collegial relationships with CPTP participants and alumni throughout their pursuit of a teaching certificate.



	<ul style="list-style-type: none"> ➤ Monthly on-campus events will engage students of color considering a teaching career, focusing on teamwork, community-building, and exposure to the world of education while building strong relationships among students that motivate and support degree attainment. ➤ CPTP will place participants in field experiences, increasing their exposure to students in a classroom environment and building internal motivation for completion of a teaching degree.
Following certification, minority educators are less likely to remain in the classroom.	<ul style="list-style-type: none"> ➤ CPTP students will form bonds that address the need for affinity group support, increasing their likelihood of remaining in the classroom. ➤ CPTP will encourage graduates who are teaching to return as guest speakers for new students in the pipeline, and eventually, serve as EAM themselves.

(4) The potential and planning for the incorporation of project purposes, activities, or benefits into the ongoing work of the applicant beyond the end of the grant.

The percentage of students of color who progress through their entire public school education without having a minority teacher continues to grow. This systemic, deep-rooted challenge cannot be effectively addressed with short-term, “flash in the pan” strategies. Center for Collaborative Education has formed a partnership with Rio Hondo Community College, El Camino Community College, and Cerritos Community College (REC) to establish lasting, systems-based strategies that can sustainably address this challenge and serve as a model for nationwide replication. The CPTP Advisory Council, including representatives from REC, California State University, administrators from local K-12 schools, Special Education teachers, English Language Learner teachers, STEM teachers, will meet quarterly to review qualitative and quantitative data related to programmatic impact. Advisory Council meetings will also provide an opportunity for community stakeholders to share data related to local communities, establishing a formal process for constant dialogue between the CPTP program leadership team and the educational community of Los Angeles. The CPTP program will be sustained beyond the federal funding period through the following sustainability features:



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- CPTP courses and certification pathways will be incorporated into the official Course Catalogues of all REC community colleges
- Streamlined transfer procedures from REC community colleges and California State University have been formalized by collaborating with CSU admission offices
- External evaluation services, provided by WestEd, will document the impact of enhanced advisory mentorship (EAM), quantify resulting rates of course completion, as well as persistence and transfer, and credit accumulation and GPA.
- Local schools will continue to partner with CPTP by hiring teachers from the pipeline which will result in increased number of credentialed teachers of color in the communities in the QOZ.
- Successful completion of a mentoring experience will result in the program graduates returning to CPTP to serve as EAMs to support new cohorts of prospective teachers.
- A **CPTP Blueprint**, detailing action steps, challenges and mitigation strategies, lessons learned, and incorporating the final results of the evaluation, will support replication.

It is important to note that Center for Collaborative Education maintains an active presence in Boston, Massachusetts as well as throughout New Mexico. Replication is anticipated in these locations in Year Four and beyond.

Significance (20)

(1) The importance or magnitude of the results or outcomes likely to be attained by the proposed project, especially improvements in teaching and student achievement.



Recruitment of minorities into teaching has long been a policy goal, particularly in districts with large percentages of students of color, and relatively little progress has been made in ensuring that the diversity of the teaching workforce reflects the diversity of the student body in U.S. public schools.²⁴

According to the National Education Association, “with 40 percent students of color and 5 percent teachers of color predicted for early in the next century, a critical shortage of education workers and role models may be at hand that could contribute to a worsening urban plight. Indeed, such a crisis could lead to a failure of all American students to learn the academic, personal, and social skills they need in the multicultural workplace of the future.”²⁵

Research shows that teachers of color help close achievement gaps for students of color and are highly rated by students of all races.²⁶ National Assessment of Educational Progress results continue to show persistent achievement gaps between students of color and their white peers. The benefits of diversity in the teaching workforce are great²⁷:

- Teachers of color boost the academic performance of students of color, including improved reading and math test scores, improved graduation rates, and increases in aspirations to attend college.
- Students of color and white students report having positive perceptions of their teachers of color, including feeling cared for and academically challenged.
- Teachers of color are resources for students in hard-to-staff schools. Many teachers of color report feeling called to teach in low-income communities of color where positions are often difficult to fill.

Three in four teachers of color work in the quartile of schools serving the most students of color nationally.

²⁴ Ingersoll, R. M., & May, H. (2011). Recruitment, retention and the minority teacher shortage (CPRE Research Report #RR-69). Philadelphia, PA: Consortium for Policy Research in Education.

²⁵ <http://www.nea.org/home/29031.htm>

²⁶ <https://learningpolicyinstitute.org/press-release/teachers-color-high-demand-and-short-supply>

²⁷ Ibid.



