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Program Narrative

Competitive Preference Priority 1 - Need for Assistance

Purpose and Need. Oxnard School District (OSD) is proud to offer our “da Vinci Magnet Academies,” proposing the formation of *three new magnet middle school Science, Technology, Engineering, Arts, and Mathematics (STEAM) academies* that will reduce, prevent, or eliminate Hispanic and Low SES isolation for middle school students; ensure that all middle school pupils have equitable access to a high quality education in schools that are designed and equipped for the 21st century; and which will prepare them to function well in a technologically oriented and highly competitive economy comprised of people from many different racial and ethnic backgrounds. The District’s Vision is: “Tomorrow’s leaders through Education, Empowerment, and Inspiration.” Oxnard School District is an elementary (kindergarten through eighth grade) district located along coastal Southern California between Los Angeles and Santa Barbara. District schools include 16 elementary campuses serving grades K-6, three intermediate schools serving grades 7-8, and one K-8 school. The total district population is 16,514 students, with the following ethnic distribution: 2% African American, 1% Asian, 2% Filipino, 89% Latino/Hispanic, and 5% White. The intermediate schools range in size from 777 to 1,255 students.

The economic base of the Oxnard community is primarily agriculture; 5% of students are classified as Migrant, with 54% English Language Learners (ELL). All district schools are certified as Title I; 81% of students receive Free or Reduced Price Meals - a measure of low income or poverty. The average parent education level is 1.95, where level 2 is equivalent to high school graduation and 3 represents some college.

The district is in NCLB Program Improvement Year 3. All three intermediate schools are in Program Improvement Year 5. As data in Table A show, Oxnard faces persistent challenges in raising student achievement, with large economic and ethnic disparities between groups. Hispanic students consistently earn lower achievement scores than White students. Economically Disadvantaged students, English Learners, and Students with Disabilities also achieve well below AYP targets. We must improve our practices to better serve these students. The district has been actively working throughout the past year to restructure all three intermediate schools as middle school magnet academies that will serve students in grades 6-8. The new middle school grade reconfiguration is one major response to the NCLB Program Improvement Restructuring requirement. Our middle school restructuring plan was designed by parents, community partners and educators to address the dual issues of Hispanic and SES segregation and persistently low student achievement. (See Logic Model, Appendix) We contracted Caldwell Flores Winters, Inc. (CFW), a firm that specializes in facilities planning and public finance for schools. Our work with CFW over the past year involved planning and financing the renovation and construction of several schools, including the conversion to middle schools, through a \$90 million general obligation bond, Measure R, passed in November 2012. Our intermediate school facilities, especially those required to implement science and engineering education, are dated; facilities as currently constructed and equipped do not allow conversion to future-oriented STEAM academic programs. With Measure R funds, we will build new science and technology infrastructure and equipment to implement STEAM at each middle school. We are also building new facilities to support our performing arts magnet theme. Construction begins spring 2013. Our middle school magnet academies blueprint is a significant effort to implement desegregation, increase equity, and substantially improve academic achievement, as measured by

Annual Yearly Progress (AYP) and the percent of students who score Proficient or Advanced on the California Standards Test (CST) in English/Language Arts and Mathematics. Table A shows the discrepancy between our State achievement targets and current student scores. We must achieve significant educational restructuring to meet our students' needs.

Table A. Percent of Students by Major Subgroups that Scored Proficient or Advanced in English/Language Arts and Mathematics 2008-2012

FRANK 2012-13 E/LA Target: 89.2%

2012-13 Math Target: 89.5%

School Year	2007-08	2008-09	2009-10	2010-11	2011-12	2007-08	2008-09	2009-10	2010-11	2011-12
Subject	E/LA	E/LA	E/LA	E/LA	E/LA	Math	Math	Math	Math	Math
Hispanic	29.7%	29.1%	31.1%	37.6%	41.7%	18.5%	24.6%	23.9%	29.9%	28.4%
White	72.7%	61.1%	66.7%	58.5%	65.2%	36.4%	50.0%	61.1%	41.2%	34.8%
Econ. Disadv.	29.8%	27.8%	30.2%	38.1%	40.2%	18.3%	24.7%	24.5%	29.9%	27.9%
Eng. Learner	19.3%	18.9%	26.1%	23.6%	30.2%	12.9%	19.3%	21.2%	21.2%	22.6%
Disabilities	6.3%	20.4%	15.1%	26.8%	23.0%	6.3%	9.3%	11.9%	19.5%	17.7%
All Students	32.5%	32.8%	34.5%	40.3%	44.1%	21.2%	27.3%	26.2%	31.9%	30.5%
Target	35.2%	46.0%	56.8%	67.6%	78.4%	37.0%	47.5%	58.0%	68.5%	79.0%

FREMONT 2012-13 E/LA Target: 89.2%

2012-13 Math Target: 89.5%

School Year	2007-08	2008-09	2009-10	2010-11	2011-12	2007-08	2008-09	2009-10	2010-11	2011-12
Subject	E/LA	E/LA	E/LA	E/LA	E/LA	Math	Math	Math	Math	Math
Hispanic	32.6%	33.2%	37.0%	39.5%	42.2%	25.1%	29.4%	39.4%	36.0%	31.9%

White	56.7%	58.1%	60.9%	62.0%	57.5%	47.6%	44.5%	54.5%	48.8%	47.2%
Econ. Disadv.	29.4%	30.6%	35.8%	37.3%	39.8%	21.4%	25.8%	37.5%	33.3%	32.0%
Eng. Learners	15.4%	16.5%	29.5%	24.6%	29.7%	13.6%	17.3%	37.1%	26.8%	30.0%
Disabilities	17.4%	9.7%	18.7%	30.1%	27.7%	17.5%	7.7%	14.2%	14.6%	18.5%
All Students	39.0%	39.0%	41.7%	43.4%	45.4%	31.2%	33.1%	41.5%	39.1%	35.1%
Target	35.2%	46.0%	56.8%	67.6%	78.4%	37.0%	47.5%	58.0%	68.5%	79.0%

HAYDOCK 2012-13 E/LA Target: 89.2%

2012-13 Math Target: 89.5%

School Year	2007-08	2008-09	2009-10	2010-11	2011-12	2007-08	2008-09	2009-10	2010-11	2011-12
Subject	E/LA	E/LA	E/LA	E/LA	E/LA	Math	Math	Math	Math	Math
Hispanic	33.3%	27.1%	32.3%	36.8%	39.8%	33.2%	30.5%	30.6%	35.1%	38.1%
White	66.7%	50.0%	52.6%	47.6%	42.9%	61.1%	45.0%	52.6%	28.6%	21.4%
Econ. Disadv.	32.7%	26.7%	32.5%	37.0%	38.4%	32.9%	31.1%	32.5%	35.6%	37.0%
Eng. Learners	21.9%	14.2%	28.7%	23.3%	31.9%	21.9%	24.2%	29.3%	25.5%	34.9%
Disabilities	12.1%	4.2%	18.5%	22.7%	27.3%	12.1%	9.9%	17.4%	14.1%	23.2%
All Students	34.5%	27.5%	33.6%	37.7%	40.4%	34.1%	30.8%	31.2%	35.2%	37.2%
Target	35.2%	46.0%	56.8%	67.6%	78.4%	37.0%	47.5%	58.0%	68.5%	79.0%

GPR Annual Performance Measure 1: Reduce, eliminate or prevent Hispanic group isolation.

Oxnard School District has a long history of court-ordered desegregation that was lifted in 1987. Briefly, in February 1970, Legal Aid Association of Ventura County and the Western Center on Law and Poverty filed in United States District Court a complaint against the Oxnard School District on behalf of ten Colonia children for “injunctive and declaratory relief for deprivation of

their rights to equal protection of the law and due process of the law.” Plaintiffs prevailed at all levels of judgment. The district was required to balance ethnicity of its schools within the “15% formula,” and all classes within the district would be balanced within the “25% formula.” This judgment remained in effect until new schools were built and the “Order Terminating Jurisdiction” was filed in March 1987.

The district continued to grow and build new schools. Current intermediate schools are segregated due to economic, ethnic, community housing, and social factors, although not in violation of the “15% formula.” Today, low SES Hispanic/Latino families and recent Latino immigrants live primarily in “La Colonia” area of Oxnard to the East, where many live in the HUD housing project built in the 1960’s or share a house or apartment among two or more families and extended family members. These students attend Frank Intermediate. Second-generation Latinos live along the J Street corridor near Haydock Intermediate, with many sharing a residence there as well. In contrast, the small number of White and upper income families reside primarily in the large housing developments of North Oxnard that include River Ridge Golf Club, in the craftsman-era houses on F street, and in the large homes at Oxnard Harbor Marina to the West. Students from these neighborhoods attend Fremont Intermediate. Economic segregation is equivalent to ethnic segregation. The economic and housing disparities between East (La Colonia) and West Oxnard (Marina area) are extreme. To address this inequality, OSD will implement Voluntary Desegregation, described below.

MSAP Issue #1: Defacto Ethnic and Economic Segregation. *Solution:* Create three middle school magnet academies to attract diverse students from the entire district to attend schools of choice. Use voluntary desegregation and open enrollment at all middle schools. All students who apply will be accepted, until schools are at capacity. (See Voluntary Desegregation Plan.)

Table B. Student Ethnicity by Percent of Enrollment 2008-2013.

FRANK

	2008-09	2009-10	2010-11	2011-12	2012-13
Hispanic	91%	91%	92%	93%	93%
White	2%	2%	2%	2%	2%

FREMONT

	2008-09	2009-10	2010-11	2011-12	2012-13
Hispanic	75%	78%	79%	82%	84%
White	14%	12%	11%	11%	10%

HAYDOCK

	2008-09	2009-10	2010-11	2011-12	2012-13
Hispanic	94%	95%	95%	94%	95%
White	3%	2%	3%	4%	4%

Table C. Percent of Students Who Receive Free or Reduced Price Lunch or Are Designated

Economically Disadvantaged.

	Frank	Fremont	Haydock
Econ. Disadvantaged	85%	74%	92%

Table D. Percent of Students Who Are English Learners.

	Frank	Fremont	Haydock
English Learners	61%	39%	63%

GPRA Goal 1. Reduce, eliminate or prevent Hispanic isolation and economic segregation. We believe that diversity is a critical tenet of education, and is essential to magnet schools. Our Voluntary Desegregation plan will balance enrollment at our three new middle magnet schools by September 2014, when the newly renovated middle school campuses open. We intend to balance ethnicity and SES at each middle school to achieve a racial/ethnic equivalence (+/- 5%) at each middle school by September 2015. Our intent is that our magnet academy program will attract not only diverse students from all around Oxnard, but also will attract and re-enroll students who currently leave the district each year due to Program Improvement status. OSD has lost a significant number of students each year to competing districts (Table F). Recapturing these students will increase our Average Daily Attendance, which will generate additional revenue from the State based upon increased enrollment.

Table F. Interdistrict Transfers – Students Transferring Out of Oxnard School District.

Year	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Transfers	630	729	571	866	728	752	692	422

Need for MSAP Funding. *Costs to fully implement da Vinci Magnet Academies exceed available resources.* As described in the Budget and Budget Justification Narrative, costs to fully implement the magnet academies exceed available revenue by \$12 million. OSD requests \$4 million in MSAP funds for three years to implement STEAM. We have funds for facilities

construction and new science equipment, but these funds cannot be used for professional development, student and faculty computers, or curricula.

Table E. Magnet Academies Program Costs vs. Resources: Gap Analysis.

Project Year	Magnet Program Elements and Cost (MSAP Funds)	Resources Available – District and Partners Funding	Costs Exceed Resources (Gap)
Year 1 2013-14	<ul style="list-style-type: none"> ▪ Planning time (substitute teachers needed) \$243,320 ▪ Staff professional development: science, technology, engineering, arts, school climate \$789,122 ▪ 1:1 computing (student netbooks teacher laptops, software) for 110 teachers and 3,500 6th-8th grade students 1,735,555 ▪ DyKnow Classroom Monitor and Vision software 167,608 ▪ WEB staff and student training \$37,080 ▪ Project personnel 	<ul style="list-style-type: none"> ▪ Measure R School Bond, state matching grants for modernization and new construction: Frank = \$4,750,837; Fremont = \$7,844,354; Haydock = \$7,689,910 ▪ District/County funds for Common Core State Standards staff training and implementation \$800,000. ▪ Categorical funding (Title I, II) ▪ School-wide AVID training and certification \$30,000 	<p>Gap is calculated as the total MSAP funds required, plus any additional funding that must be raised through local fundraising (i.e. field trip transportation)</p>

	<p>\$813,401</p> <ul style="list-style-type: none"> ▪ Consultants and Evaluation \$213,914 		
Year 2 2014-15	<ul style="list-style-type: none"> ▪ 1:1 computing (student netbooks) for incoming 6th grade students \$1,169,940 ▪ Staff professional development STEAM \$174,430 ▪ Staff professional development for school climate and safety \$110,160 	<ul style="list-style-type: none"> ▪ Categorical funding (Title I, II) ▪ ASES ▪ School-wide AVID training and certification ▪ Partnerships: UCSB MESA, Ventura County Office of Education 	
Year 3 2015-16	<ul style="list-style-type: none"> ▪ 1:1 computing (student netbooks) and 1,000 incoming 6th grade students \$1,261,620 ▪ Staff professional development STEAM \$417,087 ▪ Booster training school climate and safety \$107,040 	<ul style="list-style-type: none"> ▪ Categorical funding (Title I, II) ▪ ASES ▪ School-wide AVID training and certification ▪ Partnerships: UCSB MESA, Ventura County Office of Education 	

Table F. STEAM Magnet Program Requirements – Unfunded by District/Local Resources.

Year	Category	Projected Costs
Year 1 2013-14	<ul style="list-style-type: none"> ▪ Supplies – computers, science and robotics ▪ Personnel: Project Director, Technology Specialists, Site Teacher Coordinators ▪ Professional Development: Science, Technology, Engineering, Visual and Performing Arts, School Climate and Safety ▪ Conferences and Travel: Robotics Academy, Safe/Civil Schools, WEB, etc. ▪ Promotion and Marketing ▪ Consultants: VTS, ADL ▪ Evaluation 	<p>\$2,140,729</p> <p>\$813,401</p> <p>\$504,150</p> <p>\$105,636</p> <p>\$5,500</p> <p>\$2,500</p> <p>\$50,000</p>
Year 2 2014-15	<ul style="list-style-type: none"> ▪ Equipment/Supplies ▪ Personnel ▪ Professional Development ▪ Conferences and Travel ▪ Promotion and Marketing ▪ Consultants ▪ Evaluation 	<p>\$1,694,959</p> <p>\$660,040</p> <p>\$273,000</p> <p>\$233,841</p> <p>\$5,605</p> <p>\$93,027</p> <p>\$50,000</p>
Year 3 2015-16	<ul style="list-style-type: none"> ▪ Equipment/Supplies ▪ Personnel ▪ Professional Development 	<p>\$1,544,552</p> <p>\$862,802</p> <p>\$356,5000</p>

	<ul style="list-style-type: none"> ▪ Conferences and Travel 	\$260,601
	<ul style="list-style-type: none"> ▪ Consultants 	\$107,614
	<ul style="list-style-type: none"> ▪ Evaluation 	\$75,000

We are moving ahead with facilities construction to build and equip science labs and performing arts venues. However, without MSAP funding to supplement district resources for professional development and one-to-one computing, the STEAM magnet schools program cannot be implemented as designed. If district and State monies were the only funds available, it is highly unlikely that we would be successful in desegregating our middle schools. Without MSAP funds, we will struggle to create equity and to secure professional training and expertise to improve teaching and learning. We will not be able to implement 1:1 computing, which is a significant aspect of our MSAP magnet proposal to ensure equity, and to support individual student projects for advanced science, technology, engineering, and arts curricula and experiences that are essential to fully implement our STEAM vision.

Competitive Preference Priority 2 – New Magnet School Program

Our proposed da Vinci Magnet Academies will be the first magnet schools in Oxnard School District and the only magnets in the greater Oxnard community. OSD is a novice applicant for MSAP funds. (Table 6). Three current intermediate schools, Robert J. Frank, Fremont, and Richard B. Haydock, will be converted to 6th-8th grade middle schools during the 2013-14 school year. When they re-open in August 2014 with diverse enrollment, all three schools will be STEAM magnet academies. An interesting note: Robert J. Frank Intermediate is named for Oxnard School District Science Teacher, Robert J. Frank. School science labs were built as he would have wished them, for students to explore science hands-on.

Competitive Preference Priority 3 – Selection of Students

We recognize we must recruit and enroll 6th-8th grade students in each of our middle school magnet academies. To ensure full desegregation and promote ethnic and economic integration of diverse students, we are *eliminating intermediate school boundaries* for the 2014-15 school year and beyond. Our newly renovated middle schools will open in fall 2014. During 2013-14 and for each subsequent school year, district 6th, 7th, and 8th grade students will apply to the middle school academy of choice, based upon magnet theme, during the open enrollment period. All students will be accepted and enrolled in their first choice school on a “first come” basis until each school is at capacity. Once a magnet school is at capacity, the additional applicants will be placed on a waiting list and will be offered enrollment through a lottery system as openings occur. Students will rank-order their magnet academy preferences; students who are not enrolled at their first choice academy will be encouraged to enroll in their second choice. Open enrollment procedures allow students to apply to change magnet schools each year if desired. There are neither academic criteria nor examinations of any kind required for admission to district magnet schools. (See Voluntary Desegregation Plan, also Table 6.)

