Sylmar

Science Technology Engineering Math

Academy

Rigor, Relevance and Relationships

Critical Thinking, Communication

Collaboration, Creativity and Innovation

A 21st Century Educational Academy

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A. SUMMARY ANALYSIS

1. Mission and Vision

Note: Sylmar STEM Academy is a working name for our school. After a suitable time of serving our students and families, we will enlist the help of the community in coming up with a permanent name.

The Mission of the Sylmar Academy of Science, Technology, Engineering and Math is to provide a personalized and student-focused learning environment. Students will be furnished a rich learning experience that will foster academic achievement, acquisition of knowledge, and 21st century skills that will empower students to be prepared for future educational and career challenges and opportunities. These 21st century skills are critical thinking, communication, collaboration, creativity and innovation. Students and staff will participate in a learning community centered on a shared commitment to academic excellence, college-bound culture and creating work ready citizens. The Academy will also focus on the need to increase the number of underrepresented students (women, minorities, and economically disadvantaged) who seek higher education and training in Science, Technology, Engineering and Math.

The Vision of the Sylmar Academy of Science, Technology, Engineering and Math is to create a small school atmosphere for diverse learners where all students will have access to a robust, demanding, and engaging STEM curriculum that focuses on fostering life-long learners, and participation in the 21st century global society. Students' mastery of the standards-based content and skills essential to be college and workforce-ready will be facilitated by highly skilled, committed educators who set high standards and are enriched by up-to-date instructional resources; and quality professional development that is supported by community support networks which empower each learner to maximize her or his potential.

2. School Data Analysis

Sylmar STEM Academy will reduce overcrowding at Herrick, Hubbard & Sylmar Elementary Schools as well as Olive Vista Middle School. Our data analysis is based on information gathered from the school performance meter sheet, and the school experience survey for academic year 2010-2011.

Data Overview

The following examines student demographics at the four schools. Enrollments are predominantly Latino (95%), with 2% White and the balance a mixture of African American, Asian and other. Students with disabilities average 12%, with Olive Vista having the largest percentage at 16% of students identified as students with disabilities. The number of identified GATE students averages 7% of the combined enrollment. The English Learner population at the elementary schools averages 41% while Olive Vista Middle has a little less than a quarter at 23%. English learners at the elementary schools who are identified as reclassified averages 13% of enrollment. Olive Vista has a total of 38% of students identified as reclassified. This percentage includes students who entered middle school as reclassified. Almost 90% of the student body on average is a student identified as economically disadvantaged and on the free lunch program (Title I).

A concern that stands out is the fact that the elementary schools have an average of 40% English Learners with an average of only 13% of students who are reclassified. The need to mitigate these low

reclassification percentages is paramount when acknowledging the research that reclassified students stand a much greater chance of graduating high school (Silver, D., et al. (2008). (What Factors Predict High School Graduation in the Los Angeles Unified School District?) Another concern is the 16 percent of students with a disability at the middle school that can be a result of over identification, lack of Response to Intervention and Monitoring and/or second language issues that must be addressed at the elementary and middle school level. Another area of concern is the low number of students identified gifted and talented. We see an opportunity to identify more students as gifted and talented using all accepted identification criteria through both testing or through their CST scores.

School Overview 2010-2011	Olive Vista MS	Herrick EL	Hubbard EL	Sylmar EL
Student Population	1506	679	1043	861
Latino	95%	94%	94%	95%
Gifted and Talented	8%	8%	6%	5%
English Learners	23%	45%	38%	40%
Reclassified Fluent English Proficient	38%	13%	11%	14%
Special Education	16%	11%	10%	10%
Economically Disadvantaged	100%	88%	75%	100%

Interesting to note and of great concern is that Olive Vista Middle entered Program Improvement (PI) status in 1997-1998 and has been in PI status for 12 years. Sylmar Elementary entered PI status in 2006-2007. Hubbard only recently entered PI status in 2010-2011 and Herrick Elementary remains in good standing according to the performance meter for 2010-2011. In addition, all schools have seen their API rise in the last few years. For example, Sylmar Elementary is currently at 779, Hubbard 792, Herrick 815 and Olive Vista went up 14 points to 670 API. The opportunity to parlay the percentages we are seeing at the elementary to the middle school is both appealing and manageable through a strong instructional program, committed teachers, vertical articulation among teachers at all grades and a shared commitment to our mission and vision.

Superintendent Deasy's Five Performance Meter Goals

Although Sylmar STEM Academy will be a SPAN K-8 school and **Goal 1** in Superintendent Deasy's Performance Meter (High school graduation rate) is not measured at the elementary and middle school level; the Sylmar STEM Academy community believes that the foundation to high school graduation begins at the elementary level and continues through middle school. Based on our community outreach and input from parents, we are committed to providing quality first instruction and a personalized learning environment that focuses on long term goals of high school graduation and post secondary education. These indicators at the elementary and middle school level predict graduation rate: attendance, stability rate, and grades in RLA and Math in Middle School. By targeting 6th grade students with F's in RLA and Math; for example, we will increase the graduation rate of Sylmar area high schools.

Goal 2: Proficiency For All, over four years all schools have seen a rise in test scores in English Language Arts with 50% of the elementary students at proficient or advanced. Olive Vista had modest gains throughout this period and in 2010-2011 only 34% of students had scored proficient or advanced in ELA. Math scores in all schools have also been on the rise with 64% of students at proficient or advanced for 2010-2011 at the elementary level. Once again Olive Vista Middle trailed at 27% proficient

and advanced in math and 30% in algebra. The following table outlines the last four years of data from the targeted schools.

School	2007-2008	2008-2009	2009-2010	2010-2011
Herrick **ELA**	35%	39%	50%	54%
Hubbard **ELA**	34%	42%	45%	49%
Sylmar **ELA**	26%	34%	33%	47%
Olive Vista **ELA**	25%	26%	29%	34%
Herrick **Math**	53%	53%	59%	67%
Hubbard **Math**	52%	56%	51%	65%
Sylmar **Math**	40%	48%	42%	59%
Olive Vista **Math**	18%	22%	27%	27%
Olive Vista **Algebra**	6%	9%	15%	30%

The data clearly demonstrates a drastic drop in proficiency levels from elementary to middle school in both ELA and Math. The Sylmar STEM Academy seeks to rectify the issues found with matriculating students from the elementary to the middle through the K-8 Span model by providing the necessary relationships and personalization that is inherent in elementary school environments.

The STEM model specifically will target proficiency in science achievement. The data clearly demonstrate a significant drop in science achievement from the elementary to the middle school. The results for fifth grade CST science were 45% proficient and advanced while in 8th grade CST science scores decreased to 34%. As a Science Technology Engineering and Math focused academy, the academy will circumvent the diminished focus on science that leads to poor performance. The academy will address this need by working through an interdisciplinary model; project based learning, inclusion of technology, culminating student presentations through a rigorous and relevant instructional program.

When the data is disaggregated two groups stand out. These groups are Students with Disabilities and English Language Learners. Of the elementary schools only 25% of the English Learners are proficient or advanced in ELA. The English Learners at Olive Vista who were proficient or advanced in ELA were a bleak 5%. Students with Disabilities that scored proficient or advanced in ELA were at 20% at the three elementary schools, and Olive Vista at 7%. In elementary math, 47% of English Learners were proficient or advanced, while Olive Vista had only 5%. Although the schools have made progress as a whole, the disaggregated data suggest a need for correction and opportunities for growth. Our school's design is centered on a highly collaborative teacher model and personalization where teachers will work in teams in order to better focus on student learning as well as the students' social-emotional development. Combined with the low income level of our families (as reflected in the free lunch %), the significant number of English Learners provides us with the ideal opportunity to develop and implement our program, that is perfectly suited to benefit our community of learners: one that engages all stakeholders, provides adequate language support and universal access to all students, and meets their needs of becoming college and career ready community members.

For Goal 3 : 100% Attendance, the schools average 65% of students with 96% or higher attendance with Olive Vista leading this area with 68%. Percentage of Staff with 96% or higher attendance averages 70% across the four schools, and Olive Vista staff members having the lowest attendance rate at 49% and Sylmar Elementary highest at 89%. A concern that resonated with Sylmar STEM Academy as we looked through the data was the low attendance rate of teachers at Olive Vista Middle School. Also disheartening was that approximately 32% of students across the schools had missed school at least seven days throughout the school year. During our parent meetings held to elicit feedback and input, parents shared how having a PSA counselor full time on campus at Olive Vista helped maintain student attendance for 2010-2011. We also realize that a healthy school culture and climate play a big role in improving attendance rates among staff and students.