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- Greater diversity of teachers may mitigate feelings of isolation, frustration, and fatigue that can contribute to individual teachers of color leaving the profession when they feel they are alone.

To diversify the American school workforce, researchers, states, and the US Department of Education agree – **the pipeline of teachers of color must be increased.**²⁸ To achieve the benefits of a diverse educator workforce, qualified minority candidates must be recruited, trained, and certified. Center for Collaborative Education has established a community collaboration in California to pilot an innovative Teacher Pipeline program. CCE is prepared to disseminate strategies to support replication, while concurrently bringing the model to scale in Boston and New Mexico.

Building on best practices and evidence-based models in effective teacher recruitment and retention, CPTP will reach 300 students each program year in teacher exploration and training coursework. All students will be placed with an EAM, receiving individualized support and encouragement throughout their journey to certification. A teacher mentor network will be established to support CPTP. The teacher mentor network will serve as a hub for long-term mentoring and system of support for the teaching community in underserved QOZ.

CPTP Impact

Increased number of prospective teacher candidates in STEM and Special Education with increased teacher diversity in CPTP region (and QOZ). CPTP will increase success in public schools and will serve as a replicable model poised for widespread dissemination and national scale.

Student-Level CPTP Outcomes

Outcome Performance Measure #1: Coursework completion the percentage of participating students who complete all courses in which they enrolled each semester

²⁸ https://www.ecs.org/wp-content/uploads/State-Information-Request_Minority-Teacher-Recruitment-and-Retention-1.pdf



Outcome Performance Measure #3: Program completion—the percentage of participating students who complete the CPTP program

Outcome Performance Measure #4: Persistence The percentage of participating students who persist in enrollment at the community college through each semester of CPTP participation

Outcome Performance Measure #5: Credit accumulation The average number of credits accumulated by participating students

Outcome Performance Measure #6: Grade Point Average The grade point average of participating students

Outcome Performance Measure #7: Certificate attainment The percentage of participating students who attain a certificate offered via CPTP

Outcome Performance Measure #8: Transfer to a four-year program—The percentage of participating students who transfer to a four-year college or university

Implementation Objectives

Outcome #1: Improved visibility, understanding and exploration of teaching career based in low-income minority communities.

Outcome #2: Institutionalized STEM & SPED teacher preparation pipeline program processes at community college partners

Outcome #3: Increased number of prospective teacher candidates in STEM and Special Education with increased teacher diversity in CPTP region (and QOZ).



Outcome #4: Established teacher mentor network as a hub for long-term mentoring and system of support for teaching community in CPTP region (and QOZ).

Outcome #5: Teaching Career Pathway and Through Line from community college to CSU campuses in CPTP region (and QOZ) established

Outcome #6: Improved measures of success for students and communities in CPTP region (and QOZ)

Outcome #7: CPTP Blueprint resource disseminated widely to support national replication of effective Teacher Pipeline practices.

(2) The potential contribution of the proposed project to the development and advancement of theory, knowledge, and practices in the field of study.

Community Partnerships for Teacher Pipeline will leverage strategies recommended by NEA to increase the number of ethnic teachers of color, closely assessing and analyzing impact of the program approach to support national dissemination.

Following a Quasi-Experimental Design evaluation model, CPTP will benefit from the evaluation expertise of WestEd, documenting qualitative and quantitative outcomes resulting from the following recommended strategies:

➤ Early prospective teacher identification initiatives through community college surveys, motivational workshops, and courses in educational theory and practice

➤ Aggressive recruitment activities, including promoting transfer to four-year schools from those achieving Associate Degrees, sponsoring future teacher clubs, and organizing media campaigns that focus on minority communities

➤ Mentoring in the community college setting



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Presented to the CPTP Advisory Council, including representatives from California State University, administrators from local K-12 schools, Special Education teachers, English Language Learner teachers, STEM teachers, the REC Collective and CCE, WestEd evaluation findings will be used to inform the continuous improvement feedback loop. Council Meeting Minutes will be carefully recorded and included in dissemination resources, documenting challenges, successes, and lessons learned to facilitate replication with fidelity. Together, Meeting Minutes and resulting Action Plans, and the final evaluation report will be combined to form the **CPTP Blueprint**. This resource, designed to guide communities nationwide in model replication, will be disseminated widely.

(3) The extent to which the results of the proposed project are to be disseminated in ways that will enable others to use the information or strategies.