Competitive Preference Priority 4 – Promoting Science, Technology, Engineering and Mathematics (STEM) Education

Leonardo da Vinci: Scientist, inventor of Technologies, Engineer, Artist, Mathematician, is the quintessential renaissance man and inspiration for our middle school STEAM magnet themes. Our community and educators researched magnet themes and visited successful magnet schools and academies in southern California. We selected the da Vinci-inspired theme of Science, Technology, Engineering, Arts, and Mathematics (STEAM) based on our community values and resources. We know that magnet schools are typically more “hands on – minds on” and use an

approach to learning that is inquiry or performance/project based. This approach fits well with our middle schools philosophy and our STEAM academies model. Magnet schools use the Common Core State Standards (CCSS) in all subject areas, and this is the foundation for our magnet school curricula; CCSS are conveyed within and through the overall magnet theme of the schools. In addition, all science and engineering programs will implement Next Generation Science Standards (NGSS) in partnership with our local university, California State University Channel Islands (CI). Each of our magnet middle academies will have STEAM as the overarching framework, yet to meet our desegregation goal, each school will have a distinct STEAM emphasis (See Quality of the Project Design).

Table G. Magnet Academy Themes.

School	Science	Technology/ Career Tech.	Engineering/ Physics	Arts	Math
<u>Haydock</u> “Green Environment” and Visual and Performing Arts	Environment Science Resource Management, Ecology, Agriculture	Lighting design, Digital music, Geographic Information Systems for ESRM	Stagecraft/ Set design, Applied physics	Music, Theater arts, Visual arts	Higher level math to support science and physics
<u>Frank</u> “Dream Machines” Robotics	Data acquisition and analysis, sensors and	Computer Aided Design, Robotics, 3-D Design	Military engineering Dept. of Defense and	CAD Computer art, graphic art	Higher level math to support science and

	their application to the sciences	and production	security applications; 3-D printing “FabLabs”		engineering
<u>Fremont</u> “Marine Ecosystems”	Marine Biology, Biochemistry, Health sciences	Biotech, Medical technologies	Biotech, Biomechanics	Scientific illustration, Visual Arts	Higher level math to support science and biochemistry

Oxnard School District is completely committed to implementing STEAM middle school academies. We have researched, visited, discussed, and planned this concept over time, and we believe that this approach is the most effective for achieving our goals of integration, equity, increased student achievement, and parent choice.

Plan of Operation.

Effective management plan ensures proper and efficient administration of the project. Our da Vinci Magnet Academies will be the first magnet programs on the Oxnard region. Our planning process has been informed by other successful magnet school projects. Through visits, observations, and discussions with Project Directors of successful magnet programs, and our own multi-year planning process, we are able to apply others’ “lessons learned” in the creation of our MSAP program. From visits to magnet schools and STEM academies we learned that planning is critical –it takes time to plan and get buy-in! Program managers found that teachers

become overwhelmed in the first grant year when training and implementation were too compressed. Their recommendations were built into our Work Plan. Dedicated MSAP-grant personnel are critical to implementation of this plan. In addition to a Project Director who will oversee the entire grant project (full time), we built in site-specific MSAP coordinators and technology support teachers (see Quality of Personnel). Our Plan of Operation is: In Year 1, we will complete facilities construction and provide robust wireless fidelity connectivity throughout all middle school campuses (with district funding); conduct staff planning sessions and team building; hire required STEAM teachers and grant personnel; and configure a new schedule of classes that facilitates Project Based Learning through STEAM as well as visual and performing arts. A new student class schedule will be designed around Project Based Learning (PBL), and will eliminate the 6-period day. This schedule, adapted to PBL, is critical to our implementation and academic success for students. In the workplace, professionals do not work on projects in 50-minute “periods,” changing content and task every hour. To illustrate, building or testing the components for a robot with the local US Navy Defense team and university student mentors may require a commitment of two 3-hour blocks in a week. Also in Year 1, we will “frontload” professional development and training. We will provide training and professional development in STEAM, 1:1 computing, and classroom management software (DyKnow). We developed a step-up implementation plan starting with science, math, technology and school safety/school climate. As recommended by other Project Directors, we will add the remaining program elements in Year 2, for fully optimized STEAM magnet academies in Year 3 (Table H).

Table H. Three-Year Work Plan and Timeline for Project Implementation.

YEAR 1 2013-14 <u>Focus</u> : Establish program elements; Complete construction; Professional Development in science, math, technology, school climate, universal access strategies			
Action Plan	Timeline	Responsible	Monitoring/ Evaluation/Evidence
Design and construct science labs; performing arts facilities; install wireless fidelity for all campuses	March 2013- August 2014	District and Contractors	Construction timelines monitored by facilities management and Superintendent
Hire project-specific staff (Project Director, etc.)	October 2013	District Human Resources	HR advertising, applications, selection
Implement monthly staff planning and collaboration time at each site – two days per month	October 2013-May 2014	Principals, school staff, Project Director	School calendars, district calendar, meeting agenda and notes
Develop each Magnet Academy Vision and Mission statements	September- October 2013	Principals, school staff, parents	Written vision and mission statement for each middle academy
Identify/develop and purchase magnet theme STEAM curricula, equipment, materials for each academy	October 2013-June 2014	District, principals, staffs, After School Coordinators,	Staff planning notes, purchase orders

		Project Director	
Coordinate seamless integration of STEAM activities with After School Programs. Expand After School STEM opportunities to more students	October 2013-June 2014	District, principals, staffs, CI, MESA, After School Coordinator	Process and quality observations by Principals, Evaluator, Project Director, After School Coordinator
Conduct monthly parent/community informational meetings in neighborhoods throughout the district; recruit new Parent Advisory Committee at each site	October 2013-March 2014	District, Project Director, Project Coordinators	School calendars, district calendar, meeting agenda and notes
Develop recruitment, enrollment forms, and marketing strategies; enroll magnet students	September 2013-March 2014	District and Project Director	Enrollment forms, press releases, number of magnet academy applications
Create and coordinate the master schedule at each site, based on PBL, eliminate 6-period day	March-April 2014	District, principals, staffs	Schedule developed for each magnet academy
Conduct STEAM and	October	District leaders,	Registrations, attendance

evidence-based professional development for integration	2013-June 2014	principals, staffs	
Recruit and hire additional highly qualified science, math, engineering and arts teachers	January- June 2014	District HR, Principals	HR advertising, applications, selections
Accept student magnet applications. Plan teaching assignments based upon enrollment. Finalize STEAM curricula	February- March 2014	Principals, staffs, Project Director	Completed applications; master schedule of classes and teachers based upon enrollment
Identify teachers to attend AVID, CHAMPS, WEB, CMB, Robotics summer trainings (paid)	November 2013-May 2014	Principals, staffs, Project Director, Coordinators	Registrations, attendance
Conduct technology training for all teachers on 1:1 computing and DyKnow classroom management	June 2014	District, principals, Project Director, Technology	Staff attendance with laptops for training
Summer Professional Development: AVID, WEB, CHAMPS teacher teams. <i>All staff</i> receive Visible Thinking Skills training (paid)	June 2014	District, principals, Project Director	Registrations, attendance

YEAR 2 2014-15 Focus: Implementation; Continue Professional Development in science, math, technology, school climate, universal access strategies, A World of Difference			
Action Plan	Timeline	Responsible	Monitoring/ Evaluation/Evidence
Full implementation of Voluntary Desegregation at three magnet middle school academies	August 2014	District, principals, Project Director	California Basic Education Data Base - Students (CBEDS) enrollment
ADL A World of Difference Training for all staff	Fall 2014	Principals, Project Director	Contract executed, training completed
STEAM courses in place. STEAM professional development continues	August 2014	District, principals, Project Director	Process observations by Principals, Project Director, Evaluator
Implement 1:1 computing for grades 6-7 in science, math, engineering, language arts, social science, electives	August 2014- June 2015	Teachers, principals, Project Director	Process observations by Principals, Project Director, Evaluator
Begin sustainability planning	January – June 2015	District, Project Director, Principals	Complete MSAP Sustainability Worksheets
YEAR 3 2015-16 Focus: Full implementation; Continue Professional Development in science, math, technology, school climate, universal access strategies			

Full implementation of STEAM as designed at all middle academies	August 2015	District, principals, Project Director, Evaluator	Process observations by Principals, Project Director, Evaluator
Full implementation of 1:1 computing grades 6-8	August 2015	District, principals, Project Director	Process observations by Principals, Project Director, Evaluator
Expand business and other partnerships to ensure sustainability	August 2015- and ongoing	District, principals, Project Director	Letters of support for business, nonprofit partnerships
Sustainability planning	August 2015- and ongoing	District, principals, Project Director	MSAP Sustainability Worksheets completed

The plan is effective to attain specific outcomes that will: (A) Accomplish the purposes of the program. Best Practices, Planning, Implementation, and Evaluation. We have a five-point process for assessing the effectiveness of our plan. The five steps are: use “best practices” for teaching and learning; emphasize planning and collaboration; provide expert professional development; focus on implementation with fidelity through monitoring and process evaluation; and finally, engage in reflection and self-correction. Best Practices. In his 2012 book, John Barel identifies 21st Century skills for teachers and students as inquiry, problem solving, critical thinking, creative thinking, reflection, collaboration/teamwork, and use of information technology. Further, he stated the intrinsic personal traits to be developed and nurtured are: self-

direction, leadership, adaptability/resourcefulness, responsibility, and global awareness. Use of best practices is woven throughout our plan. Student motivation and engagement are also significant components of our high quality education program. We can't afford to have students off-task when there is so much to be learned and gained through engaging in meaningful inquiry, discussion, and reflection. The Institute of Education Services (IES) What Works Clearinghouse (WWC) (<http://ies.ed.gov/ncee/wwc/>) stated that beginning in about 4th grade, students begin to "read to learn" rather than learn to read (assuming adequate early reading experiences). Their recommendations to attain specific achievement outcomes in adolescent literacy involve concentrated and intentional vocabulary development, extended reading, and writing. WWC suggests, "Establish meaningful and engaging content around the essential ideas as well as the specific leaning processes used to access those ideas. Provide a positive learning environment, relevance to student interests, everyday life, or current events. Build classroom conditions to promote engagement and conceptual learning though strategies such as goal setting, self-directed learning, and collaborative learning." Our project includes an emphasis not only on PBL, but also on implementing one-to-one computing, that is, providing each middle school student with a personal netbook computer to increase motivation and extend learning time. Our research and observations suggest this opportunity can make a significant contribution to student engagement and achievement, provided the appropriate monitoring technologies and practices are in place. In order to attract and sustain a diverse group of students, we chose STEAM programs as our magnet themes. STEAM education is exciting, still somewhat novel, and appeals to our middle school students and their families. Planning and Collaboration for STEAM Integration. Through our use of STEAM curricula to elevate content knowledge and integrate subject matter, teachers from science to language arts to physical education will work as teams, engaging in planning and

collaborative efforts to merge the knowledge of their respective disciplines, and to research and create challenging, engaging real-world questions and scenarios through Project Based Learning (PBL). In the first year, teachers will meet two half-days per month for planning and collaboration. Substitutes will be provided through MSAP funding. Planning will continue in Year 2 and be reduced in Year 3. Our work plan calls for continued teacher planning for curriculum development and authentic assessment. Professional Development. Teacher professional development is key to success. For this reason, professional development and teacher collaboration time are significant components of our magnet plan. Summer teacher institutes involving all staff are planned and budgeted, as well as subject-specific professional development for defined teachers (i.e. science and engineering). Implementation with Fidelity Through Process Monitoring and Evaluation. The worst nightmare for a project evaluator or compliance monitor is to review a project that did not implement its program as planned and designed. Many “best practices” are just that, practices that can be learned, monitored, and improved, but are not necessarily scripted. In this case, much of the effectiveness is in the hands of the highly qualified teacher. In other cases, curricula must be implemented as designed and sequenced, with nothing omitted. Teachers are allowed little variation, if the intended results are to be achieved. In this project, teachers will implement specific modules in marine biology and engineering as designed. Through process evaluation, we will observe teachers and students engaged in the learning process, questioning, observing, networking, and experimenting. It is critical that both our Project Director and Evaluator participate in professional development along with teachers and work with them to establish the rubrics by which we will evaluate ourselves and our project. It will take time for staff to develop trust in one another and be open to accept constructive or corrective feedback. Reflection and Self-Correction. Self-reflection will be

an important feature of our process. Through professional development, such as Visible Thinking Strategies, staff becomes students who read, write, reflect, and respond to the visual prompts and questions. This will help us better articulate and reflect upon our practices. We will continue to use student data to assess learning, but will also work together to create authentic assessments of learning that results from student projects. Data will drive our decision-making.

Outcomes are attainable within the project period. We recognize that three years is a short time in which to desegregate schools, create middle school magnet academies, acquire or develop and then implement STEAM curricula with fidelity, and achieve intended outcomes. We are committed to sustaining our STEAM magnet academies as a permanent school choice. Yet, the final project report of MSAP-funded achievements will be due in October 2016. Two axioms come to mind: “Keep your eye on the prize,” and “What gets measured gets done.” Under the mentorship of our Project Director and Evaluator, we will use continuous progress monitoring for both students and project goals. The Evaluation Plan calls for frequent process monitoring of grant activities, with regularly scheduled meetings between the Project Director, Evaluator, Principals, and Teachers, and periodic reports to the community. With a regular schedule for monitoring and reporting, we will be continuously looking at project benchmarks to assess progress and correct course. All three intermediate/middle schools are highly motivated to reach the API target, “Safe Harbor” (800 API) and even surpass that mark. Since encouraging student achievement gains were made over the past three years at Frank and Haydock, we are very confident that we will meet Safe Harbor within the grant period.

Goals and objectives are measurable and quantifiable. Our goals and objectives are listed in the Plan of Operation and also in the Logic Model (Appendix). For GPRA Annual Performance Measure 1, our project goal is the GPRA goal: Reduce, eliminate or prevent Hispanic isolation

and economic segregation. Objectives for Goal 1 are: 1a. Balance enrollment at all 3 middle schools (each school will be 1,000-1,300 total 6th-8th grade students; about 350-400 at each grade) by September 2014. 1b. GPRA: Balance ethnicity at each middle school: racial/ethnic balance is equal (+/- 5%) at each middle school by September 2015. 1c. Attract and re-enroll students who leave the district due to Program Improvement status (increase Average Daily Attendance to generate additional revenue based upon enrollment); reduce the number of students who transfer out of OSD for middle school to 100 or fewer by September 2015. GPRA Annual Performance Measure 2, the percentage of magnet schools whose students from major racial and ethnic groups meet or exceed State annual progress standards in reading/language arts; and 3, Percentage of magnet schools whose students from major racial and ethnic groups meet or exceed State annual progress standards in mathematics are our local goals. Our project-level Goal 3 is: Implement magnet middle school STEAM programs and evidence-based courses of instruction that substantially strengthen students' knowledge of academic subjects, especially in reading/language arts, mathematics, and science, to improve their attainment of tangible and marketable vocational, technological, and professional skills for students. Objectives for Goal 3 are: 3a. STEAM curricula will be implemented with fidelity in all middle schools by October 2014 and throughout the grant period. 3b. High academic standards for all students will be modeled, articulated, and supported by all middle school teachers and principals by August 2014 and continuing throughout the grant period. 3c. Common Core State Standards (CCSS) and supporting curricula will be in place for all middle school math, science, technology and English/Language Arts classes by August 2014 and continuing throughout the grant period. 3d. Beginning with fall 2014, middle school teachers implement at least one Problem Based Learning (PBL) challenge each school year that is integrated across math, science, technology,

engineering, and English/Language Arts. 3e. Beginning with fall 2014, all middle school teachers, including PE, social sciences and electives use Visible Thinking Strategies (VTS) at least once each year in implementing student lessons, as measured by observation and lesson plans. 3f. GPRA: Student academic achievement increases; all three magnet schools will achieve the State’s “Safe Harbor” target, which is equivalent to an API of 800 or 10% growth in achievement over the previous year’s AYP score for all numerically significant student groups each project year in *English/Language Arts* on the California Standards Test (CST) during the grant period (Spring 2014 through Spring 2016). 3g. GPRA: Student academic achievement increases; all three magnet schools will achieve “Safe Harbor” which is equivalent to an API of 800 or 10% growth in achievement over the previous year’s AYP score for all numerically significant student groups each project year in *Mathematics* on the CST during the grant period (Spring 2014 through Spring 2016). 3h. Student academic achievement increases by 5 point each years for English Learners on the California Standards Test during the grant period (Spring 2015 and Spring 2016). 3i. Beginning with fall 2014, all middle school teachers of core academic subjects use district’s student data system to analyze student performance and to plan instruction and intervention, and to track benchmark achievement throughout the school year, as measured by observation of department and grade level team meetings.

Can be used to determine the project’s progress in meeting its intended outcomes. Our Theory of Change can be summed up in three steps: Connect well, Create well, Implement well. A Theory of Change (TOC) defines all the building blocks required to bring about a given long-term improvement in a population or condition. Briefly, a TOC describes the actions and interventions that we believe will produce our desired outcomes. The process of developing a TOC required us to answer the question, “What makes us think that if we do A, B, and C, it will bring about the

change/improvement in X, Y, and Z?” Our Theory of Change is embedded in our Logic Model (Appendix). There, we listed the pre-conditions that must be met for our actions to bring about the intended results. We also listed the assumptions we hold about the barriers and facilitators of change. In our Logic Model and throughout these application pages, we describe three main preconditions for learning: 1) establish a safe, nurturing, stimulating, and respectful school climate as a foundation for student learning and adult collaboration (Connect well); 2) use research-based best practices, effective technologies, clear plans and pathways, and interesting activities to stimulate curiosity and create learning opportunities that engage students (Create well); and 3) provide professional development, support, and recognition for staff to deliver the evidence-based practices and curricula as designed (Implement well). Our external project Evaluator has been selected and was involved with us during our recent planning process. The Evaluator understands our goals and processes, and is prepared to spend time with us during the grant-funded planning of Year 1. She will attend on-site professional development to acquire an appreciation of the pedagogy that we will employ, and will use that knowledge to help us assess our strengths and areas for improvement. The Evaluator and Project Director will work closely throughout the three-year funding to guide implementation and evaluate results.