Goal 4: Community & Parent/ Engagement, 60% of parents across the schools who responded to parent surveys stated they talk to their child's teacher about schoolwork. Hubbard parents responded with a higher percentage than all other schools. Olive Vista Middle was the outlier of the group with a dismal 38% of parents talking to their child's teacher about schoolwork. Under the Sylmar STEM K-8 model, parents will have the opportunity to have their child in a Span K-8 setting thereby increasing the opportunity for the Sylmar STEM Academy to nurture the relationships between parents and teachers throughout their schooling. By providing consistent and familiar school leadership, parents will have the continuity of collaborative relationships with the same administrative team and teachers. Only 29% of parents from the schools responded and returned the School Experience Survey with an outlier at 9% from Hubbard Elementary. According to the research, parental involvement is critical to student success and how they perceive education in general (Parental Involvement and Students' Academic Achievement: A Meta-Analysis, Xitao Fan and Michael Chen). The opportunities to create a long term parent involvement plan are endless under the K-8 model. This is another reason why the SPAN school is so alluring to the Sylmar STEM Academy design team and its community partners. We need to provide a focus and direction for our parents to become more involved and engaged in their children's place of education. In addition to providing avenues for our parents to participate in the life of our school, we have identified service providers (Parent Institute for Quality Education, Families in Schools, CSUN ETS program) that are ready to provide support to our parents that are frequently found in other communities. Furthermore, we need to establish lines of communication that remain open in both directions that are maintained and easy to navigate. We can envision a community school where students, parents, community and staff work toward high academic goals for all with an eye set on high school graduation and post secondary educational preparation.

Goal 5: School Safety, among the combined enrollment of the four schools, there was an average of 37 days of instruction lost to suspension. The outlier was Olive Vista with 111 days lost to suspension. An opportunity exists to lower suspension rates at the middle school given the fact that Sylmar STEM Academy will be a K-8 school and we can capitalize on students being in one school from kinder to 8th grade and knowing the staff and teachers throughout their education. The percentage of students who felt safe on the school grounds was 85% among the four schools which is very close to the district goal of 86%.

3. Applicant Team Analysis

The Sylmar STEM Academy Design Team is composed of teachers from the community, educational specialists, and community members. The team brings a wealth of expertise, passion for educational reform, community awareness aimed at gentrifying the Northeast Valley, and an

unwavering conviction to do what it takes to bring about college ready and work ready citizens into the 21st century.

Richard S. Ramos, Categorical Programs Advisor at Olive Vista Middle School, brings a wealth of community and educational experience, was born and raised in the City of San Fernando and served as San Fernando City Councilman and Mayor Pro-Tem where he helped set the vision of the economic development plan and creative use of community block grant monies to fund social service programs. Richard has literally worked at all levels of education. He started his teaching career at his alma mater, Morningside Elementary where he spent 7 years teaching second language learners and serving in several leadership roles among them the school leadership team that helped set and sustain the mission and vision of the school. He was later recruited to work for Project GRAD Los Angeles as an instructional math coach for K-6 programs; he worked with hundreds of teachers and students leading the charge to reform education and improve math instruction through constructivism. During this time with Project GRAD LA, teachers that Richard coached witnessed large gains in student CST scores. Later he served as Assistant Principal of Instruction at PUC Schools Early College High School in Lake View Terrace where he helped open up their new campuses. During his time at PUC Schools, Richard was successful in supervising and coaching his teachers to implement SDAIE strategies across the curriculum. Richard returned from his leave of absence from the district and immediately starting implementing what he learned while serving out of the classroom. At Olive Vista Middle School, Richard had the highest reclassification rates for English Language Learners by implementing a CST and CELDT Test Academy that targeted specific gaps in learning prior to the test administration. In a short time, Richard was elected by his peers to serve in his current position of Categorical Programs Advisor where his has continued his work of improving universal access to all students. In addition to working for LAUSD, he is an Adjunct Instructor of Basic Skills at Los Angeles Mission College where he works on remediating English Language Arts skills for returning adult students. Richard holds a teaching credential, a Masters Degree in Educational Technology and Learning from Pepperdine University, and a Masters Degree in Educational Administration and Policy Studies from California State University Northridge.

Dr. Ivan Cheng, is Associate Professor of Secondary Education at CSU Northridge, where he instructs pre-service teachers and masters candidates. A former LAUSD teacher with over 23 years of experience in middle and high schools, Dr. Cheng was among the first math teachers to earn National Board certification in LAUSD. In addition to his publications, Dr. Cheng also presents at numerous national and regional conferences and leads professional development for in-service and pre-service teachers. He is currently Principal Investigator of the SITTE Project, which was awarded $1 million from the California Postsecondary Education Commission (CPEC). He is also co-PI of the NSF Noyce Scholars Teaching Fellowship Program ($1.5 million) funded by the National Science Foundation (NSF), project director of a Planning and Implementation Grant funded by ARCHES (Alliance for Regional Collaboration to Heighten Educational Success) and was a Steering Committee Member of the Carnegie Foundation funded Teachers for a New Era project at CSU Northridge. In addition, Dr. Cheng is currently serving as the coaching coordinator for the $5 million i3 grant awarded to California Education Round Table Intersegmental Coordinating Committee—Alliance for Regional Collaboration to Heighten Educational Success (ARCHES), serving teachers across the state to improve algebra instruction using project-based curricula.

Larry Tash, has been a teacher and administrator in LAUSD for 37 years, and currently works as an educational consultant who has expertise in the areas of school reform, instruction, and school leadership. He was raised in the Sylmar-San Fernando area, and graduated from San Fernando High

before attending UCLA and CSUN. He taught at Sepulveda and Fulton Junior High Schools and was a school based administrator at many schools, including principal of Walter Reed Middle School for eleven years. He retired in 2008 from LAUSD after acting as a Local District Director of School Services, and as Director of the Office of School Redesign where he wrote and led the reform of high schools and middle schools into small learning communities/small schools, and Personalized Learning Environments.

Irene Alba Ramos, is a product of LAUSD schools and graduated from San Fernando High School before attending California State University Northridge. She currently serves as a school psychologist and brings a wealth of knowledge and skills to the Sylmar STEM team. She has worked as a school psychologist for Filmore Unified School District and currently works for LAUSD. In 2007, Irene was awarded the Outstanding School Psychologist Award from the Los Angeles Association of School Psychologists, and in 2009, she was awarded the distinguished Outstanding School Psychologist Award by the California Association of School Psychologists.

Henry Cuaz works as an ESL/English Teacher in the Northeast San Fernando Valley and brings dedication, enthusiasm and experience in working with students, parents and staff. He has been involved in organizing the annual Relay-For-Life event held at Olive Vista Middle School that brings the community together in a service learning venue. He is also part of the school's annual Santa Monica Bay clean-up team where dozens of community members and students, staffed the annual student campout at LAUSD's Clear Creek Outdoor facilities and played in concerts and festivals as a member of the Olive Vista Middle School Band. Henry has also spearheaded evening parent workshops from literacy, reclassification, CELDT preparation to parent engagement while working at OVMS. He has served in various leadership roles throughout his 12 years with the district. In support of student achievement, he offered afterschool intervention services for struggling students. These efforts have year after year resulted in his English Language Learners jumping CST bands affording students the opportunity to reclassify prior to entering high school.

Wendy Schroeder, is a National Board Certified mathematics teacher at Nobel Middle School in Northridge, California where she has taught for the last nine years. She began her career teaching mathematics at US Grant High School for six years. In between she was a successful branch/sale manager for ten years at the San Fernando branch of Motion Industries (a national power transmission distributor for industry). After coming back to teaching, she earned her MA in secondary math education at California State University in Northridge and completed her National Boards. In addition to her current role as a classroom teacher, she also shares her enthusiasm and love for teaching with multiple student teachers in collaborative, co-teaching roles she is developing as a new model for the pre-service experience. Her passion is in developing highly engaging classroom lessons and processes that incorporate higher level thinking for all students. For the last few years, she has focused on under-achieving 7th and 8th graders in their core classes as well as a support period (RTI tier two) for math support. Her students have enjoyed increased confidence, a new found appreciation for a content area they were beginning to fear as well as increased test scores.

Professor Rodolfo Casarez, is a life-long resident of the San Fernando Valley and serves as an Adjunct Professor at CSULA and Los Angeles Mission College in the Speech Communication Department. He has taught in the middle and high schools for Partnerships To Uplift Communities Charter Schools and has coached debate as well as mentored students on oratory skills and public speaking. Professor Casarez brings a wealth of knowledge from his work with second language learners and will work with

the STEM Academy as a community partner assisting in developing academic oral language and student public speaking.

