



## Section A – Cover Page

### Contact Information for Application Coordinator

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**List of Participants:** Crafton Hills College is working with several partners to assist with the success of this project. This includes those already affiliated with a Linked Learning Hub that was developed to increase college preparedness, high school graduation rates and college-going rates in the region. Linked Learning focuses on developing integrated academic and technical pathways that are aligned to high-quality standards, to prepare all students for college, career, and life, which makes this project a natural fit. K-12 partners will include the San Bernardino Unified School District, Yucaipa Unified School District, Redlands Unified School District, Rim of the World Unified School District and Rialto Unified School District. Four-year partners are the University of California schools and University of Redlands.

**Abstract:** Crafton Hills College will develop Pathway development for Underserved students including Educational plans and Dual Enrollment for Success, or PUEDES (Spanish for "you can") utilizing Innovations grant funding. As an Hispanic Serving Institution, CHC has identified innovative activities that will be especially effective for its Hispanic, low-income and other minority students. PUEDES is designed to lower the amount of time students take to complete a two-year degree and, in relation, their costs for doing so. This will include helping high school students identify a transfer or career pathway and developing an educational plan, as well as providing a variety of supports for CHC students after they enroll there. An important part of the project is the re-design of courses at CHC to include co-requisites that will provide students with valuable supplemental information to help them be successful. This will begin with math and transition into other courses, such as English.

**Contact Information for Representative of Fiscal Agent:** N/A

### Assurance and Signature

I assure that I have read and support this application. I understand that, if this application is chosen for an award, Crafton Hills Community College will serve as the fiscal agent for the award and that the responsibility of the fiscal agent includes distribution of funds to any other participants in the application pursuant to any agreement between the participants. I also understand that, if this application is chosen for an award, the Committee on Awards for Innovation in Higher Education may request submittal of reports or other information.

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Signature

## Section B – Narrative Responses to Application Items

### 1. *From the perspective of students, what is the problem you are trying to solve? (1 page)*

Students at Crafton Hills College, located in Yucaipa, are largely from low-income and minority backgrounds, leading to a unique set of needs that this community college is well equipped to address. CHC offers Associate of Arts and Associate of Science degrees in 50 areas of study with seven additional multi-disciplinary degree programs. The college had a fall 2016 student population of over 5,800 students. A full 61% of all students are minorities (including 46% Hispanic) and 62% are considered low-income. During the 2015-2016 school year, 4,690 CHC students were awarded over \$9.2 million in financial aid through fee waivers, grants and PELL. This equates to **a full 80.8% of the student population qualifying for financial aid.**

The student body is just 34% full-time, which lends itself to a problem: on average, students take 5.3 years to earn an associate's degree (all data, CHC Office of Research and Planning).

Students answering a **2016 Student Satisfaction Survey** (with a 95% confidence level generalized to the total student population) cited the following as reasons:

- Educational pathways need to be clarified to reduce confusion in the courses students need to complete to graduate (20.9% of students cited this as a weakness); and
- The scheduling of courses needs to be improved. 16.7% of respondents said courses are not convenient and 20.5% say that classes they need to complete a degree are not available.

CHC's Student Senate was also part of the planning process for this project and indicated that their primary needs involve a change in structures to better accommodate individual students and clarification of educational pathways. The primary area of concern is math, where many students get stuck in a cycle of having to retake courses early in their college education.

In looking at these concerns and associated data (including a CHC Enrollment Management study), CHC has identified as the major problem to be solved with grant funds as **unclear pathways to completion.** This issue leads to longer time to completion, higher drop-out levels and an increased cost to students.

The project being proposed by CHC has the potential to impact a wide range of students, both those preparing for college and those already enrolled. This project will serve a total of 310 students from primary service high schools, as illustrated in the chart at right. In addition, strategies being proposed on the CHC campus will impact 1,900 students per year. Over a three-year period, the expected impact is 6,010 students. Among those to be impacted will be first-time college students, low-income students and minorities, especially Hispanics.