The plan is effective for utilizing its resources and personnel to achieve the objectives of the project, including how well it uses key personnel to complete tasks and achieve the objectives of the project. We are extremely fortunate to have strong local partnerships with businesses, research facilities, nonprofit organizations, and higher education. Letters of support (see Appendix) demonstrate the strength of these commitments. One of our primary partnerships is the Science and Education faculty at California State University Channel Islands (CI). CI identified “two faculty members, one from the fine arts and one from a STEM discipline, to

serve as faculty liaisons with the middle schools to help them implement the innovative magnet school curriculum proposed by Oxnard School District. These consultants will be hired for eight days per semester at the faculty members' daily rate. The STEM faculty member will also assist in helping the schools to implement science activities designed to meet the Next Generation Science Standards. A CI Education faculty member, Prof. Jeanne Grier, will provide consulting to the Oxnard School District to assist the teachers in implementing the Common Core State Standards (CCSS) and the Next Generation Science Standards (NGSS) and in learning how to teach across the curriculum as outlined in the CCSS and NGSS." CI's award-winning after school STEM program will begin in Year 1, and this collaboration allows us to link student learning in the classroom during the day to the extended learning time of the after school program. Our After School Program Coordinator will work closely with CI and our other after school STEM partner, University of California, Santa Barbara's (UCSB) MESA program (Mathematics, Engineering, Science Achievement). Business partnerships in agriculture at Haydock and with Amgen (through their collaboration with CI) connect our students to local career opportunities. Haydock Intermediate School serves as an example. Over the past three years, Haydock has worked to develop STEM. Through a partnership with UCSB MESA, approximately 40 students each year participate in a STEM after school program. MESA also funds student and teacher participation in local and regional science demonstrations and competitions, and pays for transportation. The district's After School Education and Safety (ASES) program matches funds to pay for after school staff. With MSAP funds, STEM will be extended and developed within the school day. Additional (MSAP) funds are needed to hire new STEM staff for Haydock, specifically, a highly qualified math and two science/engineering teachers. Our Project Director, a new administrative position in the district, will work under the

supervision of the Assistant Superintendent of Educational Services to coordinate and monitor project implementation on all levels.

How it will ensure equal access and treatment for eligible project participants who have been traditionally underrepresented in courses or activities offered as part of the magnet school, e.g. women and girls in mathematics, science, or technology courses, and disabled students. One of the most exciting features of our partnership with both UCSB and CI is that their projects are grant-funded and target students who are underrepresented in STEM fields. Both universities have recruited local and minority students into their own STEM programs. Using a mentoring model, the university students model “doing science” in the after school programs, and show our kids how “cool” and “fun” science is. Work is hands-on, minds-on, and project-based. The goal is to develop the interest and foundational knowledge for Oxnard students to elect STEM fields or science and math teaching at a four-year university. The majority of our students in Oxnard qualify as underrepresented in STEM: Hispanic/Latino males and females, Economically Disadvantaged students, and English learners, making these project partnerships a perfect fit.

Another strong program that is already in place at our intermediate/middle schools is AVID – Advancement Via Individual Determination. AVID is a college readiness system for elementary through higher education that is designed to increase school wide learning and performance. Through specific learning and personal development strategies and mentorship, AVID accelerates student learning by providing support to students who do not have parents that attended university. AVID supports both the student and the parent, through evening presentations on topics such as maintaining a high grade point average, participating in clubs, completing community service, taking college-prep classes in high school, gathering information to choose a college, financial aide and scholarships, and related information that families and

students need to make a six-year plan for their child to be accepted into college. Field trips to local private and public universities are a feature of AVID, beginning in middle school. Students need to develop a vision of college, and “picture themselves” as students on campus. AVID uses research-based methods and specifies effective instructional practices for teachers, such as Cornell note taking. AVID training provides meaningful and motivational professional learning, and acts as a catalyst for systemic reform and change. Although AVID serves all students, the AVID elective focuses on the least served students in the academic middle. AVID’s formula is simple - raise expectations of and for students and, with the AVID support system in place, they will rise to the challenge. A goal of AVID, beyond academic achievement for students, is to create or enhance a college-going culture at the school that supports high expectations and levels of achievement for all students." <http://www.avid.org/> With a strong school-wide AVID program in place at all three intermediate/middle schools, we are excited to expand the opportunities for our students to explore and prepare for STEM as a possible college major.

Two other areas to address are girls/women in science and integration of students with disabilities. We have discussed the idea of creating one section of math for females only, as some schools have done, but we have not reached consensus. At the present time, we plan to implement our STEAM program as designed, with co-educational classes, and examine our data in Year 2 to see if we find disparities in math, science, or engineering achievement between girls and boys. We will address this issue only if our data suggest a statistical difference in achievement. As for students with disabilities, OSD has been a local leader in our county in integrating students with disabilities in core general ed. classes. OSD uses a model called “co-teaching in inclusive classrooms” in which the general education teacher and the special education Resource Specialist fully integrate their students and co-teach the class (Language

Arts, math, science). Students with mild disabilities, Specific Learning Disability, Asperger's Disorder, mild Autism, speech and language disorders, Emotional Disturbance, behavioral problems, physical disabilities, and Other Health Impairment, as well as students with moderate handicaps such as blind/visually impaired are fully integrated into core classes. The general ed. teacher takes the lead on core subject matter and curriculum, and the special ed. teacher most often provides guidance on accommodations and strategy instruction for diverse learners. Strategies include: multi-modal approaches to presentation and student output, study skills training, use of mnemonics, teaching all students organization and planning skills, self-monitoring, and self-advocacy. This model has been very successful for all students, including those with special needs, who benefit from the greater support provided in classrooms where co-teaching occurs. Further, this is a normative environment that exemplifies true integration. Students learn to value diversity and difference, working side-by-side.

Effective plan to recruit students from different social, economic, ethnic, and racial backgrounds into the magnet schools. We have an effective plan to recruit students from different social, economic, ethnic, and racial backgrounds. OSD embraces the magnet school mission, to create a middle academy “so distinctive and appealing – so magnetic – that it will draw a diverse range of families from throughout the community eager to enroll their children even if it means having them bused to a different... neighborhood” (U.S. Department of Education, 2004, p. 1). “To do so, the school must offer an educational option – a specialty – that is not available in other area schools” (ibid, p. 1-2). In western Ventura County, there is no middle school offering STEAM, and no middle school offering the challenging and dynamic programs that we are able to offer through local partnerships: marine biology, environmental science resource management (ESRM), biotechnology and biomedical applications, physics and robotics, and performing arts.

Even the private schools in the community do not offer these exciting options for middle school students. Our magnet themes are challenging and also sustainable, due to local resources such as the Pacific Ocean, Channel Islands National Park, Coastal Marine Biolabs, and Oxnard Science Center (marine biology); large agricultural fields, agribusiness, and resource management (ESRM), biotechnology and biomedical applications (UCSB MESA, Amgen); physics and robotics (U.S. Naval Air Station Pt. Mugu, Naval Construction Battalion, Hueneme High School Robotics, and CI); and performing arts (Rubicon Theater Company, Ventura Music Festival, CI). Further, we engaged and listened to parents in our community, especially traditionally underrepresented parents (low income Latino) who told us they want educational programs that lead to viable well-paying careers in our community, and opportunities for higher education, also within our local community. Our efforts are entirely locally developed and integrated. Our themes build upon local resources and opportunities and will prepare students for careers that increase their economic well-being. In partnership with CI, UCSB, and Oxnard College, we are beginning to build a “college-going culture” and “college to career pipeline” (see Appendix). CI and Oxnard College are enthusiastic to partner with the district in this magnet school endeavor, since the community college and university are committed to developing local, ethnically diverse scientists and science teachers who will live, work, and invest back into the local community. We are fortunate to have a wealth of resources within a 50-mile radius of Oxnard. CSU Channel Islands (CI), the newest California State University, is a student-centered, four-year, public university known for its interdisciplinary, multicultural, and international perspectives and its emphasis on experiential and service learning. CI's strong academic programs focus on liberal studies, sciences, business, teaching credentials and innovative master's degrees such as the M.S. in Bioinformatics. Students benefit from individual attention,

up-to-date technology, and classroom instruction augmented by faculty research. The University promotes partnerships with the community and works to build pathways to college for Ventura County residents. CI actively pursues sustainable and energy efficient practices. Oxnard College (OC) is an accredited two-year college that is part of the Ventura County Community College system. OC is designed to meet the needs of a multicultural, multilingual population of adult students. OC specializes in transfer, occupational, and general education, second language acquisition, and basic skills development. The college operates a Marine Center, located on Oxnard's Fisherman's Wharf, offering oceanography and marine biology classes in classrooms and an aquarium that features displays and touch tanks with local marine animals and plants for study. OSD also has a partnership with the University of California, Santa Barbara for writing projects and MESA (Mathematics, Engineering, Science Achievement). In addition, Oxnard teachers have participated in The Jason Project, a non-profit organization that connects students to real science and investigation to inspire and motivate them to study and pursue careers in STEM. Jason offers professional development, core curricula, resources, and live online interactive events for students and teachers.

The U.S. Department of Education finds that socioeconomic status has become increasingly important in defining student diversity, and "minority" students have become the majority in some states (2004). This is our situation in Oxnard. Our population is not only predominantly Hispanic/Latino, but also our populace is becoming more multi-ethnic and multi-racial; increasing numbers of students self-identify as two or more races/ethnicities. Segregation in schools and communities is based less on physical characteristics and more on economic status. Our Voluntary Desegregation Plan recognizes this, and the magnet school initiative drives our integration plan. We are creating middle school magnet academies with *no attendance zone*;

all 6th-8th-grade students who want to attend will apply, and students can live anywhere in the district. All students who apply will be accepted, until the school is at capacity. We recognize that this project requires a multi-pronged and longitudinal information and recruitment campaign, since students have never had to apply to middle school. Our process will be similar to kindergarten registration: all are accepted and placed, and early registration likely guarantees the student/family will receive their first choice academy. If the academy is full when the student applies, the student will be placed on a waiting list for that school. Upcoming vacancies will be filled from the waiting list by lottery.

Further, magnet programs offer the promise of effective schools, characterized by innovation in programs and practice, curricular coherence, staff collaboration, increased parent and community involvement, and greater student engagement (U.S. Department of Education, 2004). “A commonality is there needs to be more STEM learning opportunities than in a conventional school... There needs to be a richer set of resources and a requirement that goes beyond the minimum in math and science” (Robelen, 2011). Steps we are taking to develop distinctive, attractive magnet schools are: 1) create a focused vision and program mission; 2) clarify and blend funding streams; 3) configure transportation; 4) select project staff (Project Director, science, math, and tech. staff); 5) recruit and select highly qualified STEAM teachers with the talents, deep subject matter knowledge, and pedagogical expertise that are required to implement and sustain the STEAM magnet emphases that we value; 6) select or co-develop, with our partner agencies, evidence-based STEAM curricula; 6) provide professional development in STEAM and safe schools, and support professional learning communities throughout the project; 7) extend the school day through seamless integration with our established After School Education and Safety (ASES) programs to continue student-centered STEAM projects; 8)

actively recruit underrepresented students through high school and college to serve as mentors and tutors, and 9) through formative (process) and summative evaluation, to use data-based decision making to inform and improve our curricula and methods, and celebrate and report our successes.

Effective Outreach and Marketing. We believe that “if we build it, they will come!” Students and parents who learn about the three magnet academy options will be as excited as we are in developing them. Beginning in Year 1 and continuing throughout the project, the Project Director will meet with parents and fifth grade students at each elementary school (16 schools) to promote the three magnet school academies and to answer parents’ questions and concerns. Parent presentations will be interactive, taking suggestions and ideas from parents as well as presenting the plan, and will be conducted in English and Spanish to accommodate our families. The Project Director will also present throughout the community at City Council, Rotary and Kiwanis Club, Boys and Girls Clubs, and other venues to promote the magnet schools.

Quality of Personnel. *Experience and training in fields related to the objectives of the project, including key personnel’s knowledge of and experience in curriculum development and desegregation strategies.* Each middle school is staffed by a committed, enthusiastic, and highly qualified staff ready to contribute to the success of their restructured magnet academies. Staff at each school has been preparing this year to implement the middle school magnet program. Each staff takes great pride in their school. They are regarded as positive, student-centered, they work well as a collaborative team, and each readily embraces new teaching strategies and technologies that promise better outcomes for their students. The staffs possess strong expertise in working with diverse student populations and also with desegregation; several worked in Oxnard during

the period of court-ordered desegregation. The middle school personnel are committed to teaching to rigorous academic standards, and incorporating strategies found to be successful with ELL, economically disadvantaged students, and students with disabilities. They enthusiastically embrace the partnerships that will enable them to actualize STEAM magnet school academies during the school. There is great excitement among those who have been involved in STEAM planning.

Table I. Percent of Intermediate Teachers Who are Highly Qualified.

	Frank	Fremont	Haydock
Percent of Highly Qualified Teachers	100%	100%	100%
Highly Qualified Science Teachers	11	9	5
Highly Qualified Math Teachers	12	8	5

Oxnard’s Superintendent and several School Board members worked for the district during the court-mandated desegregation, and are fully committed to voluntary desegregation to achieve equity and increase parent choice and voice. Educational Services staff, Curriculum and Instruction, and the Assistant Superintendent possess training and expertise in curriculum development and implementation of evidence-based programs with diverse student populations including ELLs and disadvantaged students. Several teachers and administrators are bilingual, with Bilingual-Cultural-Linguistic Diversity (BCLAD) certification. Others hold certification as teachers with advanced training for culturally-linguistically diverse students (CLAD).

Table J. Percent of Intermediate Teachers Who Hold BCLAD and CLAD Certification.

	Frank	Fremont	Haydock
Percent BCLAD	6%	2%	3%

Percent CLAD	94%	98%	97%
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The Superintendent and Assistant Superintendent for Educational Services will oversee and manage the MSAP project until the Project Director is hired in fall 2013. They have been meeting with principals, School Board, and community members throughout the planning.

MSAP-Funded Personnel: *Project Director is qualified to manage the project. Ensure that the applicant has in place the necessary processes and systems to comply with reporting*

requirements. Project Director. (See Job Description.) The Project Director will coordinate all magnet project activities and will define, develop, and implement the project vision. Other major responsibilities include: managing the overall and school-site magnet school program budgets; collecting, organizing, and providing GPRA and project-level data for the annual and final evaluation reports; acting as liaison between MSAP and the District; ensuring that all project timelines are met; planning student recruitment and efforts to coincide with district Magnet School of Choice process; building awareness of the magnet program; coordinating recruitment through the use of ads, posters, free publicity, direct mail, local cable television and radio spots in English and Spanish, televised Board of Education meetings, and in-person presentations to community groups in English and Spanish, such as Oxnard City Council, Rotary, Kiwanis, El Centrito de la Colonia, and others; ensuring that project communication takes place in both Spanish & English; planning, scheduling, implementing, and evaluating all project-related staff development; tracking project accomplishments and outcomes; problem-solving obstacles and celebrating successes.

Project Director: Qualifications, Training, and Experience	
Leadership	Administrative Services Credential

	<p>Evidence of successful leadership with diverse staff and community</p> <p>Excellent communication, organization, planning skills</p> <p>Knowledge of Professional Learning Communities best practices</p>
<p>Magnet School Training, Experience</p>	<p>Experience or training in magnet school education</p> <p>Eager to further develop expertise in magnet school education</p> <p>Experience in gathering and analyzing student and other data; completing state or federal grant reports</p> <p>Experience in professional development training; curriculum development</p>
<p>Diversity Training, Experience</p>	<p>Authorization for English Learner instruction (BCLAD or CLAD)</p> <p>STEM classroom teaching experience with diverse learners</p> <p>Awareness/use of best practices for diversity education, multilingual education</p> <p>Experience and/or knowledge of successful desegregation practices</p>
<p>STEM</p>	<p>Knowledge and experience with advanced Science curricula, including Next Generation Science Standards and Common Core State Standards</p> <p>Knowledge of or willingness to develop resources and curriculum in Engineering</p> <p>Familiarity with state-of-the art educational technology and applications such as Promethean Boards, document cameras, and 1:1 computing</p> <p>Knowledge of or willingness to develop resources and curriculum in advanced mathematics for students</p> <p>Able to access and coordinate STEM resources, professional development, and student projects with local partners including business and universities</p> <p>Knowledge of and experience in Project Based Learning (PBL)</p>
<p>Arts</p>	<p>Knowledge of or willingness to develop resources and curriculum for visual and</p>

	<p>performing arts, including music, dance and theater</p> <p>Knowledge of or willingness to develop resources for music, art, dance, theatre technology, stagecraft, lighting, performance and production</p> <p>Able to bring professionals and community productions, performers, and resources to magnet schools</p> <p>Able to access and coordinate arts resources, professional development, and student projects with local partners including artists, performers and universities</p>
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The Project Director position will be filled through a broad announcement and recruitment process and in accordance with the district’s non-discriminatory employment procedures. OSD collaborates with two local universities to support district teachers in earning a master of education degree while continuing district service. This collaboration has resulted in a strong pool of administrative candidates from diverse backgrounds for positions throughout our county. Our Assistant Superintendent, Educational Services, will serve as Acting Project Director until the grant-funded Project Director is hired in October 2013 (see Resume).

Other key personnel are qualified to manage the project.