Otto “Tito” Sturcke, was born and raised in Sun Valley and is a professional artist. He has been a member of the Screen Actors Guild since 1997. Otto has performed in several television shows and films including, "Crusade", "Mad TV", and hosting Univision's "Control". In 2003, Otto began to produce and art direct award winning films, including "The Project's Lumiere", which received an Oscar by the Academy of Motion Picture Arts and Sciences Student Academy Awards and "Alondra Smiles" which was awarded the "Director's Gold Award" to good friend and director Conchita Villa at the International Family Film Festival, Hollywood. Otto will serve as a community partner helping to bring theater to life at the Sylmar STEM Academy as part of our after school enrichment program.

David Keitzman, is Executive Director of Youth Speak Collective, a youth-driven non-profit organization founded on the idea that all young people can succeed if provided with the right opportunities. YSC follows a “for youth, by youth” philosophy in which young people are empowered to help design and implement programs for youth. YSC has provided teens from throughout the Northeast San Fernando Valley with creative, high-quality programs that channel their intellect and talent, build their academic skills, and strengthen their investment in their own communities. This work is made possible by a strong network of volunteers, contributors, and community leaders who all take an active role in advancing the work of Youth Speak Collective. YSC will serve as our after school services provider to bring innovative programs to the students of the Sylmar STEM Academy.

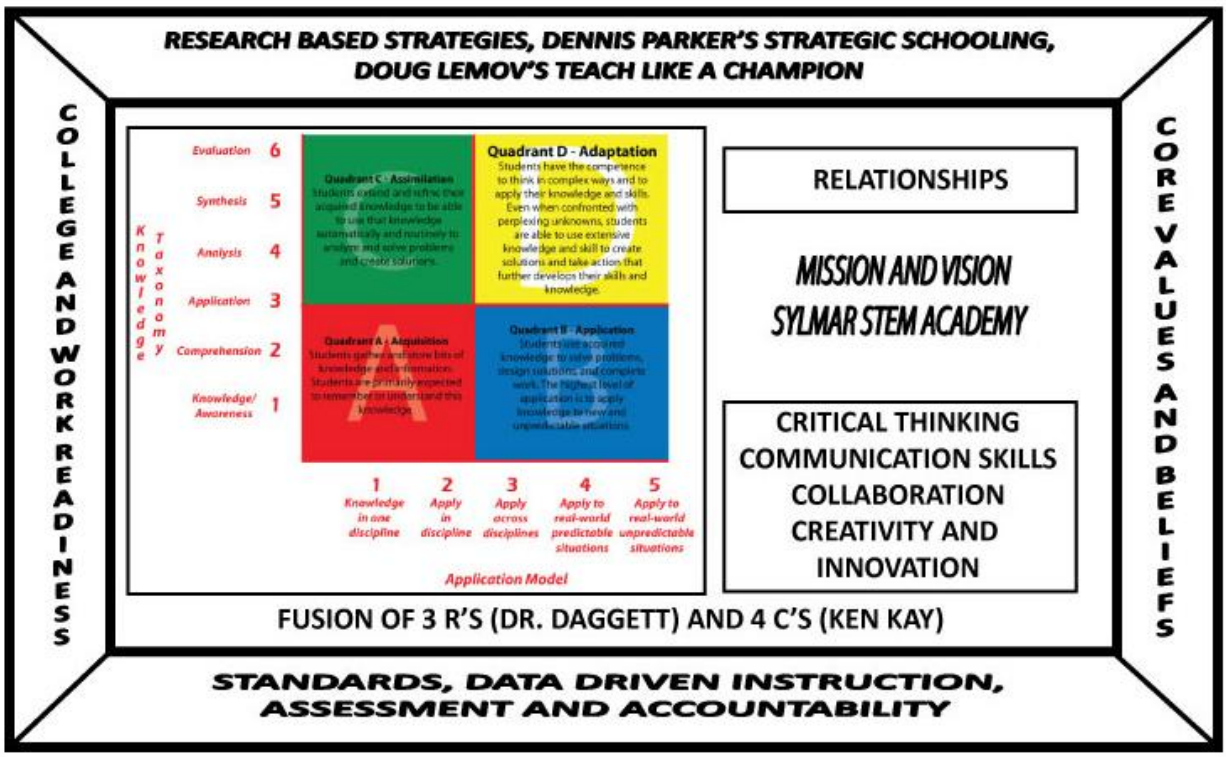
4. Informational Summary – See Appendix

B1. INSTRUCTIONAL PLAN / Curriculum & Instruction
(a). Instructional Program

LIS Waiver #2

The Sylmar STEM Academy will provide an educational environment that is conducive to social change, innovation, pragmatics, and one that puts the needs of children, the community and parents at the focus of our decision making process. The following is a narrative of our school-determined methods to improve pedagogy and student achievement. It is our design team's belief that LIS Wavier #2 is necessary to provide the Sylmar STEM Academy the autonomy to achieve our mission and vision.

After many hours of discussion and planning, our design team has selected an instructional framework based on the research of Dr. Willard Daggett from the International Center for Leadership in Education and the work of Ken Kay from EdLeader 21. Both are research based and fit into our mission and vision as well as meet the needs of our student population that were discussed in the data analysis section of this proposal. They are engaging, evidence based, provide equitable access to all and provide our students with the necessary skills to be 21st Century citizens. The learning environments that will be include 1) Project Based Learning, 2) STEM and Engineering Themes, and 3) Interdisciplinary Studies through a STEM approach discussed further on starting in kinder and continuing through eighth grade.



We selected Dr. Daggett's instructional framework which revolves around Rigor, Relevance and Relationships and has the comprehensive underpinnings that will support our students in all areas of school and beyond as well as support our mission and vision of small schools and a STEM education.

Student data was taken into account as we decided on this model since so many children in the Northeast Valley have the potential to improve their academic achievement through higher expectations by adults, and with rigorous and relevant curriculum and instruction. Dr. Daggett's model of acquisition, application, assimilation and adaptation of learning lends itself to STEM education, and to differentiating instruction for our student demographics. This model of rigor and relevance is non-linear and students can progress from acquisition (remembering or understanding knowledge), application (acquiring knowledge and applying it to new situations), assimilation (routinely solving new problems), and adaptation (creating solutions and taking action). Furthermore, relationships will be key to our instructional framework. Given the K-8 nature of the Academy, the opportunity for students and teachers to cultivate the necessary triangulated relationships, i.e., teacher-teacher, teacher-student, and teacher-parent, will develop a critical component absent in many middle schools across the country. In addition to Dr. Daggett's work, we include Ken Kay's 21st Century Skills (4 Cs), which are Critical Thinking, Communication Skills, Collaboration, Creativity and Innovation to round out our instructional model. These will be embedded throughout our instructional curriculum and assessments as they provide the necessary skills to prepare our students to be college and work ready citizens.

At the heart of our instructional framework is this basic and often non-linear progression: Rigor, Relevance and Relationships synthesize to become quality first instruction for all learners. This process is best accomplished in a meaningful context integrating interdisciplinary knowledge and skills. According to research by Newmann, Smith, Allensworth, and Bryk (2001), "students are able to increase their achievement at higher rates when their experiences within and across grades connect and build upon one another. Students become more motivated and feel more competent when they understand how what they are learning in one classroom is related to what they learned before, allowing them to gain a sense of mastery and motivation to meet new challenges." With an eye to the skills necessary to compete in a 21st Century global market, our team with input from our community decided that our over-arching theme would be Science, Technology, Engineering and Math with an interdisciplinary curriculum that fosters Critical Thinking, Communication Skills, Collaboration, Creativity and Innovation

Why STEM and Interdisciplinary Studies?

At the heart of STEM education is technological literacy – one of the 21st century literacies described in the Framework for 21st Century Learning. Furthermore, STEM not only seamlessly integrates mathematics and science, but also makes both content areas relevant, an important aspect of student engagement according to recent research (Marzano, 2010). Additionally, STEM design provides numerous other interdisciplinary connections and the by-product of Project Based Learning. Interdisciplinary Studies places Science, Technology, Engineering and Math into the heart of our curriculum while increasing the engagement factor. Beyond the content area standards, interdisciplinary studies and STEM focused instruction will also provide a means to develop essential skills in our students to participate in the 21st century marketplace. Skills inherent to STEM are also vital to the workplace.

- problem solving
- analysis and data-driven decisions
- variables and optimization
- teamwork
- creativity
- communication
- use of current technology

Important to note, the 1997 research report "The Logic of Interdisciplinary Studies" established a consensus as to the strength of interdisciplinary studies and noted the following positive outcomes.