Unified School District	Number Served
Yucaipa	150
Redlands East	100
San Bernardino	30
Rim of the World	30

CHC's project is relevant to challenges in higher education across California because it is not just innovative, but also replicable by other community colleges. It is based on relevant and recent research, as well as best practices from other institutions. In addition, the project relates to the California Community College Long-Range Master Plan (2016), which calls for a 2% increase in associate's degrees earned, which will improve the state's economy and tax revenue. Because other community colleges in California face similar issues, CHC's plan to develop a program that will allow for a clear answer to pathway concerns can have a broader impact on higher education. PUEDES will increase the number of degree earners and students who transfer to four-year institutions. This project, as presented, can assist with meeting the state's goal of increasing associate's degrees earned while also developing a plan for improving the effectiveness of community colleges.

## 2. What is the innovation? (2 pages)

The innovation being proposed in this application is **PUEDES**. Spanish for “you can,” PUEDES stands for **P**athway development for **U**nderserved students including **E**ducational plans and **D**ual **E**nrollment for **S**uccess. It has been designed to help students save time in their pursuit of a college education and, therefore, money. It will assist CHC with increasing retention and graduation rates, especially for its high-need, minority and low-income students. It will meet the needs identified in Question 1 through two components: Pathway Development and Pathway Sustainment, with an included innovation that will involve revamping the way many courses are taught and offered to students, beginning with math.

The **Pathway Development** component will focus on the K-12 to college transition. It will include ensuring that courses high school students take as part of dual enrollment align with pathways at CHC and developing subject-specific maps that students can follow to ensure they are taking appropriate courses for their selected major. It will showcase the best use of students’ time and money while allowing them to explore options so they are not locked into a decision if they determine it is not right for them. This will be done in part by including parents in the process. Specific activities are listed in the chart below.

Pathways Development and Curricular Alignment	<ul style="list-style-type: none"> <li>• Building upon dual enrollment so it is a true pathway to college</li> <li>• Holding joint meetings between CHC and high school instructors to review and align curriculum and determine general pathways</li> <li>• Developing MOUs between CHC and K-12 districts that allow dual enrolled students to earn both college and high school credit</li> </ul>
Early Outreach and Recruitment	<ul style="list-style-type: none"> <li>• Providing outreach to elementary, middle and high school students that includes information regarding college opportunities and options to begin building up the importance of college at an early age</li> </ul>
Counseling and Guidance	<ul style="list-style-type: none"> <li>• Working with high school juniors and seniors to identify educational pathways and to develop plan based on transfer or career</li> <li>• Providing counseling support and guidance to students in dual enrollment</li> <li>• Providing dual-enrolled students with information about CHC services such as Extended Opportunities Programs and Services, Disabled Student Programs and the Tutoring Center</li> <li>• Connecting dual enrolled students with a CHC Master Student, who will provide peer mentoring and assistance with college processes</li> </ul>
Staff Cross-Training and Enhancing Dual Enrollment Infrastructure	<ul style="list-style-type: none"> <li>• Training middle and high school counselors to understand community college pathways, degree/certificate options and transfer opportunities</li> <li>• Designating one or more trained high school counselors as college liaisons to assist students with course selection and enrollment</li> <li>• Including high school counselors in CHC counseling staff meeting</li> <li>• Providing on-site and online tutorial support for dual enrolled students</li> </ul>
Family Education and College Preparation	<ul style="list-style-type: none"> <li>• Providing parent orientation in English and Spanish to better inform parents of dual enrollment opportunities, pathways to and through college, and the benefits of attending a community college</li> <li>• Providing financial aid workshops for parents and students</li> <li>• Inviting dual enrolled students to participate in campus activities</li> <li>• Providing early recruitment of dual enrolled students into CHC</li> </ul>

**Pathway Sustainment** focuses on working with students once they register at CHC to ensure they remain on their path and can complete an education in a timely manner. A primary component of this is the redesign of courses into a co-requisite model. This process will begin with math, as it is a major hurdle for students in completing a degree, as noted in Section 1. Oftentimes, students will enter CHC needing remedial math or will fail a math course and have to retake it. This pattern leads to higher costs for students and frustration at feeling as if they can't succeed. The math redesign includes developing a math co-requisite program that will include options for students on transfer or career pathways, as illustrated below.