Site Project Coordinators. Three Site Project Coordinators, one for each magnet academy, will assist the Project Director and Principals with project-related duties at each academy. The Coordinators will have a strong technology and science background, or music/theatre experience for Haydock, and will work with site administrators and the Project Director to implement the magnet school themes, ensure application with fidelity, assist with professional development, and collect school-level data for MSAP reports. Site Project Coordinator qualifications and

experience will be substantially similar to that of the Project Director, but candidates would be expected to have greater knowledge of the school-level themes and practices.

Technology Teacher Specialists. Three – one for each magnet academy. The Technology Specialist is a certificated teacher who is able to clean and repair computers; teach advanced computer skills to teachers and students; maintain computer and Internet security, comply with district security requirements; is familiar with the OSD Technology Plan and curriculum; is proficient with Microsoft office suite and creative software; and demonstrates competency in current uses of technology for teaching/learning. In addition, candidates will have experience working with diverse student populations, and excellent communication, organization and planning skills.

External Evaluator. The Evaluator will be an independent consultant with formal training and experience evaluating federally funded grant and education programs, designing multiyear evaluations, developing programs for diverse learners, guiding staff in data review process, analyzing and reporting trends, and generating annual and final performance reports. She will demonstrate excellent oral and written communication skills for working with staff and community. The Evaluator will lead a collaborative evaluation effort, develop the evaluation design, assist with data collection procedures, provide process observations, analyze data and report progress at semi-annual leadership and School Site Council meetings, monitor fidelity of project implementation, make data-driven improvement suggestions, identify areas of project strength for replication and dissemination, and with the Project Director, develop grant performance reports and the final evaluation report.

Office Manager for Magnet Academies. A skilled, technologically proficient classified office manager will assist the Project Director at the district level. The Office Manager will assist with

development of letters and forms, assist with magnet schools applications, tracking and enrollment, order and track supplies, assist with data management, and help to publicize the magnet school programs.

Consultants. Beginning in Year 1 and throughout the project, expert consultants will be brought in to provide professional development and teacher coaching in PBL, VTS, Sciences, Marine Biology, Robotics, Computer Aided Design (CAD), Engineering, Visual and Performing Arts, Music, and Theater. Each consultant will be vetted for education, qualifications, experience, and effectiveness with diverse middle school students, and all will have recommendations from schools/districts with populations similar to OSD. Resumes for our consultant in Visible Thinking Strategies, CI STEM, and the STEM After School Program are included in the Appendix.

District-funded personnel:

Assistant Superintendent, Educational Services. The Assistant Superintendent is the designated MSAP Project Director during the planning and development phases, until MSAP funding is obtained, at which time the full-time Project Director will be hired. The Assistant Superintendent is responsible for working with the Superintendent in providing leadership and in directing and supervising the development, maintenance, and improvement of the district's educational programs.

Principals. Each of our three intermediate school principals has experience with diverse and economically disadvantaged students. They themselves are ethnically diverse, and mirror the Oxnard community. All three are women: two Latinas and one African-American. All have experience with curriculum development, team building, and professional development (see Resumes of Key Project Personnel).

AVID Teacher-Coordinators. OSD Educational Services will continue to support three AVID Teacher-Coordinators, one at each magnet academy. AVID – Advancement Via Individual Determination – is an evidence-based college readiness program designed to increase school wide learning and performance. The AVID system was developed to address the needs of underserved, often minority students through raising expectations and providing a support system to help them succeed. Policymakers and school administrators consider AVID an essential strategy for closing the achievement gap and making the college dream accessible for all students. Each middle school currently employs AVID strategies; we will maintain AVID site certification, increase teacher training, and monitor implementation of AVID School wide Instruction, such as use of Cornell note taking and 21st century tools, to ensure students’ readiness for high school and college.

Technology Director. OSD’ Director of Technology is a credentialed elementary teacher with more than 15 years’ experience in managing and teaching adults and students to improve their lives through technology. (See Resumes of Key Personnel).

Director of After School Programs. The After School Program Director is a district administrator with expertise in working with diverse learners. She coordinates the after school services at all 20 district elementary and middle schools. (See Resumes of Key Personnel).

Teachers who will provide instruction are qualified to implement the special curriculum to the magnet schools.

STEAM Teachers. One challenge to implementing an effective and authentic STEAM magnet program is acquiring middle school teachers with deep subject matter knowledge, particularly in our themed sciences of marine biology, engineering and robotics, environmental resource management, and mathematics. Current teaching staffs are highly qualified in the sciences and

mathematics as described in Table I. We anticipate a need to hire 2-3 new teachers at each middle school for core science and/or higher-level mathematics instruction with deep subject matter knowledge of biology, chemistry, physics, and engineering at each middle school. This will involve negotiations with teachers and with the teachers' union, Oxnard Educators Association. In Year 1, we are preparing to *open all middle school teaching positions as "new."* *All current and prospective middle school teachers must apply for these new positions.* This will allow each site principal and interview committee to "pick their team" based on the need for highly qualified teachers with specific subject matter knowledge (magnet themes), demonstrated effective teaching practices, and documented success in closing the achievement gap for diverse learners. We recognize that, as Reece (2003) noted, "The teachers whose undergraduate backgrounds fail to match the standards are not bad people nor are they unprofessional educators. Rather, their preparation is better suited to a different grade level" (p. 11). By making this decisive move in teacher assignments prior to opening the reconfigured middle schools, the district will create opportunities for many younger teachers, who would not otherwise be able to apply due to union regulations specifying seniority in hiring. This process will dramatically improve student achievement through bringing together a collaborative, enthusiastic magnet team at each academy. For the STEAM content areas, OSD will require that each teacher have a college major in the STEAM subject in addition to a secondary teaching credential. We will also send teachers to robotics, biology, and technology institutes to develop or advance subject-matter expertise. We are seeking art and theater arts teachers with these college majors as well as teaching credentials.

As part of nondiscriminatory employment practices, will ensure that personnel are selected for employment without regard to race, religion, ethnicity, color, national origin, sex, age, or

disability. In addition to federal and state laws requiring nondiscriminatory hiring practices, Board Policy (BP) 4030 complies with the Americans with Disabilities Act (ADA) and also specifies fair and nondiscriminatory practices. OSD is an equal opportunity employer. BP 4032 states that the District will develop a plan and make any reasonable accommodations to the work environment for an individual with a disability both in the job application process and also in performing the essential functions of the position for which s/he is hired. Employees shall “enjoy equal benefits and privileges of employment as are enjoyed by the district's other similarly situated employees without disabilities” (BP 4030). OSD promptly investigates any and all complaints. We are proud that members of the Board of Trustees, our administrators, teachers, and classified employees reflect the ethnic diversity of the Oxnard community.

Quality of the Project Design.

Each magnet school will promote desegregation; increase interaction among students of different social, economic, ethnic, and racial backgrounds. Over many generations, defacto school segregation existed in Oxnard. We described the historic court-ordered desegregation spanning 17 years in Competitive Preference Priority 1. In our Logic Model (Appendix), our first problem statement is, “Intermediate schools currently are ethnically segregated due to economic, ethnic, community housing, and social factors.” Educators, parents, and our community are committed to economic, social, racial, and ethnic integration of students, including individuals with disabilities. How else can we establish a safe, tolerant, respectful, and equitable society, except through modeling and co-creating this vision with our children? Thus, our solution is to establish and sustain three dynamic middle school magnet academies to attract diverse students from the entire district to attend schools of choice; use voluntary desegregation and open

enrollment at middle schools to draw diverse students to the magnet academy of choice; and accept and enroll all students who apply, until schools are at capacity.

Our rationale for promoting integration is to increase student and parent choice, and to build greater equity. Conditions that are necessary for this to occur are parent, middle school staff, school board, and student buy-in. So, we engaged our community in conversations and planning over the past ten months to bring about this shift in practice and the change in middle school enrollment process. These conversations will continue this spring and throughout Year 1. Our desired outcomes of desegregation are: establish and maintain ethnic and SES balance at district middle schools; create equitable access to stimulating, high quality instruction and academic programs to increase academic achievement; and bring about peaceful, respectful, meaningful interactions among diverse students.

GPR Annual Performance Measure – OSD Goal 1: Reduce, eliminate or prevent Hispanic isolation and economic segregation. Our measurable objectives for this goal are: 1a. Balance enrollment at all three middle schools by September 2014. Each school will enroll 1,000-1,200 total 6th-8th grade students, with approximately 350-400 at each grade level. 1b. Balance ethnicity at each middle school: racial/ethnic balance will be equal (+/- 5%) at each middle school by September 2015. This formula is much more strict than that imposed during court-mandated desegregation (15% formula) 1970-1987. 1c. Attract and re-enroll students who leave the district due to Program Improvement status; reduce exit-flight to less than 100 students by September 2015. Attaining objective 1c will increase our Average Daily Attendance, thereby generating additional revenue from the State.

To achieve these objectives, we are in the process of implementing the following: 1) Voluntary Desegregation; 2) eliminating all middle school boundaries; 3) developing a magnet

open enrollment procedure; 4) revising the district transportation schedule and routes to add middle school transportation from the neighborhood middle school to magnet school of choice; 5) designing and upgrading middle school facilities to match STEAM requirements; 6) creating a marketing campaign to attract students and their families to our magnet middle schools; and 7) holding additional parent and student focus groups to address parent and student concerns, and gathering input that will improve the responsiveness of our programs and practices. (See Work Plan.)

Strategies for Changing Practices. Our most serious challenge to desegregation is neighborhood gangs. Problem 6 states, “Community and youth gangs cause student segregation by neighborhood. Students from neighborhood gangs currently will not attend schools of rival gangs, and are therefore intentionally segregated by school boundaries, due to gang-related posturing, threats, and violence.” Gangs have been a part of Oxnard’s culture for decades; gangs are multi-generational and territorial. A number of our students “claim” gang affiliation (but may not yet be gang members, according to Oxnard Police Department Gang Task Force).

Neighborhood gangs promote student segregation; students from neighborhoods where gangs “claim” territory currently will not attend schools in the territory of rival gangs. In the past, as a district we intentionally segregated these students by school boundaries to avoid gang-related incidents. However, this practice does not integrate, it does not teach, nor allow students to learn to live and work with difference, to use conflict resolution skills, or to create a different future. Our school boundaries work against the principals of equity and equal access. We will meet this challenge through ongoing community dialogue, providing staff training, and implementation of evidence-based prevention and intervention programs to build respect and tolerance for diversity. We selected universal (Tier 1) prevention strategies and programs that will help us change our

relationships and practices over time: CHAMPS/Safe and Civil Schools, A World of Difference, and Where Everyone Belongs (WEB). With the support of the Oxnard community and the Gang Task Force, and through these effective universal prevention and conflict intervention strategies and practices, we expect that over time, middle school students from affected neighborhoods will disperse by choice among all three magnet schools (and the K-8 schools not included in MSAP) to reduce, prevent, or eliminate gang identification and behaviors before, during, and after school, and to maintain safe and positive school climates. Our project-level goal is: Goal 6a. Establish and maintain safe and positive school climates at all middle schools by implementing evidence-based prevention and intervention programs to improve positive student behavior; increase student integration by eliminating middle school neighborhood boundaries and increasing students' educational choices via magnet school programs.

In their Single Plan for Student Achievement (SPSA), all three intermediate schools identified improved student behavior as a site goal. To address this, Haydock Intermediate began implementation of one of our selected project-wide prevention/intervention programs in 2011, CHAMPS, and is achieving very positive changes in staff and student behaviors. For project goal 6a, our objectives are: 6a. Year 1: Meet with Oxnard Gang Task Force and community (2 or more meetings) to plan for voluntary student desegregation; garner parent and community support. 6b. Year 1: Use a Trainer of Trainers model to train select intermediate/middle school personnel at all sites in: CHAMPS/Safe and Civil Schools; Year 2: Provide all staff (including classified staff) on-site training in A World of Difference, and train selected staff in Where Everyone Belongs (WEB) by June 2014. Our implementation plan is: if funded, in July 2013 we will request pre-approval from MSAP to send three teams of three teachers from each middle school, the school principals, and the Acting Project Director to the Safe and Civil Schools

National Training Conference. Safe and Civil Schools is based on the philosophy that student achievement improves when classrooms, schools, and districts are safe and civil. When students respect each other and school staff, and understand expectations for success and consequences for misbehavior, they are better able to actively engage in learning. Teams will attend the two-day Effective Classroom Management course, and will then attend the two-day training in Practical School Leadership – A How-To Guide for Improving Your School’s Improvement Plan. Also in Year 1 (summer 2014), we will send three teams of five teachers/volunteer staff to training for Where Everyone Belongs (WEB). WEB is a middle school orientation and transition program that welcomes 6th graders to make them feel comfortable in their first year at middle school. The program trains 8th grade students to be leaders and mentors to the incoming 6th graders. They participate in team-building activities, and both students and adults provide guidance to new students on strategies for academic success in middle school. WEB is a yearlong transition program with four components: middle school orientation, academic follow-ups, social follow-ups, and leader-initiated contacts. This program has been correlated with increased school achievement. WEB is our student integration vehicle. We selected this specific social influence program to increase student interaction among diverse ages and groups on campus. In Year 2, we will bring a trainer from the Anti-Defamation League (ADL) to OSD to provide a two-day interactive training in A Classroom of Difference and A Campus of Difference. ADL provides trainings in anti-bias education, recognizing that attitudes and beliefs affect actions. A World Of Difference Institute's programs and resources are designed to help participants: recognize bias and the harm it inflicts on individuals and society; build understanding of the value and benefits of diversity; improve intergroup relations; and confront racism, anti-Semitism and all other forms of bigotry. 6c. WEB-trained teachers select 7th grade

students in the spring who will be 8th graders in the fall; train these WEB leaders to be mentors to incoming 6th grade students at each middle school in August 2014. 6d. Implement selected school climate and safety interventions with fidelity (CHAMPS, A World of Difference, WEB) as measured by periodic process evaluation across all project years. 6e. Increase positive school climate, school bonding, and student integration at each middle school as measured by annual assessment with the TRENDS Climate and Safety Surveys. The TRENDS surveys (www.pacificnwpublish.com/trends) provide information for analyzing strengths and weaknesses and building consensus based upon input from all stakeholders. These online surveys will be completed by students, teachers, and staff annually. Online scoring and reports are generated for schools in real time. 6f. Monitor 6th-8th grade student attitudes and beliefs about school with the online Positive Experiences at School Scale (PEASS) (Furlong, et al., 2013) in fall and spring of each project year; trend line will indicate an increase in students' positive views of schools, peers, and teachers across the grant period.

MSAP strategies and practices will improve academic achievement for all students, including the manner and extent to which each magnet school program will increase student academic achievement in the instructional areas offered by the school.

To meet this requirement, we began with school facilities. Our problem statement 2 (See Logic Model) is: Current Intermediate school facilities and equipment are outdated; facilities as constructed and equipped do not allow conversion to future-oriented STEAM academic programs. Therefore, we need to build or reconfigure, equip, and staff our science, engineering and technology labs with infrastructure and equipment to implement our STEAM programs at each middle academy. To this end, our School Board and community came together to promote Measure R, a \$90 million general obligation school bond passed by 67% of local voters in

November 2012. Measure R provides new monies to significantly redesign/reconstruct and convert to middle schools to implement planned STEAM programs that we expect will improve student academic engagement and achievement. Measure R funds cannot be used for supplies or teacher training, however, so we must apply for MSAP funds for materials, project staff, and teacher professional development to actualize our magnet STEAM academies. With MSAP funds, our facilities goal is: Goal 2. Ensure that all middle school students have equitable access to a high quality education in schools that are designed and equipped for the 21st century, and which will prepare them to function well in a technologically oriented and highly competitive economy comprised of people from many different racial and ethnic backgrounds. It is important that our facilities design is future-oriented and flexible, able to grow and expand as technology, research, and student needs change. Our objectives for Goal 2 are: 2a. Complete the middle school facilities re-design and construction to meet STEAM program requirements by July 2014; and 2b. Provide all middle schools with equipment at materials needed to implement high quality STEAM programs by October 2014. The STEAM facilities plan was completed February 2013. We are in the process of finalizing the curricula, equipment, and materials needed so that we can begin teacher professional development this summer. By the end of the grant period, we anticipate that our students will leave the magnet academies prepared to succeed in rigorous academic programs in high school that prepare them for college/university success and/or career.

As part of the reconstruction, we will also expand and improve the facilities at Haydock for visual and performing arts. The reconstruction includes a second music room for strings/orchestra in addition to the current band room, and a large drama classroom. We will expand storage space for instruments and uniforms, and will add practice rooms for students. We need to purchase a new curtain for our stage, and add a green room. We also will purchase and

install lighting and sound equipment for theatrical productions. Haydock's performing arts plans call for a dance studio with mirrors and bars that will be built near the physical education rooms.

