

Table of Contents

Competitive Preference Priority 1—Need for Assistance	3
Competitive Preference Priority 4—Racial Integration and Socioeconomic Diversity.....	17
(a) Desegregation.....	19
(1) <i>The effectiveness of its plan to recruit students.....</i>	<i>19</i>
(2) <i>How it will foster interaction among students</i>	<i>37</i>
(3) <i>How it will ensure equal access and treatment for eligible project participants.....</i>	<i>40</i>
(4) <i>The effectiveness of all other desegregation strategies.....</i>	<i>43</i>
(b) Quality of Project Design	45
(1) <i>The manner and extent to which the magnet school program will improve</i>	<i>47</i>
(2) <i>The extent to which the applicant demonstrates that it has the resources.....</i>	<i>68</i>
(3) <i>The extent to which the training or professional development services.....</i>	<i>73</i>
(4) <i>The extent to which the proposed project is supported by strong theory.....</i>	<i>78</i>
(c) Quality of Management Plan.....	89
(1) <i>The adequacy of the management plan to achieve the objectives.....</i>	<i>89</i>
(2) <i>How the applicant will ensure that a diversity of perspectives.....</i>	<i>104</i>

(d) Quality of Personnel.....106

(1) The project director (if one is used) is qualified to manage the project 106

(2) Other key personnel are qualified to manage the project..... 107

(3) Teachers who will provide instruction in participating magnet schools. 114

(4) Key personnel’s knowledge of and experience in curriculum development and..... 115

(e) Quality of Project Evaluation..... 117

(1) The extent to which the methods of evaluation will, if well-implemented..... 119

(2) The extent to which the methods of evaluation include..... 130

(3) The extent to which the costs are reasonable..... 145

Appendix (Attachments): Resumes; Letters of Support; Studies etc.

Competitive Preference Priority 1—Need for Assistance (0 or 2 Additional Points)

Introduction

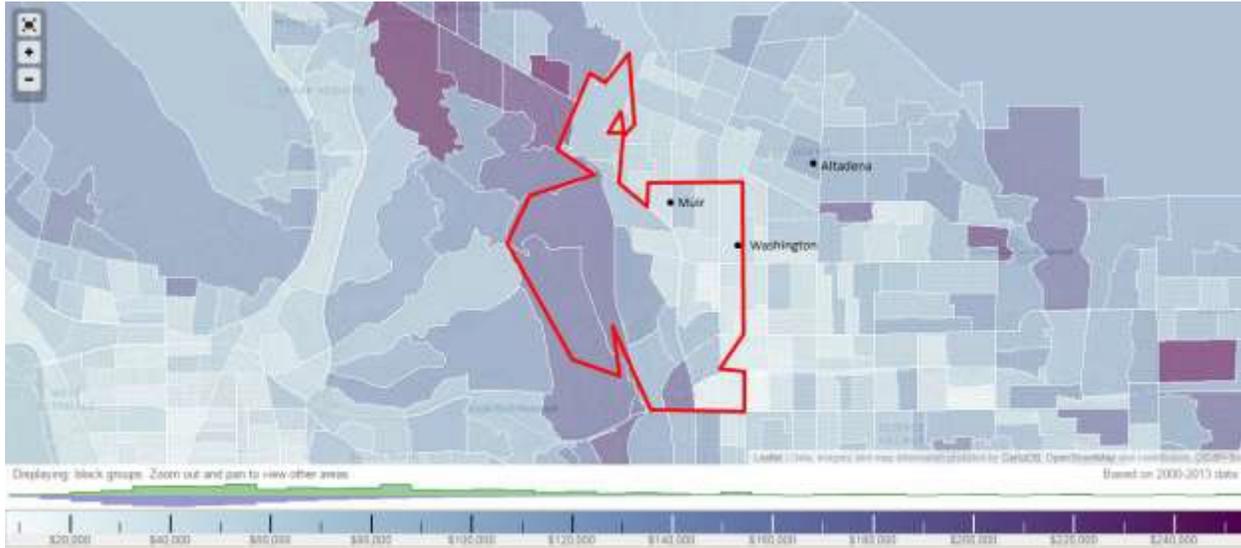
The Pasadena Unified School District (PUSD) is requesting funding to fully implement magnet themes within three of its most racially isolated and socioeconomically disadvantaged schools. This project seeks to reduce this racial isolation by increasing socioeconomic diversity. PUSD will do this by implementing attractive K-12 magnet-themed pathways that increase academic rigor and remove barriers to learning. Once implemented PUSD will have articulated K-8 Arts and K-8 STEM with Spanish Dual Immersion programs that lead into an Early College and career high school. The high school will provide opportunities for specialization in those subject areas in partnership with the local community college.

In order to understand the challenges of implementing these magnet themes and ultimately increasing socioeconomic and racial integration, it is important to understand PUSD's history. In 1970, PUSD became the first "northern" school district in the country to be held responsible for willfully segregating schools. Mandatory district desegregation and compulsory busing then resulted in massive white and middle class flight. Between 1970 and 2015, the white student population in PUSD declined from 53.7% to 16.1%. Since 2000, overall enrollment also declined from 23,559 to the just under 17,000 students served today, representing only 55% of eligible school-age children within district boundaries enrolled in PUSD. Approximately 13,000 students attend the more than 50 private or charter or other schools in the area. 27.5% of students who live in the PUSD area attend private school, roughly three times the national average. Another 15% attend charter schools or transfer to attend public school in another district.

Socioeconomic and minority group isolation: Although Pasadena has adopted a voluntary desegregation plan that includes an open enrollment policy for schools of choice based on a lottery system, there are still a number of schools with disproportionate numbers of low-income students and racial isolation. District-wide, 62.5% of students qualify for free or reduced-price lunch. There are also significant differences in poverty levels between students from varying racial and ethnic groups, areas of residence, and between schools. The percentage of students who qualify for free and reduced lunch remains much higher than the district average at Altadena Elementary School (81.3%), John Muir High School (74.4%), and Washington STEAM Magnet Academy (80.6%) As a comparison, at the schools serving students residing in the more affluent areas of Sierra Madre and Pasadena, an average of 25% of students qualify for free and reduced lunches, well below the threshold to qualify for school-wide Title I funding.

Within the 91103 zip code (outlined in the image below in red) where two of the three schools are located, the poverty level decreased from 25.6% to 19.8% from 2000 to 2010. The ever-increasing cost of housing has led to a significant amount of gentrification while areas of deep poverty remain. Median household income varies from just above \$20,000 annually to well over \$180,000. The map below demonstrates the socioeconomic diversity of the neighborhood with lighter shades representing lower household incomes and darker shades higher household incomes. Unfortunately, this socioeconomic diversity in the neighborhood is not reflected in the proposed schools. Higher income families live in the area, but they have not been attracted to these schools due to concerns about low academic achievement and school climate.

Average Household Income by Neighborhood, 91103 and Surrounding Communities



Source: <http://www.city-data.com/income>

PUSD needs MSAP funds to create attractive magnet programs that best serve our current students while simultaneously attracting back the neighborhood families (approximately 45% of whom do not currently attend PUSD schools) and families just outside of our district to decrease socioeconomic and minority group isolation. Without MSAP funds, it would also be difficult to implement the concerted and successful marketing and re-branding effort needed to overturn this historical decline in enrollment and increase in racial and socioeconomic isolation. The district does not currently have the marketing resources to capture a greater percentage of students living in the Pasadena area and beyond to increase enrollment and diversify the student population.

School climate and discipline: The three schools also have significant issues related to school climate and discipline. The table that follows shows the average suspension rates in comparison to district average.

Suspension Rate Source: California Department of Education, Report Year: Spring 2017			
District	Altadena	Muir	Washington
5.1%	3.3% High (Compare to 1% in high SES PUSD elementary schools)	13.5% Very High	15% Very High

The proposed schools will have difficulty in implementing lasting, systemic change in school climate without a dedicated staff member to put positive behavior support and intervention systems in place to decrease suspensions, improve attendance, and foster a positive school environment that supports academic success for all students through positive behavior supports, research and data-based interventions, and high expectations for all students.

Academic Need: As throughout the nation, there are large gaps in academic achievement between students of differing racial, ethnic, linguistic and economic backgrounds. PUSD students attending high-poverty schools, have on average, much lower rates of academic achievement.

As shown in table below, there are significant gaps in achievement as well between subgroups. Based on state test results, the State of California determines the percent of students who are achieving at each of four performance levels: Standard Not Met, Standard Nearly Met, Standard Met, and Standard Exceeded. The state determines the difference between a student’s scale score and the minimum scale score needed to meet the standard. From this data, the state determines a school’s average distance from the proficiency level of “Standard Met”. The scores listed below are a measure of the school’s distance from proficiency levels, therefore **higher numbers indicate lower performance**. Achievement scores for all three schools are identified by the state as low, and scores are even lower for socioeconomically disadvantaged students.

Points Below the proficiency level of “Standard Met”: All Students and Low SES, 2015-16

State Test Achievement	Pasadena	Altadena	Muir	Washington
ELA	25.7	72.2	25.5	78.6
	54.5	74.6	*	82.7
Math	48.9	81.1	109.8	128
	78.7	81.8	*	131.5

*Data available in Fall 2017.

It will take intensive professional development, far beyond current school or district resources, to close these significant achievement gaps by increasing rigor and supports in reading, writing, and mathematics, and increasing differentiation to meet students’ diverse learning needs.

The total cost to implement magnet programs to the extent that they will reduce socioeconomic and minority group isolation, increase academic achievement, and improve school climate is \$13,673,523. The requested funds will provide professional development to increase rigor and meaningfully integrate magnet themes; personnel to develop curriculum, to provide coaching and support to teachers, and to provide additional supports to students; family resource centers and parent training; supplies and equipment to implement the magnet themes; expert consultation to recommend and enact policies that promote racial and socioeconomic integration; marketing and recruitment consultation and materials; and personnel and consultation to manage and evaluate the project.

(a) The costs of fully implementing the magnet schools project as proposed.

Magnet funding is needed to provide: a comprehensive marketing and recruitment plan, intensive training and regular follow-up coaching for teachers, time and coaching for curriculum integration and development, intensive counseling and academic support for students, support for parents and community outreach, close monitoring and evaluation to ensure that our implementation is faithful to and consistent with our vision for this school and community, and technology and materials that can be used to sustain the program after the funded period. The table below summarizes the projected five-year funding needed to implement the magnet themes of visual and performing arts at Altadena Elementary School, early college and career preparation at John Muir High School, and to significantly revise the magnet program at Washington STEAM Magnet Middle School to implement a dual language immersion program.

	Year 1	Year 2	Year 3	Year 4	Year 5	Totals
Personnel	\$1,286,917	\$1,363,751	\$1,349,440	\$1,388,749	\$1,427,444	\$6,816,301
Benefits	\$395,056	\$419,833	\$405,862	\$416,607	\$470,309	\$2,107,667
Travel	\$93,410	\$88,431	\$78,435	\$55,861	\$53,415	\$369,552
Equipment	\$277,401	\$94,540	\$20,953	\$-0-	\$-0-	\$392,894
Supplies	\$678,722	\$238,485	\$227,114	\$157,317	\$151,964	\$1,453,602
Contractual	\$524,631	\$526,378	\$362,344	\$418,358	\$388,257	\$2,219,968
Other	\$111,813	\$70,771	\$52,825	\$38,885	\$39,245	\$313,539
Total Direct					\$2,530,634	\$13,673,523

With MSAP funds, we will be able to provide students with a high quality education with options for acceleration and strategic supports to promote access to and success in a rigorous academic program. We will also be able to reduce socioeconomic and minority group (Hispanic and African American) isolation at Altadena, Washington and Muir by marketing this program to students within PUSD boundaries and across PUSD boundaries (Procedures and protocols are already in place to enable interdistrict lottery participation and interdistrict transfers).

(b) The resources available to the applicant to carry out the project if funds under the program were not provided.

The cost of initiating this new magnet program exceeds the District's current capacity to fund a project of this scope in its entirety. Current resources provide enough to implement a status-quo program at the proposed schools, not the rigorous thematic program that is needed to actually raise achievement and reduce isolation.

District Resources: Funding for staff, facilities, equipment, supplies, and a limited amount of professional development are provided through Local Control Funding Formula (LCFF), which is California's K-12 funding model that allocates base funding for staffing based on student enrollment as well as increased, targeted funding for high-need students. As enrollment has continued to decline, so has base funding. District resources can provide short bursts of professional development during weekly staff meetings and district-sponsored trainings. For marketing, the schools have the basic support from the PUSD communications department which includes limited website support from the district office.

Facilities projects funded by district bond measure TT are complete or underway and include newly refurbished classroom and auditorium facilities at Altadena Elementary; a new video production studio, new black box theater, manufacturing lab space, and newly refurbished

auditorium and cafeteria facilities at John Muir High School; and new gymnasium and dance studio facilities at Washington STEAM Magnet Academy. These new facilities will make the three schools more attractive options once the magnet themed curriculum and supplies are fully in place. MSAP funds are needed, however, to provide extensive professional development to implement rigorous programs and thematic curriculum within these spaces, to provide equipment and supplies to implement an innovative theme integrated model, and to develop extensive and targeted marketing campaign.

School Resources: The three schools receive approximately \$74,700 (Altadena), \$97,116 (Washington), and \$361,795 (Muir) in LCFF target funding in addition to base funding due to large numbers of students who are low-income, English learners, and foster care youth. This provides necessities including social workers to support qualifying students. LCFF funds can only support a minor percentage of the entire magnet program- one instructional coach per site who will provide follow-up support for MSAP proposed training. MSAP funds are needed to provide initial rigorous reading and writing training, thematic integration training, and training in specialized supports to promote collaboration among diverse students as well as positive interventions and supports to improve school climate.

MSAP funds are needed for materials, supplies, technologies, and equipment to engage students in hands-on, relevant learning. The proposed school classrooms have some basic technologies; these are insufficient or obsolete, however, to support an equitable and innovative magnet program. Access to technology is inconsistent among schools and classrooms. Some classrooms have projectors and documents cameras and some do not. Students do not have access to devices they can borrow to complete work at home. MSAP funds are needed to provide all students engaging, technology-integrated curricula that prepares them for college and careers.

Community College Resources: An agreement between Pasadena City College (PCC) and PUSD will support dual and concurrent enrollment (described in more detail on p. 50) through the provision of paid faculty and courses. PCC has created a satellite campus at the high school and an additional agreement with Pasadena City College has funded upgrades to three concurrent enrollment classrooms (furniture, technology, and basic signage) to meet PCC's needs for initial implementation. Funds are needed to provide students technology and college level textbooks to eliminate financial barriers to Early College participation and to install standard college classroom technologies required by city college instructors. MSAP funds are also needed to provide time and training for Muir teachers and PCC instructors to collaborate and develop curriculum to best align high school and college curriculum offerings to ensure students are meeting both high school and college standards simultaneously to earn dual credits.

(c) The extent to which the costs of the project exceed the applicant's resources.

PUSD will need additional funds to provide intensive training and instructional coaching for increased rigor in all classes, positive behavior supports and interventions, thematic integration (Arts, Spanish Dual Language Immersion, and Early College), student and parent empowerment, and cooperative learning strategies for collaboration among diverse students.

Professional Development: Shifts in instructional practice will require funds to enable teacher collaboration time to create units and courses aligned with increased rigor, theme integration, and relevant content standards. Release time and supplemental pay to meet after school hours will enable teachers to engage in peer review sessions wherein teachers discuss and refine units to meet higher levels of depth and complexity. Funds for teacher release time (and PCC teacher stipends to attend common trainings and collaborative planning sessions at Muir) will also provide time for teachers to visit classrooms to collect classroom observation data and

plan for systematic improvements through the lens of the proposed magnet strategies. These MSAP-funded activities will build teacher capacity to implement high quality instruction that prepares students for college and careers long after the funded period.

<p>Local Resources Available: PUSD will provide training during weekly staff meetings. PCC will provide teachers for concurrent enrollment classes at the Early College@John Muir High School. Without MSAP funds we will not be able to provide intensive teacher training to implement rigorous themes, or release or paid summer/ after school time to significantly revise curricula.</p>	<p>MSAP Funding Needed: \$ 6,011,876</p>
---	---

Parent and Student Empowerment: Funds to provide parent and student engagement opportunities are needed to ensure parents and students are prepared and feel confident to support student success in rigorous courses. MSAP funds will also establish site family resource centers and engage parents (and high school students) in collaborative leadership with site administration and community groups for program implementation and sustainability. MSAP funds are needed to ensure students have supports to succeed in rigorous courses including tutoring, additional counseling, and courses and workshops in college readiness skills.

<p>Local Resources Available: The PUSD Family Resource Center provides up to two academic parent classes and one district-wide parent engagement training per year. Without MSAP funds, parent and student college workshops would be limited to these offerings. Workshops would not address the complexity of bridging diverse communities or implementing innovate themes. Counseling would be limited and inadequate in addressing the complexities of dual and concurrent enrollment.</p>	<p>MSAP Funding Needed: \$ 987,060</p>
--	---

Recruitment and Marketing: An MSAP-funded Project Director will work with the PUSD communications office, marketing consultants, and graphic designers to create, implement, and refine a comprehensive marketing and recruitment plan that increases awareness and support for the new program and attracts students within and across the PUSD boundary. Magnet schools will need to develop new branding and concise marketing messages to reach a targeted audience to increase socioeconomic and racial diversity. MSAP funds will also be used to cover necessary printing and advertising costs, professional print and digital media, school beautification, and attractive marquees to effectively reach our target audiences.

MSAP funds are also needed to collaborate with socioeconomic integration experts to develop a Blueprint for Equity and Access. This work is necessary to develop, beta-test, and implement a weighted lottery system that serves as an equitable and viable way to best achieve our socioeconomic diversity goals for recruitment and enrollment.

<p>Local Resources Available: The district communications office can provide minimal support to curate the website main page and document a couple of major district events. Without additional personnel, we will not be able to promote our school programs effectively for increased enrollment. PUSD would not have the funds to consult field experts to recommend complex changes to school assignment policies for socioeconomic and racial integration.</p>	<p>MSAP Funding Needed: \$ 840,904</p>
---	---

Materials and Supplies: PUSD provides required textbooks, basic supplies, and traditional school furniture. Altadena will need MSAP funds to transform empty rooms into flourishing visual and performing arts studios and to outfit rooms with technologies and materials that promote visual and kinesthetic learning through the arts. Washington will need funds to purchase course materials in Spanish and to provide college preparation supports. At the

Early College@John Muir High School, MSAP funds are needed to provide college-level textbooks, laptops and tablets that students can take home to complete rigorous coursework; to transform classrooms to meet Pasadena City College standards (SMART boards, projectors, document cameras, collaborative/convertible desks and modern teacher desks); and to transform labs to meet college-level career technical education industry standards. Classrooms at all sites will need additional MSAP funds to implement a flourishing workshop classroom model of instruction, including flexible seating and an abundance of engaging novels and nonfiction texts.

<p>Local Resources Available: Funding for necessities such as textbooks and some basic consumable materials is available. Without MSAP funding, growth of the programs would lag behind demand and lack quality.</p>	<p>MSAP Funding Needed: \$1,581,796</p>
--	---

Program Coordination: Site Magnet Coordinators are necessary to implement this plan with fidelity. These staff members carryout and monitor implementation plans at the site level, which includes development of a clear vision for the magnet school and completion of all project activities in accordance with the site plan. Additionally, the Counselor on Special Assignment is needed at John Muir High School to collaborate with Pasadena City College and school counselors. This is a complex role involving coordination of high school and college schedules, courses which meet standards and requirements for both to ensure students earn dual credits, and extensive knowledge of high school graduation and college graduation requirements to ensure all students are enrolled in appropriate courses while earning college credits.

<p>Local Resources Available: Schools have office staff to carry out non-instructional tasks within the school including purchasing of basic school supplies and helping parents and staff with typical school matters. Without Magnet Coordinators, schools would lack the capacity to plan, schedule, coordinate, and evaluate: professional development, marketing and recruitment, partnership development with Pasadena City College and other community partners, purchase of magnet materials and supplies of this magnitude, or site data to monitor and report progress. The high school has counselors who serve student with basic high school course enrollment. Without a Counselor on Special Assignment, John Muir High School could not create an Early College Pathway. A dedicated staff member with knowledge of the complex nature of concurrent enrollment is essential to put systems, policies, and procedures in place to ensure the success of this new partnership with Pasadena City College.</p>	<p>MSAP Funding Needed: \$2,508,757</p>
--	--

Management and Evaluation: Project management and evaluation are necessary to implement this plan with fidelity. The Project Director with the support of a Program Assistant are needed to: develop a clear vision and to create and monitor detailed implementation plans for all project activities (with the support of G&D Associates and Linda Hardman-Greene); plan, schedule, coordinate, and evaluate meetings to make recommendations for school assignment and program articulation policies; plan, schedule, coordinate, and evaluate professional development; collect, organize, and provide data for evaluation; communicate between the site and District; track project accomplishments and outcomes; problem-solve obstacles and celebrate successes. Additionally, independent evaluators will conduct unit plan analysis, interviews, and walkthroughs at least three times per year and administer surveys to measure implementation

progress. UCLA CRESST will research the impact of project strategies to help inform policy and practice.

<p>Local Resources Available: Currently the site principals dedicate two hours/week to vision development and implementation. Without MSAP funds, schools would not have the staff to fully implement the magnet program with fidelity and within a reasonable timeframe.</p>	<p>MSAP Funding Needed: \$ 1,743,130</p>
---	---

(d) The difficulty of effectively carrying out the approved plan and the project for which assistance is sought, including consideration of how the design of the magnet schools project— e.g., the type of program proposed, the location of the magnet school within the LEA—impacts the applicant’s ability to successfully carry out the approved plan.

Magnet support is needed to meaningfully and positively transform these dynamics by simultaneously bringing to scale the professional development, programmatic, school climate and policy changes required. Without MSAP funds, the three schools will have difficulty implementing program themes. Considerable planning time and staff are needed to develop and refine policies with partners. Teachers need considerable time to learn and practice new strategies, receive coaching, and incorporate feedback and suggestions into subsequent instruction. Without funding, a lack of collaborative planning time and professional development would be barriers to full implementation within a reasonable timeframe. Without grant funds, magnet schools would also be unable to provide expensive specialized textbooks, technologies, or supplies needed to implement innovative programs schoolwide, limiting the number of students served. Grant funds are needed to accelerate program implementation and growth to meet demand so classes are available to all interested students.

This project directly addresses PUSD’s long-range vision for increasing racial integration and improving student outcomes by more systematically taking into account socioeconomic diversity in designing and implementing not only magnet school programs but district policies as well. A key component is the development of a Blueprint for Equity and Access with the assistance of the consulting team of Michael Alves, Richard Kahlenberg and John Brittain. This team of nationally recognized experts has a proven track record in guiding and facilitating the development and implementation of equitable and viable socioeconomic student assignment plans in other school districts and extensive knowledge of the research and proven best practices pertaining to socioeconomic integration and improving the academic achievement of low-income and “at risk” high needs students. (See p. 43-44 for further discussion of the plan.)

Research suggests benefits to all students—not just the disadvantaged—from attending integrated schools. Researchers at Columbia University noted mounting evidence that “diversity makes us smarter.” They wrote, “researchers have documented that students’ exposure to other students who are different from themselves and the novel ideas and challenges that such exposure bring leads to improved cognitive skills, including critical thinking and problem solving” (Wells, Fox, & Cordova-Cobo, 2016).

Despite an extensive body of research establishing the harms of concentrated poverty and the benefits of diversity, significant political and legal impediments stand in the way of achieving integrated schooling. Middle-class parents worry their children will suffer in schools where low-income student enrollment has hit a tipping point. And in its 2007 *Parents Involved in Community Schools v. Seattle School District* decision, the U.S. Supreme Court placed limits on

using students' race in school assignment plans. PUSD's choice-based socioeconomic integration plan will build national evidence on how diverse schools can improve learning outcomes and explore how diversity programs can best be designed and implemented in today's legal and political environment (Wells, Fox, & Cordova-Cobo, 2016).

The district's commitment to a systemic desegregation reform effort that takes socioeconomic diversity into account is illustrated by the specific recommendations contained in the PUSD's Educational Master Plan, approved by the Board of Education in September 2016 and included in the Appendix. They are:

- Improve the assignment process for schools of choice.
- Analyze the information gathered by district demographers regarding school choice, including the distribution of students from low-income and higher-income families in PUSD schools.
- Address the causes of parent concerns regarding their school choices, as shown by 2016 survey data from Goodwin Simon Strategic Research, and attend to disparities expressed by respondents of different race, ethnicity, and income levels.
- Address the reasons why students leave the district to pursue other educational options and develop new magnet and signature programs as feasible to retain them.
- Use data to develop new enrollment patterns and program offerings so families can more easily see coherent K–12 pathways of choice.
- Address inequities in access to transportation by students whose families choose schools outside of their neighborhoods, and explore partnerships with local public transportation systems to enable choice.
- Augment the number of out-of-district students choosing to enroll in PUSD schools.

- Ensure district support for magnet-themed academic programs not filled to capacity, either through recruitment to increase enrollment or by obtaining or directing resources to support the school.
- Align budgets strategically with the priorities that emerge.

This project is intentionally designed to increase socioeconomic diversity through the implementation of magnet schools that provide compelling choices for parents because they offer strong programs with renowned partners that are not available in private schools, charter schools, or other districts in the area. These include Dual Language Immersion Programs and integrated STEAM and Visual and Performing Arts curricula from elementary to middle to high school so that students can experience a consistent, thematically-integrated education from Kindergarten to 12th grade, including theme-aligned Early College courses offered in high school.

(a) Desegregation (30 points)

(a) (1) The effectiveness of its plan to recruit students from different social, economic, ethnic, and racial backgrounds into the magnet schools

The Pasadena Unified School District serves a highly diverse community. Of the nearly 200,000 residents of Pasadena, Altadena, and Sierra Madre, 41% are White, 13% are African-American, 31% are Latino, 12% are Asian or Pacific Islander, 1% are Native American or Alaskan, and 2% are other or of two or more ethnic backgrounds. While 14% were officially identified in the 2010 U.S. Census as living in poverty, there is a wide range in socioeconomic status across a relatively small geographic area: median annual income per census tract ranged from less than \$7,500 to more than \$250,000, and families with few resources can be found living within a mile of very wealthy families.

Fully 45% of students residing within the Pasadena Unified School District's attendance boundaries — more than 13,000 children — did not attend PUSD schools in 2015–16. Those students are from predominantly middle- and upper-income families. By attracting only 20% of these pupils back into the public schools, the school district would be transformed in a decade from one that educates a predominantly low-income population (62.5% qualify for free or reduced-price lunch) to one in which a diverse population of students learn with and from each other. Each of the proposed magnet school sites is currently under-enrolled and can each accommodate between 300 and 1,000 additional students.

In 2006, the renowned education researcher Richard Kahlenberg was commissioned by the Pasadena Educational Foundation to report on the state of the Pasadena Unified School District and to recommend ways to improve the educational opportunities for all students. His report “One Pasadena: Tapping the Community’s Resources to Strengthen the Public Schools,” portrayed a community divided along economic, geographic, and racial lines and a public education system at a turning point. Despite the remarkable wealth of financial, cultural, entrepreneurial, scientific, and educational resources in the community, political, bureaucratic and reputational obstacles stood in the way of the district’s potential success. The PUSD suffered from years of state budget cuts, significant flight by middle-class families, and a poor reputation, especially among those with no direct contact with the public schools. These problems were exacerbated by inordinately negative coverage in the local media and persistent negative comments by opinion-shapers. As a result, the district’s schools did not represent the economic diversity of the Pasadena and Altadena communities considered vital for achieving equity and excellence for all.