CPTP seeks to address a challenge that is national in scope. Results will be disseminated nationally to support the continued efforts to bring effective strategies to scale that address demographic disparities in America's schools.

Internal Dissemination: The CPTP Advisory Council, including representatives from all partners and stakeholder groups, will meet quarterly. Together, this team, using WestEd evaluation findings made available to all Council members, will identify challenges and weaknesses, leveraging real-time data to drive decision-making.

External Dissemination: The **CPTP Blueprint**, including Meeting Minutes and resulting Action Plans, and the final evaluation report will be disseminated widely. This resource, designed to guide communities nationwide in model replication, will be circulated through presentations at regional, state, and national conferences. It will be available for download from the CCE website, along with related whitepapers to be authored by CCE researchers.



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CCE has a long history of broad dissemination of project results. In assisting the Boston Public Schools to design, launch, and expand the Pilot school model (in-district schools with charter-like autonomy), CCE released a number of reports on promising Pilot school outcomes (e.g., *How are Boston Pilot Schools Students Faring? Student Demographics, Engagement, and Performance, 1997 -2003 [2004]*; *Strong Results, High Demand: Boston Community Leadership Academy: Pilot School Story of Transformation and Results [2006]*) that were broadly disseminated locally, regionally, and nationally through conference presentations. As well, CCE held showcase events and school tours for interested districts across the country. This dissemination led to LAUSD and United Teachers Los Angeles approaching CCE in 2005 to bring the Pilot model to Los Angeles.

As detailed in our history of collaboration, CCE has worked in partnership with WestEd for over ten years, successfully developing and implementing programs, as well as disseminating their results, that advance its mission of transforming schools and support improved R&D for the sector. For example, as noted previously, CCE helped school districts, in partnership with California State University Los Angeles (CSULA), to launch the Los Angeles Principal Residency Network (LAPRN, a field-based Preliminary Administrative Services credentialing program). CCE and CSULA staff co-authored a research study on LAPRN graduates (Hafner, Jones, and Herrera-Stewart, 2012) and presented the findings at AERA and other national conferences; the study found that LAPRN graduates felt more prepared for school leadership roles and were quicker to transition into leadership roles than their peers who graduated from CSULA's traditional principal credentialing program.

As a national non-profit, CCE has a demonstrated record of supporting improvements in student achievement, equity, and access as well as effective preparation and professional development activities and programs for teachers, principals, and other school leaders. By disseminating these results, we have continuously improved our program models and initiatives and expanded the reach of our programs'



impact. These and other guides and white papers can be downloaded for free on our website at cce.org and have been circulated via partner district sharing platforms. Via our online blog (cce.org/blog), which reached an audience of almost 13,000 readers last year, we chronicled lessons learned from our work and that of our partners.

Quality of the Management Plan (20)

(1) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable.

The **Community Partnerships for Teacher Pipeline** initiative is committed to identifying, recruiting, training and supporting prospective teachers through a mentoring and apprenticeship model within historically under-resourced schools and communities focusing on the areas of Special Education, Math, Science and Computer Science. The overall goal of CPTP is to sustainably address the demographic disparity among students and teachers in America's public schools, strengthening the teacher pipeline for prospective teachers of color.

Year One Objectives:

1. By Month 5, at least 300 students will be enrolled as CPTP program members, paired with an EAM and taking teacher education coursework.
2. By Month 2, CPTP coursework and EAM opportunities are institutionalized through inclusion in course catalogues at all partnering community colleges.
3. By Month 3, at least 150 EAM will be recruited from local schools to work with prospective teachers of color.
4. By Semester 1, all CPTP participants will be connected with an EAM.
5. By Month 12, at least 255 Year One participants (85%) in EAM will finish first year of program.



6. By Month 12, CPTP will have hosted at least 10 on-campus teacher mentor network empowerment events.
7. By Month 12, at least 120 Teacher Mentors (80%) will commit to continuing to serve as an EAM.
8. By Month 12, at least 80% of CPTP program members report coursework in teaching career pathway resulted in academic, career, or personal success (documented through surveys).

Year Two Objectives:

1. By Month 14, at least 150 EAM are recruited and ready to work with prospective teachers of color.
2. By Month 14, at least 300 CPTP participants will be connected with an EAM Teacher Mentor.
3. By Month 24, at least 128 Year Two participants (85%) in EAM will finish first year of program.
4. By Month 24, at least 75 Year One participants (50%) in EAM will be transferring to a 4-year university.
5. By Month 24, CPTP will have hosted a minimum of 10 on-campus teacher mentor network empowerment events.
6. By Month 24, at least 120 EAM (80%) will commit to continuing to serve.
7. By Month 24, at least 80% of CPTP program members report coursework in teaching career pathway resulted in academic, career, or personal success (documented through surveys).