Our problem statement 3 addresses GPRA Performance Measures 2 and 3: In Oxnard, academic achievement is persistently low. Current Intermediate Schools are in year 5 of NCLB Program Improvement; District is in Year 3 of PI. Schools do not consistently make annual API; students do not consistently meet annual AYP. Restructuring is required. GPRA Annual Performance Measure 2: Students from major racial and ethnic groups meet or exceed State annual progress standards in reading/language arts. OSD Goal 3a. Implement magnet middle school STEAM programs and evidence-based courses of instruction that substantially strengthen students' knowledge of academic subjects, especially in reading/language arts and science, to improve their attainment of tangible and marketable vocational, technological, and professional skills for students. Objective 3a is: STEAM curricula will be implemented with fidelity in all middle schools by October 2014 and throughout the grant period. Objective 3b is: High academic standards for all students will be modeled, articulated, and supported by all middle school teachers by August 2014 and continuing throughout the grant period. Objective 3c is: Common Core State Standards (CCSS) and supporting curricula will be in place for all middle school math, science, technology and English/Language Arts classes by August 2014 and continuing throughout the grant period. Objective 3d is: Beginning with fall 2014, middle school teachers implement at least one Problem Based Learning (PBL) challenge each school year that is integrated across math, science, technology, engineering, and English/Language Arts. Objective 3e is: Beginning with fall 2014, all middle school teachers, including PE, social sciences and electives use Visible Thinking Strategies (VTS) at least once each year in implementing student lessons. Our objective 3f for GPRA 2 is: Student academic achievement

increases; *all three magnet schools will achieve “Safe Harbor” which is equivalent to an API of 800 or 10% growth in achievement over the previous year’s AYP score for all numerically significant student groups each project year in English/Language Arts on the California Standards Test (CST) during the grant period (Spring 2014 through Spring 2016).* Objective 3i is: Beginning with fall 2014, all middle school teachers of core academic subjects continue to use district’s student data system OARS – Online Assessment Reporting System - to analyze student performance, to plan instruction and intervention, and to track benchmark achievement throughout the school year, as measured by observation of department and grade level team meetings. Our most recent data show mixed, but improving trends. Frank Intermediate School met its API growth target in 2012 overall, and met AYP for Hispanic, Socio-Economically Disadvantaged (SED) and English Learners (ELL). Only Students with Disabilities (SWD) did not meet their growth target. White students are not a numerically significant subgroup at Frank. Frank students have shown consistent academic growth since 2010. In 2010, Frank achieved an API of 656 (Target is 800). In 2011, the school gained 44 points and then 12 points in 2012, for a total of 56 points growth over three years, and yielding an API of 712. Hispanic students grew 64 points in three years. SED students grew 58 points and ELL students gained 29 points in three years. Fremont Intermediate did not meet API nor its AYP in 2012 overall, nor for any numerically significant group. The data trend at Fremont have been relatively flat. For 2012, Haydock Intermediate met its API goal overall and its AYP growth target, and also met AYP for Hispanic students and ELLs. Its SED group did not meet AYP. White students and SWD are not numerically significant groups at Haydock. Haydock’s data show consistent growth over the past three years. All three intermediate schools commit to the goal of attaining the State’s “Safe Harbor” designation, which is equivalent to an API of 800 or 10% growth in achievement over

the previous year's AYP for students. Each school develops a Single Plans for Student Achievement (SPSA) that is a detailed set of goals, objectives, and an implementation plan. The SPSA aligns directly with the Local Educational Agency Plan (LEAP) to ensure that all state and federal guidelines are met. The plans incorporate technology in all five Performance Goals and are integrated in all core areas of the curriculum.

STEAM Curriculum and Instructional Strategies. With our MSAP application, our major middle school focus will be STEAM for increasing student achievement. California Department of Education (CDE) defines STEM education as a sequence of courses or a program of study that prepares students, including underrepresented groups, for successful employment, post-secondary education, or both. STEM requires different and more technically sophisticated skills including the application of mathematics and science skills and concepts; and STEM programs develop competent, capable citizens in our technology-dependent, democratic society. Taken separately, the four STEM subjects are defined by the National Research Council as: *Science* is the study of the natural world, including the laws of nature associated with physics, chemistry, and biology and the treatment or application of facts, principles, concepts, or conventions associated with these disciplines. *Technology* comprises the entire system of people and organizations, knowledge, processes, and devices that go into creating and operating technological artifacts, as well as the artifacts themselves. *Engineering* is a body of knowledge about the design and creation of products and a process for solving problems. Engineering utilizes concepts in science and mathematics and technological tools. *Mathematics* is the study of patterns and relationships among quantities, numbers, and shapes. Mathematics includes both theoretical and applied mathematics. STEM education is an interdisciplinary or trans-disciplinary approach to learning where rigorous academic concepts are coupled with real-world problem-

based lessons. STEM education exemplifies the axiom, "the whole is more than the sum of the parts."

To meet our goals and to develop a challenging yet developmentally appropriate STEAM program, we enlisted local consultants as partners to advise us and co-train our teachers so that they have the specialized knowledge and skills to effectively instruct students in our STEAM magnet themes. We also plan to send science teachers to specific institutes for training.

Science. California Department of Education (CDE) observed that scientific knowledge and technology built on that knowledge have exploded in the past 50 years. Scientific research is collaborative; to stay current with scientific developments, school science programs need to expand partnerships with colleges and universities, libraries, science and technology centers, museums, and industry. California's Standards and curriculum framework require: at grade 6, content standards focus on earth science, including environmental awareness; at grade 7, life sciences, including health and biology; and 8th grade focuses on physical sciences, including an introduction to chemistry and physics. Within our magnet science themes, we can easily weave the grade-level content standards into our science, engineering, and technology themes. Teachers will work collaboratively to develop project-based units that blend science, mathematics, reading, writing, and the cognitive skills of evaluation, analysis, and synthesis. Frank Middle School science teachers will attend a one-week summer Robotics institute at Carnegie Mellon University at the start of Year 2 and 3 to prepare them with specific content knowledge and materials to support engineering. The robotics institute is designed for middle and high school teachers, and will provide specific projects and materials that students develop and build at school. Fremont science teachers will attend the summer teachers' institute in marine biology at Coastal Marine Biolabs, here in Ventura County. To encourage students to immerse themselves

into specific concepts of science, beginning in Year 2, OSD will offer a district science fair for all students. Winners of the science fair will enter their projects in the Ventura County Office of Education science fair. Our science partners at CI will volunteer to judge the district science fair. In addition, CI hosts its own annual student science competition on campus, in which our students will participate and present their investigations.

Partnerships for Teacher Training. Currently, there are 10-15 science and math teachers at each intermediate school. In Year 1, 2013-14, these schools will still be intermediate schools, serving grades 7-8. However, as this will be MSAP Year 1, we will begin new science, engineering and math professional development with our external and university consultants at CI, under the direction of the district Assistant Superintendent of Educational Services. Year 1 will include general science principles, Next Generation Science Standards (NGSS), math to support science and engineering, and also the writing process. CI's Department of Education consultant will work with the district Ed. Services to weave in writing training, building upon professional development and methods the district has already provided, but focused even more on writing across the curriculum. Teacher teams will refine and utilize scoring rubrics for student writing, and will teach the writing process in all classes. CI's education consultant will provide three 2-hour workshops on writing, planning and collaboration, and using data to improve student achievement. The district has expended significant effort to provide professional development in these areas over the past years, so the new work would be tweaking it to fit with STEAM.

Since the science and engineering emphases will be different at each magnet academy, Year 2 will require site-specific consultation and professional development for science, engineering, and math. Again, we anticipate about 15 teachers per school for science and math. Also in Year 2, the configuration will be 6th-8th. We will need to bring the 6th grade

teachers in on the science, math, and writing training that we will conduct in Year 1 for 7th-8th. Once OSD identifies the new 6th grade teachers, we will bring them in to participate in Year 1 training by providing substitutes at their home schools. We will build in time each school year for cross-curricular consultation with CI, since in our magnet schools plan we will be moving to an integrated rather than departmentalized approach to teaching and learning. Teachers from several disciplines will collaborate on the project based learning units, weaving in the content and standards of their respective disciplines. The formal training will be complete by Year 3, so our final project year will be devoted to consultation for science and engineering, as well as support for integrated instruction. In Year 3, CI will work with the Project Evaluator to collect data on "what works."

Extended School Day Through After School Programming. With safety a concern in our community, and with persistently low achievement scores, OSD has offered State-funded After School Education and Safety (ASES) programs for more than 15 years to extend the school day for students with low achievement and economic need. The After School Program on every school campus focuses on closing the achievement gap and encourages learning by providing academic connections through opportunities and exposure to authentic experience while building skills, efficacy, confidence and competence in an environment that keeps children safe and values their input. One of the visions of the After School Program is to be aligned with the instruction during the regular school day. All of the students in the program have daily access to technology by utilizing the computer labs, laptop carts, or Promethean Boards on campus. In addition, every school site has a certificated teacher who works as the After School Program liaison. The After School Program liaison collaborates with the campus Site Director to ensure that students have access to the computer labs to strengthen skills by using software programs

such as SuccessMaker and Rosetta Stone. OSD currently benefits from an established STEM after school partnership with the University of California, Santa Barbara (UCSB) and its Mathematics, Engineering, Science Achievement (MESA) program. Through this grant-funded project, which targets Latino youth to develop opportunities to access higher education, all three intermediate schools offer MESA after school to about 120 qualifying students. With the support of UCSB staff, after school students participate in three STEM projects throughout the school year and attend local and regional science demonstrations and competitions. ASES and MESA funds support the “STEM teacher,” who is a City of Oxnard Recreation Department employee. In addition, one of Haydock’s science teachers offers a STEM club after school that meets weekly. These students also participate in local and regional science competitions. UCSB is expanding its partnership to include Oxnard Community College, since so many students attend community college prior to university.

Beginning in Year 1 - 2013-14 - CI’s Project ACCESO, another after school partnership dedicated to developing STEM disciplines for middle school students, will be co-implemented at all three middle schools as part of our STEAM effort to capture those students who are not eligible for MESA (see Appendix). This is an exciting partnership, since CI science and education faculty will collaborate with OSD on teacher training, project development, and implementation of MSAP. Adding CI’s own grant-funded after school program will link science learning during the day to the after school program (same staff, same approach). Project ACCESO seeks to increase the number of underserved students interested in pursuing a bachelor’s degree in STEM and to assist under-served students in their development of crucial STEM skill sets, e.g. critical thinking, analytical reasoning, scientific literacy, and interdisciplinary communication. Project ACCESO is funded through a Department of Education

Hispanic-Serving Institutions Science, Technology, Engineering, and Mathematics (HSI-STEM) grant. CI's STEM Skills and Discipline Exploration Pathways (SSDEP) program focuses on providing middle school students with opportunities in STEM, including STEM career exploration, STEM skill development, and introducing a college-going culture. First, students learn about pathways to STEM careers from middle school through high school and then higher education to careers, learning from STEM professionals and CI STEM majors. Next, students develop the STEM skills that scientists use daily. Students will engage in two 5-week projects, one in fall and another in spring, focused on STEM skills and the scientific process. The fall project involves using STEM and the scientific method; the spring projects will be tailored to each middle school's STEM emphasis. STEM knowledge and skills are embedded within our three STEM content areas through hands-on science activities and experiments in environmental sciences, chemistry, and physics/engineering. Lastly, students will engage in a college going culture through a field trip to CI, the only four-year, public institution in Ventura County. The field trip to CI will include a campus tour with parent participation.

Technology for Access and Equity. OSD's vision for technology is that all students will be educated in a 21st Century Interactive Classroom that is engaging, personalized, and designed to optimize teaching and learning through the use of mobile computing, audio, visual, and formative assessment technologies across the curriculum. Students use technology to analyze, learn, and explore. Teachers and administration incorporate the National Educational Technology Standards (NETS) in all core curricula daily to ensure that their students have the necessary skills to work, live, and contribute to the social and civic fabric of their communities, and use NETS as guidelines for planning technology-based activities that assure students achieve success in learning, communication, and life skills. OSD further understands the importance that

all teachers possess the skills and behaviors characteristic of digital-age professionals. Teachers are collaborating with their students and colleagues around the county, state, and world. OSD formed the Educational Technology Advisory Committee (ETAC) and revised the previous technology plan, which now extends through June 2015. Every classroom in the district has two to five Internet-connected and multimedia-ready computers. These computers are connected to both the Local Area Network (LAN) and the Wide Area Network (WAN). All classrooms have document cameras and Promethean Boards with learner response systems. Most special education classrooms are equipped with a specialized Promethean Board that is adjustable to every child's height. All teachers are provided with a laptop computer. Each school has at least one laptop cart with 20 computers. In addition, several schools, including Fremont Intermediate, are providing Dell netbooks, and iPods and/or iPads to their classrooms on mobile carts for student use. Software includes Microsoft Office Suite, Outlook, Visio, and Publisher; Accelerated Reader, SuccessMaker, Rosetta Stone, Waterford, ActiveInspire; and Sophos, iVision, SIRAS and Zangle. Teachers use telephones, email, the district's student information system (SIS), Zangle, and the Online Assessment Recording System (OARS) to communicate with parents to support the whole child and to ensure academic success.

OPIE TV. Oxnard Programming for Instructional Excellence (OPIE) Television, our K-8 Education Station, has served the district's entire community of learners since 1986 as a part of the original cable television franchise agreement between the City of Oxnard and Jones Intercable (now Time Warner Cable). Utilizing the Educational Access Channels, OPIE Television serves as the K-8 branch of the Oxnard Area Public Consortium for Instructional Television. Cooperative efforts with the local Elementary School Districts (OPIE Channel 21), the Oxnard Union High School District (VIPTV Channel 27) and the Ventura Community College District (OCTV Channel 16) created an ongoing collaborative venture designed to support basic as well as advanced communications to and

from every classroom, and available to every household. Recent changes to California State law have taken away the ability of city governments to negotiate new franchise agreements; the District is confident that OPIE Television will be available as an educational resource for many years to come. OPIE Television serves a larger educational mission for the Oxnard Area by providing information about community resources, being an outlet for student video, film and multimedia producers, and by offering access to information and education to those who are physically challenged or housebound.

OSD/ETAC developed technology goals to prepare students for the 21st Century: 1) All students will use digital media to guide inquiry, and apply critical thinking skills to support achievement, attaining proficiency or better, in English-Language Arts and Mathematics. Each student will demonstrate proficiency of the NETS by creating and managing electronic learning portfolios. 2) Students will use technology to assist them in mastery of grade-level standards in English-Language Arts and Mathematics. Students will use learner response systems, stationary and mobile devices, websites and other online resources to support learning and achieving grade-level standards. 3) Students will acquire 21st Century technology and information literacy skills needed to succeed in the classroom and the global workplace. By June 2015, all students will demonstrate an understanding and mastery of technology and information literacy skills through grade-appropriate projects and artifacts based on the NETS for students. 4) By June 2015, all teachers will create lesson plans that address the NETS for students through student projects, artifacts and portfolios. 5) By June 2015, all students will develop the skills to effectively communicate facts, concepts, opinions and ideas through the use of presentation and multimedia applications. 6) All staff and students will use technology resources provided by the district in a safe, responsible, and proper manner to support the instructional program and to advance student and teacher/staff learning. 7) All staff will comply with state and federal mandates to ensure that all students are protected from online predators and understand what

online privacy means. All students and staff will gain knowledge and necessary skills on how to protect themselves from online predators and protect personal information. 8) All students will use appropriate technology consistently in all classes. Students will have daily access and use technology to support and enhance their learning. 9) Teachers, support staff, and administrators will have access to the student information system, OARS database, and a Learning Management System (LMS) to support and accelerate student achievement. All elementary and intermediate sites will use OARS database to monitor and analyze student data. 10) All students will use an LMS, such as Moodle or Edmodo to support and accelerate student learning. 11) Technology will continue to be used to enhance communication between the home, school, and community to support student learning. *Zangle TeacherConnect* will be used by all teachers to post grades and list assignments to better communicate to parents and support student learning. 12) Teachers will integrate technology into their daily English-Language Arts and Mathematics instruction. Teachers will use Promethean Boards, learner response systems, slates, document cameras, stationary and mobile devices, websites and online resources to motivate students to collaborate, learn and achieve. 13) By June 2015, the district will provide infrastructure to keep all hardware and software working reliably, providing hardware and software capable of implementing a comprehensive and interactive 21st Century classroom learning environment.

With technology, teachers can differentiate four elements of instruction: content, process, product, and learning environment. They also can differentiate instruction based on student traits such as readiness, learning profile, interest, and affect. Finally, educators can modify instruction through a range of instructional and management strategies, including software, video streaming, and the web. The ability to differentiate, extend, and supplement the district's curricula will promote 21st Century skills. This includes digital-age literacy, inventive thinking, effective

communication, and high productivity. A mastery of these skills will lead to improved student achievement: Lessons are being developed that include use of videos, podcasts, and digital resources. Students and teachers participate in research/learning units followed with real-time conversations with expert panels regarding a variety of topics, related to their grade level standards, in experiences known as “electronic field trips.” Students are responsibly and ethically engaging in units of study and core standards using technology as a source of information, communication in real-time, and as a tool to create class projects and assignments. Podcasting, blogging, and other methods of social media will be used to offer additional distance-learning lessons that will extend and supplement the curriculum, adding rigor and attributes associated with college and career-readiness skills. The integration of technology should serve to guide, expand and enhance learning objectives. Curriculum integration with the use of technology involves the infusion of technology as a tool to enhance the learning in a content area or multidisciplinary setting. Technology enables students to learn in ways not previously possible. Effective integration of technology is achieved when students are able to select technology tools to help them obtain information in a timely manner, analyze and synthesize the information, and present it professionally. Technology is rapidly becoming an integral part of how the classroom functions, making it as accessible as all other classroom tools. In our research and visits to magnet schools, we observed firsthand the power of technology as a learning tool in the hands of students. In order to achieve equity and increase media literacy, with MSAP funds we will expand the district’s technology resources and will implement 1:1 computing over two years in our magnet middle academies. By Year 3, every student will have a district-supplied PC netbook issued for the duration of middle school. Beginning in Year 2, all 7th grade magnet academy students will receive a 11.6 -inch netbook with Window 8 Pro and

Office 2013; all teachers and project staff will receive the Dell E5530 15” laptops with Win 7 and Office 2013 licensing. These laptops are compatible with the current docking stations. Teachers and students will use Google docs and Office 365, Microsoft’s cloud-based productivity suite.