- Increased understanding, retention, and application of general concepts.
- Better overall comprehension of global interdependencies, along with the development of multiple perspectives and points of view, as well as values.
- Increased ability to make decisions, think critically and creatively, and synthesize knowledge beyond the disciplines.
- Enhanced ability to identify, assess, and transfer significant information needed for solving novel problems.
- Promotion of cooperative learning and a better attitude toward oneself as a learner and as a meaningful member of a community.
- Increased motivation.

Standards-driven instruction, 21st century student outcomes

Our teacher teams will be preparing our students for the 21st century. They will provide standards-driven instruction with rigor, relevance, relationships that produce quality first instruction. Academic instruction will primarily be delivered by interdisciplinary teams of teachers that collaboratively incorporate standards-based lessons that tie together via specific units within the overarching theme of STEM education from kinder to eighth grade. As part of the lesson development process, the teacher teams identify which standards align most naturally to the STEM theme and progress from there. (Note: all standards will be taught, only their sequencing will be adjusted to best fit the interdisciplinary approach). The student learning that results is positively related to "content knowledge, collaborative skills, engagement and motivation, and critical thinking and problem-solving skills" (CELL, 2009).

Project-based learning (Intellectually engaging across disciplines)

More importantly, in preparation for the forthcoming Common Core assessments that begin in 2014 and require students to perform on demand, inquiry based, and other authentic assessments; the Sylmar STEM Academy students will be prepared for the change in assessment through the interdisciplinary PBL model that is prevalent in the K-8 model.

Research shows that PBL not only positively affects student content knowledge, but also develops their critical thinking, problem solving and collaboration skills (Brush & Saye, 2008). Once again student demographics was looked at closely resulting in us selecting Project Based Learning as we felt it would best suit the students we are targeting, and provide the necessary outcomes for student academic success. As already mentioned, PBL is a happy by-project of interdisciplinary studies and will support our vision and mission. Furthermore, PBL instruction benefits all ability levels: one study of PBL showed low-ability students increased their use of critical-thinking skills by 446% and high-ability students by 76% (Horan, et al., 1996). Additionally, students in PBL classes emerged with more useful, real-world content knowledge which they could successfully transfer to situations outside of the school environment (Boaler, 1997). PBL increases student engagement (Belland, et al., 2006; Beringer, 2007; Brush & Saye, 2008). Students show increased motivation to learn and, according to elementary teachers who reported using PBL as a significant portion of their instructional strategies, students' work ethic improved as well as their confidence levels and attitudes towards learning (Tretten & Zachariou, 1995).

One of the most significant programmatic components of a successful school for young adolescents is interdisciplinary learning (Anfara, 2003). When coupled with PBL, this is an instructional strategy that is effective towards increasing student achievement as well as social-emotional development (Anfara, Lipka, 2003). A K-8 school provides the opportunity to use advisory periods to have students in the upper grades mentor and work on project based learning activities with students in the primary grades to develop critical thinking, communication skills, collaboration, and creativity and innovation which is part of the capstone of our mission.

Engineering themes

The underlying reasons for choosing STEM as an over-arching theme are numerous. First of all, it is part of our mission and vision to open the doors for minority students to seek out high school and post secondary education in the sciences. For this reason, our school community will implement engineering themes from kinder to eighth grade. Findings have shown that engineering development in K-8 students increases their science content knowledge as well as their math, engineering and technology knowledge. In addition to increasing content knowledge, utilizing the engineering themes increases various content's relevance, demonstrates the value of teamwork, provides the opportunity for low-achievers as well as high-achievers to succeed (open ended outcomes), changes students' ideas about technology, opens new worlds (potential career paths) to students, encourages students to revisit and refine their thinking (part of the engineering design process) (Moffett & Banilower, 2011). Hispanic Americans are less likely than European Americans and Asians to pursue science and engineering careers (NSF, 2007). The STEM Academy will be the conduit to open up our community's knowledge of careers in science, technology, engineering and math. Research suggests that middle school is the beginning of this group of students' attrition away from science and engineering careers (Atwater, 1990) due to inequitable access to the kinds of instructional opportunities that can lead to success in these areas (Hill, Atwater & Wiggins, 1995). A significant factor to this historic inequity that exists in science education goes back to the "pedagogy of poverty" that is typical in the urban schools that many minority students attend. Thus our instructional framework of rigor, relevance and relationships creates the opportunity for alternative mode of instruction, problems-based-learning with a technology, engineering, math and science focus.

The Sylmar STEM design team anticipates hiring mission and vision driven teachers that may not necessarily come with certain skills and experience necessary to implement these strategies and curriculum. Thus we see a necessary gradual implementation of these components which will take place over a series of years with all the supports that come from professional development and collaboration time.

Instructional strategies

The data from the existing LAUSD Sylmar schools significantly reflects a low-income student population. It is the design team's belief, founded on long-standing research, that to provide exemplary education to our students, we need to make a firm commitment to provide an alternative to the "pedagogy of poverty" (Haberman, 2010). Based on our students' demographics, there will be a systemic use of SDAIE to access the core content for teaching and learning from kinder to the eighth grade. Direct instruction will serve to model academic language, cooperative groupings will support oral language development and other differentiated instruction strategies will provide for universal access by addressing the specific needs of language learners. Furthermore, the STEM Academy model supports student engagement, dialogue and ownership of learning whereby instruction will include both teachers

and students actively participating so that our students' learning will be seen, not by the teacher's action, but rather by what the students are doing.

Good teaching will be seen school-wide as evidenced by the following student behaviors:

- seeing big ideas and general principles as compared with isolated facts,
- involvement in planning what they will be doing,
- applying ideals such as equity, fairness or justice to their world,
- actively and directly involved in real-life experiences and working in heterogeneous groups (Oakes & Lipton, 1992),
- making connections between new ideas and ones previously learned,
- redoing, polishing or perfecting their work,
- involvement in the technology of information access,
- self reflection on their own lives and what they believe and feel (Haberman, 2010).

Empowers our teachers and students

In addition to empowering students by moving away from traditional teacher-led classrooms through creating student-centered learning environments and opportunities for student choice and autonomy, our entire school model is about distributed leadership. From the design team to the various leadership teams, to the ongoing curriculum development, to the professional development that supports this, teacher empowerment is embedded in every aspect of our school. So too is student empowerment. As Haberman argued, good teaching is evidenced by students being involved in making decisions and planning what they will be doing in school. Our PBL approach to instruction is imbued with student choice – an important aspect of empowerment. Within PBL, lie many additional opportunities for empowering students. Students work in cooperative groups on open-ended problems and collaboratively decide on potential strategies and solutions.

Access, differentiation, high level thinking

In addition to providing students with authority over their own learning, PBL also results in high levels of student engagement (Brush & Saye, 2008). Students are able to direct their own learning when in the PBL process. This autonomy, however, is not provided in isolation. They will work towards a solution in a collaborative, heterogeneous group. The very nature of this heterogeneous grouping allows for differentiated learning and avoids the negative impact that traditional tracking has, particularly on largely low-income, Latino student enrollments like ours (Oakes & Lipton, 1992). Although the groups work collaboratively, individuals are also responsible for their own piece of the project as well as sometimes having to complete an individual essay or other form of assessment. Studies of PBL have shown that low-ability students benefit as well as high-ability (Horan, et al., 1996). In PBL, facts are not learned in isolation, but rather they're connected to a real life application. This again supports our instructional framework of rigor, and relevance and mission and vision for a 21st Century school. Thus the students are able to collectively synthesize and create meaning in their pursuit of an answer. Then, as individuals, students can add their personal perspective and make choices once again on what they feel is the answer. This transition from collaboration to independent thinking and work is fundamental to our instructional framework of rigor and relevance. Students will be able to adapt their learning to new situations and solve problems through critical thinking both through collaboration and independent work.

A significant piece of student equity and access deals with our responsibility to our large English learner population. With almost 40% of students identified as LEP in our elementary and middle school,

it's vital that our instructional framework follows current research regarding how English learners learn best. According to a 2008 article by Claude Goldenberg, in which summarizes two major reviews of research on educating English learners (Goldenberg, 2008), the current state of our knowledge points out certain key findings. Students should be supported in transferring what they know in their first language to their instruction in English. English language learners need intensive oral English language development, particularly with academic vocabulary and language. For our Long Term English Learners, CST and CELDT Preparation Academies will be mandatory to assist all elementary students to reclassify prior to moving into middle school. In addition teachers will create formative ELD assessments to use on a quarterly basis to enable teachers to focus on instructional techniques and interventions on weak areas during the school year.