Year Three Objectives:

1. By Month 26, at least 150 EAM are recruited and ready to work with prospective teachers of color.
2. By Month 36, at least 128 Year Three participants (85%) in EAM will finish first year of program.
3. By Month 36, at least 128 Year Two participants (85%) in EAM will finish second year of program.
4. By Month 36, at least 75 Year Two participants (50%) complete EAM program and transfer to a 4-year university.



5. By Month 36, CPTP will have hosted at least 10 on-campus teacher mentor network awareness/promotional events.
6. By Month 36, at least 80% of CPTP program members report coursework in teaching career pathway resulted in academic, career, or personal success (documented through surveys).

CPTP Impact

Increased number of prospective teacher candidates in STEM and Special Education with increased teacher diversity in CPTP region (and QOZ). CPTP will increase success in public schools and will serve as a replicable model poised for widespread dissemination and national scale.

Student-Level CPTP Outcomes

Outcome Performance Measure #1: Coursework completion the percentage of participating students who complete all courses in which they enrolled each semester

Outcome Performance Measure #3: Program completion the percentage of participating students who complete the CPTP program

Outcome Performance Measure #4: Persistence—The percentage of participating students who persist in enrollment at the community college through each semester of CPTP participation

Outcome Performance Measure #5: Credit accumulation—The average number of credits accumulated by participating students

Outcome Performance Measure #6: Grade Point Average—The grade point average of participating students

Outcome Performance Measure #7: Certificate attainment The percentage of participating students who attain a certificate offered via CPTP



Outcome Performance Measure #8: Transfer to a four-year program—The percentage of participating students who transfer to a four-year college or university

Implementation Objectives

Outcome #1: Improved visibility, understanding and exploration of teaching career based in low-income minority communities.

Outcome #2: Institutionalized STEM & SPED teacher preparation pipeline program processes at community college partners

Outcome #3: Increased number of prospective teacher candidates in STEM and Special Education with increased teacher diversity in CPTP region (and QOZ).

Outcome #4: Established teacher mentor network as a hub for long-term mentoring and system of support for teaching community in CPTP region (and QOZ).

Outcome #5: Teaching Career Pathway and Through Line from community college to CSU campuses in CPTP region (and QOZ) established

Outcome #6: Improved measures of success for students and communities in CPTP region (and QOZ).

Outcome #7: CPTP Blueprint resource disseminated widely to support national replication of effective Teacher Pipeline practices.

(2) The adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks.



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Representing the Collective Ownership Model partnership, CPTP will have two Co-Principal Investigators (Co-PI) –one from CCE and one from REC – who will oversee project management and oversight. [REDACTED]

[REDACTED]

A **Project Management Team** (PMT) will meet twice per month (in-person and virtual) to plan each project step, check on progress, and refine activities based on formative feedback from WestEd. One key PMT task will be a quarterly review of all project activities, timeline, and deliverables to ensure the project is on schedule, and if roadblocks arise, make adjustments while ensuring quality of implementation. The team will be responsible for timely review of WestEd formative feedback, and will work with the evaluator to develop action plans to address recommendations. [REDACTED]

[REDACTED]



[Redacted text block]

- **CPTP Program Manager (CCE), 1.0 FTE**, to be hired, will work closely with the CPTP project director, managing the project to achieve all of the project goals within the grant parameters.
- **CPTP Program Associate (CCE), 1.0 FTE**, to be hired, will work closely with the CPTP project director, ensuring operations of day-to-days tasks to advance programming goals and services.

Recruitment		
Activity / Milestone	Responsibility	Timeline
Program Staff hired	CCE P.I. & REC P.I.	Month 1
Advisory Council Meets	Program Manager	Month 1
Community wide publicity campaign advertising award and resulting opportunities	Program Manager	Month 1
Creation of awareness and recruitment posters and flyers	Program Associate	Month 1-2
CPTP website built and launched	Program Associate	Month 1-2
At least 10 CPTP Teacher Empowerment Events held on-campus to engage students of color considering a teaching career annually (30 total)	Program Director & Director of Equity	Months 2-36
EAM Teacher Mentors recruited from local schools and trained through online modules and in-person workshops	REC Project Directors	Month 1-3
Recruitment and awareness posters disseminated	Program Associate	Month 2-ongoing
Face-to-face regional recruitment in remedial courses	PLT	Month 2-ongoing
Enrollment opens for CPTP courses	REC Project Directors	Month 2-ongoing