Students will carry their netbooks from class to class using the district-supplied protective carrying case so that they are readily accessible for use in their ongoing research, projects, class assignments, writing, and note taking. These netbooks will remain with the students for the three years that they are at the middle academy. As each new group of 6th graders comes in, they, too, will receive the netbooks. Student netbooks will be loaded with MS Office 13. Teachers will have the same programs with additional applications, and each core magnet classroom will have a DYKnow Monitor and Vision system that allows the teacher to see and share, if appropriate, what is on a student’s computer and utilize that in their instruction. Professional Development for teachers in using both DyKnow systems is funded and in our Work Plan. Technology use will be integrated into all content areas and will strengthen the instructional programs, thus increasing student achievement, as described above.

Each middle academy will have robust wireless network connectivity by July 2014 so that access to digital resources will be available anywhere on campus. Our students from more affluent homes who have mobile phones, smart phones, and technology in the home have grown up immersed in touch technology. We will “level the playing field” with 1:1 computing, and bring this access to every middle academy student. Our plan calls for negotiating with the City and with our local telephone-wireless provider to supply wireless Internet access to every area of the community, thus allowing children from Haydock to La Colonia and their families to access the Internet at home at no cost to the families. We are also increasing student and family access

to the Internet through our after school programs, which run until 6 pm Monday through Friday.

As stated in our technology plan, we prepare students for the demands of the 21st century, through instructional methods that match their natural method of acquiring new knowledge. Technology is infused into daily lessons. Teaching STEAM across the curriculum, rather than in departmental courses, allows us to better integrate student learning. We have seen, based upon our award-winning elementary technology campus, McKinna, that as student engagement increases so does motivation for learning. That motivation naturally carries over to reading, writing, mathematics, history, science, engineering, and visual and performing arts, as teachers and students utilize the Internet, Learn 360, ThinkQuest, Edmodo and other electronic learning resources, and DyKnow Vision to research, share projects, create assignments, and design lessons. Research shows that technology and media literacy have many benefits for students. According to Considine (in Schwarz, 2001) benefits include: technology is interdisciplinary and easy to integrate into key elements of the existing/emerging curriculum; it is inquiry based and consistent with reflective teaching and critical thinking; it includes hands-on experiential learning and is consistent with multiple learning styles; it works well in teams and groups, fostering cooperative learning; it has been successful in appealing to at-risk and special needs students and in improving retention rates; it is compatible with SCANS (Secretary's Commission on Achieving Necessary Skills) and fosters employment opportunities. It connects the curriculum of the classroom to the curriculum of the living room.

In addition, to support the "A" in STEAM, visual and performing arts, we will add an iMac Lab at Haydock for visual and performing arts. Apple's 27-inch iMac is the tool of choice for artists, graphic arts, music and sound editing, video production, and other creative applications. The iMac is used at University of Southern California's (USC) art, cinema, and

architecture schools, and is used in Hollywood and at Disney/Pixar Studios. The iMac comes with native (built in) creative applications including *iPhoto*, *iMovie*, and *Garage Band*, as well as other creative applications (“apps”).

Technology in English/Language Arts, Sciences, Engineering, Social Sciences. Students are constantly reading print and non-print text. Therefore, teachers will capitalize on that familiarity with students incorporating the use of social network sites, blogs, music videos, and others in their delivery of lessons and assignments. When students read for a purpose, to gain pertinent information for a project, for example, they are more motivated and spend more time engaged in authentic reading. Time spent reading matched with direct instruction by the teacher will increase their proficiency levels in English fluency, comprehension, and analysis. In order for our students to become critical consumers of information, academy teachers will address aspects of reading through media differently than the traditional printed text in that they will strategically teach students how to access and filter information and assemble it in a way that is coherent. This is a critical skill with so much information available via Internet. As teachers become trained in the Visible Thinking Strategies (VTS), units of study will be developed using “through-lines” in which the major concept of a unit such as “conflict” or “sustainable resources” is analyzed and woven through the lesson via VTS. With VTS, teachers will be trained to use electronic visual images to spark thought and generate questions about the unit of study. Writing will ensue from this questioning on a daily basis, as will reading, to discover a student’s own meaning as it relates to the concept being studied. Students will use netbooks to create text, edit, and revise on an ongoing basis.

Engineering. Our engineering strand will be site-specific and designed for each academy magnet theme. In collaboration with CI, principals, and teachers, we developed our engineering strand to

include stagecraft and set design and construction at Haydock to support the fine arts and theater programs. Students will use technology to design, build, and light sets for theater and video productions. At Frank Academy, we will implement parallel engineering strands, Robotics and a security application in partnership CI and their partner, U.S. Naval Air Station, Point Mugu, located off the coast of Oxnard/Port Hueneme. According to Carnegie Mellon University (CMU), Robotics is “the premier integrator in education today. Robotics allows a teacher to talk about design, innovation, problem solving, and teamwork at the same time they are talking about math, science, and technology; robotics puts academic concepts in context” (<http://www.education.rec.ri.cmu.edu/content/educators/start/index.htm>). Further, “Robotics is a multi-billion dollar emerging industry that the US must lead if we are to maintain our standard of living.” Content standards state that as a result of activities in all grades, “all students should develop: abilities in technological design and understandings about science and technology. In the middle school years, scientific investigations can be completed by activities in which the purpose is to meet a human need, solve a problem, or develop a product. Robotics is the premier example of the marriage of science and technology, especially as related to the solving of problems or human needs.” We chose CMU for our robotics theme development due to its status, the National Robotics Engineering Center, extensive opportunities for teacher professional development, and their use of field-tested educational materials that are appropriate to middle school students. Frank Academy science-engineering teachers will attend a one-week summer professional development course at CMU. Teachers will learn to use with their student the LEGO/TETRIX robot and sensors and ROBOTC Curriculum for TETRIX & LEGO. Fremont Academy will work in partnership with CI’s Amgen projects to learn to apply biology, chemistry, physics and technology to the creation of biomedical tools and supplies. This project will take place both during school and also in the after school program through ACCESO.

Visual and Performing Arts. Over the past decade, with increasing emphasis on raising test scores and increasing academic time, many schools decreased or eliminated teaching of arts and music. Our research tells us it is time to rethink – and reverse – this policy. We now know that the arts, music, dance, crafts, and mechanics, go hand-in-hand with science, engineering, and technology. “Though many see art and science as somewhat at odds, the fact is that they have long existed and developed collaboratively. This synergy was embodied in great thinkers like the legendary Leonardo da Vinci and the renowned Chinese polymath Su Song. One of Carl Jung’s mythological archetypes was the artist-scientist, which represents builders, inventors, and dreamers. Nobel laureates in the sciences are seventeen times likelier than the average scientist to be a painter, twelve times as likely to be a poet, and four times as likely to be a musician” (Pomeroy, 2012). “Arts and crafts develop such skills as observation, visual thinking, the ability to recognize and form patterns, and manipulative ability. They develop habits of thought and action that include practicing, persevering, and trial-and-error problem solving... Learning to observe through drawing and painting has another benefit for students studying the sciences and mathematics. It turns out that one of the best predictors of success in scientific subjects in grades K-16 is visual imaging ability” (Bernstein & Bernstein, 2013, p. 17). Steve Jobs’ biography illustrates that after he dropped out of college, he spent 18 months “dropping in” on creative classes. Jobs later recalled how one course in calligraphy developed his love of typography, and resulted in Apple’s development of the myriad typefaces we utilize today. Furthermore, James Catterall (2009) demonstrated that arts have the greatest impact on standardized achievement test scores for socioeconomically disadvantaged students, especially in the area of mathematics. We believe passionately in the arts as a way to tap the creative talents and amplify the knowledge of

our Latino students, English Learners, Socioeconomically Disadvantaged, and Students with Disabilities.

Visual and Performing Arts, Today and Tomorrow. Haydock Middle School will be our magnet for visual and performing arts. With Measure R local funds, Haydock's performing arts facilities will be significantly upgraded with an expanded stage, lighting and sound booth, and green room. The band room will be expanded, with more instrument storage and practice rooms for students. An additional classroom for the strings and orchestra will be reconfigured. Visual and graphic arts classrooms will be expanded. Haydock currently offers a one-year art elective for 7th and 8th grade students. This elective will be expanded to three years for grades 6-8. Currently, each art student completes three major art projects per year, building upon several smaller projects where students learn and practice techniques. We plan to continue teaching art through project-based learning. For example, one project is a ceramic or pottery piece fired in the kiln at school. This begins with a unit focused on Cubism: students learn discipline-related vocabulary, study art expression in historical context, complete a unit on Picasso, produce a small sketch or painting, and then perhaps the final project could be a cubist style design on a flat surfaced vase fired in our kiln. Haydock currently employs a full-time art teacher who has been with the district for 20 years and teaches 5 periods of art in the Art Studio daily. She completed training in differentiated instruction for Gifted and Talented Students (GATE), and is also trained in working with EL students, but she does not have a degree in art. She currently has a state-issued waiver to teach art. As we move to magnet schools, our Board of Trustees will require every teacher to be highly qualified and in his/her subject matter, and will eliminate the district waivers. As a magnet academy, Haydock will expand its art offerings as well as its partnerships with local artists. We plan to increase opportunities to display student work in the community. Haydock's

principal is working with the Carnegie Art Museum in Oxnard to collaborate to increase student art options –both education and showcasing work – beginning next fall. “Arts 4 Action” is another partner involved in mural painting and large community art projects. They regularly seek and obtain small grants to fund their work, which is completed by students under the supervision of an artist in residence.

Haydock also has an established music program with beginning, intermediate, and advanced band. Haydock’s advanced band has won trophies in competitions all over southern California. Over the next two years, Haydock plans to expand the music and performing arts program to include strings/orchestra, mariachi group, jazz band, piano and keyboard, dance, and theater arts and production. Arts, engineering and technology will combine with classes in theater lighting, set design and construction, sound engineering and mixing, and drafting.

Technology in Visual and Performing Arts. Interactive media technology – sounds, music, images, and special effects, involves storing – and often creating – these effects on a computer. Theater, film, radio and video technologies “give rise to new forms of dramatic expression” (Satz, 2001, p. 107). Motion pictures, video, “computer animation, digital paint and sound programs, 3-D modeling, and interactive design” are exciting concepts in media arts and engineering (Birringer, 1999, p. 361). There are numerous opportunities to integrate technology and the arts. At Haydock, an iMac lab for technology and visual and performing arts will be created using MSAP funding. With the built-in camera and creative software that is native to the Mac, students will learn to write music, play a keyboard, record a song, or upload and edit video material, which they can self-produce using Apple’s *iMovie* software. Students will creatively use these applications in their art, music, and drama classes. According to the Framework for the Visual and Performing Arts in California Schools adopted in January 2001, “technology is

recognized as an essential tool that enhances learning and expression in all the arts disciplines and provides for expanded forms of expression in digital and electronic media. New technologies for the arts, arts-related computer applications, and emerging arts-related careers are especially vital in California, where the demand for individuals with artistic skills and career orientations has been steadily growing in the vast arts and entertainment industry.” Students will use technology to produce music, video, and theatrical productions.

English Language Learners (ELLs). Oxnard School District is committed to providing ELLs with “a challenging core curriculum and instruction that develops proficiency in English as rapidly and effectively as possible in order to assist students in becoming productive members of our society.” Board Policy (9025) states, “The district’s program shall be based on sound instructional theory and shall be adequately supported so that English Learners can achieve results at the same academic level as their English-proficient peers in the regular course of study.” The district offers the following program options to English Learners: (1) Mainstream English, (2) Structured English Immersion, (2a) Newcomer Program, which is a specialized type of Structured English Immersion offered to students who have less than 12 months in the U.S. (3) Transitional Bilingual Education, and (4) Dual Language Immersion. Each of these options is designed to ensure that students acquire English language proficiency and to prevent or recoup any academic deficits that may have developed in other areas of the core curriculum. All options contain the following required components: well-articulated, standards-based, differentiated English Language Development (ELD) instruction, specifically designed for ELLs; well-articulated, standards-based, differentiated instruction in the core curriculum, featuring primary language support, frontloading of content, and/or Specially Designed Academic Instruction in English (SDAIE); structured activities designed to develop cultural proficiency and positive self-

esteem. All these activities are in place and are implemented at our intermediate schools. Both Frank and Haydock ELLs demonstrate progress on CST toward achieving State standards. Our greatest challenge remains with students who plateau in their English development before achieving proficiency. These “long-term English learners” have more than five years of uninterrupted schooling in the United States. Long term English Learners often have high oral fluency in English, and in some cases have attained a “reasonably fluent” level of proficiency, but have not yet achieved the academic criteria to qualify for reclassification as English Proficient.

Teachers and Administration ensure that ELLs use technology to gain access to the core content curriculum. Schools use Santillana English Benchmark Assessments (SEBA) to assess progress and English Language acquisition, and Rosetta Stone to augment the English Language Development program. Accelerated Reader (AR) is used to improve comprehension and fluency, a critical component of independent reading. Microsoft Word facilitates the writing and editing processes. The Internet is used for investigations and research. Internet access provides English Language Learners accessibility to tools and information that are not readily available in the classroom. This allows students to build background knowledge to access grade-level core content. As an example of how STEAM courses will be developed to support English learners, Haydock’s principal developed a science intervention course for long-term English Learners that are “stuck” at a level 3 (Intermediate) on the California English Language Development Test (CELDT) but are otherwise academically sound. The students’ biggest need is developing their vocabulary and writing skills. While a traditional ELA intervention class addresses their language need, these students usually fall behind in Science and Social Studies because they cannot “read to learn” independently. Haydock’s Principal created an elective/intervention class

called Science ELD. This course employs the evidence-supported Structured Instructional Observation Protocol (SIOP) strategies to build background vocabulary and stresses the application of the scientific method using project-based learning in the content area of science. Haydock incorporated the MESA competition projects into that course.

Intervention and Integration with Special Education. Every school in the district implements a cohesive Response to Instruction and Intervention (RtI²) process that integrates resources from general education, categorical programs, and Special Education into a comprehensive system of core instruction and interventions to benefit every student. With the integration of technology in every classroom, Universal Access (UA) for English/Language Arts (ELA) and mathematics has improved the quality of interventions delivered to students. Special Education students are provided assistive technologies to support mastery of grade-level standards and access to the core curriculum. Teachers and specialists use a program called SIRAS to write their IEPs. All teachers and caseworkers have laptops. Teachers use the latest technology, currently iPads with multiple applications for students with a variety of handicapping conditions, to provide interventions and assess needs and progress. Oxnard's successful "Co-Teaching in Inclusive Classrooms" was described earlier. This program began as a pilot project at Fremont Intermediate School, and due to its success, it was replicated throughout the district. Currently, Fremont's Special Education staff and teachers implement a "parallel teaching model." In this model, both the Lead Teacher and the Co-Teacher collaboratively organize the lesson content. They identify strategies needed for groups and individual students. Teachers may divide the students into groups for more personalized or intensive instructions. Following the lesson, both teachers reflect on the process and discuss ways in which students met the learning expectations.

Since Co-Teaching is well established in OSD, is it a winning strategy to continue to integrate students with disabilities into the general education program.

Site-Specific Magnet Theme Programs: Frank School. As described above, Frank science and math teachers will work with CI to benefit from their engineering technology partnership with U.S. Naval Air Station, Point Mugu. Collaborative curriculum planning will begin in Year 1. Frank teachers will also plan for and attend the Robotics Institute at Carnegie Mellon University. Frank will continue the partnership with UCSB MESA for STEM programs and projects.

Fremont School. The scientists/educators at Coastal Marine Biolabs (CMB)

<http://coastalmarinebiolabs.org/> are our local consultants for the Marine Biology Science emphasis at Fremont School. We are fortunate to be located on the Pacific coast of California, with the Channel Islands visible and accessible from Ventura Harbor. CMB has an interactive Biosciences program for students and a rigorous training program for teachers. CMB uses project-based learning (PBL): “All units begin with an authentic scientific question that focuses on a locally relevant marine organism, system, or phenomenon. To explore that question, students work alongside scientists to conduct interrelated field and laboratory work that draws upon advanced scientific concepts and innovative technologies that span a variety of seemingly unrelated disciplines that may include ecology, environmental science, neuroscience, genetics, molecular, cellular, and developmental biology, environmental chemistry, and biomimetics. At CMB, scientific discovery unfolds in the field and in the laboratory to reveal – sometimes in surprising clarity – the interconnectedness of the natural world and the natural sciences.” In the Biomes to Genomes program, students learn how scientists evaluate human and natural impacts on the health of these fragile ocean habitats in order to protect the astonishingly diverse plants and animals that call these biomes their home. Upon returning to the lab, they then use state-of-

the-art genetic technology to participate in a landmark scientific initiative that seeks to genetically catalog Earth's plants and animals. In the NeuroLab program, students explore a surreal underwater landscape of glowing corals, anemones, and other invertebrates, and later apply groundbreaking visualization tools developed through our knowledge of marine bioluminescence to understand how scientists explore the function of genes during nervous system assembly. Reading, writing, evaluation, analysis and critical thinking are key elements of "doing science." These skills become immediate and relevant when students are engaged in exploring real-world issues, and will increase significantly when applied to scientific inquiry. What student would not be excited to be part of this hands-on-minds-on experience?

Haydock School. Over the past 3 years, Haydock has worked to develop STEM. Through a partnership with UCSB MESA, approximately 40 students each year participate in a STEM after school program. With MSAP funds, this project will be developed within the school day in partnership with CI. Currently, strong subject matter teachers in math and science are needed. The principal recruited a math-credentialed teacher with an engineering background this year. This teacher is currently working with the five top MESA students to participate in the NAVSEA Engineering day hosted by the Naval Air Station at Point Mugu. Haydock students participated in NAVSEA for a few years. The principal also scheduled for the teacher to visit Isbell Middle School in Santa Paula, which is having great success with their students and MESA curriculum.