School Wide Interventions and Advisories

In addition to our Interdisciplinary Studies and PBL focus in which students work collaboratively in cooperative teams to engage in rigorous learning across the disciplines, there are two other important components to our school day that add significantly to our Instructional strategies. First, we are implementing student advisories 5-8. Secondly, our school will offer a wide variety of academic afterschool programs several days a week. Our advisories will focus on developing teacher-student relationships that will produce effective targeted intervention, as well as focus on the social-emotional development of the young adolescent. When an advisory program is effectively implemented, it can be a significant factor in supporting student learning (Anfara, 2006). Our after-school programs will also contribute to our students' academic well-being by being aligned to our in-school focus. The academy intervention programs will be targeted, short-term and based on data. Rather than voluntary study hall or tutoring sessions, interventions will be mandatory "Standards Boot Camp". Students would be indentified by results on their benchmark tests and be expected to attend a six-week session to learn one standard. This type of program would also support our RtI program. We will also offer opportunities for our students to work on their interdisciplinary projects while supported by an adult. This could be a more convenient time for parents to volunteer their professional knowledge as it applies to our curriculum. Parents and community members involved in STEM industries could work with students in their engineering projects during after-school program time. They could also serve as an audience to students that want to polish their final presentations or even to help with the rubric guided assessments (Hirsch, 2011). Our actual offerings will be dependent on final staff hired and enrollment figures.

These teaching practices and resulting student behaviors, combined and practiced school-wide, will be indicators that good teaching and learning are present. There are significant impediments we must surmount in order to successfully implement them, however. We must establish and maintain a cycle of collaborative reflection among our staff. This is part of our professional development plan. We must also have complete buy-in to our mission and vision from all staff members and school community.

This is part of our "mutual consent" waiver #9 in hiring staff and administration that agree to our specifically designed "Commitment to Work" Agreement. We must also have a close working relationship with our parents, community and partners. This is part of our Parent and Community Engagement plan. Our school's design will only "take" if all constituencies are on the same page and our innovative system of pedagogy is wide-spread, systemic and long term. Only in this way can we educate skilled, thoughtful citizens.

Teacher Collaboration Time

The Sylmar STEM Academy is committed to providing the necessary time for teachers to have time for collaborative conversation and collaborative planning through an creative use of schedule (LIS Wavier #5). According to the report by the National Staff Development Council, "Professional Learning in the Learning Profession" points out, United States Schools "are far behind in providing public school teachers with opportunities to participate in extended learning opportunities and productive collaborative communities." Important to note, is the major challenge for elementary schools where teachers teach all subjects and do not have a prep/ conference period and lack the time for collaboration. The Sylmar STEM Academy understands the importance of collaboration. We will create opportunities for middle school teachers to join the primary grades as needed for vertical articulation and PBL planning. This collaboration time will ensure that all teachers will have organized and structured grade-level team meetings where the Responsive Teaching Cycle, and student data will be used to problem solve and discuss innovative ideas that will lead to increased student learning and achievement.

B1. INSTRUCTIONAL PLAN / Curriculum & Instruction
(b). Core academic curriculum

LIS Waiver #3

The Sylmar STEM Academy is determined in creating an educational environment that is conducive to social change, innovative, pragmatics, and one that puts the needs of children, the community and parents at the apex of our decision making process. Therefore, the following narrative consists of our school-determined methods to improve pedagogy and student achievement. It is our design team's belief that the autonomy given through LIS Wavier #3 will ensure and provide the Sylmar STEM Academy the necessary autonomy to achieve our mission and vision.

Academic Goal

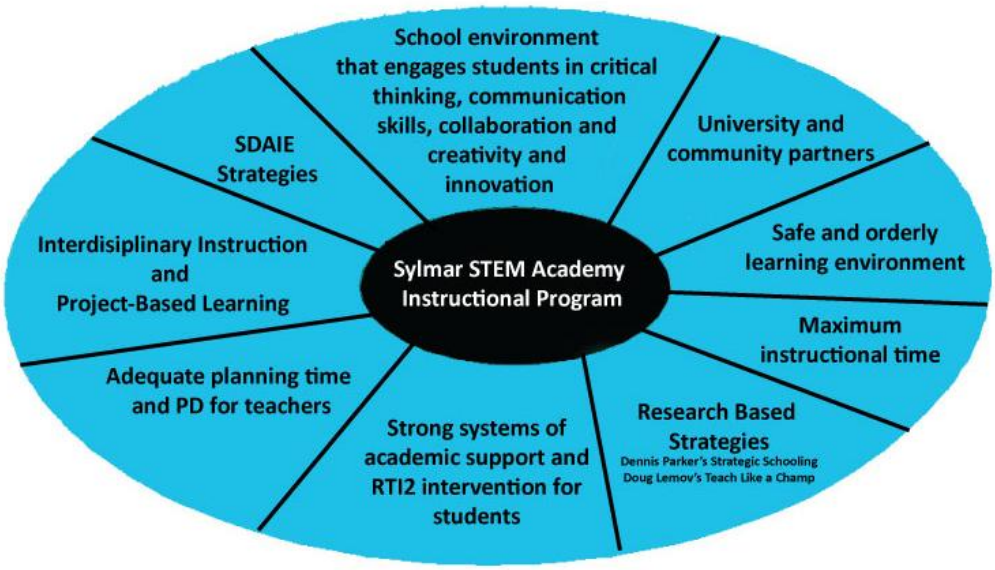
The Sylmar Academy for Science, Technology, Engineering and Math will offer a strong academic program that emphasizes rigor, relevance and relations and the 4 C's throughout its curriculum and assessment. Curriculum and assessment will be standards-based and data driven. The planning of STEM interdisciplinary components and the implementation of the components will be determined by the school design team during its summer planning time and interdisciplinary teams. Planning and pacing will be based upon data from the California State Standards Test (CST); California English Language Development Test (CELDT) and the Common Core State Standards as they are made available; current year periodic assessments; formative assessments in all content core areas approved by the school design team, and assessments conducted during initial screening at the start of the school year in grades K-8. It is the goal of the Sylmar Academy for Science, Technology, Engineering and Math to achieve a minimum score that exceeds LAUSD's district average growth based on the LAUSD Performance Meter at all grade levels taking the CST examinations. In grades K-1, a goal of a 5% increase per year, for the first five years, on the end of year summative assessments will be set.

Academic Strategies

The Sylmar STEM Academy's academic plan will focus primarily on the following strategies that have proven to increase student achievement which will be imbedded into our instructional framework.

- California State Standards-based instruction
- Dr. William Daggett's 3-R's (Acquisition, Application, Assimilation and Adaption of learning)
- Ken Kay's 4 C's (Critical Thinking, Communication Skills, Collaboration and Creativity/Innovation)
- Direct Instruction
- Research Based Strategies (Dennis Parker and Doug Lemov)
- SDAIE Strategies (Content, Connection, Comprehensibility, Interaction)
- Interdisciplinary Instruction
- Project-Based Learning
- Positive learning environment

Dr. William Daggett's Rigor, Relevance and Relationships and Ken Kay's 21st Century Skills



The areas outlined below are intended to be a general overview and not a detailed description of all activities. The goal is to achieve high student academic outcomes through our mission and vision of our school by implementing consistent curricula and instructional strategies. This will allow teachers the flexibility to compact, pace, extend, and adjust the District's pacing and planning documents to meet student needs. Sylmar STEM Academy must have the flexibility to make curricular and instructional decisions that are in alignment with our educational plan, and in alignment with state standards and responsive to student needs (LIS Waiver #3). Sylmar STEM Academy may opt to select any curriculum that is different from the standard district curriculum but will do so from the list of state adopted curriculum. Important to note, the writers of the Sylmar STEM Academy are "boots on the ground" teachers who are practitioners in classroom and understand that meeting the needs of all students mandates supplementing district curriculum or State Approved curriculum to ensure that all students receive universal access to the core content standards and achieve proficiency in the core content areas. Therefore, the autonomy inherent in LIS #3 is necessary to the Sylmar STEM Academy.

ELA and California State Standards Based Instruction

Based on CST data presented through the Performance Meter from 2010 – 2011 for elementary school students, we will utilize a rigorous standards-based state adopted curriculum like Treasures; the district adopted Reading Language Arts Programs for kinder through fifth grade. The RLA program will incorporate research-based instructional strategies (i.e. SDAIE, Thinking Maps and Visuals) to afford teachers with the necessary tools to provide for universal access by differentiating instruction to meet the specific needs of all students. Moreover, the RLA program has an English Language Development component integrated to address the specific language needs of English Language Learners. There also exists a continuum of instructional strategies (think-pair-share, visuals, academic vocabulary, graphic organizers) that are consistently employed in both RLA and ELD.