Pathway	1st Math Course	Co-Requisite	2nd Math Course
Educational Transfer	Pre-statistics (085) or Intermediate Algebra (095)	Based on a diagnostic that identifies student weaknesses	Based on chosen pathway
Career	Based on CTE program	Based on a diagnostic that identifies student weaknesses	Based on CTE program

The co-requisites will be developed by CHC faculty and include material development and training. This is truly innovative, as math faculty will embark on groundbreaking work to completely restructure how they teach the subject, with the majority of classwork being done in a lab format instead of lecture. The co-requisites will complement the offered course. They will be specific lab courses that cover topics that students are learning about, but which may require additional instruction, such as working with formulas or adding fractions. For all co-requisites, materials designed by the California Acceleration Project will be used, as will materials designed and created exclusively by CHC. Realigning courses to include co-requisites will assist students in being successful and will decrease their time to completion, as it will help them avoid having to retake courses.

In addition to the math re-alignment, this component will also include:

- Creating a Math Success Center where students can receive assistance in a lab setting, attend workshops and receive specialized assistance with math courses.
- Developing a new math classroom where instructors can teach co-requisites in a lab.
- Engaging the entire college faculty and staff as participants through planning and activities initiated in the classroom. This will include looking at specific degree programs to identify gaps in course offerings (such as courses that are only offered every four semesters).
- Implementing technology as an innovation through electronic tools such as the newly-implemented Hobson's Starfish Retention product, which will work to collect data points.
- Designing programming for second-year students that enhances their focus on achieving academic goals by collaborating with University Transfer and Career Center activities, which will further help solidify their pathways.
- Providing incentives such as priority registration and access to a lending library for calculators, textbooks and tablet computers to students who follow their educational plan. Such incentives will assist students with lowering college costs.
- Offering comprehensive financial aid assistance to include helping with forms and checking in periodically to ensure the student is not delinquent on any fees. Students on the transfer track will also be assisted with learning about financial aid opportunities at four-year institutions, including those that have special MOUs with CHC regarding scholarship funding.
- Developing an accelerated program with co-requisites for other courses, such as English, to be created after the math redesign and based upon its successes.

### 3. *How will you implement this innovation? (2 pages)*

Crafton Hills College has worked to develop PUEDES by involving a variety of constituents. This includes CHC administrators, faculty, staff and students; high school instructors and students; and partners from four-year institutions. Those involved have an existing relationship through the Linked Learning Regional Hub of Excellence, which focuses on developing integrated academic and technical pathways aligned to standards. That Hub has been in place for approximately three years and meets monthly. Partners met to determine the best innovation to develop, how it should be implemented and how to assess success. Because of the existing partnerships, support was strong from the beginning, with no actions needed to encourage buy-in. As the project progresses, these constituents will form a steering committee that will continue to guide the project. That committee will meet at least monthly to implement PUEDES, oversee the implementation process, determine if the innovations are effective, identify obstacles and, if needed, make adjustments.

As with any new project, risks of implementation include a concern that it may not produce the expected success. To mitigate this risk, PUEDES will include several elements:

- External evaluation will provide valuable quality control. An external evaluator with knowledge of the project and higher education experience will be contracted to work with the committee. The evaluator will visit campus three times (once every 12 months) to assist with analysis of the project and to tie it in with the approved objectives.
- Ongoing data collection will be used to determine satisfaction with services, as well as to evaluate increases in retention in transfer-level math courses; overall student retention; and decreased time to completion.
- The steering committee will include a strong contingent of student members who accurately represent CHC's student body as well as the student bodies of the feeder high schools in the region. Students will include those from under-represented groups including minorities and low-income students. Input from these students is paramount to both the development of the project and its success.
- Technology will be utilized through CHC's Starfish Retention software, which is currently being developed through the Chancellor's Office as a pilot project. This innovative software will enable CHC to collect a variety of targeted data on students involved in PUEDES that the college would otherwise not have access to.

To effectively implement PUEDES, a total of 36 months are being requested. It is expected to begin June 1, 2017, with Year 1 ending May 31, 2018; Year 2 going from June 1, 2018-May 31, 2019; and Year 3 from June 1, 2019-May 31, 2020. The chart below includes a timeline for project implementation.