GPRA Annual Performance Measure 3: Students from major racial and ethnic groups meet or exceed State annual progress standards in mathematics. OSD Goal 3b. Implement magnet middle school STEAM programs and evidence-based courses of instruction that substantially strengthen students' knowledge of mathematics. Local Objective 3g. for GPRA Measure 3: Student academic achievement increases; all three magnet schools will achieve "Safe Harbor" which is

equivalent to an API of 800 or 10% growth in achievement over the previous year's AYP score for all numerically significant student groups each project year in Mathematics on the CST during the grant period (Spring 2014 through Spring 2016). California adopted the Common Core Standards in 2012 and uses the National Council on Teaching Mathematics (NCTM) process standards. NCTM states: Mathematically proficient students start by explaining to themselves the meaning of a problem and then analyze givens, constraints, relationships, and goals. They might use pictures to conceptualize a problem. They persist in solving challenging problems and employ graphs and other means to represent solutions. They communicate with others and ask, "Do these data/solutions make sense?" At grade 6, students focus on understanding and calculating ratios and proportions, expressions and equations, statistics and probability, and geometry. In grade 7, students continue to expand their understanding and use of the tools and procedures learned in grade 6. The goal for 8th grade students is to complete Algebra I. However, many of our students do not yet have the requisite foundation of knowledge and skills to complete this course. Thus, students in need may complete a pre-Algebra course to prepare them for Algebra in the ninth grade. Looking at our math scores, we hope and expect that by bringing math alive through science, technology and engineering applications, we can accelerate our students' understanding and use of math concepts and applications. Our math curriculum, therefore, will be closely linked to the study of science and engineering and the projects that students will complete.

Technology in Mathematics. The mathematics curriculum, McDougal, Littell and Company Math and Algebra 1, includes electronic learning resources. Teachers have full access to all print resources in PDF format. They can see all workbooks, texts, and print via online access and can assign various lessons using the Learning Management Center. Teachers enter student names so

students have access to the website using their own passwords. Students have full access to their textbook via PDF so they are able to enlarge diagrams and print from anywhere. They also have access to interactive tutorials, lessons, and videos that are coordinated to class/homework along with extra practice resources including intervention and enrichment. In addition, teachers have full access to the interactive tutorials, lessons, and videos that are available to students online. Another key feature of the interactive component of the McDougal, Littell math curriculum are the multilingual glossary and practice quizzes. In addition, students have online math “tools” such as algebra tiles, integer chips, and scientific calculators. Since our CST scores in mathematics have increased only incrementally, our math teachers are exploring multiple ways of teaching abstract concepts in more concrete ways. Through the use of technology, sciences, and engineering, teachers will be able to do this through visual and non-linguistic representations, graphs, multi-media presentations, digital photography, spreadsheets and projects. Students who do not feel confident in their understanding of mathematics as well as those who do will have more opportunities to explore multiple ways to solve problems cooperatively with other students through technology.

Our project eliminates “drill and kill.” We are excited to propose to pilot “flipped classrooms” in Year 2 for mathematics. The flipped classroom inverts traditional teaching methods, delivering instruction online and with additional tutoring with Khan Academy (our pilot curriculum) outside of class in addition to the online math text, and moving “homework,” which we will now call “*concept engagement*,” into the classroom where students work collaboratively, as well as independently and competitively at times, to solve problems. The “lecture” is delivered at “home,” with students communicating with the teacher and each other online. This will only be possible because with MSAP funds we will implement 1:1 computing,

so that every student will have a netbook and will have wireless access after school with our extended day as well as at home through the community wi-fi project. In order to dramatically improve math scores, we will require our math teachers to be proficient mathematicians as well as experts in providing opportunity for learning through activity.

Process Strategies for Increasing Achievement through Evidence-Based Approaches: 90-90-90, PBL, VTS, Scheduling. Replicate 90-90-90 schools. A coherent and dynamic STEAM course of

study is necessary but not sufficient for improving equity and changing student achievement.

One of our key methodologies for improving student achievement through STEAM is to replicate the practices of “90-90-90” schools. The term 90-90-90 was coined in 1995 by Reeves to describe schools with 90% or more students eligible for free and reduced lunch, 90% or more were members of ethnic minority groups, and 90% or more of the students met state academic standards in reading or another area (Reeves, 2003). Consistent application of 90-90-90 techniques, which have been replicated across the nation (see Education Trust, Heritage Foundation), continue to hold promise for “improving student achievement and closing the equity gap” (p. 1). Characteristics of high achieving schools are: 1) A clear focus on academic achievement, *with charts, graphs, and tables posted all around the school, in classrooms and hallways, displaying student data and achievement trends, as well as displays of excellence in student work products.* These schools focus on a few key indicators for improvement rather than trying to “do it all.” 2) Clear curriculum choices, with an emphasis on reading, writing, and mathematics across the curriculum. Good reading, writing, and math skills predict good performance in science; the Pearson correlation is .74 between writing improvement and science scores. 3) Frequent authentic assessment – generally weekly - of student progress, with multiple opportunities for improvement. In successful schools, poor student performance is not followed

by a low grade and discouragement, but rather by more intensive instruction and multiple opportunities to improve. Teachers evaluate student needs and provide constructive coaching. The belief is, “You can do it. You’ll get it next week.” 4) An emphasis on writing in all subject areas and on all performance measures. Through writing, students demonstrate their thinking process, and their errors are diagnostic. Writing requires students to process information deeper and more clearly. Teachers analyze writing products for logic, vocabulary, understanding of content and instructions, style, and other variables. 5) Teachers also collaboratively score student work across curricular areas using agreed-upon rubrics. Schools develop common assessment practices and reinforce those practices by exchanging and scoring work of students in other departments. Teacher agreement on scoring is measured by “inter-rater reliability,” a measure of consistency. 6) Teachers focus on data from multiple sources, and look for improvement in individual students. They devote time to collaborative planning and evaluating student work across disciplines, focusing on reading, writing, and math. Teachers define what “proficient” means, and apply that definition across content areas. 7) Student assessment is frequent and authentic. Rather than being tested at the end of the chapter or unit, teachers present a skill or concept, and soon – within minutes or days – test for understanding. This allows for timely feedback designed to improve student performance. 8) Finally, every adult in the school is in the role of educator, from the bus driver to the cafeteria worker to the custodian. These individuals are respected by principals and teachers, and are included in professional development as appropriate. Successful schools recognize that the student’s school day does not begin when she walks into the classroom, but may begin an hour earlier when that student boards the bus after a fight at home. The practices and policies regarding respect and teaching of 3-5 key behavioral expectations (respect, responsibility, safety, for example) is critical to setting the tone for the

student's entire educational experience. These eight practices are not only exemplary and successful, but also sustainable, as systemic reforms. The key variables are inclusion, information, consistency, and teaching quality. Results are persistent; although low SES does not change, students who attain proficiency and “read and write to learn” in a challenging, supportive context, remain academically successful. We have been building these practices into our schools over time, but need to develop a laser-like focus on making these our institutional practices by monitoring and evaluating them through this grant opportunity.

Visual Thinking Strategies. Visual Thinking Strategies (VTS), the teaching method, and the school curriculum center on open-ended, yet highly structured discussions of visual art. Visual Thinking is a research-based approach to “teaching thinking” that develops students' analytic reasoning, while at the same time deepening their understanding of the topics they study. Rather than a set of fixed lessons, VTS is a varied collection of practices, including Thinking Routines, as well as the documentation of student thinking. Using this process, thinking becomes visible as the students' different viewpoints are expressed, documented, discussed and reflected upon. Two essential questions form the basis of Visual Thinking: *What do I want students to UNDERSTAND?* (concepts) *What do I want students to DO with what they understand?* (applications). When students provide evidence of their thinking and understanding, the thinking is “visible.” Project Zero defines Generative Topics, Throughlines, and Thinking Routines as the cornerstones of Visual Thinking. This strategy can significantly increase students' critical thinking, language, and literacy skills. The method involves rigorous and engaging individual and group problem solving, cultivating in students a willingness and ability to present their own ideas, while respecting and learning from the perspective of peers. Through VTS training programs for schools and museums, educators learn to facilitate student discussions, engaging

learners in a rigorous process of examination and meaning-making through a visual art image that has been carefully selected for age and developmental appropriateness. Experience with VTS has produced growth in all students, from challenged and non-English speakers to high achievers.

Project Based Learning (PBL). One of the primary features of PBL is that it is student-centered. Learning opportunities are relevant to the student. The context for learning in PBL is highly content-specific. It serves to teach content by presenting the students with a real-world challenge similar to one they might encounter if they were practitioners of the discipline. Teaching content through skills is one of the primary distinguishing features of PBL. The most common teacher role is to question students about their learning process by asking meta-cognitive questions: “How do you know that? What is the evidence?” “What assumptions might you be making?” The questions are intended to stimulate students’ self-reflection on their own learning process. Both VTS and PBL develop rich expressive language and meta-cognitive skills.

Encourage greater parental decision-making and involvement. The State of Michigan Department of Education research found that “the most consistent predictors of children’s academic achievement and social adjustment are parents’ expectations of the child’s academic attainment and satisfaction with their child’s education at school.”

http://www.michigan.gov/documents/Final_Parent_Involvement_Fact_Sheet_14732_7.pdf

Three major factors were found to impact parents’ involvement in their child’s education: 1) the parents’ beliefs about what is necessary, important, and permissible for them to do with and on behalf of their children; 2) the extent to which parents believe they can have a positive influence on their child’s education; and 3) parents’ perceptions that their children and the school want them to be involved. Further, research shows that parents’ participation in education was twice as

predictive of students' academic success as family economic status. Taking these ideas, it is incumbent upon our magnet academies and the district to continue to reach out to parents and invite and engage them in participating in their child's education in ways that are respectful and encouraging. The Pew Hispanic Center Report, "Latinos and Education: Explaining the Attainment Gap" (2009) key findings included: Hispanic parents and students say a college education is important for getting ahead in life, and Latino youths report that their parents place a great emphasis on the need to go to college. These studies validate the importance of curricula like AVID that involve parents in planning the child's educational future with him/her. Joyce Epstein of John Hopkins University identified six types of parent involvement: parent education, effective home-school communication, opportunities to volunteer, providing information about how to help students at home, including parents in school decision-making, and collaborating with the community.

Haydock Intermediate School's Parent Involvement Policy exemplifies the best practices described by the research reviewed above, and provides an excellent model that is shaping our magnet school policies for all three middle school academies. Haydock is committed to being a resource for, and reflection of, the community by focusing on the education, well-being and success of students. Parent and community member involvement is an essential component of nurturing students. Every effort to invite and consider parent and community input is made to ensure the success of our students. A team of parents, teachers and administrators developed the following school/parent/community involvement policy:

Parental involvement means the participation of parents in regular, two-way, and meaningful communication involving student academic learning and other school activities, including:

- That parents play an integral role in assisting their child’s learning;
- That parents are encouraged to be actively involved in their child’s education at school;
- That parents have multiple opportunities to be active volunteers during the school day and in extracurricular activities;
- That parents are full partners in their child’s education and are included, as appropriate, in decision-making and on advisory committees to assist in the education of their child.

The School Parental Involvement Policy and School-Parent Compact are distributed to parents at the beginning of each school year. Teachers review the school policies, including those in the Student Agenda, with the students at the beginning of the year. Parents are asked to read and discuss the Student Agenda with their students and sign and return an acknowledgment form.

As was confirmed by research as well as our own experience, parent involvement includes “giving back” to the school and community. Again, Haydock parents provide the best example: The Haydock School Organic Garden is the dream of a group of very passionate **parents** of past and present Haydock students working to develop their leadership role in a community that has been plagued with violence and a need for more parent engagement opportunities. The group started three years ago as part of a recruitment effort for parents interested in preparing themselves to be Community Leaders. Haydock School hosted a course taught by Dr. Roberto Vargas, author of *Family Activism: Empowering Your Community, Beginning with Family and Friends*. This was funded in collaboration with the City of Oxnard Alliance for Community Strength and Cabrillo Economic Development Corporation – Community Development Division, and in part funded by a grant from the California

Endowment and the Hansen Trust. Through raised awareness in community issues, the group first established (1) goals of safety to and from school, and (2) building sport and enrichment activities through an after-school program to ensure that students are engaged in healthy activities in the critical hours between 3 and 6 p.m. Both of those goals were accomplished in the first year of working together and the results have been maintained and continue to grow. Empowered by the results they experienced, the group set more long-term goals; they continue to recruit other parents to build their knowledge of school systems, increase engagement with the schools and other community agencies and to continue to provide a forum for leadership development.

At the district level, our magnet academies planning process began with focus groups with parents and community members. Parents clearly expressed the need for more educational options for students. From those conversations, the district proposed neighborhood elementary schools, middle school magnet academies, and a new parent-driven option, K-8 schools. Our MSAP project Goal 5 is: By July 2014, parents will be able to select a K-8 option or 6-8 middle school option for students in grades 6-8. Project objectives for this goal are: 5a. By May 2014, district will provide parents with enrollment options that include K-8 schools or 6-8 magnet middle schools. Each magnet academy will have a unique STEAM emphasis. 5b. Project Director or school site MSAP Coordinator will provide magnet school tours for prospective parents and students in January-February in Year 2 and 3. 5c. Project Director will conduct 5 or more outreach and informational meetings for students and parents at all 5th grade schools each project year. All information and meetings will be presented in both English and Spanish, to accommodate 48% of our parents who are Spanish-speaking. As our objectives reflect, we believe we can best involve parents when they meet in small purpose-driven groups. This

approach is both more personal, able to address parents' unique concerns, and is less threatening than large group meetings. Epstein's research also informs that parent education and planning for college are topics that we will need to address not only with parents of AVID students, but with all parents if we are to create a college-going culture. We need to offer parents suggestions for how to help their student at home, especially when we introduce 1:1 computing. We plan parent information and hands-on family nights to show novice parents how their students will access the Internet, how they can check attendance and homework assignments, and how they can contact their child's teachers or other school personnel. Family nights for parents and students are common practice throughout OSD schools.

Parents currently participate in school governance through School Site Council, PTA, the English Learner Advisory Committee (ELAC), the District English Learner Advisory Committee (DELAC), and District Technology Committee. We need to look for ethnic and economic balance here, too. We will seek a diverse group of parents that reflect the magnet school population. Parents also support their child at Open House, Back-to-School Night, Family Math and Reading nights, and awards assemblies. Parents have asked that school resources be made available to students and families in the evening. We will fund staffing so that at least one to two nights each week, the middle school academies' Library/Media Centers can be open until 8:00 PM to accommodate parents, students and younger children who wish to use the computers, resources, and media equipment to support their middle school child's learning. Parent involvement could also be demonstrated with parent participation as mentors and supports in their specific areas of expertise such as building, agriculture, iron working, music, etc. where their skill could be incorporated in the diverse curricula. There, participation/support would not necessarily need to be at the school their child attends, but the magnet school where their skill

would be most associated with the focus of the instruction either during the school day or with the after school program. *Adelante!* (Meaning “Onward!” in Spanish.)

Budget and Resources. *Adequacy of the resources and the cost-effectiveness of the program.*

Adequacy of the facilities that the applicant plans to use. We spent the past 18 months critically examining our achievement data, our practices, and our facilities. Our community passed Measure R to fund school renovation in order to implement an effective STEAM program at newly reconfigured middle school magnet academies. As described in Quality of the Project Design, OSD passed School Bond Measure R in 2012 specifically to fund upgrades school facilities to accommodate STEAM. For example, at each intermediate/middle school, science rooms will be enlarged and enhanced. Two existing science classes will be combined to form one large classroom-lab to allow for PBL, engineering, such as building and testing robots and robotic tools, 3-D printing projects using Computer Assisted Design (CAD), and various science experimentation. Arts facilities are being redesigned to add theater and performing arts facilities, additional music rooms, practice rooms and instrument storage, and a dance studio. All three schools will be upgraded with robust wi-fi everywhere on campus. Renovation will be completed by July 2014.

Equipment and supplies that the applicant plans to use are adequate to implement the project as described. OSD intermediate schools are equipped with much of the basic equipment and materials that will be needed to expand the science and fine arts programs to STEAM specifics. From classroom computer carts to printers to science equipment, to band instruments, the schools meet standards to implement the State’s high academic standards. With the new STEAM emphasis, however, there are supplies, both large and small, needed to support the STEAM curriculum. We are significantly expanding our curricula through partnerships. The Amgen-

Bruce Wallace Biotechnology Lab program, in partnership with CI, will engage students in learning molecular biology. CI students will mentor middle school students in this project. The laboratory experiments incorporate core technologies used by the biotechnology industry. Thanks to the generosity of Amgen, the Student Guide and Pre-Lab Notes are available for free download as PDF files. Students will download these documents to their netbooks. We will need to supply the lab materials, sensors, digital microscopes, and physics equipment for our STEAM science and engineering emphases. The Marine Biology emphasis (Fremont) and ecology sciences (Haydock) will each require a set of digital microscopes that interface with a laptop computer to film microscopic events like cell division, and to store collected data. CI also employs the curriculum from Project Lead the Way (PLTW). PLTW is the leading provider of rigorous and innovative STEM education curricular programs used in middle and high schools across the U.S. PLTW provides a comprehensive, project-based curriculum for both engineering and biomedical sciences. The curriculum is provided free of charge to schools registered with PLTW, but we must purchase the lab kits. Their Gateway To Technology (GTT), intended for grades 6-8, is offered as independent, nine-week units that explore aerospace, energy, the environment, modeling, robotics, technology and other STEM-related topics. The activities-oriented curriculum challenges and engages the natural curiosity of students. GTT units, taught in conjunction with a rigorous academic curriculum, are designed to spark an interest in STEM subjects and prepare students for further study in high school. We will purchase both the Pathways to Engineering and the Biomedical Sciences program to supplement our STEAM education. At Frank school, where the Robotics engineering will take place, we will use MSAP funds to purchase three 3-D printers and spools of plastic for use in engineering design and art. 3-D printing, also known as additive manufacturing, is a process of making a three-dimensional

solid object of virtually any shape from a digital model. 3D printing is achieved using an additive process, where successive layers of material are laid down in different shapes. A materials printer usually performs 3D printing using digital CAD technology. The technology is used in making jewelry, footwear, industrial design, architecture, engineering, construction, automotive, aerospace, dental and medical industries, education, geographic information systems, civil engineering, and many other fields. In addition, we will purchase the Robotics kits to accompany the two Robotics Institute sat CMU that Frank teachers will attend (Year 1 and 2). We will purchase computers and equip them with DyKnow and other software for teachers and students in Year 1, and implement 1:1 computing for all students at the start of Year 2. To charge the student netbooks, we will purchase 5-bay battery charging stations for each school and additional netbook (spare) batteries for each middle academy.