The 2006 “One Pasadena” report outlined a three-pronged approach for school improvement: 1) creating magnet programs to attract more middle-class students to PUSD and improve educational offerings; 2) adopting fairness guidelines to ensure that low-income students would have access to economically integrated schools; and 3) building partnerships with the community’s world-class institutions to enrich the curriculum and spur instructional innovation.

In 2016, the Pasadena Educational Foundation invited Kahlenberg to revisit PUSD to assess the progress made on his recommendations and the challenges still faced by the district as well as to make new recommendations to promote more diverse learning environments. He noted that the district had made remarkable strides in ten years, including the following:

- Fourteen elementary, middle and high schools have been revitalized with highly attractive signature and magnet programs, including the popular Spanish and Mandarin Dual Language Immersion Programs and the high school College and Career Academies.
- Important new partnerships have been established that bring the resources of the community’s outstanding scientific institutions (e.g., Jet Propulsion Laboratories), cultural institutions (e.g., the Huntington Library, Art Collection and Botanical Gardens), colleges and universities (e.g., CalTech), and business leaders into the schools.
- More middle-class families are choosing to send their children to PUSD schools over private schools or schools in other districts. Over the past decade, the proportion of middle-class students has increased substantially at several schools, including Jackson Elementary, Field Elementary, San Rafael Elementary, Webster Elementary, Hamilton Elementary, and Willard International Baccalaureate Elementary. Overall, the percentage of students classified as low-income has fallen from 67.7% in 2006 to 62.5% in 2016.

- In 2013, PUSD, non-profit organizations and local governments of Pasadena, Altadena, and Sierra Madre created Collaborate PASadena, a new collaborative framework to promote better outcomes for students by reducing unnecessary silos between social services. The initiative is designed to increase access for families to early childhood education, health and nutrition programs, and supportive communities to make progress on concrete goals, such as getting all children to read by the end of third grade.
- In 2008, voters approved local bond measure TT, which raised \$350 million for facilities improvements and school renovations throughout PUSD, many of which have already been completed.
- In 2014, California enacted the Local Control Funding Formula (LCFF) that provides important new financial resources to schools with low-income pupils, English language learners, and foster youth. These funds are allocated by the district and managed by each school. Complementing the Local Control Funding Formula is a newly required Local Control and Accountability Plan (LCAP). The LCAP is LCFF's vehicle for transparency and engagement and parents are engaged at the district level through the LCAP Parent Advisory Committee and at the school level on school site councils. All districts are expected to share with the community performance data, needs, actions, and anticipated outcomes of LCFF funding.

As a result of these efforts and an increased emphasis on public relations, outreach and engagement of key community leaders, and positive messaging, PUSD's public reputation has deservedly improved.

Kahlenberg's 2016 report, "Better Together: How Innovative Mixed-Income Magnet School Can Benefit All Children in Pasadena Unified School District," offers eight specific

recommendations supported by the evidence of the district’s achievements over the last decade as well as compelling research on similar actions taken by successful districts from around the nation. Each of these recommendations has informed the proposed project:

- Build on the successes and the lessons learned from the implementation of the four magnet schools funded by the MSAP grant awarded to PUSD in 2013 as well as the non-magnet signature programs.
- Focus community partnerships with business, arts, scientific institutions and higher education to bring the rich resources of the Pasadena community into specific schools with innovative academic programs.
- Research and develop a system of equitably weighted enrollment to attain socioeconomic diversity. (Coleman, 1966)
- Create attractive new signature programs that have strong appeal to diverse families and evidence of improving academic achievement for all students. (Bifulco, et al., 2009)
- Implement equity safeguards in its school choice policies and procedures, as well as its schools’ operations. (Schwartz, 2010)
- Seek funding and develop funding formulas to create and sustain magnet and signature programs, including federal Magnet Schools Assistance Program, private funding, and a local parcel tax. (Humphrey and Koppich, 2014)
- Support strong early education programs and “community schools” that bring together many partners to offer a range of supports and opportunities in high-poverty environments. (Kirp, 2015)
- Ultimately, create an all-magnet/signature district, where all PUSD students have access to excellent, economically-integrated schools (Wells and Crain, 2005). The report

suggests that to become a district in which no child is consigned to a segregated, high-poverty school and all families have a rich variety of options in terms of curriculum, PUSD should add one new magnet school each year over the next decade. This proposal is the first step in that direction.

PUSD's ability to attract diverse families from the area back to public schools will also depend on its responsiveness to parent concerns, needs, and desires. To understand more fully how the community views the public schools and inform the Educational Master Plan, the district commissioned a survey from Goodwin Simon Strategic Research. In February and March 2016, the firm surveyed more than 2,500 community members including but not limited to parents of former and current students and parents of students who live within the district boundaries but do not send their children to district schools. PUSD received completed responses from 1,865 current PUSD parents in grades K-10; 265 former PUSD parents who left the district between 2010 and 2016 for reasons other than graduation; 65 parents in seven local preschools; 493 parents from five local charter and private schools; and 684 PUSD parents, employees and interested community members who responded to a survey on the District's website. Responses indicated that parents were most concerned about academic quality and opportunities; class size and student behavior; facilities; and a perceived lack of responsiveness to parents by district personnel -- as well as their specific desires, including the type of magnet and signature programs that would convince them toward to enroll their children in PUSD, including the opportunity to send their children to a high-achieving, college-prep academy with smaller class sizes and a focus on higher education.

The survey also indicated that there is a high level of parent satisfaction among current PUSD parents with their children's schools (88% satisfied, including 52% who were very

satisfied). However, only 58% said they were satisfied with the choices available in the district's middle schools and only 55% were satisfied with the choices available for high schools, indicating both a gap in perception and the need to offer more choices as students matriculate from elementary to middle and middle to high school.

Focus groups and surveys were also conducted at the proposed magnet school sites by PUSD staff and volunteers. Student and parent focus groups and paper and electronic surveys were conducted at all three proposed magnet schools to determine the level of interest in the proposed magnet programs as well as to include parent, student, and community input in development of the magnet programs. These schools and their themes were selected based on strong support from these stakeholders.

Recruitment Plan: The magnet school Recruitment Plan is designed to:

- Disseminate information about the magnet schools throughout the PUSD community using traditional means of communication and new media.
- Conduct coordinated community outreach, branding and marketing with key partners.
- Facilitate the enrollment process through direct person-to-person assistance to students and parents.

The main constituency targeted by the plan is families who now enroll or are likely to enroll children in charter schools and private schools within district boundaries. To a smaller extent the recruitment plan also targets families currently enrolled in other PUSD schools or public schools outside of our district boundaries, i.e., in other districts that do not offer comparable magnet programs. (Non-resident students may apply to enroll in PUSD magnet schools during the second Open Enrollment lottery in the spring. Families must then request an interdistrict transfer permit from their home district and from PUSD.)

Recruitment planning and activities will take place at both the district level and the individual school level. Input from school-site staff and decision-making at the school level will be essential to the design and implementation of open houses, magnet fairs, branding, recruitment events, and the creation of media and other materials. Both district and school materials will reflect the individual voice of each school.

The Recruitment Plan is also designed to ensure that students who are currently in PUSD magnet schools that are achieving their objectives for increasing socioeconomic diversity and reducing racial isolation – e.g., Jackson STEM/Dual Spanish Language Immersion Magnet School (K-5) and Eliot Arts Magnet Academy (6-8) – have attractive and accessible options to continue their education in innovative middle and high school magnet and signature programs. The plan also seeks to create a feeder arts magnet elementary school – Altadena – with a socioeconomically and ethnically diverse student population in order to continue to diversify the student population at the established arts magnet (Eliot Middle School), which is located only two short blocks away.

The Recruitment Plan will be implemented by a team led by the Project Director, who will work with the site Magnet Coordinators, Family Resource Center community assistants, principals at each school, the staff of the Family and Community Engagement office at PUSD headquarters, and will be assisted by a contracted marketing agency, G & D Associates, the Marketing Director of Pasadena Educational Foundation, and the staff and volunteers of the Pasadena Education Network.

For long-term success, the process of socioeconomically integrating Pasadena's schools will require a system of communication and collaboration across all district departments and schools in ways that are transparent, consistent and tailored to be as accessible and effective as

possible given the varied situations of each individual. Using the model of the Department Of Education's Dual Capacity Framework for Family-School Partnerships, PUSD recently reorganized its Office of Family and Community Engagement to improve communication, training, referrals and linkage to community resources for its socioeconomically, culturally, and linguistically diverse parent and guardian population.

Located physically within the central district office building and virtually on the PUSD website, the Office of Family and Community Engagement offers parent education workshops, volunteer information, processing and placement, and connections to resources and resource partners, as well as a communication hub and meeting space for parent leadership groups. Key planning, training and staff development will encourage greater parent involvement. Integration of services and more effective interdepartmental communications among PUSD's Office of Enrollment and other relevant departments will support better communication with current and prospective families and outreach about school options.

Funding from this grant will enable PUSD to establish pilot Family Resource Center "satellites" at each of the proposed magnet schools, where staff will: inform parents and students about the schools magnet programs, extracurricular activities, partner organizations, and academic and social supports; help parents to make informed decisions about their child's student assignment options by arranging for school tours, meetings with teachers, administrators, staff and currently enrolled students and families; and to recruit parents to enroll their children in diverse schools. An additional service at magnet schools will be to inform parents about adult education programs (job training and certificate programs) offered on the Early College@John Muir High School campus by Pasadena City College and facilitate their enrollment in these classes.

Training to further build capacity of central staff and school-based community assistants – for cultural awareness, customer service, links to community resources, and referral systems – will address at least three distinct categories of needs resulting from increased socioeconomic integration: 1) Serving all students at schools that are currently racially and socioeconomically isolated in high-poverty neighborhoods; 2) Serving low-income, higher need students in schools located with larger percentage of high-income students and/or located in more affluent neighborhoods; and 3) Serving more affluent students and families in schools located in higher-poverty neighborhoods.

The Recruitment Plan is based in part on the successful strategies used to recruit students to the four PUSD magnet schools established with MSAP grant funds in 2013. These strategies have been refined and refocused as necessary over the past four years based on the efforts that have been effective -- in particular, magnet showcases held at feeder schools, magnet staff participation in feeder school events, and presentations to PTSA's -- and the lesson learned from recruitment efforts that have not been as successful.

The focus of marketing, branding and messaging will be on recent and current successes and improvements in PUSD, which have succeeded in attracting diverse families back to public schools in Pasadena in recent years, and the vast potential for even greater success. This will also combat negative public perceptions about the district which linger despite progress that has been made in many areas. Materials, messaging, and communications will emphasize:

- Success and achievement at the current magnet schools. At the four PUSD magnet school established through the 2013 MSAP grant, there have been increased applications from a more diverse applicant pool, improved public perception, more positive press coverage and social media “buzz,” increased tour attendance, increased socioeconomic

diversity outpacing the district's overall increase, decreased minority group isolation at three of the four magnet schools, improved school climate as measured by Response through Intervention SET assessment, and increased parent involvement.

- In-depth partnerships with respected arts, science, and business institutions and colleges in the community are already thriving throughout the district. New partnerships will be developed specifically to support and enrich the proposed new magnet programs.
- Investment in facilities. Through the 2008 \$350 million bond Measure TT and private funds raised by the Pasadena Educational Foundation, PUSD is continually making major improvements to facilities throughout the district.
 - The entire Altadena Elementary School campus was renovated in 2016, with a welcoming new main entrance, new auditorium, new and upgraded classrooms, a new playground, and a school garden.
 - New science laboratories were installed at Washington STEAM Magnet Academy in 2014 and the entire campus was given internet access. A newly-constructed gymnasium, dance studio, and athletic facility opened in 2016.
 - The John Muir High School auditorium and cafeteria are currently undergoing remodeling, and a new television production studio and black-box theater are being built. The baseball and softball fields, where Jackie Robinson played when he attended Muir, were completely upgraded in 2016 with the financial support of the Los Angeles Dodgers.

In addition to having ample room to increase enrollment, funding for the three proposed magnet schools will help equip spaces with materials for specialized instruction and enrichment, including professional grade supplies and technologies for labs, workshops,

studios, and maker-spaces that enhance the learning environment.

- Convenience and ease of access. Altadena Elementary School is centrally located in Altadena, a largely residential community. Many socioeconomically diverse families live within walking distance of the campus and it is no more than a 10 to 15 drive at any time of day from other parts of the PUSD service area. For older students, Washington STEAM Magnet Academy and Early College@John Muir High School are located very close to multiple municipal bus lines with frequent and reliable service to all parts of Pasadena and the surrounding communities. Students who live more than 2.5 miles away from their school are provided a bus pass to use public transportation at no cost. All other students receive a reduced fare of 50 cents per ride on Pasadena Transit, or they may purchase a 30-day K-12 student “TAP” card for \$24, which allows unlimited rides throughout the Los Angeles Metro system. The Muir campus also has plenty of parking for students who drive themselves to school.
- Housing and economics. Southern California remains one of the most expensive real estate markets in the nation, both for home buyers and for renters. This, coupled with stagnant earnings for much of the middle class, the ballooning cost of tuition for private schools, and the prospect of having to borrow large sums of money for their children’s future college education, has made families from all socioeconomic backgrounds look once again at options within the public schools. Marketing, branding, and messaging will focus on the enormous economic advantages of a free, high-quality public education. The Recruitment Plan will also specifically target residential realtors in the community -- who play a large part in influencing the educational decisions of families new to the area -- by engaging them directly with principals, teachers and students (e.g., in the popular

“Principal for a Day” and “Read Across Pasadena” programs and the assessment of the magnet school environments) and providing up-to-date information about the district. A major benefit of the Early College@John Muir High School that will be promoted to both low- and middle-income families will be the free tuition for students to take college-level courses. By reducing the overall cost of a college degree, the magnet will make college a possibility for low-income families who thought it was out of their financial reach, and will help reduce the cost -- and the associated burden of debt for both families and student -- for middle-income families

- Long range vision for the Pasadena Unified School District: Marketing, branding and messaging will illustrate how the new Educational Master Plan and the new Graduate Profile support all students and lead to academic and personal success. (These documents are included in the Appendix.) In all magnet school recruitment messaging, students and families will be able to understand the range of options available to them and to select well-articulated magnet pathways, programs, and curricula -- from elementary to middle to high school and beyond -- that match their interests and support their personal achievement goals.

The Recruitment Plan will employ multiple forms of marketing, communication and outreach, including both broad-based and focused strategies. Broad-based recruitment efforts (i.e., those targeted widely to the community-at-large) will include the strategic use of direct mail, email, social media, printed materials utilizing professional and high-quality design and printing, engagement of local print and broadcast media, open houses, school tours and shadowing, magnet fairs, and other public events. Coordination with partner organizations in the community (Pasadena Educational Foundation, Pasadena Educational Network, the cities of

Pasadena, Altadena and Sierra Madre, Pasadena Chamber of Commerce, Pasadena-Foothill Association of Realtors, libraries, community centers, farmers' markets, popular street fairs and festivals, etc.) will ensure that information about the magnet schools reaches into every neighborhood and gathering place in the community. Translation services and materials translated into Spanish, Armenian, Korean, and Mandarin will ensure that families who are recent immigrants to the Pasadena area are fully included.

Focused strategies (i.e., those targeted to specific communities of parents and students, schools, or neighborhoods) will include public magnet-themed events held annually at each school (Art Night, College Night, etc.); interactive recruitment events for students and parents at feeder schools, presentations to meetings of PTSA's, person-to-person outreach to students and parents, especially at critical junctures where decisions about future school enrollment are being made (pre-K, grade 5, and grade 8); direct mail of informational materials to specific zip codes/geographic areas (e.g., all residential addresses within a two-mile radius of Altadena Elementary School), and presentations to meetings of residents' and neighborhood associations.

Magnet schools will continue to be promoted prominently at annual PUSD district-wide informational events for parents and students, including the annual Parent Summit and the annual First Choice Festival. MSAP grant funding will be used to design and print materials, create compelling photographic and video documentation of the magnet schools, and include outstanding student and teacher presentations, exhibitions, and performances for these events. The First Choice Festival, organized by the Office of Open Enrollment and held at the Pasadena Convention Center every October, brings together all PUSD schools so that families can explore and select the best educational options for their children's learning needs and interests. The First Choice Festival highlights the preK-12 pathway for the whole child, from academic rigor,

enhanced enrichment, and afterschool programs to support services for students and families and transportation. The First Choice Festival hosts all PUSD preschool, elementary, middle, and high schools, programs and partners in one space so that families can gather information, meet teachers, principals and other parents, learn about open enrollment, and sign up for school tours. More than 400 families attended the most recent First Choice Festival in 2016.

An important strategy will be to improve the magnet school environments to ensure that each campus is attractive, well-organized, functional, and welcoming. As part of the consultancy provided by G&D Associates in 2014, David Gregory trained magnet project and school staff to assess the quality of school environments and how welcoming they are, especially to prospective students and parents. The tools included questions about all aspects of the visitor experience -- from physical appearance to customer service -- that could positively or negatively affect the public's perception of a school. For example: ► *Is parking for visitors clearly marked and accessible?* ► *Can the public find the school's main entrance easily?* ► *Once inside, is there clear signage directing them to the main office or to someone who can assist them?* ► *How and by whom are people greeted when they enter the school?* ► *Are staff and volunteers well-informed and friendly?* ► *Are the grounds clean and well-maintained?* ► *Do the entrance and lobby feature artwork and displays of student awards and achievements indicating a campus that celebrates success and encourages creativity?* ► *What tour routes give the best impression of the school?* ► *When visitors have completed their tour, are they thanked for coming and given up-to-date contact information, materials and resources, and accurate timelines to learn more about the school, ask follow-up questions, and begin the enrollment process?*

These questions will be used to evaluate each of the magnet school sites as well as the PUSD headquarters and Office of Family and Community Engagement.

The success of the Recruitment Plan will depend in large part on positive personal contacts between current members of the district and school communities and prospective students and their families. Each individual associated with a school is also an ambassador for it, so the plan includes include training and support for members of the magnet school communities—parents, students, teachers, classified personnel, principals, partners, and neighborhood leaders—as advocates and community liaisons. For example, student ambassadors from the upper grades at all three magnet schools will be recruited to receive developmentally-appropriate training, talking-points, and materials so that they can give school tours to and be “shadowed” by prospective students.

A key partner in the “word-of-mouth” campaign will be the Pasadena Education Network (PEN; www.penfamilies.org), a group of mostly middle-class families founded in 2003 that encourages other families to consider using public rather than private schools and to engage in improvement efforts in PUSD schools. PEN is an independent non-profit organization that promotes socioeconomic integration by actively encouraging families to learn about and attend public schools in PUSD. PEN helps families explore, evaluate and engage with public schools by connecting parents with facts, tools, resources, and other parents. Since it was established, PEN has become the acknowledged “go-to” organization in the community for families to learn about PUSD schools, particularly for parents who might be skeptical of the district’s marketing efforts but are open to hearing from peers. PEN regularly communicates information via email, social media, workshops, guides, and meetings about district-wide and school-based initiatives to its

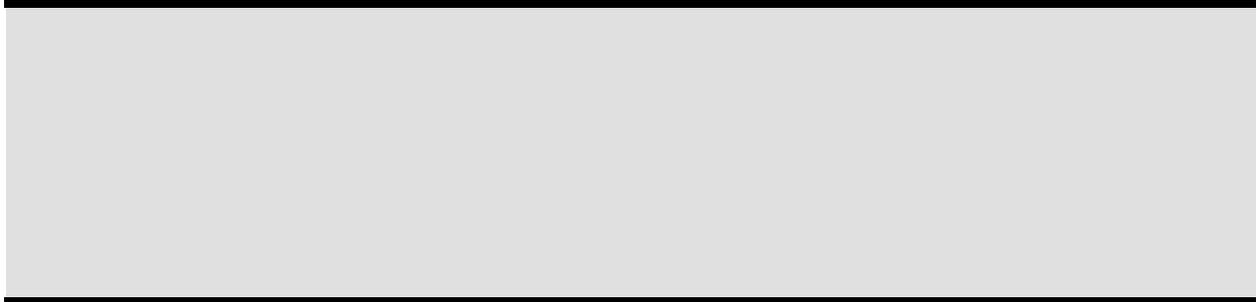
network of over 1,200 families. It also encourages parents and other members of the community to become leaders and volunteers at their children's schools, advocates for all students and families, and to share their perspectives with the district's leadership.

To improve interactions and communication between district and school staff and the public, the Recruitment Plan also includes additional training and resources for the staff of the main Office of Family and Community Engagement at PUSD headquarters and the satellite Family Resource Centers at each of the magnet school sites. For example, the staff will receive training in cultural awareness and the main center will be equipped with simultaneous translation equipment that will enable them to communicate with families from growing immigrant communities, including those whose first language is Armenian, Korean, or Mandarin.

Alignment of programs between elementary schools and middle schools and middle schools and high schools are essential to increasing enrollment at the proposed magnet middle and high schools. When elementary school families have positive interactions with and dispositions toward middle schools and middle school families have positive dispositions toward high schools before matriculation, they are more likely to apply and enroll. To make these connections, Muir's Early College and Career Preparation teachers, for example, will partner with local feeder middle and elementary schools by encouraging students to take short field trips to Muir's campus to view an Early College classroom, a student advisory session, and the new television production studio. Similarly, teachers from Washington's STEAM and Dual Language teachers will visit classrooms at district elementary schools, particularly the two STEM magnets and the three other elementary schools with Spanish Dual Language Immersion programs.

Resources will be allocated to pilot new and innovative strategies with the potential to expand applicant pools for the magnet schools. An example would be presentations by high-level district personnel (e.g., Superintendent, Chief Academic Officer, or Assistant Superintendents), principals, and magnet school teachers to faculty and staff of local prestigious colleges and universities -- e.g., Caltech and Art Center College of Design -- who have school-age children.

Recruitment strategies and activities will be developed, monitored, and adjusted in a timely way using data, feedback, and outcomes. Key district-based staff, school-based staff, and partners--including the Marketing Director of the Pasadena Educational Foundation, who will lead evaluation and data analysis of marketing effectiveness--will assess the success of specific recruitment activities on a quarterly basis and use the data to make informed decisions. Data collection for these purposes will include: attendance at open houses, the PUSD First Choice Festival, magnet fairs, and school tours; click-throughs and open rates for e-newsletters; email split tests; the number of individual visitors and hits on district and magnet school websites; reach and impact on social media and content of responses; extent and tone of press coverage; tracking responses to online and interactive ads; responses to direct mail and distribution of printed materials; numbers of people engaged at community events, including the number of new families for whom contact information is collected. The team will collect and analyze data on the number and diversity of the families engaged through these efforts, which marketing/outreach mechanisms they responded to, whether they apply for enrollment in the magnet schools or decide not to apply, and survey families to determine what factors led to their decisions.



In socioeconomically and racially integrated schools, populations can quickly be divided into different tracks and tensions can arise if teachers and administrators are not well trained. Different groups of parents, too, may conflict. Educators have learned a great deal about how to capitalize on diversity to the benefit of all students, and students who attend schools with more socioeconomically, racially, and ethnically diverse student bodies are said to be exposed to a wider array of experiences, outlooks, and ideas that can potentially enhance the education of all students (Wells, Fox, & Cordova-Cobo, 2016).

To ensure that students from different backgrounds will interact throughout the course of the school day and in afterschool activities, all of the magnet schools will use heterogeneous classes and cooperative learning strategies. Staff development will support these strategies and help magnet teachers use pedagogical practices that enable students to learn from each other (Cohen & Lotan, 1995). School-site councils comprised of magnet students, parents, and teachers will also receive leadership training to help to ensure that students of different social, economic, ethnic and racial backgrounds all have a voice in decisions about their school.

Heterogeneous Classes: To ensure the interaction of students from different backgrounds, every magnet school class will have nearly the same racial/ethnic and gender composition as every other class in its grade. By the end each project year, for each magnet school, at least 65% (Year 1), 70% (Year 2), 75% (Year 3), 80% (Year 4), 85% (Year 5) of classes will reflect their grade's enrollment for each racial/ethnic group by ± 15 percentage points.

Cooperative Learning: Cooperative Learning is a successful strategy to foster interactions among students of different racial, ethnic, and economic backgrounds and to improve student achievement. In cooperative learning, small teams, each consisting of students with different ability levels, engage in learning activities designed to improve their understanding and skills. It has been used to promote reading and writing achievement, conceptual understanding in science problem solving in mathematics and higher-order thinking and learning.

Cooperative learning will be used throughout the school day as well as in afterschool activities. When part of an established model such as Kagan Cooperative Learning or the Reading and Writing Workshop, small groups will be used and structured as specified by that model. At other times, cooperative learning groups will be set up and facilitated by teachers and incorporate the features that successful cooperative learning approaches have in common (e.g., setting of group goals, diverse interdependent teams, teaching communications and problem solving skills).

► **Impact:** Students will demonstrate increased positive interactions among other students, increased engagement, and increased academic achievement.

► **Rationale:** Cooperative learning strategies have been extensively researched and have been shown to improve student achievement for a wide variety of subjects for grades kindergarten through high school, when properly implemented. Cooperative experiences promote greater interpersonal collaboration than do competitive or individualistic ones. Cooperative learning promotes the development of caring and committed relationships for every student. Cooperative learning results in increased higher-level reasoning, greater transfer of learning, greater elaboration, and more time on task (Wittrock, 1986). When students are

engaged in collaborative projects they develop essential skills, such as teamwork and communication (Slavin, 1980). Cooperative learning ensures that all students are meaningfully and actively involved in learning. Active, involved students do not tend to engage in disruptive, off-task behavior (Johnson and Johnson, 1999). Cooperative learning also ensures that students are achieving up to their potential and are experiencing psychological success, so they are motivated to continue to invest energy and effort in learning. (Johnson and Johnson, 1999) Cooperative learning promotes academic achievement and builds positive social relationships (Sapon-Shevin, 1994; Stevens and Slavin, 1995).

Each proposed magnet school will expand its current after school enrichment program with new activities that support the magnet theme. These will be designed and delivered by magnet teachers and partnering organizations, including Education Through Music at Altadena Arts Magnet, College Access Plan at both Washington STEAM Magnet Academy and the Early College@John Muir High School. Heterogeneous classes and cooperative learning strategies will be used in all extensions of the school day.

All magnet schools will partner with Pasadena Education Network to offer workshops that help new families understand the magnet programs and Open Enrollment process as well as workshops that bring families from diverse backgrounds together to establish trusting relationships and common goals for continuous and sustained school improvement. Parents, teachers, and students from different leaderships groups on campus will come together for a four-part series, “Different Perspectives, Common Goals.” This program is designed to facilitate communication among parents from different backgrounds and build bridges to diverse families so they can work together to support the students, address their school’s challenges, and implement ideas for improvement.



PUSD will ensure equal access to and treatment in the full range of programs, classes, extracurricular activities, and other academic and enrichment opportunities offered at each magnet school for English learners and special education students. PUSD will also actively recruit students for the magnet schools from groups who are underrepresented in the academic and professional areas of focus, including Early College and career pathways, arts, and dual immersion, (including members of racial or ethnic minorities, females, English language learners, and students with disabilities) as well as students from demographic subgroups who may not think of themselves as college-bound including students who would be the first in their families to attend college.

It is essential that these students become highly engaged in high quality educational activities and receive the supports they need from the beginning of their schooling, so they will have the confidence in their abilities and learning potential to fully develop their interests in a variety of subjects. It is also essential that students from underrepresented groups be given opportunities, early in their schooling, to apply their own knowledge and experiences as they learn the prerequisites that they need to enroll and be successful in advanced courses in high school and college, an important goal of this project.