Activity/Task	Person(s) Responsible	Time Frame
Project start-up	Dr. Wurtz; steering committee	June 2017
Identify and appoint staff	CHC administration	June-July 2017
Steering committee meetings held	Dr. Wurtz	Monthly throughout project
Faculty and staff training	Dr. Wurtz; CHC faculty and staff; high school instructors and counselors	Monthly in Year 1; quarterly in Years 2, 3
Math redesign, develop co-requisites	CHC faculty and staff	Fall semester 2017 (Aug. 15-Dec. 15)
Develop Math Success Center	CHC faculty and staff	Completed Spring 2018



K-12 pathways development	Dr. Wurtz; CHC faculty and staff; K-12 instructors; steering committee	Fall 2017-Spring 2020
K-12 early outreach	Dr. Wurtz; CHC faculty and staff; K-12 instructors; steering committee	Fall 2017-Spring 2020
K-12 counseling services	Dr. Wurtz; CHC faculty and staff; K-12 instructors; steering committee	Fall 2017-Spring 2020
Staff Cross-Training and Enhancing Dual Enrollment Infrastructure	Dr. Wurtz; CHC faculty and staff; K-12 instructors; steering committee	Fall 2017-Spring 2020
Family Education and College Preparation	Dr. Wurtz; CHC faculty and staff; K-12 instructors; steering committee	Spring 2018 and ongoing throughout project
Math Success Center Opens	Steering committee; project staff	Spring 2018
Provide CHC support services for students	CHC supportive services; steering committee; faculty and staff	Develop Fall 2017; Implement Fall 2018
Project evaluation	Dr. Wurtz, steering committee, external evaluator	Formative at monthly intervals; summative every six months
Final evaluation conducted	Steering committee, external evaluator	May 2020
Project institutionalized	Administration; Steering committee	Completed June 2020

To support the implementation of this project, CHC has developed a logic model that illustrates the resources needed, activities to be undertaken and outcomes. This logic model will be followed throughout the project to ensure appropriate implementation.

Resources	Activities	Outcomes
<b>Staff</b> <ul style="list-style-type: none"> <li>• Faculty (course redesign, developing co-requisites)</li> <li>• Pathways Specialist</li> <li>• Outreach Specialist</li> <li>• Math Center Coordinator</li> <li>• Tutors</li> <li>• Research Analyst</li> <li>• Substitute faculty (trainings)</li> </ul> <b>Equipment/supplies</b> <ul style="list-style-type: none"> <li>• Office supplies</li> <li>• Diagnostic tools</li> <li>• Computers and software</li> <li>• Lending library items</li> </ul> <b>Training</b> <ul style="list-style-type: none"> <li>• Workshops, follow-up</li> <li>• Faculty share sessions</li> </ul> <b>Facilities</b> <ul style="list-style-type: none"> <li>• Space for Math Center</li> <li>• Upgrade traditional classroom</li> </ul>	<ul style="list-style-type: none"> <li>• Develop co-requisite courses</li> <li>• Develop Math Success Center</li> <li>• Develop K-12 pathways</li> <li>• Offer K-12 outreach and counseling</li> <li>• Provide training at all levels</li> <li>• Offer family education/outreach</li> <li>• Provide outreach to K-12</li> <li>• Develop sustainability plan</li> <li>• Share data between K-12 and CHC</li> </ul>	<ul style="list-style-type: none"> <li>• Increased enrollment at CHC</li> <li>• Improved content in dual credit courses</li> <li>• Development and implementation of supportive services at K-12 and college levels</li> <li>• Increased retention in transfer-level courses</li> <li>• Improvement in overall student retention</li> <li>• Improved faculty communication and training</li> <li>• Decreased time to completion for students</li> <li>• Increased intentionality to attend college</li> </ul>

**4. *How does this innovation align with other efforts you are undertaking and how does it relate to other efforts in higher education in California? (1 page)***

Crafton Hills College assesses existing programs every time it develops a new activity for its students to ensure that efforts are not duplicative and that they meet student needs. PUEDES will align with several existing programs, with these services feeding into the new project by providing complimentary services. These current programs are:

- **Left Lane** is an opportunity for first-year students at CHC to make a clean transition into college life. Participants in the Left Lane Program receive priority registration, and access to exclusive programs and services. Those testing into pre-college-level math, English or reading are eligible.
- **SOA<sup>3</sup>R** (Student Orientation, Application, Assessment, Advising and Registration): makes Crafton Hills staff available at high schools to assist prospective students with applications and registration.
- **Promise Scholars** includes college tours for youth as young as fifth grade, which allow students to see a variety of college programs.
- **Zero-Cost Textbook program**: CHC uses this program to help save students money on textbook costs, which are often prohibitive for low-income students.
- **STEM Trek**: This program combines STEM coursework and scientific co-curricular opportunities to expedite transfer and continued engagement. Students receive counseling, tutoring and assistance with STEM core courses.
- **Non-Credit Courses**: CHC makes available many non-credit courses that students may find useful to their success. Among the most important for this Hispanic-serving institution is English as a Second Language (ESL).
- **Technology Success Center**: This facility provides training on technology systems college-wide, which will assist with the technology components of this project, including labs.