It is imperative that the RLA program be aligned with the vision of the Sylmar STEM Academy whereby students will possess critical thinking skills, communication skills, collaboration skills and creativity and innovation. The instructional framework through its interdisciplinary focus on project-based learning will continue to be at the core of the RLA program. STEM Academy's rigor and relevance will lead to the mastery of academic language, authentic writing projects, student presentations and analytical comprehension skills. Therefore, the RLA program will empower students to acquire, apply, assimilate and adapt language to confront the changing demands of the 21st Century global citizen.

The RLA program will emphasize mastery in key areas of language instruction that are essential for students transitioning and readiness for the middle school curriculum. Emphasis will be placed on:

- Oral Language
    - Listen and Speaking
- Vocabulary
    - Vocabulary Development
    - Vocabulary Strategies
- Comprehension
    - Genres
    - Strategies and Skills
- Phonics/Spelling
    - Word Study
- Fluency
    - Oral Reading
- Grammar
    - Language Conventions
- Writing
    - Narrative
    - Expository
    - Persuasive
    - Descriptive

A comprehensive and effective reading language arts program must be augmented with proven research-based instructional strategies to meet the specific needs of our English Learners, Special Education, At-Risk and GATE student populations. SDAIE strategies will serve as the backbone to supplement, enhance and enrich the instructional RLA program thereby supporting our target

population by providing universal access to the curriculum. Teachers will differentiate instruction of the RLA program according to the following SDAIE strategies:

• Use of graphic organizers. • Use of wait time. • Encourage oral language. • Think-Pair-Share. • Predictions. • Asking questions. • Sentence starters. • Transitional words. • Partner and choral reading. • Writing journals. • Making connections. • Tapping prior knowledge. • Use TPR (Total Physical Response). • Use body movements/facial expressions and gestures.	• Create safe and low anxiety environment. • Explicit vocabulary development. • Use realia, graphic organizers, and visual clues. • Repetition and practice. • Explicitly teach discourse patterns. • Encourage student to draw upon L1 (their primary language). • Picture Walks. • Cooperative Learning Groups. • Scaffolding strategies. • Use of technology. • Comprehensible input. • Theatrical performance.

The data from Olive Vista Middle School demonstrates that 34% of all students have scored proficient or advanced on the ELA CST for 2010-2011. Moreover, 5% of English Learners and 7% of Special Education student populations scored proficient or advanced on the ELA CST for 2010-2011. This glaring disparity of the achievement gap, for ELLs and Special Education populations, which is also reflected in all groups, mandates an immediate intensive strategic plan with clear goals and objectives for the students at the Sylmar STEM Academy.

The following SMART goals will drive instruction for the middle school ELA academy: SMART Goal(s): By the end of the academic year, 100% of all students (inclusive of English Learners and Special Education) will show progress on the ELA CST as measured by their baseline data. Moreover, 45% will score proficient or advanced to meet the LAUSD performance meter goal in the following state standards:

- Word Analysis
- Reading Comprehension
- Literary Response and Analysis
- Writing Strategies
- Writing Conventions

The design of the STEM Academy K-8 model facilitates a continuous systemic implementation of SDAIE strategies, as discussed in the aforementioned RLA curriculum, to ensure that differentiated instructional strategies will be the driving force to meet the specific needs of all students and provide access to the core curriculum.

Reform education mandates authentic alternative solutions (LIS #3). In order to meet the needs of our matriculating fifth grade English Language Learner population, the DPI, CELDT and CST

scores will continue to be used for placement of EL students, however, High Point will not be offered. Matriculating fifth grade students will enter core English with an elective English Language Skills or Reading class. This autonomy will ensure that our middle school EL students receive core content grade level standards upon matriculating to middle school. For English Language Learners with intensive language needs an additional level of support will be required (RTI tier 3 intervention). These students will be placed in the aforementioned mandatory "Standards Based Boot Camp" where they will be provided intensive, targeted, small group and short term interventions that focus on language development with L1 support (Laurie Olson, Reparable Harm.)

All the core subjects of the Sylmar STEM Academy will include the component of professional development and vertical articulation. This systemic process ensures that the delivery of instruction will be supported and enhanced with innovative research-based strategies to meet the specific needs of all student populations in the K-8 program. Therefore, the following three tenets will be employed to guarantee a comprehensive educational program.

- Formative and Summative Assessments-These are the assessments that will be used to identify students for interventions.
- Ongoing Professional Development
- Collaboration and Interdependence

Math and California State Standards-Based Instruction

Sylmar STEM Academy Design Team Teachers (K-8), through an Interdisciplinary Planning Model, will utilize standards-based instruction, proven research based pedagogy, and data-driven decisions to provide for universal access by differentiating instruction to meet the specific needs of our student demographics (EL Learners, Special Ed, At Risk and GATE students.) The main objective is to develop students that possess critical thinking skills, mathematical reasoning, and real world problem solving abilities that will equip them for college matriculation and work ready careers in the areas of Science, Technology, Engineering, and Math.

Project-based learning will be at the core of the STEM Academy's rigor and relevance leading to higher student engagement, collaborative work ethic and real world culminating projects that showcase our students understanding and acquisition of academic vocabulary, math conceptual mastery, problem-solving reasoning skills, computational fluency-automaticity; creating students who are capable of acquiring , applying, assimilating and adapting math to confront the changing demands of the 21st Century global citizen.

We acknowledge the importance of math as integral to the understanding of the hard sciences and the gateway to college acceptance and success. According to research by Achieve, "… that higher level mathematics courses such as Algebra II improve access to postsecondary education, are critical for college success, and are important to many careers – including those that don't require a four-year college degree" (The Building Blocks of Success: Higher-Level Math for All Students).

Therefore, the Sylmar STEM Academy will utilize rigorous district/state adopted curriculum for our K-8 students and the autonomy provided through LIS #3 to utilize; we have only identified Envision MATH California for K-6 and UCLA Math Department's Introduction to Algebra for 8th grade Algebra Readiness. Due to significant changes in middle school math in the forthcoming Common Core standards, we feel is wisest to make further curricular decisions closer to the release of the new California approved supplemental list. The data demonstrates elementary proficient/advanced in math

at 64% (overall), 47% (EL's), 36 **%** (Special Education). The enVisionMATH program offers the components/strategies that specifically targets/addresses the needs of our student demographics. For example,

(1) daily spiral review, is intended to review standards, skills, academic vocabulary from prior learning to frontload/connect to new lesson
(2) develop concept: interactive learning, setting the purpose, making connections, and student engagement
(3) develop concept: visual, use of technology, direct explicit instruction, and independent practice
(4) close and assess; differentiate instruction, essential learning, constructive response assessment, data based differentiated instruction and leveled homework

The aforementioned elements/components of enVisionMATH provide specific instructional strategies for access to the core math curriculum through collaborative groupings, task-based activities, use of visuals/graphic organizers, authentic assessments, academic vocabulary development which is conducive to a learning environment that allows English Learners, Special Education, At-Risk, and GATE to develop and gain problem solving skills, mathematical reasoning, computational fluency and communication skills. Moreover, LIS #3 will provide autonomy to integrate programs such as, Singapore Math, Hands-On Equations, Marcy Cook, and Marilyn Burns which have at their core proven instructional strategies that have helped to close the achievement gap for our targeted demographics by employing concrete, pictorial, abstract and linguistic multiple solutions representations in math. These programs minimize repetitive drills, rote memorization; discouraging low level Bloom's taxonomy application of algorithms. This methodology of instruction/learning is in line with our mission and vision by supporting rigor and relevance through conceptual understanding and real world applications. In turn, students will be empowered with the necessary skills to be prepared for the growing complexity and rigor of the middle math curriculum. These programs create a problem-based learning teaching model that is aligned to the academy's instructional goals.

Data from the middle school demonstrates proficient/advanced in math at 27% (overall), 5% (EL's), 5**%** (Special Education) and 30% (algebra). Rigorous state and district adopted textbooks offer the components/strategies that specifically targets/addresses the needs of our student demographics. However, the achievement gap for EL's, Special Education and At-Risk students exponentially widens at the middle school level, therefore, the elementary model/strategies will continue to serve as the method of instruction to augment/support the middle school math program through real world problem solving, conceptual development, collaborative learning. For example, Singapore Math, Hands-On Equations, Marcy Cook, Kahn Academy and Marilyn Burns will continue to be intertwined in the 6th and 7th grade math instruction. Furthermore, we will employ rigorous curriculum like College Preparatory Math (CPM) Algebra, Discovery Algebra for our all 8th graders to help make the development from elementary to middle school a seamless transition whereby maintaining the continuity of a comprehensive and systemic program. Furthermore, professional development and vertical articulation will play a key role in ensuring that proven instruction strategies will be implemented consistently and systemically throughout the K-8 program. The success of a comprehensive curricular educational program is incumbent on the following three tenets.