CPTP coursework and EAM opportunities are institutionalized through inclusion in course catalogues at all partnering community colleges	PLT	Month 2-ongoing
Advisory Council Meets to review quarterly analysis and guide program implementation through data-informed decision-making	Program Manager	Months 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36
Retention		
Activity / Milestone	Responsibility	Timeline
Enrolled students complete career aspiration survey	REC Project Directors	Month 2-ongoing
Students meet with CPTP Success Coach at least twice annually to identify clear course pathways for certifications and degrees and proactively address challenges	REC Project Directors	Month 2-ongoing
Students are connected to EAM, completing at least 30 hours of mentoring each semester	REC Project Directors	Month 3-ongoing
CPTP Success Coach reaches out proactively to all CPTP students who are performing below expectations to offer personalized support	REC Project Directors	Month 4-ongoing
CPTP students complete field experiences, increasing their exposure to students in a classroom environment	REC Project Directors	Month 3-ongoing
Teacher mentor network meets to coordinate and actively participate in monthly CPTP Teacher Awareness Events held on-campus to engage students of color considering a teaching career	Program Director & Director of Equity	Month 4-ongoing
CPTP students completing EAM requirements earn a stipend each semester	REC Project Directors	Month 5-ongoing
Mentors and Success Coaches support students as they prepare for transfer to 4-year university	REC Project Directors	Month 18-ongoing
CPTP Blueprint complete and disseminated	Program Manager	Month 35-ongoing

(3) The adequacy of procedures for ensuring feedback and continuous improvement in the operation of the proposed project.

A comprehensive evaluation process will result in formative and summative reports that detail progress towards meeting projected objectives, performance measures, and outcomes. External Evaluation firm WestEd will provide evaluation findings highlighting strengths, gaps and weaknesses in program impact, enabling real-time decision-making. Presented to the CPTP Advisory Council, including representatives from California State University, administrators from local K-12 schools, Special Education teachers, English Language Learner teachers, STEM teachers, the REC Collective and CCE, evaluation findings



will be used to inform the continuous improvement feedback loop. Council Meeting Minutes will be carefully recorded and included in dissemination resources, documenting challenges, successes, and lessons learned to facilitate replication with fidelity. Together, Meeting Minutes and resulting Action Plans, and the final evaluation report will be combined to form the **CPTP Blueprint**. This resource, designed to guide communities nationwide in model replication, will be disseminated widely.

The proposed evaluation plan is thorough, feasible and appropriate to the goals, objectives and outcomes of the project. It provides an efficient framework that includes extensive feedback loops to ensure that the program is on course to meeting the needs of populations pursuing teaching careers. To facilitate a continuous improvement model, the evaluation plan supports ongoing monitoring and timely adjustments as appropriate.

Quality of the Project Evaluation (25)

(1) The extent to which the methods of evaluation will, if well implemented, produce evidence about the project's effectiveness that would meet the WWC standards with or without reservations as described in the WWC Handbook.

WestEd will conduct the independent evaluation of the CPTP program. Using a quasi-experimental design (QED) meeting What Works Clearinghouse (WWC) standards with reservations, WestEd will examine CPTP's impact on the students' course completion rates after two and four semesters of program participation (see Confirmatory Impact Questions [CIQ] 1–2 below). The QED will also examine CPTP's impact on persistence rates, transfer rates, credit accumulation, and GPA, (see Exploratory Impact Questions [EIQ] 1–2) and the impacts for students who had high levels of participation in CPTP support (see EIQ 3). As part of the formative component of the evaluation, WestEd will administer surveys of participating students and their mentors; conduct interviews with program management staff, as well as participating students and their mentors and coaches; and review program documents in order to provide



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CCE with performance feedback and regular assessments of their progress toward achieving intended project objectives and outcomes. In addition, WestEd’s evaluation will assess performance measures using quantitative and qualitative data collection and analysis.

Research Questions		
Confirmatory Question 1	Impact	What is the impact of two semesters of CPTP participation on students’ course completion rates?
Confirmatory Question 2	Impact	What is the impact of four semesters of CPTP participation on students’ course completion rates?
Exploratory Question 1	Impact	What is the impact of two and four semesters of CPTP participation on students’ persistence and transfer rates?
Exploratory Question 2	Impact	What is the impact of two and four semesters of CPTP participation on students’ credit accumulation and GPA?
Exploratory Question 3	Impact	What is the impact of CPTP participation for students who had high levels of participation in CPTP support?