In addition to aligning with other CHC programs, PUEDES also relates to California's higher education programs in general. Specifically, it closely follows the California Guided Pathways Model, which is an integrated and institution-wide approach to student success. As with CHC's proposed innovation, Guided Pathways includes a clear and structured educational experience for students from entry through completion. PUEDES meets the Guided Pathways concept in the following ways:

- **Clarify paths to student end goals**: CHC will begin working with students in high school to develop program maps that make the courses needed clear. These maps will include transfer options for students continuing to a four-year institution.
- **Help students choose and enter a pathway**: High school students in CHC's service area will be given the choice of selecting a STEM or non-STEM path before they begin taking college courses. This will simplify their choices for specific courses and put them on the right track for math classes, which often serve as a deterrent for success in college.
- **Help students stay on a path**: CHC is developing a series of supports designed to assist students throughout their college experience. These will include building upon current programs, developing a Math Success Center and working with students regarding financial aid and options for paying for their education.
- **Ensure that students are learning**: Goals for this program have been clearly established and include retention rates, degree and certificate completion rate, and the transfer rate. Additionally, a primary component of the project is ongoing faculty training so instructors are well versed in the needs of CHC's underserved, minority and low-income students.

**5. *How could this innovation be scaled up within the setting in which you work and replicated in other areas in California? (1 page)***

Crafton Hills College is proposing increases through PUEDES in the areas of transfer-level course completion, high school students enrolled in dual credit, retention and completion; as well as a decrease in time to completion. These projections, described in further detail in Question 7, were based in large part on CHC's past success in implementing similar projects, as well as on research and best practices.

The college will begin PUEDES with grant funding and expects to scale it up after ensuring that the innovations proposed are effective. This will be done by adding additional co-requisite courses into programs other than math. The first to be targeted will be English, with administrators already scheduling meetings with faculty from that department to determine needs and to discuss the types of co-requisites that students require.

The proposed innovations are significant for CHC, based on proof of evidence:

- While there is not a single "fix" for low retention and graduation rates, there are tested practices that have worked. The Center for Postsecondary Education at Indiana University carried out a multi-year line of research published by the American Association of Colleges and Universities (2011) that defined high impact interventions that can lead to increased retention and graduation rates. Among the main recommendations were: simplify the structure students must navigate; and collect and use data to inform continuous improvement.
- Low-income students are underserved by high school guidance counselors. High schools serving predominately low-income and minority students have counselor to student ratios twice the national average – 1,000 students per counselor versus 470 students per counselor nationally (White House Report, "Increasing Opportunities for Low-Income Students," January 2014). This points to a need for community colleges to work with high schools to provide college-going information to students, such as CHC is proposing.
- It is important for faculty members to develop new skills surrounding teaching. An Emerging Education Technologies report from May 2014, titled "Sharing Best Practices in Professional Development for Successful Online Teachers," states that faculty members who change their teaching formats must "be specifically trained." This relates directly to CHC's plan to provide ongoing training to involved faculty.

PUEDES has great potential to be replicated in other community colleges – both in California and elsewhere in the country – as it addresses many issues that similar-sized colleges face. This includes an increased time to completion, high costs of attendance, high remediation rates and low retention. To ensure this happens, CHC faculty and administration will be committed to sharing the project's success with other institutions through written materials and one-on-one presentations. Community colleges will be invited to tour CHC and view the Math Success Center. Lastly, faculty will commit to presenting the project and its success at the annual Alliance for Hispanic Serving Institutions Educators (AHSIE) Conference, which draws over 500 participants from throughout the United States each year. Presentations are encouraged from practitioners who have developed innovative projects that serve low-income, Hispanic and high-need students.

This replication becomes important when looking at research by Excelencia in Education, an organization launched in 2004 to help accelerate Latino success in higher education. Its publications point to the importance of HSIs like CHC in challenging themselves to integrate institutional change that will serve Hispanic students and measure the institution's ability to do so.