All magnet schools recruitment materials will make clear to parents of students with disabilities the full range of choices that will be made available in the magnet schools. PUSD will actively recruit special education students to ensure that every magnet school is serving the

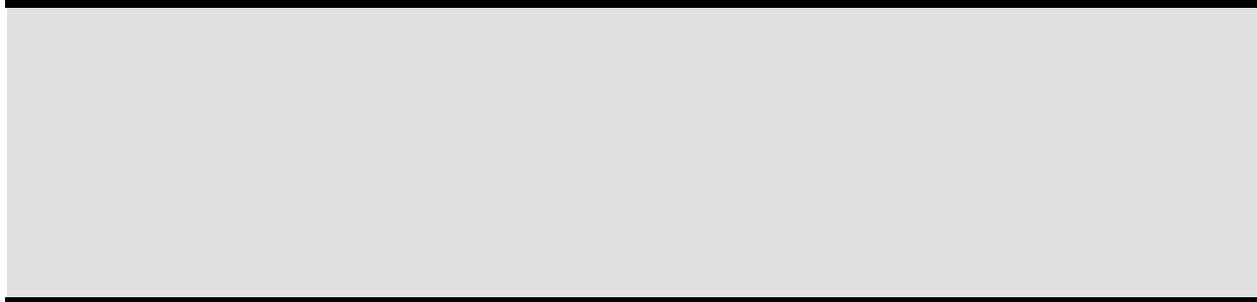
broadest population of students possible. Each magnet school will work with the Special Education Department to create a special education component that will maximize the possibilities for mainstreaming students, including them as fully as possible into each school's magnet program. All magnet schools and activities will be accessible to students with physical disabilities.

English language learners will receive the supports necessary for equitable and successful inclusion in all of the activities with the general student population. The magnet schools will include English Language Learners (ELLs) in all of their programs and activities. ELLs will receive the supports necessary for equitable and successful inclusion in all of the activities with the general student population. Additionally, PUSD provides each site with an instructional coach to support teachers in training and curricular support in meeting the needs of English learners. The coach regularly monitors student progress toward reclassification including data chats with students and parents to ensure they understand the reclassification process and to partner for the benefit of the student.

PUSD magnet schools do not use academic criteria to select students. Student interest is the only criteria. Once they enter a magnet school, students from underrepresented groups are guaranteed equitable treatment. Differentiated and culturally responsive instruction, cooperative learning, heterogeneous classes, and professional development: (1) prevent resegregation within the school; (2) counter stereotypes and other biases; and (3) facilitate more positive interactions among diverse groups of students and between staff and students and staff and parents; and, (4) recognize students' own resources for learning as well as their academic needs.

Equitable access to high quality education requires that district school, school staff, and community partners work in concert to address and support each student's individual developmental needs, skills, strengths, interests, and aspirations. For those with greater needs, additional support will be provided in the form of Personalized Support Plans (PSP) that provide sufficient social and academic supports so that students can succeed. Current research confirms that larger social structures and contexts beyond the school are critical, accounting for up to two-thirds of the variance in student achievement. Schools cannot close the achievement gap without a systemic approach to addressing out-of-school factors. Personalized Support Plans will develop ways to leverage school and community resources to mitigate some of the non-academic barriers to learning by improving the coordination and delivery of student supports in the magnet schools.

The Response to Intervention Coach at each site will lead school teams in organizing the resources and structures already present in each school and throughout our PUSD community, and connecting students with services in a more efficient way. The most at-risk students at these schools will be identified through universal screening and have Personalized Support Plans designed to meet their specific needs. Goals, services and supports included in these plans will be monitored and coordinated by the Response to Intervention team comprised of the RtI Coach and several staff members. Teachers and coaches will design and implement tiered interventions, supports, and materials that align with the student's needs, interests, and motivations. The team will meet monthly to ensure the intervention is producing positive outcomes. When students do not respond to interventions in the plan, the plan will be revised. The Response to Intervention Coach will also function as the point person for community-based service providers.



To further promote socioeconomic diversity in its magnet schools, PUSD will develop a new district-wide school assignment policy -- called the Blueprint for Equity and Access -- with the goal of increasing socioeconomic diversity and reducing minority group isolation in schools with a substantial proportion of minority students.

As part of its current Voluntary Desegregation Plan, PUSD employs a blind lottery system that does not consider a student's socioeconomic status in student assignment plans. The Open Enrollment system provides priorities for 1) students currently attending a school; 2) those residing within a half mile of the school; 3) siblings; and 4) students transferring from a school in need of improvement.

In the current school assignment system, each magnet school is a neighborhood school with open enrollment options. No academic criteria, entrance examination, or performance auditions/portfolios will be used to select students for the magnet program. Incoming students who live within the resident boundary apply and register directly at the school site, with all students living within resident boundary to be admitted until capacity is filled. Students who live outside of the resident boundary can apply through the Open Enrollment lottery. Once at capacity, the magnet school will become boundary-less. The district Open Enrollment office uses its own software system that allows parents to apply online, incorporates letters and other

communications to parents, and provides application and enrollment results that are required by magnet school programs.

Despite the acknowledged drawbacks of the current Open Enrollment system, PUSD has seen positive results in increasing socioeconomic diversity and reducing racial isolation in its current magnet schools. Therefore, the district is confident that the combination of a new lottery that accounts for socioeconomic status and the expansion of magnet schools will accelerate the pace of change and offer more choices for all families.

The new weighted lottery system will be developed with the input of a team of nationally-recognized consultants— Michael Alves, Richard Kahlenberg and John Brittain— with a proven track record in guiding and facilitating the development and implementation of equitable and viable socioeconomic student assignment plans in other school districts. They will work with the district Equity and Access Coordinator to solicit parent and community input in the planning process (September 2017-March 2018), use data to identify the optimal socioeconomic integration plan and revise school assignment policies, design pre-implementation activities including revising the online school choice application process (April-June 2018), pilot and beta-test choice-based socioeconomic student assignment policy (July-August 2018), report on the comparative results and identify the best options for achieving socioeconomic diversity goals (September 2018). PUSD plans to fully implement the system for student enrollment in the 2019-20 school year.

(b) Quality of Project Design (30 points)

PUSD has established a strong professional learning community to ensure students' needs are met and has recently embarked on an exciting 5-year Educational Master Plan process that sets out District intentions in the areas of policy, practice, and public engagement to create high-quality, highly desirable schools, welcoming students from across the District in a full-choice system. To launch the next five years of increasing excellence, access, and equity for all, PUSD seeks to develop magnet programs at two new magnet schools, Early College@John Muir High School and Altadena Elementary (Visual and Performing Arts), and significantly revise a magnet program at an existing magnet school Washington Middle (STEAM; Revision- Addition of Spanish Dual Language Immersion).

Our **Theory of Action and logic models** are explained in detail on pages 79-83, section (b4) of the Project Design, and are based on the following evidence-based, core strategies at all three magnet sites:

- **Rigorous Reading and Writing Curriculum and Instruction:** Professional development and curriculum development facilitated by expert coaches and consultants to promote:
 - Increased academic rigor and supports with school wide use of age-appropriate reading and writing instruction in a small group workshop model*
 - Frequent assessment and differentiation within workshops to challenge students within their unique zones of proximal development to achieve the next level of knowledge and skill.

*The workshop model will also be used to deliver rigorous math instruction as well for optimal differentiation opportunities.

- **Positive Behavior Interventions and Supports:** Extensive coaching of staff, students, and parents in positive behavior interventions and supports that emphasize teaching students appropriate replacement behaviors and restorative practices in lieu of traditional classroom and school suspensions. PUSD will also supplement this coaching support with Trauma Informed Care training and Personal Support plans to provide teachers the tools to support students who face overwhelming challenges.
- **Innovative, Attractive Magnet Themes that Increase Academic Achievement:** Professional development, curriculum and assessment development, and development of community partnerships to implement rigorous, innovative school themes that attract families thereby reducing or eliminating racial and socioeconomic isolation.
- **Partnership with Parents:** Parents will be welcomed and valued as true partners in our magnet school communities with welcoming community spaces on each campus, opportunities to partner with school and other parent leaders to plan for continuous improvements, and parent workshops to empower parents with knowledge of school and college systems.

Training and implementation will be facilitated by experienced project staff and exceed more than 50 hours of training and follow-up coaching in reading and writing curriculum, PBIS, and magnet theme. This will result in magnet schools that achieve the Pasadena community's top two priorities for "appealing" schools (based on a survey of more than 2,000 respondents; see p. 24) Rigorous high-achieving, schools that prepare students for college, and 2) Positive, safe schools that make real efforts to address bullying and social-emotional learning.



The student outcomes that will result from the implementation of these magnet schools will be increased proficiency in English language arts and mathematics, increased high school graduation rate, and increased theme proficiency.

Manner of increasing academic achievement: Rigorous Reading and Writing Curriculum and Instruction, Units of Study, Reading and Writing Workshop:

Teachers at all three magnet sites will undergo intensive training in *Units of Study for Teaching Writing* and *Units of Study for Teaching Reading* for rigorous implementation of readers' and writers' workshop. Teachers will use state-of-the-art writing and reading workshops that help students meet or exceed rigorous standards including writing opinion/argument, information, and narrative writing with increasing complexity and sophistication across the curriculum and interpreting and synthesizing text. The curriculum will support greater independence and fluency through intensive reading and writing opportunities, strategic performance assessments to help monitor mastery and differentiate instruction, use of leveled exemplar texts that model writing progression, classroom structures to support inquiry and collaboration, and self-monitoring strategies. Units of Study implementation will result in

increased English/language arts achievement. Classroom environments will also change to ensure flexible seating for students to learn comfortably in small groups using the workshop model of instruction. High school students will complete a senior research paper and oral defense as a graduation requirement.

Reading and writing workshops are based on proven strategies to positively impact student achievement. Frequent assessment and use of the workshop model enables teachers to differentiate instruction to teach within a student's zone of proximal development and offer repetition if needed thereby increasing academic achievement (Calkins 1994; Graves 1994; Ray 1999). Reader's and Writer's workshops enable teachers to use differentiated instructional strategies, including flexible grouping, student choice of learning tasks, self-selected reading time, and access to a variety of texts. In a study of elementary and middle school students whose teachers used these strategies, the targeted students improved their decoding, phonemic, and comprehension skills. Student attitudes about reading and their own abilities also improved. (Baumgartner, Lipowski, and Rush 2003). Reader's workshop is structured to provide increased volume of student time reading texts with high comprehension, which has been shown as a key factor in order to move up levels of text complexity. (Anderson, Wilson, and Fielding, 1988).

Manner of increasing academic achievement: Math Workshop (All):

All three magnet schools will adopt new math curriculum in 2017-18 that is aligned to the rigorous Common Core State Standards. Just as in reader's and writer's workshop, all three schools will utilize the workshop model of instruction to ensure frequent assessment of individual student progress to to differentiate instruction, teaching within a student's zone of proximal development and offering repetition if needed thereby increasing academic achievement (Rock, Gregg, Ellis, & Gable, 2008). Differentiation when delivered in small

groups or with targeted instruction has also been shown to have a greater positive impact on achievement for students with mild or severe learning disabilities (McQuarrie, McRae, & Stack-Cutler, 2008).

Manner of increasing academic achievement: Positive Behavior Intervention and Supports

All three sites will hire a Behavior (RtI) Coach to partner with teachers, parents, students, and community members to: implement a schoolwide system of positive behavior supports and interventions (PBIS), create and implement personal support plans for students, and implement research-based interventions that directly address the underlying issues leading to bullying and student discipline referrals. The Behavior RtI Coach will also coordinate and provide follow-up training in Trauma Informed Care, Mindfulness (K-8th), and Capturing Kids Hearts (9-12th) to improve teacher-student relationships and safe, effective classroom environments for all students, including our students who are facing overwhelming personal obstacles. Practices like Mindfulness support PBIS and social emotional learning by showing students how to recognize and control difficult emotions.

This project strategy is a necessary component to attract and retain new students and to improve academic achievement- parents and students need to feel that the school community is a safe and caring community, and students need to first realize their physical, social, and emotional goals in order to achieve their full academic potential (Maslow, 1943). Once fully implemented, students will demonstrate improvements in perceived safety of the school setting, increased academic achievement, increased prosocial behaviors, decreased office discipline referrals, and decreased suspensions.

Improved use of school wide positive behavior supports and a preventative approach to discipline with high fidelity of implementation has been shown to increase the perceived safety

of the school setting, improved academic performance, reduction in office discipline referrals, and reduction in suspensions (Bradshaw, Mitchell, & Leaf, 2010; Horner et al., 2009). Research related to staff training in positive behavior interventions and supports found that staff and teachers increased their level of perceived priority for implementing positive behavior supports in their school. A decrease in monthly discipline referrals to the office and the proportion of students who required secondary and tertiary supports was noted. (Bohanen et al., 2006).

Training in Mindfulness resulted in a 24% gain in prosocial behaviors, 24% decline in aggressive behaviors, and a 15% increase in math achievement attributed to more focused attention and a more positive outlook on school (Schonert-Reichl & Lawlor, 2010). Capturing Kids Hearts implementation has shown to 26% increase prosocial skills and 22% decrease discipline referrals. (Holzapple et al., 2010).

Manner of increasing academic achievement: Innovative, Attractive Magnet Themes that increase Academic Achievement

- 

In partnership with Pasadena City College, the Early College@John Muir High School will create a unique high school environment where all students see college as a clear option for their future. All students will take college classes and receive intensive college and career counseling and guidance. Students who need extra help and support to access college and career coursework will receive the necessary support, interventions, and motivation to see themselves as fully capable of succeeding in college and career coursework, well prepared for postsecondary learning and working opportunities.

Students from throughout PUSD will be able to enroll in Early College@John Muir High School at ninth grade without academic criteria, and all will be offered a rigorous college and

career ready curriculum. Students entering at ninth grade will take a minimum of one dual enrollment course per semester in 9th grade. From there, students can continue to participate in an Early College Pathway or a Career Technical Education Pathway with dual enrollment classes and Early College options.

Students who choose the Early College pathway will have the potential to acquire the units needed for an Associate's degree or enough college credit to transfer to a University of California or California State University having fulfilled lower division General Education requirements. Students who enroll in one of Muir's three career technical education (CTE) pathways – the Engineering & Environmental Science; Arts, Entertainment & Media; and Business & Entrepreneurship- will participate in technical education courses that are designed specifically for that industry sector and subject area. CTE students can enroll in Early College courses specific to their pathway. For example, students in the Engineering and Environmental Science can take Principles of Engineering college course and earn three credits from Pasadena City College.

The graphic on the following page illustrates an example of how a sequence of courses would be integrated into the school day so that students in will be able to complete high school graduation requirements while earning a significant number of college credits. It also demonstrates how those within the Early College pathway can earn up to two years of college credit during the four years of high school. This Early College course sequence is also designed to maintain eligibility for University of California/California State University admission, and earn an Associate's degree aligned to Intersegmental General Education Transfer Curriculum (IGETC). The completion of IGETC permits a student to transfer from a community college or

Early College high school to either a UC or CSU system without the need, after transfer, to take additional lower division general education courses to satisfy GE Requirements.

<p><u>Minimum</u> dual enrollment and Early College courses by pathway.</p> <p><i>All students can opt to take additional college courses.</i></p>	<p>College Credits</p>
<p>Engineering and Environmental Science: College & Career Readiness Counseling Classes (6), Digital Electronics (3)</p>	<p>9+ Dual Enrollment</p>
<p>Arts Media & Entertainment: College & Career Readiness Counseling Classes (6) Graphic Design (6) OR TV Production (3)</p>	<p>9+ Dual Enrollment</p>
<p>Business and Entrepreneurship: College & Career Readiness Counseling Classes (6)</p>	<p>6+ Dual Enrollment</p>
<p>Early College Pathway:</p> <ul style="list-style-type: none"> ● 9th Grade: College & Career Readiness Counseling Classes (6) ● 10th grade: Spanish 1 & 2 (10), Photography (3), Psychology (3) ● 11th grade: Political Science 1 (3), History 7B (3), Environmental Studies (4), Anthropology (4), <i>or Dual Enrollment (17)</i> ● 12th grade: English 1A (4), Math 131, 3 or higher (9) AP Science class (3) Electives: Art, History, Philosophy or other (9) 	<p>60 Early College (Courses taught by PCC professors)</p>

This is a low-cost, scalable model for bringing accelerated courses to high school students. These classes will provide the students at the Early College@John Muir High School opportunities to take college credit courses needed to complete an AA degree, and all students

have the option to take additional Early College courses beyond the minimum course of study listed above.

Pasadena City College has partnered with the Early College@John Muir High School magnet to create a satellite campus located at Muir. The satellite campus will provide an array of concurrent enrollment classes (which offer simultaneous high school and college credit) taught by PCC instructors in addition to dual enrollment courses taught by PCC approved high school teachers. All students who participate in Early College classes will require parental consent to take classes simultaneously with adult college students in the PCC satellite building.

Early College courses will be an option open to any student entering John Muir High School, students and parents will need to consult with their student's counselor if they are interested in exploring this accelerated opportunity. The Early College@John Muir High School magnet also proposes implementing a comprehensive School Counseling model which will provide academic, career and personal/ social development for all Muir students. MSAP will add a 0.5 FTE counselor to provide additional counseling time to ensure all students receive college and career readiness counseling, appropriate placement, support services to access rigorous curriculum, intensive advisement on career pathways and possible college coursework. In their freshman year, students will receive guidance from counselors and faculty to develop a learning plan for college and career readiness. At this key point, students and parents will determine in consultation with counselors if they want to follow the accelerated learning plan offered by rigorous Early College pathway or opt to blend options by pursuing their pathway interest while taking some courses for college credit. Counselors will meet with freshman and utilize a project-developed rubric to identify students who may benefit from full or partial participation in the Early College sequence of courses.

All students will also have access to college guidance provided after school and during the summer through services of College Access Plan, one of the project's partners. A quantitative evaluation of College Access Plan's 2013-2014 programs in Pasadena Unified schools illustrates that participants in the graduating class of 2014 were significantly more likely to: attend a 4-year college among A-G ineligible students (23% vs 8%) ,attend a 4-year college among A-G eligible students (67% vs 58.5%).

Pasadena City College will support the project by adding guidance on community college access, transition, college credit and transfers. Students and their parents will be provided a variety of resources to help them plan for and apply to college, including academic advisors, college counselors, workshops, and college visits. High school and college faculty, counselors and community partners will instill an awareness of and excitement about college in students and their families.

Additional supports will include intensive guidance including regular advisory meetings with counselors, ongoing academic support: summer, evening and weekend classes or extended school days; tutoring College preparatory information for students and parents, dedicated college resource center, summer bridge program, first year Success Coaches and Tutors. Muir's seven-period day will be particularly helpful to students who may need extra assistance while still desiring a pathways education. As an example, the seven-period day would help to accelerate English learners progress toward English proficiency by enabling them to take an intensive daily block of English language development designed for those with lower levels of English proficiency.

As a result of teacher professional development, rigorous implementation of the magnet curriculum, and positive behavior supports and interventions, Early College@John Muir High

School students will demonstrate increased English language arts and math achievement, higher graduation rates, and increased college credit completion.

Students will also benefit academically from the three career pathways with optional college courses. Each Academy will offer rigorous academic core courses integrated with industry- themed, career technical education and opportunities for work-based learning. The magnet will use a linked learning approach that integrates core academic standards with career-technical education, organized around industry-sector themes. Teachers collaborate across subject areas with input from working professionals. Learning is reinforced in work-based settings with real employers. These work-based learning experiences will range from presentations by career speakers, taking students on field trips or giving them virtual tours of workplaces to more extensive real-life opportunities for job shadowing, mentoring, and internships.

Students will also benefit from the integrated use of professional equipment purchased with MSAP funds. Arts, Media and Entertainment students will record professional grade television segments in an on-site TV studio and edit using AVID and Adobe Creative Cloud industry software. Students in the Engineering and Environmental Science Academy will use professional industry tools to develop innovative new technologies such as robots and solar-powered boats in collaboration with Caltech scientists from Community Science Academy, and Business and Entrepreneurship students will run their on-site credit union in partnership with Pasadena Community Credit Union. Students will apply real world mathematics, science, and engineering skills in a state-of-the-art manufacturing lab. Engineering and Environmental Science students will design and engineer their own products and medical technologies; Arts Media, and Entertainment students will design and engineer for sets and props for the Blackbox

theater; and Business and Entrepreneurship students will create and manage a microbusiness to experience the entrepreneurship process at each stage from idea, to manufacturing and marketing. Students can earn dual enrollment college credit for some of these courses.

Muir will partner with professional development consultant Connect Ed and Caltech Community Science Academy to ensure pathway courses are rigorous and prepare students for college and careers. Connect Ed will facilitate teacher team meetings with the primary aim of conducting lesson studies: 1) Formulating goals for student learning and long-term development. 2) Collaboratively planning a “research lesson” designed to bring life to these goals. 3) Conducting the research lesson, with one team member teaching and others gathering evidence on student learning and development. 4) Discussing the evidence gathered during the lesson, using it to improve the lesson, the unit, and instruction more generally. 5) Data analysis and calibration of student work. Caltech will support the Engineering and Environmental Science Academy with robotics and technology integration. PCC instructors will participate in training and collaborative planning with high school teachers.

With the support of Connect Ed and Caltech Community Science Academy, Career technical education pathway programs, and especially those that offer dual enrollment/ Early College courses will produce positive student outcomes including improved attendance, increase achievement on math and English/language arts assessments, and increased high school graduation rates. A longitudinal study of Career and technical Education Programs found a positive impact on student attendance, achievement on state academic assessments, academic grade point averages, and progress to graduation than control/comparison students. (Castellano, Sundell, Overman, & Aliaga, 2012). Research analysis suggests that dual enrollment can improve postsecondary success for all students, including those in CTE programs. More

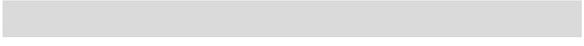
specifically, participation in dual enrollment (high school and college credit courses) positively impacts high school GPA, likelihood of earning a high school diploma and likelihood of enrolling in college. (Karp, Calcagno, Hughes, Jeong, & Bailey, 2007). A randomized controlled trial showed similarly promising outcomes for increasing number of students completing college applications, being admitted to a 4-year college, and enrolling in a 4-year college (Hoxby & Turner 2013).

To prepare students to matriculate to the Early College@John Muir High School. Washington and Muir will adopt AVID college readiness skills school wide including rigorous curriculum, Cornell notes, time management, binder organization, tutoring and small group collaboration, and oral presentation skills. Washington will also implement the AVID Elective, an elective course that targets students who earn mostly B, C, and D grades, who have the desire to go to college, who will be the first in their families to attend college, and/or who come from groups traditionally underrepresented in higher education. AVID encourages students to enroll in rigorous courses (Honors courses at the middle school level) and supports them through direct instruction in organizational and study skills, critical thinking thinking, academic help from peers and college tutors, and enrichment and motivational activities to make their college dreams reality. Muir counselors and lead teachers (high school and PCC instructors) will also attend AVID summer institutes to align school wide college-ready practices.

Researchers found that AVID students were prepared for advanced coursework and had higher language arts grades (Black, Little, McCoach, Purcell, & Siegle, 2008). AVID graduates complete the sequence of courses necessary for four-year college acceptance at an 84% rate; the California state average is 34%. Of the 100 AVID graduates that were surveyed, 95% were enrolled in a college or university. Nearly 75% reported attending 4-year colleges – a rate almost

three times that of the state average. (Guthrie & Guthrie, 2002). AVID Students were better prepared for college due to participation in AVID and being exposed to rigorous curriculum. Students formed relationships and bonds with others which positively influenced their educational experiences in high school and in college. Seventy-nine percent of the AVID students in the sample were on track to graduate from college in six years, compared to 54% nationally and only 28% at a Texas University. (Mendiola, Watt & Huerta, 2010)

Manner of increasing academic achievement: Innovative, Attractive Magnet Themes that increase Academic Achievement

- 

Altadena will partner with respected arts partners including Armory Center for the Arts, Lineage Dance, and Education through Music-Los Angeles to provide visual and performing arts classes including music, dance, visual art, and theatre for all students in grades K-5 during the school day. Altadena will partner with Armory Center for the Arts to implement arts-integrated core curriculum. Students will receive a rigorous, arts education that prepares them to enter the PUSD’s nearby Eliot Arts Magnet in 6th grade.

Increased Arts Classes: Altadena will expand its arts classes to grades K-5 by partnering with Education through Music Los Angeles to provide yearlong music classes one hour/week, with Lineage Dance to provide dance classes semester-long one/hour week, and by hiring a visual arts teacher to provide yearlong visual arts classes for one hour/week. At Altadena Arts Magnet you will see kindergarten students learning to find their singing voice and comparing locomotor and non-locomotor movements, third graders studying color theory and learning staff notation and names of rhythms as they learn to play their first instrument, and the fifth grade orchestra performing for the nearby middle schoolers at Eliot Arts Magnet and co-

producing performances and exhibits. Altadena will be outfitted with the supplies and equipment needed to offer rigorous arts experiences in spaces that inspire creativity and build the capacity of the school to implement programs with fidelity including a dance room, music room, art room with a kiln, a musical sculpture garden, and an innovation lab complete with virtual reality equipment for regular museum visits and concert attendance. This newly refurbished facility will come alive with artwork produced by students of all ages displayed throughout classrooms and hallways and on digital monitors.

Increased arts classes will improve students' academic achievement and result in decreased suspensions, and decreased truancy. Longitudinal studies conducted by the National Endowment for the arts found that students of low socioeconomic status (SES) who have a history of in-depth arts involvement show better academic outcomes than do low-SES youth who have less arts involvement. They earn better grades and demonstrate higher rates of college enrollment and attainment. For example, eighth graders who had high levels of arts engagement from kindergarten through elementary school showed higher test scores in science and writing than did students who had lower levels of arts engagement over the same period. (Catterall, Dumais, & Hampden-Thompson, 2012). A Missouri Alliance for Arts Education Missouri study concluded that districts with higher numbers of fine arts courses and higher enrollment in the arts had lower rates behavior infractions and higher attendance rates. (Scheuler, 2010).

Arts Integration: Altadena will also integrate visual arts and performing arts into core classes including math, science, history and English/language arts through a new partnership with Armory Center for the Arts and UCLA Arts and Healing and through an expanded theatre artist residency. The Arts curriculum specialist will provide additional daily support and follow-up coaching. Fourth graders will learn about diameter, radius and decimals while creating artistic

compositions and calculate the price of a self-created sculpture based on materials use while first graders will study the science of sound as they learn about musical instruments and use readers' theater to improve comprehension skills. All classes will start the day with therapeutic drumming to build community and start the day with a positive team-building experience.

Arts integration will increase students' math and English/language arts proficiency as well as their social-emotional skills. A 2003 evaluation by researchers at the University of Minnesota found that students in classrooms where teachers reported they implemented arts integration "a lot" produced modestly higher gains in Grade 3 reading and math scores when compared to students with less exposure to arts integration. The relationship between arts integration and reading scores was stronger for low income students and English language learners. (Ingram & Reidel, 2003). Sustained student involvement in theater arts improved students reading proficiency, self-concept and motivation, and higher levels of empathy and tolerance for others. (Catterall, Chapleau, & Iwanaga, 2003). Teachers who integrated drumming through UCLA Arts and Healing's Beating the Odds program reported reduced overall problem behavior, as well as reduced specific behaviors reflective of inattention, withdrawn depression, anxiety, post-traumatic stress, attention deficit/hyperactivity, oppositional defiance, and sluggish cognitive tempo. (Ho, Tsao, Bloch, & Zeltzer, 2011).