In order to produce evidence about CPTP’s effectiveness that will meet WWC standards with reservations, WestEd will employ a QED that will identify a matched comparison group of students from within the three participating community colleges. The QED will rely on extant data from administrative records and will use propensity score matching to identify the comparison students. In addition, WestEd will conduct regression analyses to assess the impact of the program on student outcomes.

Data Collection. WestEd will collect the individual-level demographic, prior achievement, CPTP participation, and outcome data necessary for the QED from the three colleges’ administrative records. In order to be able to create a pool of potential comparison students and obtain all of the necessary outcome data, WestEd will collect all of the individual-level data for all students in the three colleges after during Year 2 (after the cohort of students participated in CPTP for two semesters) and Year 3 (after the cohort of students participated in CPTP for four semesters) as depicted in the table below (which shows student participation in CPTP over time, with the area in grey noting the time period during which data for the QED will be collected).

Academic Year	Semester	Cohort A	Cohort B	Cohort C
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2020–2021	Fall 2020	Participant recruitment		
	Spring 2021 Semester 1	A1 1 semester exposure	Participant recruitment	
2021–2022	Fall 2021 Semester 2	A2 2 semesters exposure	B1 1 semester exposure	Participant recruitment
	Spring 2022 Semester 3	A3 3 semesters exposure	B2 2 semesters exposure	C1 1 semester exposure
2022–2023	Fall 2022 Semester 4	A4 4 semesters exposure	B3 3 semesters exposure	C2 2 semesters exposure
	Spring 2023 Semester 5	A4 5 semesters exposure	B3 4 semesters exposure	C2 3 semesters exposure

The demographic data will include full-time/part-time status, first-generation college status, whether students previously enrolled in college, number of semesters enrolled in the college, gender, age, and race/ethnicity. The prior achievement measure will be the students’ high school grade point average (GPA). The outcome measures will include the students’ course completion rates, persistence rates, transfer rates, credit accumulation, and GPA.

Identification of Treatment and Comparison Students. The treatment or CPTP students will include all students who enrolled in the program, regardless of the extent to which they participated in CPTP support. The pool of potential comparison students will include all non-CPTP students. However, any non-CPTP students known to have participated in CPTP support or activities will be excluded from the pool of comparison students. To identify comparison students who are equivalent on the observable pre-treatment variables known to be related to the outcomes of interest, we will use propensity score matching (Stuart, 2010). Propensity score matching is an analytic technique that uses logistic regression to match each CPTP student with a non-CPTP student with similar demographic characteristics and high school GPA. To increase the statistical power of the QED, WestEd will employ 2-1 matching and identify two comparison



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students for each CPTP student (Shadish et al., 2002). The propensity score matching will be conducted separately by college and will include all of the demographic variables listed in the Data Collection section.

Following the matching, WestEd will calculate the standardized difference between the groups (i.e., the mean difference divided by the pooled standard deviation) for prior GPA. This type of numerical balance diagnostic will determine the quality of the matches. Given the large number of non-CPTP students in each college, it is likely we will be able to identify an equivalent comparison group. However, in accordance with the WWC (U.S. Department of Education, 2020b) guidelines for baseline equivalence, we will investigate using weights based on the propensity scores if the differences between the treatment and comparison students on the achievement measures exceed 0.25 standard deviation.

Power Analysis. WestEd used the PowerUp! tool to conduct a power analysis for CIQ 1 using a fixed effects model (Dong & Maynard, 2013). The power analysis was based on 150 CPTP students per college, which will be the number of unduplicated students who participated in the program for two semesters by the middle of Year 3. After accounting for 15% attrition, the power analysis included 128 CPTP and 256 comparison students per college. Additionally, the power analysis included the following parameters: three colleges (i.e., blocks), 25% of the variance in the student-level outcome explained by student-level covariates and the blocks, $\alpha = .05$, and power of .80. The minimum detectable effect size (MDES) produced by this power analysis was 0.15. It is very feasible for CPTP to produce an effect size of this magnitude given the previous research on the size of impacts of other educational interventions (Hill et al., 2008) and the extensiveness of the support that will be provided by CPTP.