- Formative and Summative Assessments -These are the assessments that will be used to identify students for interventions.
- Ongoing Professional Development

- Collaboration and Interdependence

Science and California State Standards Based Instruction

The core science program at Sylmar STEM Academy will follow an Interdisciplinary Planning Model that is driven by standards-based instruction, inquiry-based learning, project-based collaborative experiments with a hands-on-approach, technology, authentic field assessments, and student presentation and portfolios, whereby, community partnerships (CSUN, Los Angeles Mission College, and Youth Speak Collective) will play an active role to provide immediate feedback as students cycle through complexities of the scientific method.

Science students of the Sylmar STEM Academy will develop 21st century skills as critical thinking investigators, technologically proficient communicators, and collaborative researchers, capable of creative and innovative ideals for the challenges of a global society. In line with the mission of the Sylmar STEM Academy, the science curricular program is dedicated to creating awareness and opportunities to increase the number of underrepresented students (women, minorities, and economically disadvantaged) to seek higher education and training in Science, Technology, Engineering and Math.

Based on the science achievement gap for students in 5th and 8th grade described in the Data Analysis section, the academy will meet the needs of our student demographics by incorporating writing and academic oral language at all levels of the science curriculum. The systemic use of SDAIE strategies will continue to drive differentiated instruction to meet the specific needs of English Learners. To ensure a rigorous and relevant science curriculum, professional development and vertical articulation will monitor, develop, and ensure a systematic implementation of proven research-based instructional strategies throughout the K-8 program. The success of a comprehensive curricular educational program is incumbent on the following three tenets.

- Formative and Summative Assessments-These are the assessments that will be used to identify students for interventions.
- Ongoing Professional Development
- Collaboration and Interdependence

Social Studies and California State Standards Based Instruction

The Sylmar STEM Academy will implement a standards-based interdisciplinary social sciences model where listening, speaking, reading and writing will be the fundamental tools to explore and investigate the historical, social, political, geographical and cultural events and conditions that have impacted and shaped the history of our global society. The core of instruction in learning will be guided through project-based collaborative explorations. This hands-on approach will incorporate a variety of modalities that include; live webinars, blogs, podcasts, wikis, social networks, Google Docs, e-books, online maps, virtual field trips, screencasts, online posters, guest speakers, field trips, timelines, first-hand accounts, autobiographies, and biographies. The hands-on model will also serve as the key assessment tool whereby authentic culminating tasks will include powerpoint presentations, theatrical performances, student created web sites, exhibits, art gallery, dioramas, display boards, speeches and debates.

In line with the mission of the Sylmar STEM Academy, the social science curriculum will foster 21st century skills where critical analytical writing, research based collaboration, technological communication, and creativity and innovation are demonstrated to understand the historical, social, political, economic, and cultural conditions that impact the global citizen. Rigor and relevance will guide interdisciplinary instruction and learning as the driving force behind academic mastery of a hands-on approach to writing, reading, listening, and speaking to empower students to grasp the social science curriculum at the highest level of Bloom's taxonomy.

To best meet the needs of our student demographics in K-8, the SDAIE model will be systemically incorporated to ensure that differentiated instruction will provide for universal access. Furthermore, professional development and vertical articulation will be the corner stone of comprehensive curricular educational program based on the following three tenets.

- Formative and Summative Assessments-These are the assessments that will be used to identify students for interventions.
- Ongoing Professional Development
- Collaboration and Interdependence

Physical Education and Health California State Standards Based Instruction

The primary goal for Sylmar STEM is to implement a standards-based physical and health educational program. Though a competitive collaborative game-based model the students will engage in kinesthetic activities that develop physical movement skills, positive self-esteem, social interaction, and healthy life long habits. In addition, the importance of a balanced nutritional dietary program will be discovered whereby the food plate, nutritional foods and values, understanding food labels, long-term impacts of poor dietary habits, environmental factors, and lack of activity, obesity and drug awareness will lead to a comprehensive positive healthy physical life style.

The instructional program for physical education will focus on meeting the standards through activities such as dance, drill team, folklorico, YOGA, soccer, basketball, volleyball, golf and other physical activities that champion good sportsmanship and teamwork. This comprehensive balanced approach to physical education will result in the development of aerobic capacity, abdominal strength, muscle and strength endurance, appropriate body composition (BMI), flexibility,and students meeting the requirements identified in the physical education assessments, so that kids are able to pass all assessment requirements before moving into high school.

Partnerships with the Northeast Valley Health Corporation and Los Angeles Mission College will support our physical and health education program through parent workshops, guest speakers, and health fairs that highlight the importance of a proper healthy life style.

Special Education

Sylmar STEM teachers will provide academic support to students with special needs, provide necessary accommodations and modifications, and closely monitor the Individual Education Plans (I.E.P.) goals, written under the guidelines of Individuals with Disabilities Education Act (I.D.E.A). See Special Education Plan

Rigor, Relevance and Relationships

Rigor- We employ a rigorous project-based learning college-preparatory and work readiness curriculum that sets high expectations for everyone, and give our students the skills, academic supports,

and motivation (collaboration leads to choices, that lead to ownership/accountability, that leads to empowerment/motivation) to meet them.

Relationships- The Sylmar STEM Academy is small and personalized learning environments. Class sizes are also small, and teams of teachers and peers provide students with academic and social guidance by building relationships that last multiple years.

Relevance- Education must have meaning every day. Our teachers create curriculum around current events, personal backgrounds and experiences, and historical realities while emphasizing competency in 21st Century skills.

Direct Instruction

Direct instruction is a systematic step-by-step format requiring students to respond to instruction and receive immediate feedback. Direct instruction also includes continuous modeling by teachers, followed by more limited teacher direction and then fading teacher involvement as students begin to master the material. With direct instruction, teachers will follow a sequence of events; generally stating the objective; accessing prior knowledge necessary for new information, presenting new information; questioning students; providing group instruction and independent practice; assessing performance, and giving more practice Sylmar STEM Academy has defined Direct Instruction when any six of the following instructional strategies are occurring. Teachers will facilitate classroom instructional time, whether utilizing direct instruction or the PBL model, by using the following strategies:

- Breaking down a task into small steps
- Administering feedback repeatedly
- Providing a pictorial or diagram representations
- Allowing independent practice, and individually paced instruction
- Breaking the instruction down into simpler phases
- Instructing in a small group
- Teacher modeling a skill
- Providing individual student instruction
- Teacher asking open ended questions

Research Based Strategies

Doug Lemov's Teach Like a Champ Strategies and Dennis Parker's Strategic Schooling Strategies are research-based instructional strategies that will assist in improving student achievement across all content areas and across all grade levels.

- The Essential Techniques – Doug Lemov
- Data Chats on CST and CELDT test
- Target Content
- Target Students
- Feedback
- Know-How

SDAIE Strategies

SDAIE is a set of specific strategies (as aforementioned in the curriculum section) that are integrated into standards-based instruction in order to make the grade-level core content accessible and

comprehensible for English-Learners (ELs). In order to meet the needs of ELs, universal access requires that instruction be differentiated with "purpose" and "intention" while planning for the Four Critical Elements of SDAIE.

Four Critical Elements
Content: Standards, Skills, Objective, Big Idea, Specific Language

Connections: Prior Knowledge, Personal Experience, Past Learning, Adaptation

Comprehensibility: Visuals, Graphic Organizers, Total Physical Response, Hand Signals, Realia, Songs, Chants, Voice

Interaction: Groupings, Think Pair Share, Modeling, Open Ended Questions, Student Presentations

Interdisciplinary, Project-Based Curriculum and Instruction

Project-based learning or PBL is a key instructional strategy in Sylmar STEM Academy's instructional program. Students from kinder through eighth grade will engage and explore the curriculum through project-based learning. It is a model that organizes standards into a real world contextual framework whereby student learning is demonstrated through student projects that facilitate learning and assess student competencies. Students will engage in the use of technology to inquire and respond to a set of complex issues, real world problems and challenges. PBL focuses on student-centered inquiry and cooperative group learning with the teacher serving as the facilitator. This approach to learning increases student engagement that requires higher order critical thinking skills to meet the demands of complex tasks while offering a genuine opportunity for collaboration, revision, community partnering, demonstration, application, and presentation. All project-based learning activities should:

- Be interdisciplinary
- Produce a product
- Include written documentation
- Involve student teams of two or more, depending on the nature of the project
- Include teacher and student reflection

PBL activities will:

- Conclude with a community exhibition
- Have a community partner
- Culminate with a parent reception

Projects in our span school will scaffold progressively from grades K-8. The projects will increasingly involve more components, be relevant to the community, and demonstrate knowledge of two or more subjects. Projects will increase in frequency as well as complexity as students advance through our academy. Upon graduation from the upper academy (8^{th} grade), our students will be accustomed to this method of learning which will set them up for a seamless transition if they opt to attend one of the new LAUSD high schools located at VRHS#5, as they are also engaging in interdisciplinary project-based learning.