Manner of increasing academic achievement: Innovative, Attractive Magnet Themes that increase Academic Achievement

- **Washington STEAM Middle School:**

Washington STEAM Magnet proposes a necessary and substantive change to its magnet program by adding Spanish Dual Language Immersion as well as increased rigor and supports to prepare students to matriculate to a rigorous Early College High School. Washington has

implemented an innovative STEAM theme over the past five years (since 2012), but it continues to struggle in attracting families, particularly middle-class families due to other attractive middle school options in the area. In order to be more successful, Washington STEAM needs to provide an unparalleled attractive theme- STEAM with Spanish Dual Language Immersion. By adding middle school Spanish immersion, Washington will attract students who are currently enrolled in Spanish immersion elementary schools, Pasadena Unified's most popular programs. Washington will simultaneously target efforts to increase academic rigor and improve school climate, as these are top priorities for parents and families when choosing a school. Washington would continue to improve its innovative STEAM theme and thematic instruction while making these substantive changes, which are necessary to reduce or eliminate socioeconomic and minority group isolation and to increase academic achievement.

Washington will develop its Spanish Dual Language Immersion curriculum by hiring specialized teachers to develop and implement the middle school Spanish Dual Language Immersion curriculum infused with the STEAM theme. Components would include: a Spanish Language Arts and Literature class for each grade level (6th- 8th), Spanish for Spanish Speakers classes that enable Spanish speakers to increase their Spanish reading and writing proficiency and opt into the Dual Immersion at the middle school level, and the addition of 6th -8th grade core classes (STEAM integrated history or science) taught in Spanish. Washington will also offer after-school enrichment, rigorous English language arts and literature classes school-wide. Spanish dual immersion teachers will spend the majority of their time developing curriculum and assessments, conducting marketing and outreach activities, and developing partnerships with community organizations to provide students with authentic opportunities to practice their Spanish skills with business and cultural organizations in Year 1 and 2. As more students

matriculate from dual immersion elementary schools and demand increases in Years 3 and beyond, the dual immersion teachers' roles will increasingly shift to providing direct Spanish dual language instruction to students as outlined in the table below.

Sample schedule for dual language immersion teachers on special assignment:

Spanish Dual Immersion Teacher 1	Spanish Dual Immersion Teacher 2
Year 1: Development of curriculum and assessments, marketing, and developing partnerships	
Year 2: 1-Spanish 6th, 1-Spanish Speakers + program develop. & recruitment	Year 2: 1 History-6th (Spanish) + program develop. & recruitment
Year 3: 1 ea. 6th/7th Spanish, 1 Spanish Speakers + program develop. & recruitment	Year 3: 1 6th, 1 7th History (Spanish) + program develop. & recruitment
Year 4: 1 ea. 6th- 8th Spanish, 1 Spanish Speakers + program develop. & recruitment	Year 4: 1 ea. History 6th-8th (Spanish) + program develop. & recruitment
Year 5: 1 ea. 6th- 8th Spanish, 1 Spanish Speakers + program develop. & recruitment (after school)	Year 5: 2 6th, 1 ea. History 7th-8th (Spanish) + program develop. & recruitment (after school)
Year 6+: Full course load, classes are at capacity and sustained through increased enrollment	

Washington will also consult with dual language immersion expert Linda Hardman-Greene to train teachers in the key features of effective dual language education and to carefully

plan an articulated program based on research-based practices. This includes the research and proven evidence-based practices grounded in the Guiding Principles for Dual Language Education (Howard, Sugarman, Christian, Lindholm-Leary, & Rogers, 2007).

Dual immersion students will demonstrate increased proficiency in English language arts. ELs in dual immersion programs develop English/language arts skills much faster than those in English immersion. By 7th grade, dual immersion students' scores have surpassed those of students in English immersion and maintenance bilingual programs. Dual immersion and transitional bilingual programs appeared to be more effective at promoting longer-term development of English/language arts skills than English immersion and maintenance bilingual programs. ELs in some two-language programs make academic gains that are as much as 0.3 standard deviations larger from grades 2 through 7 than their peers in English immersion. (Umansky, Valentino, and Riordan, 2016). A Portland study of seven cohorts of English learners found that students in language immersion programs demonstrated positive effects on reading performance in 5th through 8th grades ranging from 13%-22% of a standard deviation and were less likely to remain classified as English Learners in 6th and 7th grade. (Steele et al., 2015).

Because students would need access to both Spanish classes and other electives including STEAM electives and the AVID college preparation program, Washington will revamp its master schedule over the course of Year 1 to enable two elective options for all students. The revised schedule and MSAP training will enable Washington to offer the following courses for all students: English- STEAM integrated Reader's and Writer's Workshop (Units of Study), Math- STEAM integrated Math Workshop Model, History- STEAM integrated World and U.S. History* (**Taught in Spanish for students in Dual Language Immersion*), STEAM integrated Physical Science, Life Science, Earth Science, physical education, and 2 electives:

Elective Choices	Elective options: Spanish for Spanish Speakers 1 and 2; Spanish Literature and Language Arts 1, 2, and 3; AVID College Readiness; STEAM (Engineering and Robotics); Glee/Choir; Band and Orchestra; Math and English Language Arts Intervention. Required: Health and Physical Fitness
After School Enrichment Options	After school clubs including Glee/Choir, STEAM Innovation clubs facilitated in English and Spanish, Competitive Math (Math Field Day)

Manner of increasing academic achievement: Partnership with Parents (All)

As described in section (a) Desegregation, all schools will partner with Pasadena Education Network to offer workshops that empower parents and bring families from diverse backgrounds together to establish trusting relationships and common goals for continuous and sustained school improvement.

All schools will establish a centrally located family resource center that welcomes the whole family and provides easy access to resource information in multiple languages to develop trusting relationships with families and ensure they are welcomed as valued partners. All schools will invite families to participate in activities such as student mentoring, career days, senior projects, and fundraisers. Washington STEAM Magnet and Early College@John Muir High School will partner with College Access Plan to provide workshops that empower parents with the knowledge and competence to prepare their children for college and navigate the college application and financial aid systems. PCC will also offer free adult and community education courses including job training and workforce preparation, vocational English, and parent education classes.

Students will demonstrate increased academic achievement, improved attendance, and increased prosocial behaviors as a result of increased parent engagement. Research shows that students with involved parents, regardless of family income and background, are more likely to earn higher grades and test scores, and enroll in higher level programs; be promoted, pass their classes, and earn credits; attend school regularly; have better social skills, show improved behavior, and adapt well to school; graduate and go on to postsecondary education. Family and community involvement that is linked to student learning has a greater effect on achievement than more general forms of involvement. To be effective, the form of involvement should be focused on improving achievement and be designed to engage families and students in developing specific knowledge and skills. Schools that succeed in engaging families from very diverse backgrounds focus on building trusting, collaborative relationships among teachers, families, and community members; recognize, respect, and address families' needs, as well as class and cultural differences; embrace a philosophy of partnership where power and responsibility are shared. (Henderson & Mapp 2002).

Extent of increased academic achievement for all students attending each magnet school

These three schools are among the most racially isolated and socioeconomically segregated schools in the district and were selected after careful review for their potential to achieve the following project objectives:

- **Student academic achievement:** Increased proficiency in English language arts and mathematics and high school graduation rate, Increased completion of dual and concurrent enrollment college-level courses by high school students. (Muir)
- **Socioeconomic and minority group isolation:** Increased socioeconomic diversity and reduced minority group isolation: Decreased isolation of Hispanic/Latino students

(Washington and Muir) and Decreased isolation of Black/African American students
(Altadena and Muir)

- School climate/social-emotional skills: Decreased office discipline referrals, Increased prosocial behaviors, Increased parental involvement, Decreased chronic absenteeism, Decreased suspensions.
- Capacity-building/sustainability: Established partnerships, Built teacher capacity through professional development. Skills and knowledge to implement: Attractive themes, Rigorous core instruction, School-wide behavior supports and interventions.

A summary of the general academic achievement objectives follows:

- **Objective 2**— All students will receive high quality instruction that includes their school's systemic reforms and magnet themes in units and courses aligned with CCSS, NGSS and State standards.
- **Objective 3.1b**—College credits earned: Students at Muir will have increasing access and preparation to succeed in dual and concurrent enrollment courses within an Early College pathway or career-focused academy using integrated Linked Learning curriculum with access to college courses. By the end of each project year, at Early College@John Muir High School the percentage of college credits completed will increase by 10 percentage points each year for 9th graders and 5 percentage points each year for 10th- 12th graders.
- **Objective 4.1-4.4**—Academic Achievement, Reading/Language arts: The percentage of students who meet or exceed standards on the Smarter Balanced Assessment will increase, when compared with the previous year for the total population and for each of the student subgroups.

- **Objective 4.5**—High School Graduation rates: By the end of each project year, John Muir High school will increase its graduation rate when compared to the previous year. Our goal is to meet or exceed the state average of 90% within 7 years.
- **Objective 4.7**—By the end of the fourth year of the grant (September 30, 2021), for each project school, students in two or more of the tested groups/subgroups (e.g., total tested population, each racial/ethnic group, low income students, English Learners) will have higher test scores than carefully matched students attending non-magnet schools in at least one subject area tested by the State (ELA/literacy, mathematics, science). These results will be statistically significant.
- **Objective 4.8**—By the end of the fourth year of the grant (September 30, 2021), at John Muir High School, students in the Early College Pathway (e.g., total tested population, each racial/ethnic group, low income students, English Learners) will have higher test scores than carefully matched students in other CTE pathway programs in ELA/literacy and mathematics as measured by the State assessments. These results will be statistically significant.

Extent to which the magnet school will increase student academic achievement in the instructional areas offered by the school:

- **Objective 3.1a**—College credits earned: Students at Muir will have increasing access and preparation to succeed in dual and concurrent enrollment courses within an Early College pathway or career-focused academy using integrated Linked Learning curriculum. The five-year goal is that 55% of ninth grade students and 95% of tenth through twelfth grade students will have earned college credits. Ultimately, we expect

virtually all Muir students to have earned a minimum of six college credits and a group of Muir students to have earned an Associate of Arts degree by their high school graduation.

- **Objective 4.6**—By the end of the grant period, 75% of students in each magnet school will develop mastery of the magnet curriculum, as determined by project based assessments scored by rubrics.

(b)(2) The extent to which the applicant demonstrates that it has the resources to operate the project beyond the length of the grant, including a multi-year financial and operating model and accompanying plan; the demonstrated commitment of any partners; evidence of broad support from stakeholders (e.g., State educational agencies, teachers' unions) critical to the project's long-term success; or more than one of these types of evidence.

Pasadena Unified School District and the proposed magnet schools have the resources it will take to operate the project beyond the length of the grant. California's new law for school funding, called the Local Control Funding Formula (LCFF) forms the basis of the multi-year financial and operating model. As the magnet programs become fully operational, and enrollment and socioeconomic diversity increases, they will become self-sustaining. The proposed program partners have long-standing relationships with schools in Pasadena Unified and are committed to the longevity of newly implemented programs, seeking outside resources and supporting fundraising as needed.

The sustainability of the Early College@John Muir High School will be further strengthened by established agreements between PUSD and PCC, state legislation in support of the Early College concept, and the ongoing commitment and financial support from the District and community college. California's AB288 funding formula for dual enrollment, known as the College and Career Access Pathways Act, which pays both the high school and the college for

each student, has proven to be a cost-saving strategy for students and a cost-neutral savings for Muir and PCC. Please see Attachments for a copy of the dual enrollment agreement between the district and PCC, which will be formalized during the MSAP-funded period. As with other acceleration mechanisms, dual enrollment saves taxpayers money by reducing the number of courses and time it takes for a student to get a postsecondary degree. The specific plan for sustaining the magnets is summarized in the following table:

Multi-Year Financial and Operating Model and Plan

YEAR	1	2	3	4	5	6 and Beyond
MSAP	MSAP-funded program and school improvements to create magnet schools.					Sustained through increased state funding from increased enrollment
State	Base state funding based on enrollment increases; additional state funding for low-income, English learners and special needs students remains stable or gradually decreases with greater socioeconomic diversity					
Local	Establish formal agreement between partners for long-term commitment incl. PUSD and PCC to offer Early College@John Muir High School	Terms of agreement with partners have committed partner and LCFF funding; PCC and PUSD have college funding from new legislation Early College@John Muir High			Magnets sustained through local agreements between partners and PUSD, LCFF funding for increased enrollment, established agreements, and shared fundraising with partners	

Demonstrated Commitment of Partners

Letters of commitment from our community partners mentioned below are available in the Appendix. PUSD's selected providers for the Units of Study training include **Powerful Choices** (Altadena and Washington) and **Columbia Teacher's College**. Providers are enthusiastic about PUSD's sustained and concerted effort to implement rigorous Units of Study to implement readers' and writers' workshop with fidelity. Powerful Choices has experience working with PUSD schools including Dual Language Immersion programs.

The key partner in the Early College@John Muir High School is **Pasadena City College**. The district and college have been working over the past years and months to forge a formal agreement regarding Dual Enrollment in Pasadena schools. That work is coming to fruition this summer with an expected signing of an agreement between this great partner and the district to provide both dual and concurrent enrollment college courses to Muir high school students. Please see draft agreement in the Attachments. **Connect Ed** will provide professional support to build rigorous, articulated and integrated curriculum units to support literacy, numeracy, and cross-disciplinary problem-solving skills, as well as the teaching strategies necessary to ensure all students can succeed in the Early College and career technical education opportunities that will be provided to students in Muir's Linked Learning academies, no matter their starting points. **College Access Plan (CAP)** will provide drop-in college advisement sessions twice per week in addition to targeted in-class workshops during the school day at Muir as well as student and parent workshops at Muir and Washington. Topics include: SAT preparation, personal statement essay writing, exploring colleges and identifying careers, and successful completion of college applications. Students in open sessions are supported by CAP staff members with advanced degrees in related fields.

A key partner in developing Washington's Spanish Dual Language Immersion program is **Linda Hardman-Greene (California Association for Bilingual Education)**, professional development and curriculum consultant, who will guide program development and implementation. Ms. Hardman-Greene supported the development of Spanish and Mandarin Dual Language Immersion programs in Pasadena Unified, which are now among PUSD's most popular schools.

Key partners in Altadena's Arts Magnet program are **Education through Music Los Angeles (ETMLA), Lineage Dance, and Armory Center for the Arts**. Both ETMLA and Lineage Dance independently fundraise 50% or more of their proposed services, and are committed to long-term residencies at Altadena just as they have at PUSD's Cleveland Elementary and Eliot Middle School. They will support additional fundraising efforts as needed until increased enrollment provides additional funds needed to maintain the program. Armory Center for the Arts has been a longtime partner and support of PUSD through the My Masterpieces arts exposure program and developed Artful Connections with Math, its arts integration curriculum, in collaboration with PUSD. Armory Center for the Arts has successfully trained artists to use the Gradual Release Model of teacher training to sustain curriculum use for longevity of the program.

Evidence of Broad Support from Stakeholders

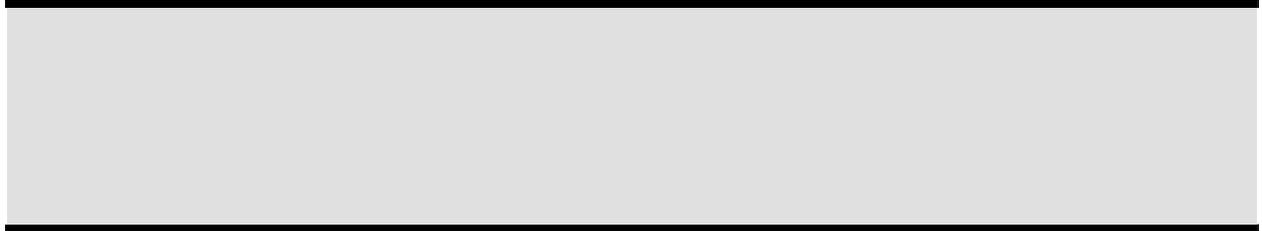
Pasadena Unified District has been on a long road to building a better, more diverse and district that provides high quality and equitable education for its students. It has engaged all stakeholder groups and utilized experts in the field over the past year in developing a 2016 Educational Master Plan. The plan is supported by research, has the broad support of stakeholders, and is Board approved. Prominent stakeholder groups that had significant roles and

input into the plan development were: the over 150 parents, students, educators, government officials and community members who were interviewed by the master planning team of Architects of Achievement (AofA), WLC Architects, researcher/writer Kathleen Cushman, and Century Foundation Senior Fellow Richard D. Kahlenberg. Please see list included with the 5-Year Educational Master Plan in Appendix.

Educational Master Plan

Over the last eight years, the PUSD established a graduate profile and strategic plan to guide its approach to education and support services, leading to the Educational Master Plan and its recommendations from which this project directly stems. Aligned activities, including reviewing and revising school assignment, improving service delivery model of school and student supports, implementing a tiered approach to managing schools, implementing magnet and other signature programs are now critical components of Local Control Accountability Plan (LCAP) planning process. Required of school districts by the state of California as part of its Local Control Funding Formula enacted in 2013-14, PUSD's LCAP contains sets out goals, strategies and actions, performance targets, and budget encompassing a three-year period. Plans are collaboratively developed with stakeholder input and oversight, and the final LCAP is presented to the public and Board of Education for approval in June each year for the following fiscal year. PUSD plans to engage the national expertise of SES Consultants to assist PUSD staff in navigating the complexities of Pasadena, its current school assignment policies and building capacity for family and community engagement will help sustain the long-term benefit.

Additionally, magnet sites, magnet themes, and magnet strategies were selected based on survey input from over 2,500 community members and site focus group input as described in detail on p. 24.



The proposed magnets will require a comprehensive professional development and training program that is sufficient in quality, intensity, and duration to lead to improvements in participant practices. The professional development plan is summarized in the table below. It cites impact and evidence to demonstrate sufficient quality of training and 50 or more hours of training per intervention to ensure sufficient intensity and duration to lead to improvements in teacher practice (Yoon, 2007). The table includes the following for each project year: the topic/goal, the high-quality PD provider, the target group, the intensity and the duration of the PD, and the research-supported method of PD.

Target	Intensity and Duration	Impact/ Evidence Base
Academic Achievement, Student Learning, and Engagement		
Powerful Choices (Muir and Altadena), Columbia Teacher’s College (Muir)- Reading and Writing Curriculum and Instruction		
All English Language Arts Teachers, Administrators/ All three schools	18 hrs. training, 32 hrs. coaching	Increased English/language arts achievement (Calkins 1994; Graves 1994; Ray 1999; Baumgartner, Lipowski, and Rush 2003)
Connect Ed: Lesson Study, Assessments, Instructional Rounds and Caltech Community Science Academy- Robotics/Technology Integration to offer rigorous Career Technical Education pathways (Muir)		
CTE Pathway Teachers, Administrators at Early College@ John Muir High School, PCC Instructors	5 days on site training/year; 90 hours remote team coaching and support; 50 hours data mgmt.	Improved student attendance, achievement on state academic assessments, academic grade point averages, and progress to graduation. (Castellano, Sundell, Overman, & Aliaga, 2012)

CTE Pathway Teachers (Engineering Academy), PCC Instructors	72 hours lesson planning (2/wk.) 19 hours classroom visits (i.e. one every 2 weeks) 18 hours training	Improved student attendance, achievement on state academic assessments, academic grade point averages, and progress to graduation. (Castellano, Sundell, Overman, & Aliaga, 2012)
College Access Plan parent and student workshops and drop-in support (Muir and Washington)		
Parents, Students	20 classes/yr. (5 per grade level at high school); 5 classes/yr. at middle school	Increased college course participation, college credit completion. (10% higher or more for College Access Plan participants than non-CAP participants)
Dual Language Immersion Training and Curriculum Development: Linda Hardman Greene (California Association for Bilingual Education) (Washington, District)		
Dual language immersion teachers, plus overview for all teachers, parents, admin.	24 hrs.+ PD/year + visitations, parent workshop annual CABE conference 12 hrs./year	Increased English/language arts achievement for English learners (Umansky, Valentino, and Riordan, 2016). Increased English learner reclassification rate (Steele et al., 2015)

Arts Integration Curriculum Development & Co-teaching: Armory Center for the Arts, UCLA Arts and Healing, Everyday Arts for Special Education, Coaching (Altadena)		
All teachers, Administrator, Curriculum Specialist	41 hrs. coaching; 15 hrs. curriculum development; 18 hrs. training (per teacher per subject over 5 years)	Increased academic achievement, prosocial behaviors, social emotional skills (Ingram & Reidel, 2003; Catterall, Chapleau, & Iwanaga, 2003; Ho, Tsao, Bloch, & Zeltzer, 2011).
AVID College readiness, Summer Institute, (Washington, Muir)		
Administrators., Counselors, AVID teacher, Lead Teachers, PCC Instructors	18 hrs./year	Increased English/language arts achievement, increased high school graduation rates, increased college credit completion. (Black, Little, McCoach, Purcell, & Siegle, 2008; Guthrie & Guthrie, 2002; Mendiola, Watt & Huerta, 2010)

School Climate/Student Support		
Positive Behavior Interventions and Supports (PBIS) Coaching and Training: RtI Coach, Capturing Kids Hearts (9th-12th), Mindfulness (K-8th), Trauma Informed Care (All)		
Teachers, Staff, Parents, Students who do not respond to universal interventions	18 hrs. training/year; 10+ hrs./ year/teacher coaching plus	<i>PBIS</i> : Improved academic performance, reduction in office discipline referrals, and reduction in suspensions (Bradshaw, Mitchell, & Leaf, 2010; Horner et al., 2009; Bohanen et al., 2006). <i>Mindfulness</i> : Increased prosocial behaviors, decline in aggressive behaviors, and increase in math achievement (Schonert-Reichl & Lawlor, 2010). <i>Capturing Kids Hearts</i> : increased prosocial skills and decreased discipline referrals (Holzapple et al., 2010).

MSAP funding will provide for high-quality, intensive professional development to prepare teachers to implement rigorous core and theme-integrated coursework. “Simply increasing the amount of time teachers spend in professional development alone, however, is not enough. The time has to be spent wisely, with a significant portion dedicated to supporting teachers during the implementation stage. Support at this stage helps teachers navigate the frustration that comes from using a new instructional method.” Professional consultants will provide training in key areas with follow-up coaching provided by MSAP curriculum specialists and PUSD Instructional Coaches during the implementation phase. The Project Director and MSAP staff will attend the same training as all PUSD coaches as well as the Art of Coaching Institute wherein they will practice and reflect on their own transformational coaching skills to

deepen coaching and learn new ways of supporting teachers and staff in conversations that transform practice and increase impact. MSAP staff will learn new ways to explore and shift teacher and staff practices that “don’t support student achievement, identify core values, develop a vision for coaching, and build confidence as powerful coaches” (Aguilar, 2016, p. 1).

(b)(4) The extent to which the proposed project is supported by strong theory

The proposed magnet school programs evolved from PUSD’s five-year Educational Master Plan process and will implement evidenced-based practices, serving as District models to:

- Solve long-term challenges. PUSD sees too many middle-class families choosing other options for their children’s education, and it aims to bring them back.
- Guide innovative program development. PUSD sees community partners eager to contribute in a multitude of ways, and it aims to streamline that process as it deepens the learning experience. PUSD sees that school facilities can inspire collaboration and innovation, and it aims to create environments that spur all to excellence.
- Provide equitable access to opportunities for all students in the District. PUSD aims to ensure that all students have access to a high-quality school environment, and will assess and improve its assignment process for schools of choice.

The **theory of action** for this project can be summarized as follows:

- IF teachers and staff are provided with high quality, evidence-based, professional development of sufficient duration and intensity for implementing successful, diverse magnet schools including curriculum and instruction that is rigorous, theme- and/or industry-based, and academically challenging,
- AND students are engaged and motivated to learn,
- AND there are academic supports to promote success and interventions to remove barriers to learning,
- AND diverse students are recruited through effective promotion to the communities served by the district, with a school assignment process designed promote equity and access,
- AND the currently high levels economic and racial isolation at the three identified schools are reduced,
- THEN, student learning outcomes will be improved and sustained.

Please see the project and school logic models on pages 80-83 which depict the rationale for each of the project elements.

LOGIC MODEL: Pasadena Unified School District

RESOURCES	ACTIVITIES	OUTPUTS	SHORT-TERM OUTCOMES	MID-TERM OUTCOMES	LONG-TERM OUTCOMES
<p>District Support, Policies, Personnel</p> <p>Experienced Project Director</p> <p>Knowledge of Evidence-based strategies</p>	<p>Curriculum and Instruction</p> <p>Oversee Budget, Rigorous Curriculum and Instruction: C&I, PBIS, Work Behaviors</p> <p>Interventions and Supports (PBIS)</p> <p>- K-5 Arts classes</p> <p>Academic PD</p> <p>- Technology and Magnet Course</p> <p>Cooperative Learning</p> <p>(50 hrs. ea. /site of Reader/Writer's Workshop, Magnet Theme, PBIS), tech. integration, cooperative learning</p>	<p>Capacity Built</p> <p>Implementation and Skills and knowledge to implement rigorous core instruction, Arts, knowledge of policies and practices, skilled coaching, project implementation</p> <p>Capacity Built</p> <p>Skills and knowledge to implement C&I, PBIS, high quality peer reviewed curriculum units</p>	<p>C&I Benchmarks</p> <p>unit quality, arts dosage, theme and implementation, student engagement, heterogeneous classes</p>	<p>Increased Achievement in English Language Arts and Math, high school graduation rate, college credits earned for all students</p> <p>Annual PM 4.1-4.8</p>	<p>PM 5 Year Targets</p> <p>Increased Achievement in English Language Arts and Math, High School Graduation, College Credits for all students, PM 4.1-4.8</p> <p>Sustainability- Arts partnerships in place</p>
<p>MSAP Support for Project Management, Curriculum Development, Training, Materials, Supplies, Equipment</p> <p>-Magnet Coordinator, Coaches, Data Tech. Committed Partners</p> <p>-Expert consultants: project management program articulation</p>	<p>Parent Outreach & Education, Family Resources Centers</p>	<p>Increased Parent Activities; skills and knowledge enhanced</p>	<p>PD Benchmarks</p> <p>Dosage on target, used in all classrooms, PD supported theme integration/PBIS</p>	<p>PD targets attained</p> <p>Annual PM 5.1-5.3</p>	<p>Built teacher capacity- 50 hrs. PD each area per site</p> <p>PM 5.1-5.3</p>
<p>Parents, Comm. Asst., Parent Ed. Providers</p>	<p>Desegregation: Policy development, student recruitment, application activities</p>	<p>Desegregation- Equity and Access Blueprint; Lg., diverse applicant pool, students registered & enrolled</p>	<p>PBIS Benchmarks</p> <p>80% SET Score, decreased referrals, decreased absences</p>	<p>Decreased Suspensions</p> <p>Annual PM 6.3</p>	<p>Decreased Suspensions PM 6.3 and Decreased Chronic Absenteeism PM 6.4</p>
<p>Socioeconomic Integration Experts, Marketing Consultation and recruitment materials</p>	<p>Data collection and analysis to support evaluation</p>	<p>Comparative Data: Proj. Research Study</p>	<p>Parent Activity Benchmarks</p>	<p>Increased Parent Involvement</p> <p>Annual PM 6.2</p>	<p>Increased Parent Involvement PM 6.2</p>
<p>Independent Evaluation, Research</p>			<p>Applicant Pool Benchmarks</p> <p>Isolated groups 10 points less than current percentages</p>	<p>Decreased Group Isolation of Low SES & Black/AA, Hispanic students</p> <p>Annual PM 1.3, 1.5</p>	<p>Decreased Group Isolation of Low SES & Black/AA, Hispanic students PM 1.1- 1.5</p>
				<p>Compliance review, reports meet/exceed DOE expectations</p>	<p>Research contributes to knowledge base</p>

LOGIC MODEL: Altadena Elementary, Visual and Performing Arts Magnet

RESOURCES	ACTIVITIES	OUTPUTS	SHORT-TERM OUTCOMES	MID-TERM OUTCOMES	LONG-TERM OUTCOMES	
MSAP Support for Project and Curriculum Personnel, Training, Materials, Supplies, Equipment Magnet Coordinator, Coordinator Art Teacher, Arts Instructional Coach, Partnerships, Arts Art Teacher	Curriculum and Instruction (C&I) - Rigorous core instruction: Reader/Writer's Workshop (50 hrs.) - Magnet Theme: Arts integration (50 hrs.) - K-5 Arts classes - Arts enrichment - Technology integration - Cooperative learning	Capacity Build Instruction Skills and Capacity Built: Knowledge to implement rigorous knowledge to core instruction, cooperative learning Programs implemented, high quality peer reviewed curriculum units	Classroom Benchmarks for Quality Review arts dosage and implementation, Student engagement, heterogeneous classes	Increased Achievement in English Language Arts and Math for all students Annual PM 4.1-4.4, 4.6, 4.7	PM 5 Year Targets Increased Achievement in English Language Arts and Math for all students PM 4.1-4.4, 4.6, 4.7 Sustainability- Arts partnerships in place	
			Professional Development Benchmarks Dosage on target, used in all classrooms; PD supported arts integration/PBIS	PD targets attained Annual PM 5.1-5.3		Built teacher capacity- 50 hrs. PD each for arts, literacy, PBIS PM 5.1-5.3
			PBIS Benchmarks 80% SET Score, decreased referrals, decreased absences	Decreased Suspensions Annual PM 6.3		Decreased Suspensions PM 6.3 and Decreased Chronic Absenteeism PM 6.4
			Parent Activity Benchmarks	Increased Parent Involvement Annual PM 6.2		Increased Parent Involvement PM 6.2
Parents, Comm. Asst., Parent Ed. Providers	Parent Outreach & Education , Family Resources Centers	Increased Parent Activities; skills and knowledge enhanced	Applicant Pool Benchmarks Isolated groups 10 points less than current percentages	Decreased Group Isolation of Low SES & Black/AA students Annual PM 1.3, 1.5	Decreased Group Isolation of Low SES & Black/AA students PM 1.3, 1.5	
Marketing Consultation and recruitment materials	Desegregation: Student recruitment, application activities	Desegregation- Lg., diverse applicant pool, students registered & enrolled				

Low SES 81.3% (District 62.5%), Black or African American: 29% (District 30.4%) Altadena Elementary Visual and Performing Arts Magnet which serves grades 6-8 is within walking distance.