The student-level sample size for CIQ 2 is considerably smaller because only students who started the program in Year 1 will have participated in CPTP for four semesters by the middle of Year 3. With the exception of the student-level sample size for each college, which included 40 treatment and 80 comparison students after accounting for 20% attrition, the other parameter estimates from the power analysis for CIQ



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1 were the same. The MDES produced by this power analysis was 0.27. Although larger than the MDES for CIQ 1, an effect size of this magnitude is still feasible given the prior research on other educational interventions (Hill et al., 2008) and the increased dosage received by the students who participated for four semesters.

Analytic Plan. WestEd will use regression models to conduct the impact analyses for the QED. We will use ordinary least squares regression for the continuous outcomes (e.g., course completion rate) and logistic regression for the dichotomous outcomes (e.g., transfer status). To increase the precision of the impact estimates and to meet the WWC baseline equivalence standard (if the GPA differences between the groups are between 0.05 and 0.25 standard deviations), the models will include high school GPA and student demographics as covariates.

The proposed regression model used to address CIQ 1 is outlined by the equation below:

$$Y_i = \beta_0 + \beta_1(\text{CPTP Status}) + \beta_2(\text{CC 1}) + \beta_3(\text{CC 2}) + \beta_4(\text{High School GPA}) + \beta_5(\text{Demographic Measure 1}) + \dots + \beta_Q(\text{Demographic Measure Q}) + \varepsilon$$

Y_i is the value for the outcome measure (i.e., course completion rate) and β_0 is the intercept in the model. Additionally, β_1 is the coefficient describing the strength and direction of the association between the intervention status (i.e., CPTP students = 1 and comparison students = 0) and the outcome. Values greater than zero for β_1 will indicate the CPTP students have higher course completion rates while values below zero will indicate the comparison students have higher course completion rates. β_2 and β_3 are coefficients that describe the strength and direction of the associations between dummy codes controlling for the community college attended. β_4 is the coefficient that describes the strength and direction of the association between high school GPA and the outcome. β_5 to β_Q are coefficients that describe the strength and direction of the associations between continuous measures (e.g., age) and dummy codes (e.g., gender) representing the demographic variables and the outcome. Finally, ε is the residual or error term.



To address EIQ 4, WestEd will disaggregate the impact findings for students who participated in CPTP activities to a greater and lesser extent by including an interaction term (i.e., participation level \times treatment status) in the regression analyses. The participation level measure will be a composite variable based on all CPTP activities, and WestEd will use a median split to create the high and low participation groups.

Consistent with WWC recommendations (U.S. Department of Education, 2020b), WestEd will use casewise deletion to handle any missing data. None of the outcome measures or the covariates will be imputed. Additionally, WestEd will use the Benjamini-Hochberg correction (Benjamini & Hochberg, 1995) with any statistically significant findings to control the Type I error rate.

To aid in the interpretation of the impact estimates, WestEd will calculate effect sizes according to WWC recommendations (U.S. Department of Education, 2020a). To calculate the effect sizes for the continuous outcomes, we will divide the differences between the means for the CPTP and comparison students over their respective pooled standard deviations (i.e., Hedges' g). For dichotomous outcomes, we will use the Cox index to calculate effect sizes. In addition, WestEd will calculate an improvement index (i.e., the difference based on the percentile rank of the treatment and comparison groups) using the impact estimates that will describe the practical importance of the findings.

(2) The extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes.

To provide CPTP with performance feedback and periodic assessment of progress toward achieving its intended outcomes, during the evaluation WestEd will address formative evaluation questions (Patton, 2008), such as: What are the strengths and weaknesses of CPTP? What types of implementation problems are occurring and how can they be corrected? What do participants want to change about the program? To answer these and other potential formative questions, we will conduct semi-structured interviews with CPTP management staff, participating students and their mentors and coaches, and review program



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documents. WestEd's qualitative findings, delivered via brief formative quarterly reports in Year 1 and biennially in Years 2 and 3, will help refine and improve CPTP's approach during all years of the program.

WestEd will also offer performance feedback and periodic assessment of progress via annual reports on the extent of implementation of key project components. In addition to conducting qualitative data collection via interviews, WestEd will administer surveys to participating students and their mentor annually using survey items for assessing how effectively CPTP implements the strategies supported by Moderate Evidence, namely (a) requires or incentivize regular participation in enhanced advising activities, (b) offers students performance-based monetary incentives, and (c) implements comprehensive, integrated and long-lasting support programs. Survey items will be designed to collect data on the content, quality, dosage, and perceived efficacy of each strategy, as applicable.