**6. *What evidence suggests that this innovation would be effective in addressing the problem identified in your response to Item 1 and implemented successfully? (1 page)***

Crafton Hills College is confident that PUEDES is the best way to solve the problems cited in Question 1. This is due in large part to the experience of involved faculty, staff and administration, as well as CHC's successful implementation of past grants, including multi-million dollar projects: Title V Hispanic Serving Institutions grant in 2010 and a U.S. Department of Education STEM grant in 2011. Each was used to develop programming to improve student success. Those specific projects had positive outcomes and have given CHC the knowledge to implement this Innovations grant.

In developing PUEDES, CHC Enrollment Management sought to identify systematic dropout/stop-out points for CHC students so that effective interventions could be designed and implemented to improve student success. The Crafton Hills College Office of Institutional Effectiveness, Research and Planning (OIERP) conducted a study to identify the best predictors of being transfer prepared and earning a degree or certificate. The research examined 10 momentum points and 17 instructional and student service strategies. The best predictor of achieving any of the outcomes was to successfully complete transfer-level math.

Several documents and best practices from other institutions were also studied to determine what is most likely to work for CHC students. This included "Effective Practices for Postsecondary Student Success in California," a brief by Education First published in November 2016. It provides current, relevant information regarding practices at other institutions. CHC recognized that many of these ideas will work for its low-income and minority students and designed this project with the following ideas as the most relevant: improve K-12 to college transitions; transform remediation; accelerate time to degree; and collect/utilize data to improve outcomes.

Other important research includes the White House Report "Increasing Opportunities for Low-Income Students" (January 2014), which points to a need for the exact types of interventions CHC is planning, including pre-college information regarding what to expect, financial aid options and how to apply, as well as on-campus supports designed to promote timely completion. According to the study: "By the time students get to 12th grade, it is too late to improve college-eligibility... It could be said that students begin to drop out of college in grade school." This statement directly relates to CHC's plan to reach students early to establish college expectations and give them the experiences and support they need to view college as an attainable aspiration. Promising interventions include college visits, promoting a strong college-going culture in middle- and high-school and helping students understand financial aid eligibility.

CHC also studied institutions that have implemented similar programs. Among them are:

- The Fast Track program at Harper College in Schaumburg, IL, which offers students pre-selected programs of study (courses are prescribed) with a variety of support services.
- The New Mexico Highlands University ARMAS (Achieving in Research Math and Science) Center, which provides comprehensive support to students and faculty. ARMAS students have higher graduation rates than nonparticipants (72% vs. 40%).
- Math Jam at Cañada College, which addresses low levels of math preparation through a STEM Center. 62% of students who tested into remedial courses "jumped" to the next level math course or higher. Student performance in next semester math courses show higher retention (93% vs. 77%) and success (77% vs. 53%) rates among participants compared to non-participants.

**7. *What information will you use to assess the success of this innovation in addressing the program's goals and how will that assessment be used to inform future efforts? (1 page)***

PUEDES has been developed as an innovative way to allow CHC to support all of its students, especially those who are Hispanic and low-income. Goals have been clearly developed for this purpose. For every project it undertakes, CHC uses a process of continuous quality improvement that utilizes both qualitative and quantitative data; a review and discussion of results; the identification of strategies to make progress; and communication regarding strategies. The evaluation plan includes several critical elements. It is sufficient and effective in determining if the project is meeting its goals, has buy-in from administration and will be appropriately institutionalized at the end of the grant period.

Evaluation will be driven by the Project Lead, Dr. Keith Wurtz. He will work with other project staff and an external evaluator to develop data collection tools, collect data, coordinate activities and, as needed, to make changes in project implementation to ensure success.

Formative evaluation will take place on a regular basis and include tracking students involved in the process, surveys on activities and spreadsheets updated at least weekly to provide a clear picture of who is being served and what services they are taking part in. Summative evaluation activities will be conducted less often, at six-month intervals, to determine if activities have attained their measurable outcomes and led to the intended results. For instance, utilizing the data collected in the formative evaluation, project staff can look at student retention rates to determine if services are making an impact. Dr. Wurtz will develop intensive reports every six months to present to CHC administration. The external evaluator will be available throughout the grant project to assist with creating data collection tools, providing feedback on progress and assisting with adjustments as needed. The evaluator will also visit the campus every year to meet with staff and assess progress.