LOGIC MODEL: John Muir High School, Early College Magnet

RESOURCES	ACTIVITIES	OUTPUTS	SHORT-TERM OUTCOMES	MID-TERM OUTCOMES	LONG-TERM OUTCOMES
<p>MSAP Support for Project and Personnel, Training, Materials, Supplies, Equipment Magnet Coordinator, Counselors, PCC and Coordinator Industry Partnerships, Instructional Coach - Art Teacher, Arts</p>	<p>Curriculum and Instruction (C&I) - Rigorous core instruction: Reader/Writer Workshop, Works Shop, 50 hrs.) - Magnet Theme: Arts Integration (50 hrs.) - Early College, Early College, Early College - Arts enrichment w/ Technology Career C&I Integration - Cooperative learning</p>	<p>Capacity Built Instruction Skills and Capacity Built: knowledge to implement rigorous knowledge to implement core instruction, learning Early College, cooperative learning; implemented high quality curriculum reviewed curriculum units</p>	<p>Benchmarks for unit quality view, arts dosage and implementation - College dosage and implementation - Student engagement - heterogeneous classes</p>	<p>Increased Achievement in English Language Arts and Math for all students Annual PM 4.1-4.8</p>	<p>PM 5 Year Targets Increased Achievement in English Language Arts and Math for all students Grad. Rate, College Credit, 4.0, 4.6, 4.7 for all students Sustainability- Arts partnerships in place</p>
<p>Principal's Leadership Teachers' Knowledge and Skills</p>	<p>Positive Behavior Interventions & Supports (PBIS) Training (50 hrs.) & Implementation: Positive behavior supports, screening, social emotional learning, support plans</p>	<p>Capacity Built PBIS Skills and Capacity Built: knowledge to implement schoolwide supports and interventions schoolwide support and interventions</p>	<p>Professional Development Benchmarks Dosage on target, used in all classrooms; PD supported arts integration/PBIS</p>	<p>PD targets attained PD targets attained Annual PM 5.1-5.3</p>	<p>Built teacher capacity- 50 hrs. PD each for Early College, literacy, PBIS PM 5.1-5.3</p>
<p>Positive Behavior Interventions/ Supports Expertise, Materials, Supplies - Response to Intervention Coach - Community partners</p>	<p>Parent Outreach & Education, Family Resources Centers</p>	<p>Increased Parent Activities; skills and knowledge enhanced</p>	<p>PBIS Benchmarks 80% SET Score, decreased referrals, decreased absences</p>	<p>Decreased Suspensions Annual PM 6.3</p>	<p>Decreased Suspensions PM 6.3 and Decreased Chronic Absenteeism PM 6.4</p>
<p>Parents, Comm. Asst., Community partners</p>	<p>Desegregation: Student recruitment, application activities</p>	<p>Desegregation- Lg., diverse applicant pool, students registered & enrolled</p>	<p>Parent Activity Benchmarks</p>	<p>Increased Parent Involvement Annual PM 6.2</p>	<p>Increased Parent Involvement PM 6.2</p>
<p>Marketing Consultation and recruitment materials</p>			<p>Applicant Pool Benchmarks Isolated groups 10 points less than current percentages</p>	<p>Decreased Group Isolation of Low SES & Black/AA, Hispanic students Annual PM 1.1, 1.2, 1.5</p>	<p>Decreased Group Isolation of Low SES & Black/AA, Hispanic students PM 1.1, 1.2, 1.5</p>

Low SES 74.4% (District 62.5%), Black or African American 24% (District 13%), Hispanic or Latino 71% (District 61%); John Muir High has newly

partnered with Pasadena City College to offer dual and concurrent enrollment for college credit. Students can earn up to 60 college credits in HS.

LOGIC MODEL: Washington Middle School, STEAM/Spanish Dual Language Immersion Magnet

RESOURCES	ACTIVITIES	OUTPUTS	SHORT-TERM OUTCOMES	MID-TERM OUTCOMES	LONG-TERM OUTCOMES	
<p>MSAP Support for Project and Curriculum Personnel, Training, Materials, Supplies, Equipment Spanish Dual Immersion Teachers Coordinator (DL IP), Califo Instructional Coach Association for Bilingual Education</p> <p>Principal's Leadership Teachers' Knowledge and Skills</p> <p>Positive Behavior Interventions/ Supports Expertise, Materials, Supplies Response to Intervention Coach Community partners</p> <p>Parents, Comm. Asst., Parent Ed. Providers</p> <p>Marketing Consultation and recruitment materials</p>	<p>Curriculum and Instruction (C&I) - Rigorous core instruction: Reader/Writer's Workshop, 50 hrs.) - Magnet Theme: Arts Spanish DL (50 hrs.)</p> <p>- STEAM classes - STEAM integrated classes - Technology Spanish Cooperative - Cooperative learning</p>	<p>Capacity Build Instruction Skills and Capacity Built: knowledge to implement rigorous core instruction, Arts cooperative learning M, DL IP/STEAM cooperative learning; implemented high reviewed curriculum</p>	<p>CE&I Benchmarks Unit quality review arts DL/PA/SE/EA/MTs dosage and implementation. Student engagement heterogeneous classes</p>	<p>Increased Achievement in English Language Arts and Math for all students Annual PM 4.1-4.4, 4.6, 4.7</p>	<p>PM 5 Year Targets Increased Achievement in English Language Arts and Math for all students PM 4.1-4.4, 4.6, 4.7 Sustainability Sustainability - Arts partnerships in place</p>	
	<p>Positive Behavior Interventions & Support (PBIS) Training (50 hrs.) & Implementation: Positive behavior supports, screening, social emotional learning, support plans</p>	<p>Capacity Built Skills and Capacity Built: knowledge to implement supports school wide supports and interventions</p>	<p>Professional Development Benchmarks Dosage on target, used in all classrooms; PD supported arts integration/PBIS</p>	<p>PD targets attained PD targets attained Annual PM 5.1-5.3</p>	<p>Decreased Suspensions Annual PM 6.3</p>	<p>Built teacher capacity- 50 hrs. PD each for DLIP, literacy, PBIS PM 5.1-5.3</p>
	<p>Parent Outreach & Education, Family Resources Centers</p>	<p>Increased Parent Activities; skills and knowledge enhanced</p>	<p>PBIS Benchmarks 80% SET Score, decreased referrals, decreased absences</p>	<p>Decreased Suspensions Annual PM 6.3</p>	<p>Decreased Suspensions PM 6.3 and Decreased Chronic Absenteeism PM 6.4</p>	
	<p>Desegregation: Student recruitment, application activities</p>	<p>Desegregation- Lg., diverse applicant pool, students registered & enrolled</p>	<p>Parent Activity Benchmarks</p>	<p>Increased Parent Involvement Annual PM 6.2</p>	<p>Increased Parent Involvement PM 6.2</p>	
			<p>Applicant Pool Benchmarks Isolated groups 10 points less than current percentages</p>	<p>Decreased Group Isolation of Low SES & Hispanic students Annual PM 1.4, 1.5</p>	<p>Decreased Group Isolation of Low SES & Black/AA students PM 1.4, 1.5</p>	

Low SES 80.6% (District 59.1%) Hispanic or Latino 86% (District 62.5%); Washington Middle (grades 6-8) is located near Jackson Elementary (STEM/Spanish Dual Language). Adding Spanish to STEAM will retain these students in middle school through an articulated program K-8.

The project is supported by strong theory, as demonstrated in the evidence cited here to support two of the objectives of the proposed project: 1) implementing magnet schools to improve academic achievement, and 2) implementing Early College high schools to increase high school graduation and college enrollment rates.

Citation #1: Bifulco, R., Cobb, C. D., & Bell, C. (2009). *Can interdistrict choice boost student achievement? The case of Connecticut's interdistrict magnet school program*. *Educational Evaluation and Policy Analysis*, 31(4), 323–345.

Rating: Meets WWC group design standards without reservations because it is a randomized controlled trial. Reviewed using Single Study Review Protocol.

Citation Outcomes: Statistically significant effect on improving student outcomes. The experimental component of Bifulco et al., focused on two interdistrict magnet schools operated by the Capitol Region Education Council in Hartford, Connecticut. The study found that students who attended these two interdistrict magnet schools had higher test scores in reading and math than students who attended non-magnet schools in the same region of the state. These results were positive and statistically significant for 8th grade students. The effect sizes were .138 for math and .278 for reading.

Relevance to the Proposed Project: The project evaluated in Bifulco et al., and the proposed project share many attributes -- including student demographics, project design, and school assignment policies - which makes the evidence cited relevant to this project. In Bifulco et al., the researchers studied test scores at two schools using an experimental design and then performed a larger study (many more schools and students) using a quasi-experimental design because it was difficult to obtain carefully matched random samples for the larger number of schools. The experimental study used student selection lottery winners as the treatment group

and students who applied to a school but were not selected in the lottery as the comparison group, which was not possible for the larger group of magnet schools. Bifulco et al., found that the quasi-experimental design study, which controlled for student demographics and prior achievement, and drew comparison students from the same district, produced results of comparable reliability to the experimental approach.

- The schools included in the study serve students from a large urban center and its surrounding suburbs. Together the communities of Pasadena, Altadena, and Sierra Madre form a midsize city within the much larger urban area of Los Angeles County.
- Students currently enrolled in PUSD, like those of Hartford, are largely Latino and African-American. In Hartford, the percentages are 31% African-American/Black, 53% Hispanic/Latino, 11% White, 3% Asian. In PUSD, they are 13% African-American/Black, 59% Hispanic/Latino, 18% White, 7% Asian, and 3% other. Both districts serve large percentages of low income students.
- The two magnet schools in the study serve students in grades 6-8 and in grades 6-12. The statistically significant results in reading and math were for grade 8 students. The schools in this proposal serve grades K-5, grades 6-8, and grades 9-12. While the study is relevant to all schools, it is most directly relevant to the proposed middle and high schools.
- The schools in the study were required to develop a special curriculum that was capable of attracting substantial numbers of students of different socioeconomic backgrounds, PUSD is implementing of magnet schools that provide compelling choices for diverse parents because they offer strong programs not available in private schools, charter schools, or other districts in the area.

- Students in the study were selected through a lottery that does not use race as a selection factor and there were no academic selection criteria. A similar selection and assignment process is used in Pasadena.

Citation #2: Berger, A., Garet, M., Hoshen, G., Knudson, J., & Turk-Bicakci, L. (2014). *Early college, early success: Early college high school initiative impact study*. Washington DC: American Institutes for Research.

Rating: Meets WWC group design standards without reservations because it is a randomized controlled trial with low attrition. Reviewed using Transition to College Review Protocol.

Citation Outcomes:

1. Statistically significant effect on improving student outcomes. Students in this study were assigned to participate in either an Early College high school or a comparison group school via a lottery system. There were a total of 1,044 students in grades 9-12 in ten Early College high schools in the intervention group and 1,414 students spread across 272 schools in the comparison group. The authors reported and WWC confirmed that there was a statistically significant positive difference between the intervention and comparison group students in four areas:
 - a. *High school graduation rates.* At 86%, Early College students were significantly more likely to graduate from high school than students in the comparison group at 81%.
 - b. *College enrollment rates.* Early College students (80%) were significantly more likely to enroll in college than students in the comparison group (71%).
 - c. *College degree attainment.* During the study period (2005-2011), 22% of Early

- College students were significantly more likely to earn a college degree (typically an associate's degree) as compared with only 2% of comparison students.
- d. *High school ELA achievement.* The effect size in English language arts was 0.15 with an improvement index of +6. If standardized scores were translated into percentiles, Early College students in this study would score at the 64th percentile, compared with the 59th percentile for comparison students. The study found no statistically significant improvement, however, in achievement in mathematics.
2. Empirical evidence of linkages between critical components of the project design/logic model and the outcomes presented in the study.
 - a. *Academic rigor.* Rigorous instruction, high expectations, extensive writing on various topics, research projects, and defense (students explaining their thinking) all contributed to Early College students reporting “engaging in rigorous learning activities significantly more frequently than...the comparison group.” (Berger, et al. p. 57)
 - b. *College exposure in high school.* Early access to college instruction in high school, college credit accrual, and the differences in instructional approaches between college and high school teachers “helped students to see college as a possibility and provided them with a head start toward postsecondary degree attainment by allowing them to earn a substantial amount of college credit in high school.” (Berger, et al. pp. 55-56)
 - c. *Student Supports.* The wide variety of academic and social supports in this proposal -- including tutoring, advisories, assistance with study skills and time management, individualized instruction and strong instructor-student relationships, and career-focused instruction and career guidance – as well as systematic support with college

preparation – including information, tours, test preparation, and help with applications for admission and financial aid – contribute to student academic success, high school graduation, and to the establishment of a college-going culture at Early College high schools.

Relevance to the Proposed Project: The attributes of this proposal – i.e., the demographics of the students, project design, partnerships, personnel qualifications, etc. – when compared to the attributes of the schools in the study indicate that the evidence in the citation is highly relevant to the proposed project. The study also examined results for various subgroups who also form a significant proportion of the targeted population at John Muir High School (racial/ethnic minorities, low income students, and first-generation college students), and found that Early College impact generally did not differ by subgroup, and when the impact differed, the difference was generally in favor of underrepresented groups.

- Of the ten Early College high schools in the research study, five were in large urban areas; three in small towns; and two in mid-sized cities. Pasadena is a mid-sized city within the much larger urban area of Los Angeles County.
- Seven schools in the study had a two-year public college partner, two had a four-year college partner, and one had both. The partner in this project is Pasadena City College, a two-year public college.
- Minority students comprised 52% of the study’s intervention group. African-American students currently are 24% of the total school population and Hispanic/Latino students 61% of the total.
- 31% of the study’s intervention group was the first generation in their families to attend college. 61% of parents of current Muir students did not attend college.

- Low-income students comprised 47% of the intervention group. 74.4% of current Muir students are low-income.
- Seven of the schools in the study also had a subject-matter focus in addition to providing opportunities to earn college credit. John Muir High School is currently a Linked Learning school with three College to Career Academies.
- All ten schools in the study offered a wide array of supports, including the following proposed for Early College@John Muir High School: tutoring, advisories, and block scheduling.
- Seven of the schools in the study had course sequences that allowed students to earn 2 years of college credit, as will the Early College@John Muir High School.
- Nine of the schools in the study had college instructors, rather than high school instructors, teaching the college-level courses. PCC instructors will teach all college-level courses at the Early College@John Muir High School

The full studies are included in the Appendix.

(e) Quality of the Management Plan (15 points)



The proposed management plan is based on the model currently being used by the Pasadena Unified School District to implement the magnet school project funded by an MSAP grant in 2013. The Project Director and MSAP staff will receive training from David Gregory of G&D Associates -- the nationally-renowned firm which provides change management

consultancy, coaching and mentoring for school and district leaders undergoing complex change -- to create the detailed management and action plans and a communications plan for frequent monitoring and necessary revision of the management plan. The management plan will include: an action plan based on the specific, measurable, agreed-upon, realistic, and time-based goals, objectives, and outcomes described in the Quality of Project Design and Quality of Evaluation sections of this proposal; a clear delegation of responsibilities among the members of the district-based and school-based project staff; a timeline with major project milestones; and well-defined reporting pathways, mechanisms, and deadlines.

A comprehensive District MSAP Action Plan will be developed and shared via Google Sheets, an online spreadsheet program that enables individuals to collaborate, update, comment, and see others' written contributions in real time. The MSAP Action Plan will be shared with the following collaborators: the Chief Academic Officer, Project Director, site administrators, and all MSAP project team members who have reporting responsibilities. The Action Plan is a detailed spreadsheet that includes a Strategic Plan for the entire grant period and Annual Plans for each year of the project. The plan format has been used effectively by current magnet schools due to the level of detail, clear delineation of responsibilities, and use of color coding to easily communicate project status to all MSAP staff. For each major project Goal-- derived from the MSAP application -- there is a specific Deliverable, an Owner (the staff person responsible), a Budget allocation, a Deadline. Each of the Goals also links to a specific detailed Plan that includes Start & End Date, Personnel (including partners and contact information), Training, Detailed Budget, Resources, Incentives, Sustainability, First Step, Milestones and Measures, Criteria for Success, and Evidence.

The Owner of each Goal updates the Action Plan on a weekly basis so that the Project Director can monitor progress and address obstacles as they arise. The Action Plan and all of its components are purposefully designed with a high level of detailed information so that, in case of staff illness or turnover, another member of the project team can see what is in process and assume responsibility for what needs to be done next.

Qualified personnel and representative committees will have clearly defined responsibilities, timelines, and milestones for accomplishing project tasks to ensure project implementation with fidelity and regular monitoring of implementation plans, budget, and objective achievement:

Executive Leadership Team (ELT): The ELT consists of the PUSD Superintendent and six Division Chiefs for Academics, School Support Services, Technology, Facilities, Business Services, and Human Resources are accountable for carrying out the specific strategies and processes needed to accomplish desired actions within the district's Educational Master Plan and Local Control Accountability Plan (LCAP). The Executive Leadership Team has the responsibility of executing the district-level changes relevant to this application with project leadership resting with the Chief Academic Officer who will supervise Project Director.

Project Director: The Project Director will be responsible for managing and monitoring all aspects of the magnet school implementation, including: delegating responsibilities; coordinating work with all consultants, professional development providers, and other collaborating organizations; ensuring that timelines are adhered to, objectives and outcomes are achieved, and activities are implemented within budget; building collaborative partnerships to sustain the project past the grant funded period; communicating with partners, teachers, principals, and District administration; scheduling and facilitating meetings, focus groups, and

other recruitment activities; professional development; collecting and organizing data for evaluation; and reporting regularly to stakeholders on project challenges and successes.

Project-Level Steering Committee: The Pasadena MSAP Steering Committee will provide guidance for the grant and monitor progress towards full and effective implementation of each magnet school and associated component. The Steering Committee will meet at least five times per year during all five project years to monitor project implementation, review progress toward outcomes, and monitor budget expenditures in a synergistic manner. The committee will include the MSAP Project Director, site principals and school site coordinators, representative educators (teachers and administrators), parent representatives from each school, the independent project evaluator (as needed), and representatives from major partner organizations, including the Pasadena Educational Foundation, the Pasadena Education Network, and Pasadena Community College. A representative from the district budget office will also attend as needed.

- Project implementation: The committee will support, monitor, and document that individuals and organizations fulfill their roles and responsibilities, activities are implemented, and milestones are achieved.
- Progress toward outcomes: The committee members will review data regarding advancement toward project objectives as it becomes available, will match those data implementation activities, and will use project data to make informed decisions about future efforts.
- Budget monitoring. The Steering Committee will review actual versus proposed budget expenditures tied to project goals, activities, and outcomes.

When concerns arise regarding implementation or outcomes, committee members will review the allocation of resources, including budgeted items to ensure that resources needed to

achieve objectives are expended as planned or that adjustments are made to improve implementation and subsequent outcomes. The Project Director will meet also weekly with the Chief Academic Officer to discuss progress toward outcomes and budget expenditures.

Progress towards objectives -- i.e., program implementation, outcomes, and budget expenditures -- will be regular meeting agenda items and the agenda will be planned jointly by the committee members with advisement from the evaluator and the business office as needed. All participants will have a voice and decisions will be based on the multiple perspectives represented. We will ensure that all meetings are effective and efficient by using: a strategically designed agenda with commonly understood goals and objectives; a clear, agreed-upon process (Norms of Collaboration) for reaching those goals and running the meeting; an awareness that people come with their personal preoccupations and feelings, as well as an interest in the subject at hand; a sense of involvement and empowerment; people feeling that the decisions are their own; that they are able to do what needs doing; and a skilled facilitator. All meetings will end with milestones for responsible members to complete in the period between present and next meeting to include activities, roles and responsibilities, detailed timelines, resources, outcomes, inputs need to accomplish outcomes, and method of verification that milestones have been achieved. MSAP schools and the overall project will develop a detailed plan for all areas during the first two months of the funded period.

School-Level MSAP Governance (School Site Council): Members of the school-level committees will include the principal, the MSAP site coordinator, elected teacher representatives, elected parent representatives, and major partner representatives for that site (as needed). Meetings will be held at least five times per year and will follow the agenda and process described for the project above. These same teachers and parents will represent the site on the

project-level Steering Committee. Meeting minutes will be shared at each subsequent meeting and posted on the project website as well as other electronic means of transparent management.

Equity and Access Committee: The PUSD Equity and Access Committee (EAC) is a diverse group of staff, parents, and community members facilitated by the PUSD Equity and Access Coordinator. The committee provides advice and support to the Superintendent and his Senior Staff to ensure educational equity and excellence in each of our schools and central office departments in integrating research-based practices and procedures to institutionalize racial equity in education with the goal of ensuring the academic success and socio-emotional development of each and every student who is entrusted to us. The EAC will collaborate with the MSAP Project Director and consultants who support socioeconomic integration plans to carry out the activities involved with completing the Blueprint for Equity and Access as outlined in the management plan below and described in the Desegregation section.

Family Resource Center Work Team: The Family and Community Engagement Coordinator and Project Director will be responsible for establishing the new “satellite” Family Resource Centers at the magnet schools, training for district-based staff and school-based community assistants, and partnerships with community organizations. Key representatives from the School Support Services division, parent leadership groups, community leadership group Collaborate PASadena (see p. 22), and teachers and school-based staff will be recruited for the Work Team.

The Committees and Work Teams will be guided in these efforts by the management plan

that follows:

Project expertise and communication systems support implementation with fidelity.		
Project activity	Deliverable(s)	Completion Date/ Person(s) Responsible
Hire and train experienced, high quality MSAP staff.	Staff in place, training agendas and sign-ins	October 2017 / Project Director, Site Administrator
Implement Steering Committee. Develop shared vision and protocols for meetings. End meetings with next steps: activities, timelines, resources, outcomes, and method of verification.	Meetings agendas and minutes, shared vision and protocols	November 2017 / Project Director, Steering Committee
Establish detailed management and action plans and a communications plan for frequent monitoring and necessary revision.	Plans and procedures in Google Sheets	November 2017 and Ongoing Revision / Project Director, Site Coordinator

Desegregation:**Objective 1**-Minority group and socioeconomic isolation will be reduced.**Objective 6a**-All students will have equitable access to high quality education.

Project activity	Deliverable(s)	Completion Date / Person(s) Responsible
Hire a marketing consultant/agency.	Consultant Agreement	November 2017 / Project Director
Create recruitment and marketing plans that include target audiences, effective messages, marketing tools, responsibilities, etc.	Recruitment and marketing plan	December 2017 / Project Director, Marketing Team
Develop tools and procedures to monitor effectiveness of recruitment efforts. Use results to drive ongoing revisions.	Monitoring tools and procedures	December 2017 / Project Director, Marketing Team & Agency
Train staff on marketing and recruitment plan.	Workshop agendas/sign in sheets	February 2018 / Project Director, consultants
Complete branding. Develop and purchase marketing materials.	School “screams the theme: marquee, banners, brochure, update website, etc.)	February 2018 / Project Director, Site Coordinators, Marketing Team & Agency

<p>Begin targeted marketing efforts.</p>	<p>Marketing materials, targeted mailing lists, outreach event calendar</p>	<p>February 2018 / Project Director, Site Administrators, Site Coordinators, Marketing Team & Agency</p>
<p>Organize the Equity and Access Committee (EAC) into sub-groups and provide workshop on socioeconomic (SES) integration.</p>	<p>Workshop agenda, EAC subgroup assignments, sign-in sheets</p>	<p>November 2018 / Project Director, EAC, SES Integration Consultants</p>
<p>Identify changes needed to current open enrollment policy to achieve SES integration goals, best practices for providing student transportation to achieve SES integration, best practices to attract and increase medium/ high SES student enrollment in PUSD.</p>	<p>List of best practices and anticipated and/or researched outcomes if practices are used</p>	<p>December 2018 / Project Director, EAC, SES Integration Consultants</p>
<p>Brief parents, students, and partners to provide outreach and recruitment support.</p>	<p>Meetings RE: talking points with each group</p>	<p>March 2018 / Project Director, Marketing Team & Agency</p>

<p>Conduct community-wide forums on the purpose of the SES Integration planning process. Inform community about the purpose of the project. Conduct community engagement workshops on SES diversity.</p>	<p>Forum and workshop agendas, sign in sheets</p>	<p>June 2018 / Project Director, EAC, SES Integration Consultants</p>
<p>Recommend and report proposed student assignment options. Review current Open Enrollment and magnet application process. Identify deficiencies and inequities that need to be addressed to make the application process more transparent and parent-friendly.</p>	<p>Initial recommendations for open enrollment, magnet application policy revisions</p>	<p>April 2019 / Project Director EAC, SES Integration Consultants</p>
<p>Customize and beta-test an online application software system for choice-based SES lottery assignment. Review and analyze beta test results. Beta-test results for SES integration with realigned school attendance areas.</p>	<p>Report on optimal SES lottery weighting and attendance areas to achieve SES integration</p>	<p>August 2019 / Project Director EAC, SES Integration Consultants</p>
<p>Beta-test optimum SES Integration plan. Review recommendation for approval by school board, Office of Civil Rights, MSAP Officer. Recommend plan, “Blueprint for Equity and Access” for adoption by PUSD.</p>	<p>Formal recommendations for open enrollment, magnet application policy revisions</p>	<p>January 2020 / EAC, SES Integration Consultants</p>

Review and report date to monitor progress toward objective achievement.	Enrollment data reports	October annually / Project Director and Steering Committee
--	-------------------------	---

Professional Development:

Objective 5-Magnet schools will provide professional development related to Improvement of Curriculum, Instruction and Magnet Theme Development and Implementation.