The budget, in relation to the objectives of the project, is adequate and reasonable. We are committed to implementing 1:1 computing at our magnet middle academies to achieve equity for our economically disadvantaged, ELL, and students with disabilities. Without this personal technology, too many of our students lack access to a computer outside of the classroom, and can't keep up with rapid information changes. In order to fully implement STEAM with project-based learning, students need to conduct research, take notes, develop creative projects, turn in work online, receive prompt feedback from teachers, and use online textbooks. Learning needs to be extended beyond the school day, and so students will take their netbooks home. A recent *eSchoolNews* article (February 23, 2012), stated schools need to define clear goals for what they want to accomplish with 1:1 computing. The netbook must be paired with the learning outcomes for each lesson. The teacher is the critical variable. We have seen that 1:1 computing is much more than teaching students to make a PowerPoint presentation. The netbook is a tool for taking

notes, accessing online textbooks with built-in tutorials and video examples, as well as a creative tool for art, music, and video recording. Our planning budget and teacher professional development weave throughout the project years to support teachers in using technology to achieve educational goals. Change takes time, and our teachers, like our students, need time and support to improve their skills with expert and ongoing professional development. Although we developed a conference budget, our emphasis is on site-based and collaborative professional development with support. Grant supported personnel, such as the Technology and Site Coordinators, will model and support teachers in lesson design throughout the project. As teachers develop project-based learning activities and collaborate across disciplines, 1:1 computing and other technology will be integrated into all subjects. “Significant, ongoing professional development is necessary, but not just around technology. Early PD should focus on transforming learning. Just as with our kids, the PD learning should be differentiated, collaborative, authentic, and not just skills-based”

<http://www.eschoolnews.com/2012/02/23/how-to-make-one-to-one-computing-a-success/2/>.

Our budget also reflects significant funding to develop hands-on lab sciences, especially biology and chemistry, and to expand the science curriculum, equipment and supplies to include more laboratory experiments. Haydock’s agriculture and ecology program will require soil and water testing equipment, and Frank’s “sensors in science” program will require a variety of types of sensors and equipment, which are funded in the MSAP supplies budget. The digital microscopes we will purchase for all magnet schools connect to the student laptops so that they can photograph and video-record what they see under the microscope, and store that data in their computer. The budget also reflects the building of engineering capabilities for middle school students, with our theme emphasis on Robotics. In our community, with medical technologies,

military applications, and agriculture, machines and robots are completing increasingly more tasks that previously were done by humans. We want our students to be prepared for this future with a solid foundation in engineering and mechanics. The robotics kits we selected were developed by experts and have been extensively field-tested with students. They are high-interest and engaging, and teach through experimentation that looks like “play.”

Evaluation Plan.

Evaluation methods are appropriate to the project. In planning our magnet academies, our team met with parents and key stakeholders throughout the school-community assessment and planning process. We developed a Logic Model that drives our grant development process. We identified seven problems for which we designed solutions and wrote goals and objectives (See Appendix). Our own goals align perfectly with GPRA annual performance measures: 1) reduce, eliminate, or prevent Hispanic and low SES group isolation, 2) students meet or exceed State annual progress standards in reading, and 3) students meet or exceed State annual progress standards in math. OSD will contract with an independent evaluator who will: 1) assist with data collection, 2) conduct process and outcomes evaluation, 3) assist the Project Director in reporting annually to U.S. Department of Education Office of Innovation and Improvement, 4) report annually to district and community stakeholders, and 5) prepare the final project evaluation report of the Magnet Schools Assistance Program in collaboration with the district and other partners.

Data Collection. Program evaluation is data driven. Multiple data sources will be used to determine program effectiveness and report outcomes of project activities:

Quantitative Data Sources	Qualitative Data Sources
CA Basic Education Data System (CBEDS) – district and school demographic and descriptive data – enrollment by ethnicity	Event and classroom observations (collaboration, professional development, student work, etc.)
CA Standards Test – (CST) standards based assessment of ELA, math, science, disaggregated by numerically significant subgroups	Process meetings with Project Director, Project Coordinators, Principals Interviews and focus groups with key informants
Online Assessment Reporting System (OARS) district student database – data system for benchmark and local achievement data	Portfolio analysis, authentic assessment of student work products and performances

Will determine how successful the project is in meeting its intended outcomes, including its goals for desegregating its students and increasing student achievement.

Process Evaluation uses on-site and ongoing monitoring to assess the implementation status of strategies, activities, programs, and services. Process evaluation allows for timely review and refinement of the project on the basis of self-assessment and program results. The Evaluator will make on-site observations of key magnet school activities such as professional development, use of technology, and implementation of STEAM magnet themes as specified, to obtain qualitative information on implementation and results. Interviews and focus groups with parents and teacher and staff surveys (TRENDS School Climate and Safety) will be used annually to gather information on project services and their impact on intended recipients as well as the overall school climate. The Evaluator will seek input and share process observations with the Principals,

Project Director and Site Project Coordinators in monthly meetings, and will meet semi-annually with the school and district leadership teams to receive input and share progress toward identified goals. Process evaluation is critical to meeting projected outcomes: strategies, activities, programs and curricula must be implemented with fidelity and as specified in the Work Plan in order to produce desired results.

Outcome (Summative) Evaluation. The purpose the summative evaluation is to quantify student progress and program improvement toward identified performance measures and goals. The Evaluator will work with the Project Director and Site Project Coordinators to collect and analyze data on desegregation and student achievement, as well as project-level data. The methodology proposed for the outcome evaluation is quantitative data analysis that will be summarized using descriptive statistics and objective reporting of changes in student achievement. Multiple quantitative data sources will be used to determine magnet school program effectiveness (see Table J) and report data for the Government Performance Results and Accountability measures. Qualitative observations and data will be used to understand and interpret quantitative results.

Success in meeting intended outcomes including desegregation goals. MSAP requirements for annual performance measure reports and the final evaluation report at the end of Year 3 will be completed by the Evaluator with the assistance of the Project Director, Principal, and district staff. Methods to evaluate success in meeting intended outcomes are detailed below.

Table J. Magnet Program Outcomes Evaluation Work Plan.

MSAP Performance Measure/Project Goal	Activity or Strategy	Method of Evaluation	Timeline
GPRA 1: Reduce	Voluntary	1b. Quantitative – Enrolment:	Annual.

<p>minority group isolation. 1b. Balance ethnicity at each middle school; racial/ethnic balance is equal (+/- 5%) at each middle school</p>	<p>desegregation plan of all middle schools through elimination of boundaries and open enrollment</p>	<p>percent enrollment by race, ethnicity, economic, and home language for each middles school. Descriptive stats from CBEDS Qualitative - observations: classroom balance, student interactions are fluid in school and extra-curricular activities</p>	<p>October CBEDS data Monthly</p>
<p>2b. All middle schools have equipment and materials needed to implement high quality STEAM</p>	<p>Science, engineering supplies; 1:1 netbooks; iMac Lab, DyKnow</p>	<p>2b. Qualitative - observation: classroom equipment, netbooks, DyKnow</p>	<p>October 2014 and ongoing</p>
<p>GPRA 2 - 3f: Percentage from major racial and ethnic groups that meet or exceed State annual progress standards in ELA; Safe Harbor</p>	<p>STEAM curricula implemented with fidelity; CCSS; PBL; VTS</p>	<p>3f. Quantitative: Percent by race, ethnicity, economic, language and disability that meet Safe Harbor targets on CST English/LA. Data sources: DataQuest and OARS; Qualitative – student work products, performances</p>	<p>Annual – CST API, AYP data</p>
<p>GPRA 3 - 3g. Percentage from major racial and ethnic groups that meet</p>	<p>Flipped classrooms for math; online</p>	<p>3g. Quantitative: Percent by race, ethnicity, economic, language and disability that meet Safe Harbor</p>	<p>Annual – CST API, AYP data;</p>

or exceed State annual progress standards in math; Safe Harbor	math textbooks; Kahn Academy	targets on CST Math. Data sources: DataQuest and OARS.	
4a. Professional development events in the magnet schools 4b. Waive seniority requirements; principals hire magnet teachers based on qualifications, deep subject matter knowledge, experience	Professional development New hiring practices for middle schools	4a. Qualitative –observations of professional development, participation, professional learning communities 4b. Quantitative: Number of STEAM teachers hired with STEAM college majors	Project Year 1,2,3 Year 1,2,3
GPRA 4. Promote parental choice, decision-making and involvement. 5b. Magnet school tours for prospective parents and students in January-February 5c. Project Director conducts informational meetings for students/parents at all 5 th	Active outreach, marketing, education Magnet school tours at each site Information meetings at elementary and K-8 schools.	Quantitative – number of events for parents at each magnet school. Qualitative – focus group with parents 5b. Quantitative – number of tours 5c. Quantitative – number of information meetings	Annual Spring Year 1,2,3 Spring Year 1,2,3

grade schools			
5d. Parent-led activities and membership on school and district committees/boards reflect community diversity	Parent membership on committees; parent-led activities	5d. Qualitative – observations of parent ethnic diversity in leadership activities	Fall, spring Year 1,2,3
GPRA 4: Cost per student in the magnet program	Cost by enrollment	Quantitative: Cost analysis.	Annual
6d. Implement WEB, CHAMPS, A World of Difference	WEB, positive behavior practices of staff	6d. Qualitative – observations of WEB activities, school-wide positive behavior and support	Monthly observations
6e. Positive school climate (school bonding) at each middle school		6e. Quantitative – Administer TRENDS School Climate and Safety Survey to staff	Annual Spring Fall and
6f. Monitor 6 th -8 th grade student attitudes and beliefs about school		6f. Quantitative – Administer PEASS Survey to students	Spring each year

Evaluation includes methods that are objective and that will produce data that are quantifiable.

Applicant has in place the necessary processes and systems to comply with reporting

requirements. Data collection and analysis methods for summative evaluation are primarily

quantitative. Data will be analyzed and summarized using descriptive statistics. Magnet schools

desegregation and enrollment data by grade level and race/ethnicity descriptive will be obtained from the California Basic Education Data System (CBEDS). Student achievement data as measured by California Standards Test (CST) disaggregated by numerically significant group: White, Hispanic, Economically Disadvantaged, English Learners, and Students with Disabilities will be obtained from the CDE online DataQuest system. School climate and safety survey data will be provided by teachers and school staff, using the *TRENDS School Climate and Safety Survey* annually. Survey analysis will describe the school climate using descriptive statistics. Students' beliefs and feelings about their school, teachers, and peers will be obtained from the online *Positive Experiences at School Student Survey*, administered in fall and spring. In Year 3, the Evaluator will work with the Primary Investigator at CI to analyze project results and determine "what works." Successful practices and materials will be sustained and shared with other schools.

Reporting. The Evaluator will coordinate with school and district personnel to complete all MSAP program reporting requirements and timelines. The Evaluator, with the Project Director, will report student achievement and other project data annually to the School and District Parent Advisory Committees, Governing Board, and Office of Innovation and Improvement.

Commitment and Capacity.

Applicant is likely to continue the magnet school activities after assistance under the program is no longer available. Extent to which the applicant is committed to the magnet schools project.

The district is strongly committed to the STEAM magnet school academies. Following 5-7 years of improved curriculum, student data analysis with grade-level and department data teams, and teacher professional development, intermediate (future middle) schools have not yet achieved the

NCLB target for AYP with every significant student group. *We must restructure our schools to increase achievement.* OSD made a commitment of time, money, and resources to develop the Measure R School Bond initiative, which is funding our school reconfiguration and reconstruction of facilities to support STEAM academies. In these difficult economic times, two-thirds of the local community supported our measure to improve local schools, at the same time that voters statewide supported a modest tax increase for seven years to support education. We are encouraged by this support, and we are fully committed to realize the vision that we promised parents and students. We also realize that students who feel successful and motivated will learn, retain, and apply knowledge that is meaningful to them. We believe that our magnet academies, with the STEAM themes we originated, and with the use of project-based learning and 1:1 computing, will engage students and increase academically productive time. We have seen other 1:1 computing schools make significant gains during the second year of implementation and beyond with this technology. Once we build and reconfigure our intermediate schools as magnet middle school academies, we are confident that parent and community support will be sustained as well. Teachers and students will be motivated by the success of increased academic engagement and improved student achievement. Parents, the community, and our university partners will want to work with us to sustain this important program. In addition, we believe that the magnet school process will be transformative for our students, schools and community.

For more than 20 years, OSD has successfully implemented multiple federal and state grant programs including Healthy Start, After School Education and Safety program, the Elementary and Secondary School Counseling Grant, Primary Intervention Program, Neighborhoods for Learning, and others. The district utilizes initial grant awards to establish

programs, hire and train staff, develop policies and procedures, provide student and family-centered services, and monitor outputs. An example of a funded program that OSD has sustained for nearly 20 years is the Healthy Start program. Funding for Healthy Start was used to establish five school-based family resource centers which offered “one-stop shopping” for families to access health and human services, domestic violence counseling and support, referrals to free legal clinics, access to WIC (Women-Infants-Children) and food stamp applications, classes on child development, a parent library, and access to Head Start and State Preschool. Services and referrals were provided in English and Spanish by Outreach Consultants, who also conducted case management for the most needy families. Free dental, vision, and immunization clinics for children were provided several times per year. The family resource center model was replicated at five additional schools. Healthy Start funding was discontinued 12 years ago, but funding was leveraged and the family resource centers remained operational with Outreach Consultants for an additional six years. The Outreach Consultants continue to work with families at district schools today.

Extent to which the applicant has identified other resources to continue support for the magnet school activities when assistance under this program is no longer available. We are aware that the most difficult and costly project element to sustain after federal funding ends will be 1:1 computing. Beginning in Year 2, we will use the MSAP Sustainability Self-Assessment, Planning, and Financing tools to identify project elements that we wish to sustain, and to seek resources to fund them, including federal Title I funds, state monies, business partnerships, and additional grants. The MSAP Sustainability process will help us clarify our goals, define what we want to sustain, develop a 3-5 year work plan to acquire financial resources, and obtain commitment from funders. As a preliminary task, we identified the following practices that we

know we will maintain beyond the grant funding. We believe our MSAP project will bring systemic changes to our middle schools, which will transfer to elementary and high schools.

Others will want to replicate the successes we are invested in.

Activities Designed to Build District Capacity	Plans to Sustain the Magnet Academies
Successful voluntary desegregation of middle schools	Continue open enrollment and district-funded transportation to magnet academies of choice. Community support for parent and student choice supports desegregation.
Professional Development in STEAM	Teachers imbedded in STEAM model support new teachers, using a Trainer of Trainers model.
Integrated middle school curriculum	Professional learning communities are established at each school. Staff works collaboratively to support students.
Project-based learning and Visible Thinking Strategies	STEAM curricula and established practices continue to support PBL as a critical strategy for teaching and learning.
Technology for 21 st Century teaching and learning	As technology evolves, students, teachers, and parents seek to identify new funding streams to acquire new technology.
1:1 computing	Develop middle schools into model technology demonstration sites; request and leverage funding from business and technology companies; apply for Gates Foundation support. Publicize successes to maintain parent and community support.
Robotics, marine biology	Seek private and grant funds for continued Robotics training and other teacher institutes.

Visual and performing arts	Expand and diversify community partnerships with arts, music, and theater groups, colleges and university, artist in residence.
Magnet academy themes	Continued parent and student support for choice
AVID implemented school-wide	As student achievement increases, all teachers continue to implement AVID practices. District continues to fund AVID school-wide certification.
CHAMPS/Safe and Civil Schools	As student behavior improves through consistent, respectful teaching and recognition of positive behavior, suspensions and expulsions are reduced. Staff improves in positive classroom management, thus increasing academically engaged time. Teachers become trainers for the district.
A World of Difference	Staff and students increase respect and tolerance. Seek community funding for booster training after grant Year 3.
WEB	As student integration improves and students work cooperatively in a diverse school environment on PBL, school bonding increases. We anticipate a reduction in gang-related youth conflict in the community. Parents, police and city officials will work with OSD to sustain the program.
Process and Outcomes Evaluation	Schools use authentic and timely assessment processes to provide corrective feedback to students. Cross-discipline data teams continue to meet. Principals and teacher leaders

	share, graph, and post student data and work products. A continuous cycle of improvement results from true professional learning communities.
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The district’s strong commitment to the magnet school is demonstrated by time and resources already committed, including transportation for students to actualize the voluntary desegregation plan. There is a comprehensive plan for building magnet program infrastructure during the funding period and a realistic plan for cost assumption at the conclusion of the grant. This commitment is evident by the involvement of district administration, site leadership, and parents and community members in the planning and writing of this application. A strong philosophical commitment to increasing school choice through our voluntary desegregation plan is evident from the School Board, Superintendent, district management team, and teachers’ association leadership. We are inspired by both the genius of Leonardo da Vinci and also Astronaut Christa McAuliffe: “I touch the future. I teach.”