Based on prior research conducted at CHC, successfully completing transfer-level math and English are milestones to earning a degree, certificate or transferring. Moreover, the Institutional Effectiveness Partnership Initiative has proposed changes that include the successful completion of math and English in the student's first and second years. With this in mind, the attainable but ambitious project objectives for PUEDES are:

**Objective 1:** Increase by 10% the percentage of students who complete transfer-level math within two years.

**Objective 2:** Increase by 5% the number of high school students enrolled in dual credit courses.

**Objective 3:** Increase by 5% overall retention at CHC.

**Objective 4:** Increase the percentage of students who complete a degree, certificate or successfully transfer by 10%.

**Objective 5:** Decrease the average time to completion at CHC from 5.3 years to 4.0 years.

These objectives will drive the project. For each, CHC will collect a variety of data including student numbers, success rates, degrees acquired and retention rates. This will be done through the college's Office of Institutional Effectiveness, Research and Planning (OIERP) by developing evaluation instruments with project faculty, staff and administrators.

The assessment plan outlined above will allow for the continuous collection of data, feedback from administration and, when necessary, the capability to make changes in how the project's goals are being met. It will also inform CHC of processes that are effective in improving retention, graduation and transfer rates for the future. The project will be institutionalized after the grant period, but will guide the development of other programs long after funding is gone by determining best practices for CHC's unique student population.

**8. *What resources or commitments, or both, do you currently have to support this innovation and how will this innovation be sustainable over the long-term? (1 page)***

As noted elsewhere in this application, CHC is part of a very strong partnership that includes K-12 education and four-year institutions committed to the success of students in the region. The Linked Learning Hub will be a vital part of PUEDES, with members serving on a steering committee and providing in-kind services for the project.

Partners include San Bernardino High School, Yucaipa High School, Redlands High School, Rim of the World, the University of Redlands and the University of California system.

<b>PUEDES Partners</b>	<b>Commitments</b>
High Schools	<ul style="list-style-type: none"> <li>• Counselor and teacher time to work with CHC counselors</li> <li>• Increased time spent with non-college-ready students</li> <li>• Space for dual credit classes workshops and parent sessions</li> <li>• Instructors for dual credit courses</li> </ul>
Four-Year Institutions	<ul style="list-style-type: none"> <li>• Financial incentives/scholarships for CHC transfer students</li> </ul>
Crafton Hills College	<ul style="list-style-type: none"> <li>• 40% salary of Math Success Center Coordinator during grant</li> <li>• Salaries for Math Success Center Coordinator, Pathways Specialist, Outreach Specialist and tutors after grant</li> <li>• Space for the Math Success Center and a classroom</li> <li>• Salary for Project Lead (Dr. Keith Wurtz)</li> </ul>

To ensure that PUEDES is effectively implemented, CHC will be required to provide resources for staffing, training, equipment/supplies and facilities development.

Staffing is among the most important components of the project, with the college already receiving buy-in from faculty and staff excited to improve student success. Staff expenses will include stipends for faculty to design and develop courses and attend training; funds to hire a Math Success Center coordinator, a research analyst, Pathways Coordinator, Outreach Coordinator and tutors; funds to pay for substitutes to cover courses when faculty are in training; and fringe benefits at a 45% rate.

Under training, CHC will provide workshops to all faculty members participating in this innovation. They will be afforded the opportunity to obtain effective training related to the course changes. Five faculty members will be selected to travel to other community colleges that are offering co-requisites. In addition, CHC will contract with an outside individual versed on math redesign and co-requisites to come to campus and train faculty.

Equipment and supplies will be necessary to properly implement the project. Among the items needed are: general office supplies, math diagnostic assessments for students, computers for the Math Success Center, software, and calculators and tablets for the lending library.

Lastly, under facilities, CHC will require one-time funding to upgrade space on campus to house the Math Success Center and to repurpose a classroom.

Many of the costs outlined above will be one-time commitments designed to ramp up the project. This includes faculty time for training and course development; the research analyst; renovation costs for the Math Success Center and classroom; travel; and many supplies. However, because CHC recognizes the extreme importance of sustaining this project, administrators have committed to providing funds for ongoing costs, such as the Math Success Center Coordinator, Outreach Specialist (is in CHC's long-range plan and will be sustained) and Pathways Specialist. These will be sustained through means including investigating apportionment models for co-requisites, the math lab and tutoring contact. Tutors will be sustained through the generation of funds by the Math Success Center.