Project activity	Deliverable(s)	Completion Date/ Person(s) Responsible
Finalize and implement MSAP training schedule. Begin MSAP training.	Training calendar, training agenda & sign ins, rosters indicating participation level	November 2017 and Ongoing / Project Director, Site Administrators, Site Coordinators
Provide follow-up training, ongoing coaching and feedback to support full implementation of new strategies.	Coaching records show teachers received coaching	Ongoing / Site Administrators, Instructional Coaches, Curriculum Specialists
Evaluate professional development effectiveness. Modify training as needed based on results.	PD evaluations, classroom observation records	Ongoing / Project Director, Site Administrators, Instructional Coaches,

		Curriculum Specialists
<p>Academic Achievement & Theme Integration:</p> <p>Objective 2-All students will receive high quality instruction that includes their school's systemic reforms and magnet themes. Objective 3-All students will receive magnet theme instruction. Objective 4-(a) Student academic achievement will increase each year in ELA/literacy and math for all students. (b) The percentage of students from major ethnic and racial subgroups attaining proficiency on state assessments will increase. (c) The John Muir High School graduation rate will increase.</p>		
Project activity	Deliverable(s)	Completion Date / Person(s) Responsible
Maximize master schedules for theme implementation: College and career pathway course schedule and dual enrollment policy (HS), two electives (MS), arts classes (ES).	Revised master schedule for each site	November 2017 / Project Director, Counselors, Site Administrators
Purchase and distribute thematic integration materials.	Budget records, inventory lists	November 2017 and Ongoing / Project Director, Program Assistant, Site Coordinators

<p>Develop curriculum: College and career readiness (HS), Dual Immersion (MS), and arts integrated curriculum (ES); reading and writing (All)</p>	<p>Online, shared curriculum folder for each site</p>	<p>August 2018 / Coaches, Partners, Teachers</p>
<p>Identify partners for real-world learning experiences (including speakers, field trips, VR tours, mentoring, job shadowing, and internships).</p>	<p>2 or more community learning experiences per grade level linked to academic content</p>	<p>August 2018 / Project Director, Site Coordinators, Teachers</p>
<p>Increase counseling, tutoring, intervention, student/parent support classes. Provide additional supports for English learners, students with special needs and students struggling with ELA/math.</p>	<p>Schedule and description of additional resources</p>	<p>August 2018 / Project Director, Site Coordinators, Site Administrators Teachers, Counselors, Curriculum Specialists, Instructional Coaches</p>
<p>Monitor and report student achievement data (benchmark data) and progress toward objective achievement. Modify supports as needed.</p>	<p>Benchmark data, data reports with modifications listed</p>	<p>Every other month, Ongoing / Project Director, Counselors, Site Administrators Teachers</p>

Parent Involvement:

Objective 6b-There will be an increase in parent participation at each magnet school.

Engage parents in leadership roles on MSAP Steering Committee and Site Committees, Equity & Access Committee.	Parent nomination/ election forms, meeting sign in sheets	November 2017 / Project Director, Steering Committee Site Coordinators, Comm. Assistants
Increase parent classes to provide academic/ college and social-emotional learning information and forums to bring diverse parent groups together.	Schedule and description of additional resources	November 2017 / Project Director, Site Coordinators, Site Administrators, Partners, FRC Work Team
Create site family resource centers with staff and information about enrollment, programs and classes, and community resources.	Established centers, resources in multiple languages	December 2017 / Site Administrators, Site Coordinators, Comm. Assistants, FRC Work Team
Brief parents to provide outreach and recruitment support.	Meetings RE: talking points at each site	March 2018 / Project Director, Agency, FRC Work Team

Positive Behavior Supports and Interventions:

Objective 6-There will be reduced suspensions at each magnet school.

Objective 6d-There will be reduced chronic absenteeism at each magnet school.

Project activity	Deliverable(s)	Completion Date/ Person(s) Responsible
Coordinate professional development with social emotional learning providers.	Training calendar, sign in sheets, agendas	November 2017 / RtI Coach
Convene RtI team and determine school wide behavior supports and interventions (Tier 1). Train staff, students, and parents.	School Positive Behavior Plan	December 2017 / RtI Coach, RtI Team, Site Administrators
Administer Universal Screening tool to identify students who could benefit from personal support plans and appropriate Tier 2 interventions	Screening results, personal support plans	December 2017 / RtI Coach, RtI Team, Site Administrators, Teachers
Collect data on student behavior and school climate. Modify the training and/or structures and student supports as needed, based on an analysis of the results (Tier 2 and Tier 3 Interventions with necessary).	Suspension, truancy reports, personal support plans	Monthly / RtI Coach, RtI Team

Program is sustained through built teacher capacity, increased parent involvement, established partnerships, and increased funding due to increased enrollment.

Project activity	Deliverable(s)	Completion Date / Person(s) Responsible
Finalize sustainability plans (procedures, structures, activities to continue, impact, and funding sources identified) and partner commitments to sustain MSAP classes, theme integration, and recruitment efforts.	Sustainability plans, memorandums of understanding with partners	December 2018, Final December 2020 / Project Director, Site Administrators, Site Coordinators, Steering Committee

(e)(2) How the applicant will ensure that a diversity of perspectives are brought to bear in the operation of the proposed project, including those of parents, teachers, the business community, a variety of disciplinary and professional fields, recipients or beneficiaries of services, or others, as appropriate

PUSD has already convened an **Equity and Access Advisory Committee** (as introduced on p. 94) to provide advice and support to the Superintendent and his Senior Staff to ensure educational equity and excellence in each of our schools and central office departments. The Advisory Committee first convened in October 2016, has met monthly, and is comprised of parents, guardians, community members, city representatives, higher education, teachers, staff and instructional leaders who reflect the diversity of Pasadena Unified School District families. In its first five months, the team has created a Student Bill of Rights, trained the team on the

Personal Support Plan initiative and Data Driven Dialogue, and refined an equity lens and self-assessment guide to provide school site equity teams with a common vocabulary and protocol for establishing and prioritizing goals and recommending resource allocations. The committee will ensure that diverse perspectives and research-based practices inform the recommendations, policies, and procedures that are revised as part of the Equity and Access Blueprint. The committee will also monitor implementation of Personal Support Plans for students to ensure equity, academic success, and the socio-emotional development of each and every student who is entrusted to us.

The project will also utilize the networking capacity and community-wide communication offered by **Collaborate PASadena** (www.collaboratepasadena.org), a framework for collective impact and shared leadership with a shared vision for the children of Pasadena, Altadena and Sierra Madre to all grow up in a safe, stable and supportive environment and a mission to work collaboratively to ensure desired outcomes for all children and families through the alignment of resources, shared accountability and meaningful participation of diverse stakeholders. It is guided by a Leadership Council that includes the Mayor and City Manager of Pasadena, council members and Chamber of Commerce representatives from Altadena and Sierra Madre, PUSD Superintendent, Pasadena City College President, Caltech Education Director, and student, parent, faith-based and community representatives. The existing networks and communication vehicles previously established by Collaborate PASadena will help support community engagement and outreach.

The project will also benefit from the perspectives of the many diverse **parent leadership groups**, including the district-wide and school-based African American Parent Councils, English Learner Advisory Councils, PTAs, and Community Advisory Council for

Special Needs Students. Local **community and civil rights organizations**, including the NAACP, Latino Coalition, Pasadena/Altadena Coalition for Transformative Leaders (PACTL), and neighborhood associations will be recruited to participate in the development of the project as members of the Equity and Access Committee to inform policies and strategies that promote socioeconomic integration and inclusive programs.

(d) Quality of Personnel (5 points)

Pasadena Unified School District has 16 years of experience in the planning and operation of signature programs and magnet schools including the management of three magnet schools in 2001 and four in 2013 established with MSAP grant funding. These magnet schools have included the development of innovative new curricula development, desegregation strategies, professional development, and evaluation. The continuity of district personnel, who have helped to successfully implement these projects, as well as magnet programs in other communities, will support the achievement of the goals of the proposed project.

(d)(1)(a) The project director (if one is used) is qualified to manage the project.

The day-to-day management of all aspects of project implementation will be the responsibility of a full time (1.0 FTE) MSAP-funded Project Director. PUSD will require that the Project Director have knowledge, experience, and training in the following areas:

- Magnet theme curriculum development.
- Design and implementation of desegregation strategies, including marketing, recruitment, lottery procedures, early notification, and follow up after lottery selection.
- Program implementation and change facilitation of magnet school programs or similar complex educational innovations.

- The design and implementation of school improvement plans to increase student achievement, including the development of comprehensive support services to provide all students to access to and success in rigorous curriculum.
- Organization and facilitation of professional development, including the coaching, feedback, and sustainability of skills taught in training efforts.
- Understanding of and ability to manage timelines, action plans, and work teams to create and sustain magnet school components.
- Communication to work successfully with magnet partners, teaching staff and site administration, parents and students.
- Recording, collection, presentation, and analysis of data.

Additional required qualifications include: Valid California Administrative Credential and/or California General Pupil Personnel Services Credential and 3+ years successful administrative experience.

(d)(1)(b) Other key personnel are qualified to manage the project.

1. District Office Personnel

The **Project Director** (Magnet Coordinator) will report directly to the Chief Academic Officer, Dr. Shawn Bird. The Equity and Access Coordinator will collaborate with the Project Director and expert consultants to create the Equity and Access Blueprint. MSAP funds will provide a Database Specialist and Program Assistant. The responsibilities and qualifications are described here; brief biographies of key personnel can be found in the following section (d)(2) and sample resumes and/or job descriptions can be found in the attachments.

Database Specialist: A Database Specialist will support the Project Director and evaluators in recording, collecting and analyzing both demographic and student achievement

data to determine the effectiveness of each of the desegregation strategies, professional development programs, and student support systems and efforts. This position will work closely with the PUSD Office of Enrollment, Permits & Student Records and Innovative Technology Services. Qualifications: Knowledge of and training in ARIES student information systems, 3+ years' experience in assessment development, and 3+ years working with teachers at site or District level.

Program Assistant: The Project Director will be assisted by a Program Assistant who will assist with ordering and distribution of marketing and recruitment material, requisition and procurement of MSAP-funded materials and supplies, and record keeping for evaluation and performance reports. Qualifications will include four years increasingly responsible clerical experience and a high school diploma.

2. Site Personnel

One of the most critical factors to magnet success is the “conviction, enthusiasm, and readiness to contribute” of the project teachers and administrators (Dentler, 1991). Principals and teachers for each site were selected based on high-degree of interest in working at the magnet site, skills and training specific to the magnet themes, experience in curriculum development, flexibility and willingness to take on new challenges.

The following MSAP positions will support implementation of the project at magnet sites: Site Coordinators, Instructional Coaches, Response to Intervention Coaches, Technology Coach, Counselors, Curriculum Specialists (Dual Immersion, Arts), and Family Resource Center Community Assistants. The responsibilities and qualifications are described here and sample resumes can be found in the attachments.

Magnet Site Coordinators (1.0 FTE at Altadena, Muir): Each Site Coordinator will be a Teacher on Special Assignment. The position will be responsible for creating the cohesive structure at each school to support the project goals, including recruitment and outreach, facilitating meetings of teachers and staff, purchasing, coordination with the Project Director and principal, and site-level reporting. Qualifications: Teaching credential, advanced coursework related to project objectives, and 5+ years successful teaching experience in the appropriate grades; 2+ years leadership experience in conducting staff and curriculum development; experience or training in the magnet theme, diversity in education, positive parent communication, promoting school climate and positive student interactions; experience or training in facilitating Professional Learning Communities, organizing agendas setting norms, presenting and analyzing data. Curriculum specialists will fulfill these duties at Washington STEAM Magnet Academy with direct support from the Project Director since this site already has MSAP experience.

Instructional Coaches (1.0 FTE, 10 months at each magnet school, Site Funded): To support teachers in implementing the magnet themes and literacy strategies in all classes. The Instructional Coaches will conduct workshops, organize professional development, demonstrate strategies, assist teachers with curriculum differentiation, and provide and/or arrange coaching for teachers. In addition, the Coach will assist the Project Director and principals to design and implement school wide interventions and systems for student success. Qualifications, experience, and training will include: Teaching credential, advanced coursework related to project objectives, 3+ years' successful teaching experience in the appropriate grades, 3+ years' experience in conducting staff and curriculum development, training and teaching experience in the magnet theme and literacy strategies, and certification to teach English Learners.

Response to Intervention Coaches (1.0 FTE, 10 months at each school): To provide ongoing professional development to teachers, support staff and site administration in the implementation of positive behavior supports and structures school-wide. In collaboration with the Project Director and principals, the RtI Coaches will structure school wide behavior supports, plan and implement appropriate interventions, collect data on student behavior and school climate, modify the training and/or structures and student supports as needed, based on an analysis of the results. Qualifications: 3+ years leadership experience in facilitating professional development and/or implementation of Positive Behavioral Intervention and Supports, training in and experience in implementing behavioral Response to Intervention, Current Crisis Prevention Institute (CPI) certification (or willingness to obtain within first few weeks of accepting the position), and 5+ years successful teaching or counseling in appropriate grade levels

Curriculum Specialists (1.0 FTE, 10 months, Year 1 at Altadena Arts Magnet; 2.0 FTE at Washington STEAM Magnet Academy): To develop the magnet theme curriculum and work with all teachers to develop theme-integrated lessons across all academic content areas. In the Arts Magnet, they will collaborate to develop arts-integrated lessons, projects and activities in which students develop their creative abilities by solving problems and presenting information across a wide array of content, from history to science. They will also provide follow-up support and coaching after partner provided training. In the STEAM/Spanish Dual Language Magnet, this includes creating Spanish STEAM integrated curriculum for history, Spanish Literature & Language Arts, and Spanish for Spanish Speakers for 6th, 7th, and 8th grades. After Year 1 of the project, their responsibilities shift increasingly in each year to classroom teaching and curriculum refinement. Qualifications: Knowledge of Common Core State Standards, educational reform, development of curriculum and instruction, professional

development, collaborative planning process, and the principles of dual immersion and development of the Spanish language; successfully experience as a classroom teacher, preferably in a dual immersion program; successful experience coaching/mentoring bilingual, immersion, and/or ELD teachers; proficiency in data analysis and data-driven instruction; effective collaboration skills; and an ability to work within a team teaching environment.

Technology Coach (1.0 FTE, 10 months, shared by Altadena Arts Magnet and Early College@John Muir High School): To support all teachers in the effective integration of technology and instruction, provide training in the use of technology in pedagogy, ensure equitable access for all students to technology, and maintain equipment as necessary.

Qualifications: Minimum of five years of classroom experience, coursework in Educational Technology and/or practical experience in the classroom, demonstrated PC and Macintosh experience, and ability to troubleshoot computer/video/technology problems.

Counselors (1.5 FTE, 10 months at the Early College@John Muir High School): To provide additional counseling time to ensure all students receive college- and career-readiness counseling, opportunities to participate in internships with community partners; appropriate placement and credit, support services to access rigorous curriculum, and intensive advisement on career pathways and college coursework. Qualifications, experience, and training required for these position follows: Pupil Personnel Services Credential and 3+ years successful counseling experience; experience and training with Dual Enrollment, California Partnership Academies and College and Career Pathways; knowledge of student information systems to collect and analyze data relative to attendance, behavior, and achievement; Bilingual English-Spanish; experience articulating with post-secondary institutions and monitoring and collecting data on dual enrollment opportunities, CTE enrollment and post high school enrollments; knowledge of UC

course requirements and GPA requirements for CSU and UC, familiarity with UC's Transcript Evaluation Service (TES); ability to communicate effectively and develop relationships with college and university admissions offices as well as other relevant student groups.

Family Resource Center Community Assistants (315 hours/year at each magnet school). To provide information about the school, resources and assistance to prospective and current families, train student and volunteer ambassadors, schedule tours, assist with magnet events and fairs, and help represent the school to the community-at-large. Qualifications: Must possess a high school school diploma, or its equivalent (GED). Advanced education, such as an Associate (AA) degree, or education beyond an AA degree is highly desirable. Experience: Equivalent to one (1) year of full-time experience working with community agencies and school age children is required.

3. Other Key Personnel and Consultants

Project Evaluator: American Education Solutions (AES) will be the external evaluator for this project, in collaboration with the National Center for Research on Evaluation, Standards, and Student Testing (CRESST) at UCLA. Since 1995, AES has evaluated 61 Magnet Schools Assistance Program grants. The AES team includes highly experienced magnet practitioners and university partners. AES practitioner teams include site visitors who have many years' experience as teachers and as magnet school principals, as well as administrators of magnet projects and other equity programs. For the past seven years AES has partnered with CRESST on rigorous evaluations and on survey development and analysis for Magnet Schools Assistance Program projects. For the 2010-2013 cycle AES partnered with CRESST on 5 rigorous MSAP evaluations. For the 2013-2016 cycle, AES partnered with CRESST on another 5 rigorous MSAP evaluations. And for the 2016 – 2019 cycle, AES and CRESST will work together on

another 3 rigorous MSAP evaluations. Prior to 2010, AES worked with Education Alliance at Brown University and the SERVE Center at the University of North Carolina on 10 rigorous MSAP evaluations. CRESST will perform the quasi-experimental design study, as well as survey design, analysis and reporting described in the evaluation section of this proposal. CRESST has done hundreds of high quality education studies. The Principal Investigator (PI), Dr. Joan Herman, and the Co-PI, Dr. Jia Wang, have done well received, high quality research for many years. The duties, responsibilities, qualification and experience of the evaluators are described in greater detail in the Quality of Project Evaluation section.

Marketing, Community Outreach, Family Engagement and Recruitment Team:

The team responsible for developing, implementing, and evaluating the Recruitment Plan described in the Desegregation section of this proposal collectively have more than 25 years of experience developing effective marketing, communications and community outreach strategies, including work on MSAP-funded magnet school programs in Pasadena and other communities in the United States. Their qualifications include: experience in designing comprehensive public relations campaigns involving press, print media, television, radio, web; command of current social media tools, trends, and techniques (i.e., Facebook, Twitter, LinkedIn, YouTube, Blogs, etc.) and social listening tools such as TweetDeck and Google Alerts; experience conducting targeted outreach and messaging to ethnic, cultural, geographic, and socioeconomically diverse populations; fundamentals of writing, editing, composition, layout, and production of employee publications, news magazines, and educational publications; quantitative and multi-faceted market research, and statistical analysis and data gathering techniques; ability to create and obtain input from focus groups, develop and implement ad campaign, create free and paid media

spots, write press releases and other communication; background in graphic design and development of brochures, posters, and websites.

(d)(1)(c) Teachers who will provide instruction in participating magnet schools are qualified to implement the special curriculum of the magnet schools.

Current teachers have been selected to ensure the successful implementation of the magnet program and future hiring as enrollment increases or openings arise will maintain this emphasis on teaching excellence. All current teaching staff members share a high degree of interest in working at the magnet sites, skills and training specific to the magnet themes, experience in curriculum development, and flexibility and willingness to take on new challenges.

There will be a total of 81 classroom and resource teachers who will provide instruction, receive training, or participate in curriculum development at the three MSAP sites in Year 1 of the project. All teachers meet the following essential criteria for participation in the magnet project, and as the magnet schools attract more students, PUSD will hire additional teachers as needed for each site based on these same criteria. Highly qualified teachers from within the District will have priority.

- Demonstrated interest and commitment to the purposes of the magnet school program: inclusion and diversity, high standards for all students.
- Experience in or commitment to participate in magnet curriculum development.
- Willingness to attend professional development and implement new strategies.
- Flexibility and ability to collaborate, work as a team, and support the concept of shared decision-making.
- Knowledgeable about analysis of student achievement data and how to make instructional decisions based on assessment data.

- Commitment to maintaining/sustaining magnet school structures and strategies.
- Have completed coursework or testing for state English Learner authorization, qualified to provide English language development and sheltered content for English Learners.

Dual Enrollment courses for college credit at the Early College@John Muir High School may be taught by a high school teacher who has a Master’s Degree in the subject to be taught. The application process will include an interview with the appropriate PCC Division Dean and faculty members. PCC instructors teach concurrent enrollment/Early College courses.

(d)(2) Key personnel’s knowledge of and experience in curriculum development and desegregation strategies.

At each of the proposed magnet sites, the administrators, teachers, support staff, partners, volunteers, as well as students and parents, have demonstrated their commitment to the creation and development of a high-quality magnet program. The District will support their efforts through the careful hiring and placement of qualified MSAP staff with outstanding knowledge, experience, training, and qualifications to develop and implement curriculum and desegregation strategies. The following are brief biographies of key project personnel:

Project Director: Shannon Mumolo, MA Ed., has been the PUSD Magnet Coordinator since 2014. In this position, she has collaborated with leadership teams to create action and sustainability plans aligned with school visions for the implementation of the 2013 MSAP grant at four PUSD schools; supported coaches in the development of theme-integrated instruction (STEM/Arts) and coordinated teacher professional development; facilitated collaboration between magnet teachers and scientists and artists to develop, co-write, and co-teach integrated lessons through a Gradual Release Model and to establish online library of integrated lessons;

engaged current and prospective families through stakeholder meetings and family events to improve communications and to empower parents as leaders; used evaluation including Google Forms and paper surveys to analyze and improve outreach efforts; created marketing plans to successfully recruit families from private and charter schools for increased enrollment; and developed and strengthened partnerships with Arts and STEM organizations to enhance educational programs including: Caltech Community Science Academy, Lineage Dance, The Huntington, Light Bringer Project, The Pasadena Playhouse. Prior to becoming the PUSD Magnet Coordinator, Mumolo was a classroom teacher, curriculum specialist, instructional coach and trainer for ten years.

Chief Academic Officer: Shawn Bird Ed.D. has been the Chief Academic Officer PUSD since 2015, comes to Pasadena from LAUSD where he served as Director of Instructional Supervision and was responsible for Principal Supervision within the Superintendent's Intensive Support and Innovation Center. Dr. Bird supported schools, including LAUSD's extensive network of magnet schools to improve student achievement and socioeconomic and racial integration through innovative programs. Dr. Bird also has experience serving as Principal of middle and high schools, and as an Assistant Professor of Teacher Education (University of San Francisco).

Equity and Access Coordinator- Trudell Skinner, MA Ed. leads PUSD's Equity and Access efforts including facilitation and leadership of the Equity and Access committee. Ms. Skinner is an experienced leader with equity, high school pathways, and extensive data analysis and reporting. As former Principal of Blair High School, provided professional development to staff relating to the African American Student Success Initiative (2012-2016), analyzed and submitted data necessary for including Blair High School in the US News and World Report

Silver Medal Best High School Rankings (2015), collaborated with the Health Careers Academy Team in completing the certification requirements for being named a National Academy Foundation certified academy (2014).

Additional resumes of highly qualified staff are provided in the attachments to demonstrate that the District has the internal capacity, expertise, and experience to provide the leadership necessary for full project implementation.

(e) Quality of Project Evaluation (20 points)

This evaluation, spanning the five years of this project, is designed to produce evidence of promise (rigorous evaluation with two sets of quasi-experimental studies) as well as provide feedback to help school and district staffs improve project performance and attain high levels of fidelity of implementation. The evaluation will also produce information needed by the United States Department of Education (USDOE) to properly evaluate project effectiveness, determine if all project activities are implemented as designed and on time, and to insure that adequate progress is made toward the attainment of all project outcomes (two annual summative reports).

Data Collection: This evaluation will draw on a wide variety of data to provide substance and context for formative and summative reports and the quasi-experimental study. The evaluation contractor will develop a complete set of data collection instruments (including surveys, data and document requests, and observation and interview protocols) designed to collect sufficient information to address performance measures, perform the quasi-experimental analysis and supplement extant data. However, extant data will be used whenever possible to lessen the burden on school and project staff. The data to be collected will include:

Student academic achievement, demographic, enrollment and other data: The

contractor will collect standardized test score data (e.g., school and grade level and individual student data linked to their teachers) needed to address performance measures related to student academic achievement and perform the quasi-experimental study. School enrollment, applicant pool and student selection data disaggregated by race/ethnicity and socioeconomic status data will indicate the extent to which the schools succeed in meeting desegregation related performance measures.

Document requests: The contractor will request documentation from magnet school teachers and MSAP staff to help determine the quality and extent of MSAP implementation. Examples include: ► **descriptions of and dosage** (amount of program delivered) **for units and courses** that present the magnet theme to students; and student recruitment, teacher professional development, parent involvement; ► **schedules** of school based magnet staff; ► School improvement plans. **Observation and interview data** will be collected during site visits to each school (see schedule at end of section), by trained evaluators with extensive experience in magnet schools. During site visits, the evaluator will conduct walkthroughs, observe lessons, and interview teachers, administrators, students and parents to help assess progress towards performance measures.

Surveys will be administered annually to all teachers and a sample of students (one complete grade) at each magnet and comparison school. Comparison schools will be selected based on school size, grade span, and school-level student achievement and demographics. Drawing on its 20-year history of MSAP and regular and rigorous evaluations, American Education Solutions developed survey items and scales with its survey consultants, Dr. David Silver, a senior researcher at UCLA's CRESST Center, and currently, Dr. Jia Wang, a senior research scientist at CRESST. *These survey items are directly related to the purposes of the*

MSAP and the logic model, objectives and performance measures of this proposal. Validated survey items and scales measure constructs including school climate, instructional leadership, professional development hours (formal, collaborative and coaching) and effectiveness, student academic commitment and expectations, student engagement and motivation, student and teacher perceptions of intergroup relations and magnet theme implementation, standards based instruction, systemic reform implementation, parent involvement, and magnet-specific professional development dosage.

(e)(1) The extent to which the methods of evaluation will, if well-implemented, produce evidence of promise (as defined in this notice)

CRESST’s Rigorous Evaluation of Magnet Schools Assistance Program

The rigorous evaluation design proposed below will be carried out by researchers at University of California Los Angeles (UCLA), Center for Research on Evaluation, Standards, and Student Testing (CRESST). Dr. Joan Herman will be the principal investigator (PI), and Dr. Jia Wang will be the co-principal investigator (co-PI) and project director. The UCLA team has many years of experience conducting similar studies, including evaluations of magnet schools (e.g., Los Angeles, New Haven), charter schools (e.g., Green Dot), and I3 validation grants (e.g., Literacy Design Collaborative). Both the PI and co-PI have peer-reviewed publications based on our prior magnet work (Wang, Schweig & Herman, 2014 & 2017).

UCLA CRESST’s rigorous evaluation of the impact of Pasadena Unified School District’s Magnet School Assistance Program (MSAP) grant on student learning will be comprised of two sets of quasi-experimental studies and will also examine fidelity of implementation of Early College High School program and magnet implementation. These quasi-experimental studies are designed to meet the “What Works Clearinghouse Evidence

Standards with reservations” by comparing MSAP outcomes with an identified comparison group that is similar to the treatment group at the baseline. If the interventions are well implemented, we expect the quasi-experimental studies to produce evidence of promise on the relationship between program implementation and objective performance outcomes.

The first set of quasi-experimental studies will examine the impact of the Early College@ John Muir High School on the achievement of students in the pathway as compared to the achievement of academically and demographically similar comparison students in the other three pathways (Engineering, Arts, and Business) at Muir. The second set of quasi-experimental studies will explore how students in each of the three project magnet schools perform relative to academically and demographically similar peers in similar non-magnet schools in Pasadena Unified. The following sections will describe these studies in detail.