To identify other program components to be assessed as part of the evaluation, evaluators will draw upon our existing knowledge of CPTP, review program documents, and discuss the program with CPTP staff (Century, Rudnick, & Freeman, 2010). Evaluators will work collaboratively with program staff to identify thresholds for low, medium, and high levels of implementation for each program component. WestEd will then develop an implementation rubric at the start of Year 1 of the program and will collect implementation data in all years to provide feedback to program staff. WestEd will use both implementation indicators and survey data on CPTP components in correlational analyses that identify relationships of program implementation and components with the outcomes of interest. Findings from these analyses will be incorporated in annual evaluation reports.

WestEd's performance feedback and periodic assessment to CPTP can be used to improve the program both in its current implementation to make mid-course corrections and to inform future larger-scale implementation. Regular, meaningful engagement between CPTP and WestEd is critical for both to succeed. Wholey (2010) notes that well-intended evaluation efforts can fail if users do not agree on program



goals, objectives, information priorities, and intended uses of program performance information. Our engagement with CPTP staff to discuss the relevance of and progress toward project goals and objectives, data collection approaches, findings, and implications—will help ensure the evaluation is informative, relevant, and useful.

(3) The extent to which the methods of evaluation include the use of objective performance measures that are clearly related to the intended outcomes of the project and will produce quantitative and qualitative data to the extent possible.

As noted above WestEd will employ multiple methods in its evaluation, which incorporate both quantitative (e.g., extant data, surveys, implementation rubrics) and qualitative (interviews and document review) data collection and analysis and the use of objective performance measures related to the intended outcomes of the project. Through the evaluation WestEd will provide annual summaries of objective performance measures, including the GPRA and project-specific performance measures, and the proposed CPTC goals, objectives and outcomes, that will be suitable for inclusion in Annual Performance Reports submitted to the Department as well as in formative and annual reports of findings.

WestEd collaborated with CCE to develop objective performance measures for intended outcomes of the program. The measures, detailed in the Objectives and Performance Measures form in Grants.gov, address the following areas that will also be assessed by WestEd's proposed QED: *coursework completion*, *persistence*, *credit accumulation*, *credit accumulation*, and *grade point average*. Other areas addressed by the measures and to be assessed via analysis of survey data and extant data (i.e., community college and CPTP records) collected through the evaluation are *certificate attainment* and *program completion*. With the exception of the *certificate attainment* and *program completion* measure, CPTP's outcomes assessed by the objective performance measures will be compared to the outcomes of students not participating in the program. Such a comparison is incorporated within WestEd's QED for the applicable measures.



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Evaluators will use both qualitative and quantitative data about implementation of the project components to enhance program staff understanding of the extent of attainment of the objective performance measures, as well as of CPTP's goals and objectives. Formative and annual reporting through the evaluation will provide narrative assessments that incorporate implementation data about from program documents, interviews, surveys, and rubrics that can be used collaboratively with program management staff to develop explanations about the extent to which implementation successes and challenges influenced the intended outcomes of CPTP as depicted by findings on the attainment of the objective performance measures.

Evaluator Experience. WestEd, a preeminent educational research and service organization, has the capacity to successfully conduct the independent evaluation of CPTP. WestEd has been a leader in moving research into practice by conducting evaluations, research, and development projects and providing technical assistance. In addition, WestEd has a full-service communications department that works with its research and evaluation staff to disseminate study findings through reports, publications, email newsletters, and social media. WestEd's budget for the CPTP evaluation is included in the proposed budget. The proposed evaluation team includes the project director, Alberto Heredia, and the methodologist and lead analyst, Jonathan Nakamoto, both Senior Research Associates. The team was involved in two Investing in Innovation Development (i3-Development) grants, three School Leadership Program (SLP) grants, and two Teacher Quality Partnership (TQP) grants from the US ED Office of Innovation and Improvement. WestEd completed the i3-Development evaluation of Beaverton School District's supplemental literacy curriculum in 2015 that employed a cluster randomized trial and met WWC Evidence Standards without reservations. WestEd also completed the i3-Development evaluation of Clark County School District's middle school science curriculum in 2016 that used a QED with a group of comparison schools using Mahalanobis distance matching and met WWC Evidence Standards with reservations. WestEd additionally served as the external evaluator for three SLP grants, two of which were in partnership with CCE and the



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Los Angeles Unified School District, and two TQP grants in partnership with CCE and the California State University Los Angeles. Heredia directed the evaluation of the California Migrant Education State Services Delivery Plan, which employed a QED design assessing outcome performance measures for migrant students and qualitative assessment of the implementation of migrant education services.

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