Our studies will be conducted with the statistical rigor of a high-quality quasi-experimental design, but with keen attention to limitations of available data and sample sizes, and on a scale that is reasonable within the current funding structure. This evaluation strives to bolster the current body of research with instrumentation and analytic methodology aligned directly with the priorities and selection criteria of the Magnet Schools Assistance Program (MSAP), and it is intended to contribute to the evidence-based database on magnet schools the Department of Education is building.

While we will administer annual surveys to students and teachers to get their perspectives on their magnet schools and provide context for our student outcome analysis, the evaluation focuses on measuring MSAP impact on student achievement in English Language Arts (ELA), math, and science, as well as graduation and college course completion at the high school level. Using a statistically rigorous, high-quality quasi-experimental design, we examine the following

broad evaluation questions:

- **Evaluation Question 1.** How did students in the early College Pathway perform on assessments in English Language Arts, math, and science relative to matched students in the three career and technical education pathways at Muir? How did the graduation rate and college course completion rate compare in the two matched samples?
- **Evaluation Question 2.** How did students attending each of the three target MSAP schools perform on state tests relative to matched students at comparison non-magnet schools in Pasadena Unified School District? How did the graduation rate at the MSAP high school compare to graduation rates at comparison high schools?
- **Evaluation Question 3.** How did the level of magnet implementation vary across the three target MSAP schools?

The following sections describe how these evaluation questions will be addressed:

Evaluation Question 1: Quasi-Experimental Study of Early College Career Pathway Program

As noted earlier, Muir High School will create a new Early College Career Pathway as part of the MSAP grant. Students choosing to enter the Early College program will be able to access a large number of college courses during the four high school years, by enrolling in Pasadena City College classes taught on a satellite campus at Muir. Students will have the opportunity to complete an Associate's degree concurrently with their high school education and will be provided a variety of supports including guidance to help them access college course and prepare for matriculation into 4-year institutions.

Students will decide in eighth grade which career pathway to enter into in the following year. The Early College pathway will be an option starting for ninth graders entering Muir High

School in fall of 2018. The student enrollment in the Early College pathway is expected to be 25 students in year 2 (2018-19), 50 in year 3, 75 in year 4, and 120 in year 5. Student outcome measures for this study will include grade 11 Smarter Balanced scores in ELA and math, grade 10 California Science Assessment (CAST) scores, graduation rate, and college course completion. Our study will be able to analyze the impact on CAST scores for two cohorts of students (10th graders in 2019-20 and 2020-21), Smarter Balanced scores for one cohort (11th graders in 2020-21), college course completion in 2019-20 and 2020-21, and high school graduation for one cohort (12th graders in 2021-22).

Identification and Matching of Comparison Group

We will utilize a radius matching approach to select students from the other pathways who are similar to Early College students across a broad range of variables (Huber, Lechner, & Wunsch, 2010). The radius matching approach will compute a distance measure comprised of both a propensity score and a Mahalanobis distance score for all eligible comparison students. Any comparison student whose distance measure falls within a defined distance (radius) of a treatment student in the same grade will be matched to that student.

If the propensity scores of multiple comparison students are sufficiently close to a single treatment student, each comparison student will receive a weight inversely proportional to her difference measure. For example, two comparison students who have identical difference measures within the defined radius distance would each receive a weight of 0.5. Treatment students will be removed from the analyses when they cannot be matched to any comparison student within the defined radius. The approach will also apply a trimming technique to ensure that no single control case is weighted too heavily in the analysis (Huber et al., 2010). We intend to use the following variables in the matching process: grade, gender, race/ethnicity, English

Language Learner (ELL) status, National School Lunch Program (NSLP) status, special education status, and prior achievement score.

Analysis Approach

Our research will compare the outcomes of students in the Early College pathway to demographically and academically similar students in the other Muir High School career pathways. To examine the effect of Early College on student achievement outcomes we will use a regression-based approach with bias adjustment, which performed well in a recent simulation study as detailed in Huber, Lechner, & Steinmayr (2012). Specifically, we will first use a Weighted Ordinary Least Square (WOLS) regression equation on the comparison student population to produce the coefficient estimates.

A counterfactual estimate will then be obtained by adding a bias adjustment from the regression results to the average observed score of the comparison population in an outcome year. This counterfactual represents an estimate of how these students may have fared if they had not entered the Early College pathway and had instead an alternative career pathway. The average treatment effect on the treated (ATT) (Ho, Imai, King, & Stuart, 2007) is determined by subtracting the counterfactual estimate from the actual average observed score of the students enrolled in the Early College pathway. This approach is known as a double-robust regression as the estimator is said to be consistent if either one of the two models (propensity score or regression) is correctly specified (Huber et al., 2010). In other words, controlling for prior indicators relevant to treatment status and achievement in both the matching model and the analysis model increases the robustness of the estimates.

Evaluation Question 2: Quasi-Experimental Studies of Magnet School Attendance

To answer Evaluation Question 2, we will conduct individual school analyses for each of the 3 magnet schools in this grant application. However, there are three key differences. The first difference is that instead of identifying comparison students from other pathways within Muir High School, the comparison students will be identified from similar non-magnet schools in Pasadena Unified via a two-step process. Specifically, we will first select comparison schools within the district based on how closely they match the characteristics of MSAP supported schools in the year prior to magnet implementation using hierarchical cluster analysis. The comparison school selection will take into consideration the grade span of the school, school size based on enrollment, school racial composition (i.e., percentage of Black and Hispanic students), the percentage of ELL students and the percentage of NSLP participants.

To identify comparison students, the research team will first restrict the pool of MSAP and comparison students to those that had achievement outcomes for each outcome year and may also limit the students to those at the same MSAP or comparison schools for a defined period of time. A covariate balancing propensity score will then be computed for the eligible comparison students. Students from each comparison sample will be matched to MSAP students with similar propensity scores using radius matching.

The second difference is that instead of investigating the effect of Early College on student outcomes, we will investigate the effect of magnet school attendance on student outcomes. Our research will examine the effect of MSAP implementation by comparing outcomes of students in MSAP schools to the counterfactual condition of how they would have fared if they had not been a part of the MSAP program. As described earlier, this effect is known in the literature as the average treatment effect on the treated (ATT).

The third difference is that we will conduct individual school analyses (one for each of the three schools). These analyses will examine the impact of attending a magnet school on student performance on Smarter Balanced ELA and math in grades 4-8 and 11, on the CAASPP in grades 5, 8, and 10, and graduation and college course completion at the high school level.

Evaluation Question 3: Variation in Magnet Implementation across Target MSAP Schools

As described earlier, our evaluation will collect and analyze data on magnet implementation via surveys, site visits, and analysis of artifacts. These instruments will be used to construct variables such as magnet theme implementation, professional development usage, etc. and thresholds for adequate fidelity of implementation will be set for each measure.

CRESST will work closely with AES and the district in developing the rubrics used to rate the classroom artifacts teachers submit for peer review. The classroom artifacts will include end-of-unit assessments developed by teachers and the accompanying student work.

Assignment/assessment tasks can serve as windows into such variables as teacher clarity of instruction, cognitive rigor of instruction, and, in this case, degree and quality of magnet theme implementation. The CRESST team will also independently score a random set of these artifacts to ensure that school site peer review teams are reliably scoring the artifacts in alignment to the expectations set forth in the rubrics.

Based on collaboration with AES and the school district, the CRESST research team will create a fidelity index incorporating the various variables which we will use to measure quality of implementation at the school level. We will determine different levels of fidelity for each construct, including a threshold for adequate implementation. The fidelity index will indicate whether a particular school performed adequately across the different constructs, such magnet theme implementation, quality of professional development, etc.

UCLA CRESST has been developing a database of individual school MSAP effects based on our prior evaluations, and has published multi-site analysis work based on this database. Individual school effect estimates and fidelity measures from the current study could potentially be used in future analyses that would take advantage of this growing database of magnet studies.

Evidence of Promise

(1) The Early College study will establish a link between the Early College component of Muir High School's logic model and student outcomes in ELA, math, science, graduation, and college course completion.

(2) The magnet school study will be conducted for each of the three project schools, and the study will establish a link between the Quality Magnet Curriculum and Instruction component of their logic models and student academic outcomes for ELA, math and science on state tests, as well as graduation and college course completion at the high school level.

Rigorous Evaluation Timeline

► Study design revision (Year 1); ► UCLA and district IRB application & renewal (Years 1-5); ► Request and analyze school level data to identify comparison schools for surveys (Year 1); ► Survey development (Year 1); ► Survey administration, analysis and reporting (Years 1-4); ► Development of artifact scoring rubrics (Years 1-2); ► Scoring and analysis of artifact data (Years 3-4); ► Analysis of implementation variables (Years 3-4); ► Student level data request (Years 1-4); ► Student outcome data analysis & reporting for Early College study (Years 4-5); and ► Student outcome data analysis & reporting for magnet attendance study (Years 4-5).

Rigorous Evaluation Reporting

Students are tested in late spring, and the testing data usually become available in

September at the end of the grant year. To study the impact of Early College on student outcomes, we will analyze student outcome scores in years 3-4 at the beginning of Years 4-5. The analysis of the impact of student attendance in the magnet schools in years 3-4 will also be done at the beginning of Years 4 and 5. With that said, the year 5 analysis will include 2021-22 student graduation data. A draft report will be submitted to the district within 8 weeks of the receipt of the complete data set.

The report will contain an executive summary, introduction, description of the school district and the participating magnet schools, analysis procedure that describes data, data collection, and analysis approaches, and the analysis results for both quasi-experimental studies. For the Early College study, results will be reported for the comparison between Early College pathway students and comparison students in the other career pathways at Muir High School; and for the magnet school study, student results will be presented for each school relative to non-magnet schools in Pasadena Unified. When the sample size allows, the results will be disaggregated by race/ethnicity, grade, free and reduced price lunch status, English Language Learner status, and disability status.

UCLA CRESST Capacity

UCLA's Center for Research on Evaluation, Standards and Student Testing (CRESST) proposes to conduct the rigorous evaluation for the current MSAP grant application. CRESST brings to the effort strong capacity in rigorous qualitative and quantitative methodologies and wide experience in evaluating and supporting the improvement of state, district, and local programs. CRESST is at the forefront of discussions in assessment and evaluation design, implementation, and evidence of high-quality measures and their constructive applications to students of various backgrounds across diverse educational settings. Dr. Joan Herman will serve

as Principal Investigator (PI), and Dr. Jia Wang (Co-PI and Project Director) will lead the proposed evaluation study.

- Dr. Joan Herman, PI, CRESST Co-Director Emeritus, a nationally known expert on educational assessment and evaluation, will provide intellectual leadership and overall direction. Dr. Herman will provide overall conceptual and methodological leadership and direction to the project. She has wide experience as an evaluator of school reform and has shared her expertise in this area through a number of practical guidebooks, including the recently published Turnaround Toolkit.
- Co-PI and Project Director, Dr. Jia Wang, with over a decade of experience in educational evaluation and specializing in research design and methodology, has led multiple statewide evaluation projects and evaluation projects that involve multiple school districts. Dr. Wang has day to day responsibility for project operations, including evaluation design and analysis, data collection and analysis, reporting and monitoring and assuring the quality, timeliness, and cost effectiveness of project operation.

The current UCLA team has many years of experience conducting similar studies, including evaluations of magnet schools (e.g., Los Angeles, New Haven), charter schools (e.g., Green Dot), and I3 validation grants (e.g., Literacy Design Collaborative). Our rich history in studies of the implementation and effects of school reform programs positions us to understand and be sensitive to MSAP's intended outcomes and the factors that are likely to influence its success.

The same CRESST team has been engaged in the evaluation of magnet schools on student learning and teacher effectiveness since June 2010. We worked with 11 MSAP grant awardees in the 2010 cycle, and 9 MSAP grant awardees in the 2013 cycle. Among these, we

conducted rigorous student outcome analyses for 5 awardees in each of the 2010 and 2013 cycles. Based on this prior magnet work, the team currently has three publications. The following are examples of other relevant school projects the PI and co-PI have completed:

CRESST has been engaged in the evaluation of the implementation and impact of Literacy Design Collaborative (LDC) tools on student learning and teacher effectiveness since 2011, funded by the Bill and Melinda Gates Foundation. Dr. Herman is the Principal Investigator for the Study. There are two independent studies of LDC: one an examination of LDC implementation in 8th grade social studies and science classrooms in Kentucky and Pennsylvania and the second a district-wide implementation in 6th grade advanced reading classes in Hillsborough, Florida. The studies are employing specially crafted measures of LDC implementation and impact and feature a quasi-experimental design to examine LDC impact on student learning. Results are available in two technical reports (Herman, et al. 2015a and Herman, et al. 2015b) and a journal article (Herman, Epstein, & Leon 2016).

Another example, completed in February 2013, is the Five-year Evaluation Project of Green Dot's Locke High School, funded by the Gates Foundation. DR. Herman is the PI and Dr. Wang is the Project Director. The three associated reports (Rickles, Wang, & Herman, 2013; Herman, Wang, Rickles, Hsu, Monroe, Leon, & Straubhaar, 2013; Herman, Wang, Ong, Straubhaar, Schwig, & Hsu, 2013) can be found at the CRESST website (<http://www.cse.ucla.edu/products/reports.php>). With a history of severe segregation that mirrors the residential segregation of the surrounding neighborhoods, Locke High School had a record of among the lowest academic performance of any school in Los Angeles County. With approval from Los Angeles Unified School District, Locke High School transitioned into a set of smaller, Green Dot Locke (GDL) Charter High Schools in fall 2007. The CRESST evaluation, employing

a rigorous quasi-experimental design with propensity score matching and comparing GDL students to similar students at three neighborhood high schools, found statistically significant, positive effects for the GDL transformation including improved achievement, school persistence, graduation, and completion of college preparatory courses for both cohorts of GDL students. During the five-year evaluation, we also conducted focus group with staff and students, conducted site visits and interviews.

(e)(2) 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

Project performance measures follow the description of the formative evaluation.

Formative Evaluation: The evaluation contractor will aid in the continual improvement of the project through formative evaluation, an examination of implementation that returns information to project, school and district staff to help them improve program performance. Formative evaluation includes the study of program fidelity (the degree to which a program is implemented as designed) and reach (the proportion of the target group that participates). Components of fidelity include: ► adherence – the degree to which the program adheres to its goals, plans, activities, timeline; ► dosage – the amount of program delivered; ► quality – the quality of program activities and services; ► responsiveness of participants to program activities; ► program differentiation – unique features when compared to non-magnets.

Formative Evaluation Reporting: Data will be collected, as available, and analyzed, and findings will be discussed with the project director, the school evaluation team and school staff throughout the year. Five formative evaluation reports will be written by evaluators each year:

Reduction of Minority Group Isolation (MGI) Report: Enrollment data will be compared with applicant pool and student placement data (all disaggregated by race/ethnicity), benchmarks and data from previous school years to determine why performance measures were or were not attained and if previous recommendations were implemented. The October site visits will focus on desegregation activities including recruitment, student selection and placement procedures and on the final results of the process. During this visit, the MGI report and all related data will be discussed with the project director, each school's recruitment and evaluation teams, and MSAP project staff. If minority group isolation performance measures were not attained, the data supporting the findings will be discussed and will inform modifications to recruitment or selection procedures and the collection of additional information (e.g., parent focus group results) if needed. Recommendations for improvement will be jointly formulated by the evaluator, the project director and the school evaluation teams.

Site Visit Reports provide feedback based on data related to project implementation. After each site visit (2 for year 1; 3 for years 2-4; 1 for year 5), a report will be written by the site visitor and submitted within ten days. It will summarize the findings of the visit, help school staff understand if they are on track to attaining performance measures and benchmarks, discuss reasons they may not be attained and highlight project successes. Recommendations for improvement, jointly arrived at by the staff (school evaluation team), the project director and the evaluator, will be included. **Documentation Reviews**, included in site visit reports, will summarize descriptive and quantitative data related to magnet curricula and instruction, systemic reforms, parent activities and professional development, and report on: adherence (e.g., activities implemented on time), dosage (e.g., the amount of time students, teachers and parents are exposed to grant activities), quality (e.g., peer reviews of units). Note: Because of the time

involved in project start-up (e.g., hiring staff) there will be 2 visits for year 1. Because of the schools' increased capacity to implement program activities, there will be 1 visit during year 5.

Survey Reports will include item by item results for each school and summaries of survey construct results for each school. Relationships between variables (e.g., magnet implementation and student engagement, professional development dosage and impact) are explored as is change over time. **Other formative evaluation strategies include: Short Term Outcomes.** **Benchmarks** are short term outcomes that indicate whether adequate progress is being made towards the attainment of annual performance measures. Most are derived from site visit and documentation review reports, survey items or the MGI report. Examples of critical benchmarks are included in the performance measure section which follows. The project director, evaluator and the school evaluation teams can decide on additional benchmarks that could help guide one or more schools. The degree to which benchmarks are attained will be reported in the site visit, documentation review, survey and MGI reports or during Skype or Google Hangout sessions when needed (e.g., at critical points during the recruitment period).

Continuous Cycle of Improvement. This evaluation uses a four-part iterative cycle that will lead to better understanding of the components of this project's logic model and theory of action as well as improved outcomes for students: **1) Planning or Modifying Activities.** The logic model and the activities described in this proposal will form the basis of the implementation plans that will be developed at the beginning of each project year. **2) Implementation.** Activities described in the MSAP proposal will be implemented by school and project staffs with fidelity. **3) Formative Evaluation Feedback** includes the five reports listed above, three site visits (most years, please see schedule at the end of this evaluation), two annual summative reports, and ongoing telephone, Skype and email discussions with the evaluators

about the reports and data. **4) Reflection/Discussion.** This part of the cycle insures that formative and summative data are discussed and used for project improvement. A school evaluation team, composed of the magnet coordinators, teacher representatives (determined by the school site Steering Committee) and the principal, review all formative and summative reports and data, discuss report findings and recommendations with teachers during faculty and grade conferences, get teachers' feedback and monitor the implementation of recommendations. The team will meet at least five times per year within a few days of the receipt of each report. PLC's for magnet resource teachers. Magnet resource teachers and the project director will meet once per month to discuss project implementation, examine benchmark and short term outcome data and discuss barriers to implementation and how to solve them. Successes (best practices) will be identified, shared and duplicated in other schools. The results of **Reflection and Discussion** will be used for **Planning or Modifying Activities** as the cycle repeats throughout each project year.

Summative Evaluation and Reporting: The evaluator will determine the extent to which performance measures (medium term outcomes on the logic model) are attained. The evaluator will collect and analyze the data, prepare two semi-annual summative performance reports (mid-May and end of September), summarizing findings, and discuss the results with district and magnet school staffs. The data and findings in the semi-annual summative reports can be used in the Annual Performance and Ad Hoc Reports submitted to the U.S. Department of Education. The following section describes the annual performance measures, their relationship to each MSAP program purpose and to the Pasadena Unified School District's MSAP logic model and how the evaluators will assess their attainment (e.g., indicators, measures of change, data collection methods, data sources and frequency of data collection). Long term outcomes on the logic model are the year 5 performance measures and represent the outcomes for the entire

project period. They will be reported on in the final report.

Program Purpose 1: The elimination, reduction, or prevention of minority group isolation in ... schools with substantial portions of minority students....

Logic Model Activity: Desegregation- Reduction of Socioeconomic and Minority Group Isolation – Student recruitment, application and selection activities; Benchmarks: for applicant pool - proportion of isolated students (race/ethnicity and socioeconomic status [SES]) is 10 percentage points less than actual enrollments for each school. All proposed magnet schools will reduce minority group isolation and increase socioeconomic integration by increasing enrollment reflective of Pasadena’s racial/ethnic and socioeconomic diversity. For magnets schools, this will result in a decrease in the overall percentage of black/African American and/or Hispanic students and low income students. The percentage of black/African American students (Altadena, John Muir) and Hispanic students (John Muir, Washington) are greater than the district-wide average of black/African American students (13%) and Hispanic students (61%). The proportion of low income students at each school is greater than the district average of 59%.

Objective 1. Minority group and socioeconomic isolation will be reduced at the proposed magnet schools. (This objective addresses MSAP Performance Measure a.)

Performance Measure 1.1-1.4: By October 1 of each project year, each of the magnet schools will reduce the isolation of black/African American or Hispanic students (using 2016-17 as the baseline) as measured by the decline in the percentage of of overall Hispanic or Black/African American enrollees in the magnet sites shown in the table below.

Overall Change in Hispanic/Black African American Enrollment by School Year

	John Muir HS <i>1.1, % Hispanic</i>	John Muir HS <i>1.2, % Black/AA</i>	Altadena ES <i>1.3, % Black/AA</i>	Washington MS <i>1.4, % Hispanic</i>
2016-17	71%	24%	29%	86%
2017-18	71%	24%	25%	86%
2018-19	70%	22%	23%	85%
2019-20	69%	20%	21%	82%
2020-21	66%	19%	19%	78%
2021-22	62%	17%	16%	74%

1.5: By October 1 of each project year, will reduce the isolation of low income students as measured by the decline in the percentage of overall low income enrollees who qualify for free/reduced lunch in the magnet sites shown in the table below, therefore reaching the district SES average of 59% ±5 percentage points for magnet schools by the end of the project.

Overall Change in Low SES Enrollment by School Year

	John Muir HS	Altadena ES	Washington. MS
2016-2017	74%	81%	81%
2017-2018	74%	75%	79%
2018-2019	71%	72%	77%
2019-2020	68%	69%	73%
2020-2021	65%	64%	67%
2021-2022	61%	59%	61%

Assessment: School enrollment data, disaggregated by race/ethnicity and socioeconomic status, as defined in Competitive Preference Priority (CPP4), collected by the district, will help determine the degree of attainment of 1.1-1.5. Each year (October 1), the percentage of students in the isolated racial/ethnic group and low income students enrolled in each school will decrease. Baselines are 2016-17 school enrollments. School census data is collected by teachers at each school and aggregated and confirmed by the district.

We believe that within eight years, we will be at or below the district percentages for Black/African American and Hispanic groups, not because we have excluded anyone, but because we have higher overall enrollment and a more diverse population due to attractive magnet schools and implementation of the district Blueprint for Equity and Access. As well, because almost all new students will enter at Kindergarten, 6th, and 9th grades, it will take longer to change the demographic of the entire schools. We know from experience that we cannot change percentages overnight, but we can change them over time.

Purpose 2: To develop, implement and expand magnet school programs that will assist LEAs achieve systemic reforms, and provide all students the opportunity to meet challenging State academic standards.

Logic Model Activity: Improve Curriculum, Instruction & Student Academic Supports;
Benchmark: 90% of each school's teachers agree that a great deal of emphasis was placed on
(a) alignment of curriculum content and assessments with CCSS, NGSS and state standards; (b)
data based decision making; (c) RtI (Positive Behavior Interventions and Supports; d) Rigorous
Reading and Writing Curriculum and Instruction (e) Thematic unit quality reviews. (Survey
results.)

Objective 2: All students will receive high quality instruction that includes their school's systemic reforms and magnet themes in units and courses aligned with CCSS, NGSS and State standards.

Performance Measure 2.1 By the end of each project year (September 30), at each magnet school, at least 15% (year 1), 40% (year 2), 65% (year 3) and 90% (year 4) and 100% (year 5) of all core academic subject units will meet district and project quality criteria determined by peer reviews using a unit quality rubric.

Assessment: Unit quality rubrics will be designed, and passing scores established, by each school under the guidance of the instructional coaches, the project director, and the evaluator. Reviews will occur 2-4 times per year as determined by the site level Steering Committees. Teachers will review each other's units facilitated by magnet resource teachers who will monitor the process and maintain a database of review results. Teachers will be trained in rubric use to insure inter-reader reliability. Evaluators will review a sample of units to check for inter-reader reliability. Baseline is zero for 2016-17. The percent of units meeting quality criteria increases each year.

Purpose 3: The development, design and expansion of innovative educational methods and practices....

Logic Model Activity: Magnet Theme Integration; Benchmark: (a) Unit dosage attains the target number of hours. (Checked 3 times/year.) (b) See Benchmark for Project Purpose 2. (c) Student surveys indicate that engagement and motivation increase each year (year 1 is baseline). (d) 90% of students are interested in magnet theme and find it challenging.

Objective 3. All students, at each magnet school, will receive magnet theme instruction.

Performance Measures: 3.1a— By the end of each project year, all students will receive

magnet theme instruction coordinated with or including systemic reforms for at least 3 (year 1), 6 (year 2) and 8 (year 3), 10 (year 4) and 12 (year 5) hours per week. **3.1b**—College credits earned: Students at Muir will have increasing access and preparation to succeed in dual and concurrent enrollment courses within an Early College pathway or career-focused academy using integrated Linked Learning curriculum. By the end of each project year, at John Muir High School the percentage of college credits completed will increase by 10 percentage points each year for 9th graders and 5 percentage points each year for 10th- 12th graders. The five-year goal is that 55% of ninth grade students and 95% of tenth through twelfth grade students will have earned college credits. Ultimately, we expect virtually all Muir students to have earned a minimum of six college credits and a group of Muir students to have earned an Associate of Arts degree by their high school graduation.

Assessment: Success will be determined, by the evaluators, through unit analysis and confirmed with surveys, interviews and walkthroughs. Unit summaries for each teacher (including teacher dosage logs) are submitted to evaluators by each school 3 times per year. Entire units are made available by schools (magnet resource teachers) to evaluators (on-line access) on a continuous basis. The dosage is the average number of hours per week each teacher presents magnet theme related instruction (integrated units and separate magnet theme classes) to students. The baseline is zero for 2016-17. The number of hours will increase each year to meet the target. 3.1b We will baseline our students' college credit completion at the end of year 1 and establish yearly targets.

Program Purpose 4: *Courses of instruction within magnet schools that will substantially strengthen the knowledge of academic subjects and the attainment of ... career, technological, and professional skills of students...*

Logic Model Activities: All. **Logic Model Output:** *Quality Magnet Curriculum and Instruction. Benchmarks:* See *Benchmark for Project Purposes 2,3,5, and 6.* Beginning with the 2014-2015 school year, in order to assess students' academic achievement in English language arts and mathematics, the State of California now administers the Smarter Balanced Assessment Consortium (SBAC) Assessments to students in grades 3-8 and 11. For English language arts and mathematics, the State of California determines the percentage of students who score at each of four performance levels: 1--Standard Not Met; 2--Standard Nearly Met; 3--Standard Met; 4--Standard Exceeded. Percentages are determined for "All Students" and for students in the major racial/ethnic subgroups, as well as Economically Disadvantaged students, Students with disabilities, and English Language Learners. In addition, the State of California determines the *difference* between each student's scale score and the minimum scale score needed to meet Level 3 (Standard Met) on the SBAC tests. From this data, a school's *average "Distance From Level 3"* score (DF3) is determined. This DF3 score is used as the Academic Indicator in the State of California's "New Integrated Accountability and Continuous Improvement System," which was designed in response to the new requirements per the Every Student Succeeds Act (ESSA). For high schools, graduation rate is also a state indicator of academic achievement. The Graduation Rate Indicator is the current four-year cohort graduation rate.

Objective 4 (a) Student academic achievement will increase each year in ELA/literacy and math for all students. (b) The percentage of students from major ethnic and racial subgroups attaining level 3 or 4 on the state assessments will increase. (c) The John Muir High School graduation rate will increase.

Performance Measures: Performance Measures 4.1, 4.2, and 4.5 address GPRA (U.S. Department of Education) Performance Measures (b, c, and e): *The percentage of students from*

major racial and ethnic groups in magnet schools receiving assistance who score proficient or above on State assessments in reading/language arts and mathematics. The percentage of magnet schools that received assistance that meet the State's graduation rate targets.

4.1-4.2: By the end of each project year, for each magnet school, the percentage of students scoring at level 3 (Met Standard) or 4 (Exceeded Standard) on the Smarter Balanced Assessment will increase, when compared with the previous year for the total population and for each of the student subgroups: **4.1:** in English language arts and **4.2:** in mathematics.

4.3: By the end of each project year, each magnet school will increase its Distance From Level 3 score (DF3) in ELA, when compared to the previous year.

4.4: By the end of each project year, each magnet school will increase its Distance From Level 3 score (DF3) in mathematics, when compared to the previous year.

4.5: By the end of each project year, John Muir High school will increase its graduation rate when compared to the previous year.

4.6: By the end of the grant period, 75% of students in each magnet school will develop mastery of the magnet curriculum, as determined by project based assessments scored by rubrics.

4.7: By the end of the fourth year of the grant (September 30, 2021), for each project school, students in two or more of the tested groups/subgroups (e.g., total tested population, each racial/ethnic group, low income students, English Learners) will have higher test scores than carefully matched students attending non-magnet schools in at least one subject area tested by the State (ELA/literacy, mathematics, science). These results will be statistically significant.

4.8: By the end of the fourth year of the grant (September 30, 2021), at John Muir High School, students in the Early College Pathway (e.g., total tested population, each racial/ethnic group, low income students, English Learners) will have higher test scores than carefully matched students

in other CTE pathway programs in ELA/literacy and mathematics as measured by the State assessments. These results will be statistically significant.

Assessment: All students are tested in April of each school year. The high school graduation rate is calculated according to the state formula for the four-year graduation cohort. Data is analyzed by the State Education Department and made available to school districts. This data (4.1-4.5) will be presented in the Annual Summative Performance Reports in tabular form, highlighting the performance targets and how each magnet school – both in aggregate and by subgroups – performed in relation to these targets. Baselines are 2016 scores and indexes. Project based assessments (4.6) will be developed in year 1 for each grade by the magnet resource and classroom teachers with the support of the curriculum and instruction department. Rubrics will be used in years 2 through 5 by teachers at least twice per year (frequency to be determined by each school’s planning and management team) and be approved by the magnet project director. The baseline is zero for 2016-17 and will increase each year. PM 4.7/4.8 will be determined through the quasi-experimental analysis of SBAC (ELA and math) in project years 3 and 4. (Please see the quasi-experimental design section of this evaluation.)

Purpose 5: Improvement of the capacity of LEAs, including through professional development, to continue operating magnet schools at a high performance level after Federal funding...is terminated.

Logic Model Activities: Professional Development (PD); Benchmarks: (a) PD is implemented as designed. (Checked during site visits.) (b) At least 85% of teachers will agree with survey items related to PD: (i) helped me integrate the magnet theme into lessons; (ii) deepened my content knowledge; (iii) helped me better maintain student engagement; (iv) I use what I learned from PD in my classroom;

Objective 5. Magnet schools will provide professional development related to Improvement of Curriculum, Instruction and magnet theme development and implementation.

Performance Measures 5: By the end of each project year, at each magnet school, teachers will receive at least 50 hours of professional development (e.g., workshops, courses, coaching) in each of the following areas: **5.1** directly related to the improvement of curriculum and instruction including the development and implementation of the systemic reforms listed in the school improvement plan; **5.2** directly related to the development and integration of the magnet theme. **5.3** directly related to the development and integration positive behavior supports and interventions.

Other performance measures related to capacity building include: (2.1, 3.1) development and implementation of systemic reforms and magnet theme units and courses.

Assessment: Magnet coordinators will collect professional development (PD) data including the type of training, the number of hours provided and which teachers are involved and summarize it. This information will be entered into a database at each school under the supervision of the magnet coordinators. Attendance sheets and data, agendas, workshop materials and magnet resource teacher logs and schedules will be available at each school and checked by the evaluator and project director. The 2016-17 baseline is zero. As explained by the logic model, the effects of professional development on student achievement are mediated by classroom teaching activities related to the PD. Therefore, the evaluation of PD effectiveness will include measures of classroom teaching practices and student achievement. These include teacher surveys, teacher logs (self-reports) of teaching strategies developed by the evaluators and district staff, units created by teachers, and student testing data. Individual student test scores will be linked to their teachers' implementation data. This data will be analyzed by the evaluators

and used for the quasi-experimental study. Please see the quasi-experimental study design.

Purpose 6: Ensuring that all students ... have equitable access to high quality education that will enable the students to succeed academically

Logic Model Activities: Parent Involvement, Positive Behavior Interventions and Supports, and all other logic model activities; Benchmarks: The degree to which: (a) all classes reflect the racial/ethnic composition of the school. (Items a and b be determined during each site visit.) (b) parent activities described in the proposal are being implemented; (c) office referrals decrease; schools earn 80% or higher on Schoolwide Evaluation Tool (SET) for Behavior RtI Implementation (d) decrease in the number of students missing 10 or more school days

Objective 6a: All students will have equitable access to high quality education.

Performance Measure 6.1 By the end each project year, for each magnet school, at least 65% (yr. 1), 70% (yr. 2), 75% (yr. 3), 80% (yr. 4), 85% (yr. 5) of classes will reflect their grade's enrollment for each racial/ethnic group by ± 15 percentage points.

Assessment: Success will be determined by analysis of class enrollments disaggregated by race/ethnicity and gender. Please see the assessment for measures 1.1-1.5. Baselines are 2016-17 enrollments. The percentage of classes meeting the criteria increases each year. Parent involvement promotes equitable access to high quality education for all students.

Objective 6b: There will be an increase in parent participation at each magnet school.

Performance Measure 6.2 By the end project years 2 through 5, for each school, there will be a 5% increase (compared with the previous year) in the numbers of parents who participate in school activities. **Assessment:** Workshop materials, attendance records and parent interviews will determine parent participation and satisfaction. They will be collected by the magnet resource teachers as sessions occur and summarized and submitted to evaluators and the

project director 3 times per year. The baseline year will be 2016-17. There will be an increase in the number of parents involved in school activities for years 2 through 5.

Objective 6c: There will be reduced suspensions at each magnet school.

Performance Measure 6.3 By the end project years 2 through 5, for each school, there will be a 5% decrease (compared with the previous year) in the suspension rate. **Assessment:** The suspension rate calculations are based on the unduplicated number of students suspended within the academic year. The suspension rate is calculated by dividing the number of students suspended by the cumulative enrollment multiplied by 100. The baseline year will be 2016-17. There will be an increase in the number of parents involved in school activities for years 2 through 5.

Objective 6d: There will be reduced chronic absenteeism at each magnet school.

Performance Measure 6.4 By the end project years 3 through 5, for each school, there will be a decrease (compared with the previous year) in the rate of chronic absenteeism. **Assessment:** The project will use the state Chronic Absenteeism indicator which will be available in the fall of 2018. The baseline year will be 2018-19. There will be a decrease in the number of students who are chronically absent for years 3 through 5.

Annual Evaluation Schedule: ► Initial meeting with project and district staff (Week 1); ► Refine data collection instruments and plan; refine analysis plan; (Weeks 1-3); ► Collect data (Throughout year): Enrollment data (Week 1); Documents collected (e.g. units integrated with magnet theme - Weeks 17, 29, 2 in next school year); Site visits including interviews, observations, implementation data collection for quasi-experimental study, etc. (Weeks 18, 30, 3 in next school year); Site Visit-Documents Review Reports (Weeks 19, 33, 3 in next school year); applicant pool data (Week 31); Dosage data (ongoing); Surveys administered (Week 33-35);

State test data (Week 49); Survey results reported (Week 40); ► Formative evaluation including discussion of recommendations (Weeks 1-52); MGI Report (Week 3); ► Analyze and process summative data (Weeks 30-32 and 50-52); ► Prepare Summative Evaluation Reports (Weeks 29-30 and 50-52); ► Summative Evaluation Reports (Weeks 31 and 52); Quasi-experimental Evaluation Report (Week 3). Week 1 is the week the project begins each year. For the 2016-19 MSAP cycle, October 1 was week 1. The site visits and related activity dates denote two visits for year 1 and the third visit at the beginning of year 2, three visits in years 2 through 4, and one for year 5.

(e)(3) The extent to which the costs are reasonable in relation to the objectives, design, and potential significance of the proposed project

This evaluation will be cost effective and, at the same time, provide appropriate levels of service. It contains the most important activities that will provide the support and feedback that schools need to modify and improve project activities and produce evidence of promise, while keeping an eye on level of service in relation to cost. The frequency of evaluation activities is summarized in the table below.

Activity	Year 1	Year 2	Year 3	Year 4	Year 5
Quasi-experimental Analysis	No	No	Yes	Yes	No
Site visits	2	3	3	3	1
Site visit reports	2	3	3	3	1
Surveys	Yes	Yes	Yes	Yes	No
MGI Reports	No	Yes	Yes	Yes	Yes
Summative Reports	2	2	2	2	2

Project year 1 will most likely start on October 1, 2017. Project staff needs to be selected/assigned following district guidelines and procedures, and project activities are just beginning. Therefore, it makes more sense to have two, rather than three, site visits during project year 1 to allow time for startup. Also, MGI reports will start in year 2 after the first recruitment/application/selection cycle during the first year. For years 2 through 4, there will be three site visits. By year 5, project activities will be completed or nearly completed, Therefore, there will probably be a need for only one visit. Site visit reports and documentation reviews will be written after each site visit. Two summative evaluation reports will be written each year (May and October). Surveys will be given for years 1-4. The quasi-experimental design (QED) analysis will be performed for project years 3 and 4 (see rigorous evaluation section). An analysis for years 1 and 2 may not show significant results, because students and teachers may

not be exposed to the treatments for a long enough period of time. Experience has shown that there may not be enough time during project year 5 for an analysis of test scores before the end of the project period.

Part 1 of the QED analysis is significant, because it looks at the impact of the Early College@ John Muir High School on the achievement of students in the pathway as compared to the achievement of academically and demographically similar comparison students in the other three pathways (Engineering, Arts, and Business) at Muir. This is important to inform policy implementation as Assembly Bill 288 was passed recently authorizing the community college district to enter into a College and Career Access Pathways partnership school district with the goal of developing seamless pathways from high school to community college. An important question is whether Early College implementation that takes place at John Muir High school will have a statistically significant impact on student math achievement scores when compared to matching students in other pathways. Previous researchers found significant impact on student English language arts scores and high school graduation rates, but did not find significantly similar results for math achievement (Berger, Garet, Hoshen, Knudson, & Turk-Bicakci, 2014). If the Early College pathway is well implemented, as determined by the evaluation described in this section, we believe that English/language arts test scores and high school graduation rates of students in the Early College Pathway will be higher than those of similar students enrolled in other pathway programs, and that the differences will be statistically significant supporting the findings of Berger, Garet, Hoshen, Knudson, & Turk-Bicakci (2014).

Quasi-experimental analysis 2 is significant, because it compares the test scores of magnet school students in this project's schools with those of similar students in non-magnet comparison schools. There are very few high quality studies of magnet schools that show

significant and positive results. Ballou (2009) examined 14 studies and found four that met high design quality criteria. Of those four, two, Crain, Heebner and Sim (1992 and 1999); Ballou, (2007) had statistically significant positive results. The What Works Clearinghouse has only one study (Bifulco et al., 2009) that meets its design standards and has positive, statistically significant results. A recent multi-site study (Wang, et. al. 2016) of 24 MSAP magnet schools in five districts found no effect on test scores, on average across all schools, but wide outcome variability. Using local implementation data to differentiate among schools, Dr. Wang found that the variability in student achievement was due to the degree of fidelity of implementation, which included magnet theme implementation (e.g., curriculum and professional development dosage, quality and reach) and support of classroom teachers (e.g., time with coaches). The two study-level covariates, explained about 60% of the variance between school sites for the magnet effect on math and about 40% of the variance on reading. The effect of both factors was statistically significant. Wang, et. al., indicates the importance of fidelity of implementation of key grant components and of coaching, part of this project's professional development activities.

If the magnet schools in this project are well implemented, as determined by the evaluation described in this section, we believe that test scores of students attending project schools will be higher than those of similar students attending non-magnet schools, and that the differences will be statistically significant, an important result. This result would support the findings of Wang, et. al., that the degree of fidelity of implementation of a magnet program is related to student achievement and that attending a magnet school contributed to improved student achievement, supporting the findings of Bifulco (2009).

The total 5 year cost of this evaluation is \$494,000 or 3.4% of the total 5 year budget of \$14,478,893. This is much less than evaluation budgets for grants such as I3, which can cost as

much as 10% to 15% of a budget's total. The 3.4% is also reasonable considering the research focus of part of the evaluation as well, as the formative and summative evaluation components.

It is difficult to separate this exactly into the categories of rigorous evaluation, summative evaluation and formative evaluation as described in the evaluation section because of the close working relationship between UCLA CRESST and American Education Solutions. That said, however, the cost of the "rigorous evaluation," including the QED design, analysis, reporting, collection of test score data, survey design and analysis and reporting, is \$265,000 for the five years of the grant. The cost of the formative and summative parts of the evaluation (\$229,000 for the five years of the grant) includes the site visits and site visit reports and documentation reviews, the MGI Report, the summative reports, the collection of all data except for test scores including all data related to desegregation (e.g., enrollments, applicant pool, placements) and teacher level implementation data related to the QEDs. There is some overlap in data collection. For example, teacher level implementation data collection and monitoring including logs, interviews and unit quality rubrics will occur in schools, and their collection cost is included in the formative/summative component.

The average cost of the evaluation per year is therefore, \$98,800 for all evaluation activities. That is \$53,000 per year, on average, for the "rigorous component" and \$45,800 per year, on average for the formative and summative evaluations as described in this section.

We believe these costs are reasonable because: (1) two sets of quasi-experimental studies are being performed to answer questions that the district feels are important; (2) the QED analysis is being done twice, during years 3 and 4, rather than four or five times. The results obtained from adding years 1 and 2 would not be worth the expense; (3) the formative evaluations include site visits to all three schools, and, most years five formative evaluation

reports; (4) during site visits to all three magnet schools evaluators will collect teacher level data related to the implementation of professional development, units related to the magnet theme, and other implementation data needed for either the quasi-experimental study or the formative and summative evaluation; (5) The evaluation will look at the quality of the magnet curriculum including rigor. In addition, using validated survey scales and items, the evaluation will look at school climate, instructional leadership, student engagement and motivation, magnet theme implementation, etc. (please see survey descriptions); (6) the evaluators are very experienced. The CRESST at UCLA has done hundreds of high quality education studies. The researchers, Drs. Wang and Herman, have done well received, high quality research for many years (please see the description of CRESST and the researchers in the appendix). American Education Solutions (AES) has been doing magnet evaluation work for over 20 years. AES has performed 61 MSAP evaluations since 1995 working in partnership not only with CRESST but also with the Education Alliance at Brown University; (7) the formative and summative evaluations include only those activities that are necessary as described above. Because of these factors, the cost of this evaluation is, we believe, reasonable.

References

- Aguilar, E. (2016). *The Art of Coaching*. Oakland, CA: Elena Aguilar Consulting. Print.
- Anderson, R.C., Wilson, P.T. & Fielding, L.G. (1988). Growth in Reading and How Children Spend Their Time Outside of School. *Reading Research Quarterly*. Vol. 23, No. 3, pp. 285-303.
- Ballou, D. (2007). *Magnet school and peers: Effects on mathematics achievement*. Vanderbilt University. Unpublished manuscript.
- Ballou, D. (2009). Magnet school outcomes. In M. Berends, M.G., Springer, D. Ballou, & H. J. Walberg (Ed.), *Handbook of research on school choice* (pp. 409-426). New York: Routledge.
- Baumgartner, T., Lipowski, M. B., & Rush, C. (2003). Increasing reading achievement of primary and middle school students through differentiated instruction. Unpublished research project: Saint Xavier University.
- Berger, A., Turk-Bicakci, L., Garet, M., Knudson, J., & Hoshen, G. (2014). Early College, Continued Success: Early College High School Initiative Impact Study. Washington, D.C.: American Institutes for Research.
- Bifulco, R., Cobb, C. D., & Bell, C. (2009). Can interdistrict choice boost student achievement? The case of Connecticut's interdistrict magnet school program. *Educational Evaluation and Policy Analysis*, 31(4), 323–345. Retrieved from http://www.jstor.org/stable/25621589?seq=1#page_scan_tab_contents
- Black, A.C., Little, C.A., McCoach, D.B., Purcell, J.H., & Siegle, D. (2008). Advancement Via Individual Determination: Method selection in conclusions about program effectiveness. *Journal of Educational Research*, 102, 111-124.
- Bohanon, H., Fenning, P., Carney, K. L., Minnis-Kim, M., Anderson-Harriss, S., Moroz, K. B.,

- & ... Pigott, T. D. (2006). Schoolwide Application of Positive Behavior Support in an Urban High School. *Journal Of Positive Behavior Interventions*, 8(3), 131-145.
- Bradshaw, C. P., Mitchell, M. M., & Leaf, P. J. (2010). Examining the effects of School-Wide Positive Behavioral Interventions and Supports on student outcomes: Results from a randomized controlled effectiveness trial in elementary schools. *Journal of Positive Behavior Interventions*, 12, 133-148.
- Calkins L. M. (1994). *The art of teaching writing*. Portsmouth, NH: Heinemann Educational Books.
- Castellano, M., Sundell, K., Overman, L. T., & Aliaga, O. A. (2012). Do career and technical education programs of study improve student achievement? Preliminary analyses from a rigorous longitudinal study. *International Journal of Educational Reform*, 21, 98-118.
- Catterall, J. S., Chapleau, R., & Iwanaga, J. (1999). Involvement in the Arts and Human Development: General Involvement and Intensive Involvement in Music and Theatre Arts. In E. B. Fiske (Ed.), *Champions of Change: The Impact of the Arts on Learning* (pp. 1-18). Washington DC: Arts Education Partnership and President's Committee on the Arts and Humanities.
- Catterall J., Dumais S., Hampden-Thompson G. (2012). *The arts and academic achievement in at-risk youth: Findings from four longitudinal studies*. Washington, DC: National Endowment for the Arts.
- Cohen E. G. & Lotan R. (1995). "Producing Equal Status Interaction in the Heterogeneous Classroom," *American Educational Research Journal* 32, 99-120.
- Coleman, James S. *Equality of Educational Opportunity (COLEMAN) Study (EEOS)*, 1966. ICPSR06389-v3. Ann Arbor, MI: Inter-university Consortium for Political and Social

Research [distributor], 2007-04-27. <http://doi.org/10.3886/ICPSR06389.v3>

Crain, R. Heebner, A., & Si, Y. (1992). *The effectiveness of New York City's career magnet schools: An evaluation of ninth grade performance using an experimental design*.

Berkeley, CA: National Center for Research in Vocational Education.

Graves D. H. (1994). *A fresh look at writing*. Portsmouth, NH: Heinemann Educational Books.

Guthrie, L., & Guthrie, G. (2002). *Longitudinal research of AVID 1999-2000: Final report*.

Retrieved September 10, 2009, from http://www.ldonline.org/article/An_Introduction_to_College_Access_Programs

Henderson, A. T., & Mapp, K. L. (2002). *A new wave of evidence: The impact of school, family, and community connections on student achievement*. Austin, TX: Southwest Educational Development Laboratory.

Herman, J. L., Epstein, S., Leon, S., Dai, Y., La Torre Matrundola, D., Reber, S., & Choi, K. (2015). *The implementation and effects of the Literacy Design Collaborative (LDC): Early findings in eighth-grade history/social studies and science courses (CRESST Report 848)*. Los Angeles: University of California, Los Angeles, National Center for Research on Evaluation, Standards, and Student Testing (CRESST).

Herman, J. L., Epstein, S., Leon, S., Dai, Y., La Torre Matrundola, D., Reber, S., & Choi, K. (2015). *The implementation and effects of the Literacy Design Collaborative (LDC): Early findings in sixth-grade Advanced Reading courses (CRESST Report 846)*. Los Angeles: University of California, Los Angeles, National Center for Research on Evaluation, Standards, and Student Testing (CRESST).

Herman, J., Epstein, S., & Leon, S. (2016). *Supporting Common Core instruction with literacy design collaborative: A tale of two studies*. *AERA Open*, 2(3), 1–15.

- Herman, J., Wang J., Rickles J., Hsu, V., Monroe, S., Leon, S. & Straubhaar, R. (2012). Evaluation of Green Dot's Locke transformation project: Findings for cohort 1 and 2 students. Los Angeles, CA: National Center for Research on Evaluation, Standards, & Student Testing (CRESST).
- Herman, J. L., Wang, J., Ong, C., Straubhaar, R., Schweig, J., & Hsu, V. (2013). The perspective of teachers and administrators (CRESST Report 824). Los Angeles: University of California, Los Angeles, National Center for Research on Evaluation, Standards, and Student Testing (CRESST).
- Ho, D., Imai, K., King, G. & Stuart, E. 2007. Matching as Nonparametric Preprocessing for Reducing Model Dependence in Parametric Causal Inference. *Political Analysis*, 15: 199–236. Copy at <http://j.mp/jPupwz>
- Ho P., Tsao J.C., Bloch L., Zeltzer L.K. The impact of group drumming on social-emotional behavior in low-income children. *Evidence Based Complement Alternative Med.* 2011; 2011: 250708
- Holtzapple, C.K., Griswold, J.S., Cirillo, K.J., Rosebrock, J., Nouza, N., & Berry, C. (2011, accepted). Implementation of a school-wide adolescent character education and prevention program: Evaluating the relationships between principal support, faculty implementation, and student outcomes. *J. Research in Character Education*.
- Horner, R., Sugai, G., Smolkowski, K., Todd, A., Nakasato, J., & Esperanza, J. (2009). A Randomized Control Trial of School-wide Positive Behavior Support in Elementary Schools. *Journal of Positive Behavior Interventions*, 11 (3), 113-144.
- Hoxby, C. & Turner, S. (2013). “Expanding College Opportunities for High-Achieving, Low-

Income Students.” Discussion Paper 12-014. Stanford, Calif.: Stanford Institute for Economic Policy Research.

Howard, E. R., Sugarman, J., Christian, D., Lindholm-Leary, K. J., & Rogers, D. (2007).

Guiding Principles for Dual Language Education (2nd ed.). Washington, DC: Center for Applied Linguistics.

Huber, M., Lechner, M. & Steinmayr, A. (2014). Radius matching on the propensity score with bias adjustment: tuning parameters and finite sample behaviour. *Empirical Economics* 49 (1), 1-31.

Humphrey, Daniel, and Julia E. Koppich. 2014. Toward a Grand Vision: Early Implementation of California’s Local Control Funding Formula. Menlo Park, California: SRI International. http://www.sri.com/sites/default/files/publications/lcff_researchbrief_10-26-14.pdf

Ingram, D. & Riedel, E. (2000). What Does Arts Integration Do for Students? Center for Applied Research and Educational Improvement, University of Minnesota, October 2003. <http://conservancy.umn.edu/handle/144121>.

Johnson, D. W., & Johnson, R. (1999). Learning together and alone: Cooperative, competitive, and individualistic learning (5th Ed.). Boston: Allyn & Bacon.

Karp, M. M., Calcagno, J. C., Hughes, K. L., Jeong, D. W., & Bailey, T. R. (2007). *The postsecondary achievement of participants in dual enrollment: An analysis of student outcomes in two states*. New York, NY: Community College Research Center, Teachers College, Columbia University.

Kirp, David L. *Impossible Scholars: The Rebirth of a Great American School System and a Strategy for America’s Schools*. 2nd edition. New York: Oxford University Press, 2015.

- Maslow, A.H. (1943). A Theory of Human Motivation. *Psychological Review*, 50 (4), 430-437.
Washington, DC: American Psychological Association.
- McQuarrie, L., McRae, P., & Stack-Cutler, H. (2008). *Differentiated instruction provincial research review*. Edmonton: Alberta Initiative for School Improvement.
- Mendiola, I.D., Watt, K.M., & Huerta, J. (2010). The Impact of Advancement Via Individual Determination (AVID) on Mexican American Students Enrolled in a Four-Year University. Unpublished dissertation.
- Mickelson, R. A., Bottia, M., & Lambert, R. (2013). "A Meta-Regression Analysis of the Effects of School and Classroom Composition on Mathematics Outcomes," Review of Educational Research, 993–1089.
- Peppler, K.A., Wessel Powell C., Thompson N., & Catterall J. (2014). Positive Impact of Arts Integration on Student Academic Achievement in English Language Arts, The Educational Forum, 78:4, 364-377, DOI: 10.1080/00131725.2014.941124 Phillips, K. (2014). How diversity makes us smarter. Scientific American, 311(4).
- Ray, K. 1999. *Wondrous Words: Writers and Writing in the Elementary Classroom*. Urbana, IL: NCTE.
- Rickles, J., Wang, J., & Herman, J. (2013). Evaluation of Green Dot's Locke Transformation Project: Supplemental report on Cohort 2 student outcomes (CRESST Report 825). Los Angeles: University of California, Los Angeles, National Center for Research on Evaluation, Standards, and Student Testing (CRESST).
- Rock, M., Gregg, M., Ellis, E., & Gable, R. A. (2008). REACH: A framework for differentiating classroom instruction. *Preventing School Failure*, 52(2), 31–47.
- Sapon-Shevin, M. (1994). *Playing Favorites: Gifted Education and the Disruption of*

- Community*. Albany, N.Y.: SUNY Press.
- Scheuler, L. (2010). Arts Education Makes a Difference in Missouri Schools: A Study of Fine Arts Education in Missouri School Districts Funded by the Missouri Arts Council. St. Louis, MO: Missouri Alliance for Arts Education.
- Schonert-Reich, K. and Lawlor, M.S. (2010). The Effects of a Mindfulness-Based Education Program on Pre- and Early Adolescents' Well-Being and Social and Emotional Competence. *Mindfulness* 1(3):137-151.
- Schwartz, H. (June 6, 2010) Housing Policy Is School Policy. New York, NY: The Century Foundation.
- Sharan, S. (1980). Cooperative learning in small groups: Recent methods and effects on achievement, attitudes, and ethnic relations. *Review of Educational Research*, 10, 241-271.
- Slavin, R. E. (1980). Cooperative learning. *Review of Educational Research*, 50, 315-342.
- Stevens, R. J., & Slavin, R. E. (1995). The cooperative elementary school: Effects on students' achievement, attitudes, and social relations. *American Educational Research Journal*, 32 (2) 321-351.
- Steele, J. L., Slater, R., Li, J., Zamarro, G., & Miller, T. (2015). Costs and effects of dual-language immersion in the Portland public school. Evanston, IL: Society for Research on Educational Effectiveness. Retrieved on September 1, 2016, from <http://files.eric.ed.gov/fulltext/ED562111.pdf>
- Umansky, I., Valentino, R., & Reardon, S.F. (2015). The Promise of Bilingual and Dual Immersion Education (CEPA Working Paper No.15-11). Retrieved from Stanford Center for Education Policy Analysis: <http://cepa.stanford.edu/wp15-11>

- Wang, J., Schweig, J., & Herman, J. (2014). Is there a magnet school effect? Using meta-analysis to explore variation in magnet school success. CRESST Technical Report 842. Los Angeles: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST).
- Wang, J., Schweig, J., & Herman, J. (2017). Is there a magnet school effect? A Multisite Study of MSAP-Funded Magnet Schools. *Journal of Education for Students Placed at Risk*. 22(2), 1–23
- Wells, A. S., Fox, L., & Cordova-Cobo, D. (2016). How racially diverse schools and classrooms can benefit all students. New York, NY: The Century Foundation.
- Wittrock, M. C. (1986). Students' thought processes. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (pp. 297-314). New York: Macmillan.
- Yoon, K. S., Duncan, T., Lee, S. W.-Y., Scarloss, B., & Shapley, K. (2007). Reviewing the evidence on how teacher professional development affects student achievement (Issues & Answers Report, REL 2007–No. 033). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from <http://ies.ed.gov/ncee/edlabs>