Furthermore, our teachers will be supported in their professional growth as they collaboratively design and implement these often new strategies and lessons. The implementation of our

interdisciplinary, pbl instructional approach will reflect the experience level of the teachers we hire. It is the design team's belief that teachers willing to embrace this 21st Century strategy should be allowed to grow as professionals learning new, research-based strategies, but in a manner that won't overwhelm their capacity to continue providing quality classroom instruction to their students.

Engineering Curriculum

Sylmar STEM Academy will integrate engineering within the interdisciplinary project-based model throughout the K-8 model. Engineering is designed to help children understand the human-made world around them. Integral to this curriculum is the development of skills that are vital to technological literacy at the K-8 level that includes such topics as: what is engineering and technology and what do engineers do? How does technology impact the world (positively and negatively)? What are the various fields in engineering? What are the various contributions of minority engineers from diverse backgrounds? Community partnerships with CSUN college of Engineering will contribute by providing student guest speakers within the engineering program to serve as role models and to expose students to the many opportunities and disciplines of engineering.

The Sylmar STEM Academy design team anticipates hiring teachers potentially unfamiliar with teaching engineering in K-8. Thus we project a gradual implementation of this particular focus. We plan on implementing STEM focused curricular units immediately, but formal engineering curriculum would first need to be learned by the faculty before being presented to the student body. We plan on waiting until the 3rd year to phase in this focus.

Curriculum Development – Not Applicable

The Sylmar STEM Academy will utilize state and district adopted curriculum which will be interwoven into our problem-based interdisciplinary model.

(c). WASC Accreditation – Not Applicable

(d). Addressing the Needs of All Students

The Sylmar STEM Academy will assess students after enrollment for the purpose of identifying the appropriate RTI2 interventions that students will need to have academic success. Assessment and screening is an efficient measure of skills and abilities while serving as a strong indicator of student performance. The instructional leaders and teachers will use this data as an initial baseline. The following matrix describes specific strategies to meet the needs of all students.

Student Population	**Meeting the Needs of all Learners**
English Learners	• In addition to the strategies in the SEL section below, English learners will benefit from an increased focus on using background knowledge to build academic proficiency and project-based learning to increase oral language proficiency. • Organizing curriculum around relevant themes, building on a students' background knowledge and experiences, and planning collaborative activities that scaffold instruction and build academic proficiency. • Focus on meaningful instruction and interdisciplinary curriculum. • Build on student experiences, cultures and languages by building personal relationships with them and their families. • Diverse cooperative grouping, language-rich activities, hands-on curriculum, and real world application. • Rigorous language arts curriculum; explicitly teaching, modeling and providing guided practice in a variety of learning modalities (audio, visual, kinesthetic, and Meta cognition). • Systemic SDAIE strategies. • Use of technology. Relevant Research Building background knowledge, collaborative instruction: (Freeman & Freeman 2003, Waxman & Tellez, 2002, Thomas & Collier, 1997) Thematic instruction for ELs: (Garcia, 1999) Personalization: (Mrona, Tinajero, Stobbe, and Tinajero 1993) Experiential learning (Mass Insight Education and Research Institute, 2010) Meta-cognition: (Booth Olson & Land 2007) On-line learning: (Evaluation of Evidence-based Practices in On-line Learning: A Meta-analysis and Review of On-line Learning Studies, US DOE, 2009). Differentiated instruction: (Tomlinson, 2005)

Long Term English Learners (LTEL)	• In addition to the strategies mentioned for English Learners, LTELs require more intensive and comprehensive supports. • Ongoing language assessment and modification of language instruction. • Focus will be given to Listening, Speaking, Reading and Writing for multiple functions and contexts. • All staff members must serve as language teachers for our LTEL population. Relevant Research Laurie Olson, Ph.D Reparable Harm
Students with Disabilities	• In addition to all strategies in the SEL section below, students with disabilities will benefit from an increased focus on student collaboration and full inclusion in all academic and extra-curricular activities. • To meet students' needs for specialized instruction, careful planning between teachers and specialists will ensure that appropriate accommodation and strategies are implemented for student success. • We will adopt a plan for full inclusion of special needs students in general education classrooms that complies with the federal requirements for education in the least restrictive environment. • As necessary, students will receive assistance from trained personnel, supplemental services and aids, adapted curriculum and materials. • In addition, our emphasis on student collaboration, focus on problem-based learning will provide the additional supports and motivation for our special needs students. • Students will increase social confidence and academic motivation by participating in project-based learning. • A focus on PBL will increase the opportunities for our students to expand their range of skills and experience by engaging in real-world learning. They will engage in learning beyond the classroom through job shadowing; introductions to and mentorships with arts and other business professionals. All teachers will have copies and understand the recommendations made in each students' IEP and use that information for planning the appropriate learning experiences for these students. Relevant Research Full inclusion: (Holmes et al., 2006) Cooperative grouping for students with disabilities: (Johnson & Johnson, 1989) Problem/project-based learning for students with disabilities: (Belland, Glazewsk, & Ertmer, 2009) Differentiated instruction: (Tomlinson, 2005)

Students of Poverty	• In addition to all strategies in the SEL section below, students of poverty will benefit from an increased focus on personalization and advocacy. • All research suggests that the most important attribute for serving this population is focused personalization, which leads to each student's sense of belonging with lots of modeling by adults and older students. • Instruction to improve academic English and literacy skills using culturally relevant and responsive methodologies. • Community, teachers, parents or caregivers all work as partners to enhance wellbeing and to create a home-like environment for all students. Mental and physical wellness, food, security and safety are critical to each child's ability to focus on the academic and extracurricular activities that are essential to creating future economic opportunity and enhancing quality of life. All adults in Sylmar STEM Academy are committed to providing students with the support and services required to build a foundation for a productive future. Relevant Research Personalization: (Darling-Hammond, 2006/2007).
Standard English Learners	• Rigorous, standards-based core content instruction for all learners. • Our project-based interdisciplinary instruction and authentic assessments are aimed at closing the achievement gap for all students. • Our key instructional strategies that support our SEL population are student-centered instruction, cooperative grouping, project-based learning, simulations, focus on writing, research, building on prior academic and cultural knowledge, engineering focused advisories and technology-based programs to build mastery in math and language arts. Relevant Research Student-centered, inquiry-based instruction: (Newmann & Wehlage, 1995, Corcoran & Silander, 2009). High expectations for all learners: (Guess & Thompson, 1989, Heshusisus, 1998, Waxman & Tellez, 2002, an Tassel-Baska, 2008) Differentiated instruction: (Tomlinson, 2005)

Gifted Students	• In addition to all strategies in the SEL section above, gifted students will benefit from an increased focus on intensive inquiry. • Interdisciplinary, thematic instruction allows students to see underlying systems and patterns in order to synthesize content from multiple disciplines and time periods. • Problem- based instruction appeals to gifted students' high levels of curiosity by placing the teacher in the position of facilitator rather than dispenser of knowledge. • Students are presented with challenges that provide them with the opportunity to wrestle with problems in active, meaningful ways. • California Department of Education guideline for instruction. Specifically, each subject will provide 1) Differentiated opportunities for learning commensurate with the gifted and talented pupils' particular abilities and talents. 2) Alternative learning environments in which gifted and talented pupils can acquire skills and understanding at advanced ideological and creative levels commensurate with their potentials. 3) Elements that help gifted and talented pupils develop sensitivity and responsibility to others. 4) Elements that help to develop a commitment in gifted and talented pupils to constructive ethical standards. 5) Elements that assist gifted and talented pupils to develop self- generating problem-solving abilities to expand each pupil's awareness of choices for satisfying contributions in his or her environment. Relevant Research Problem-based: (Feinburg & Mindess, 2001) Making thematic connections: (J. VanTassel-Baska, 1998)

(e). Vertical Articulation

The Sylmar STEM Academy will utilize the K-8 model to ensure that vertical articulation of the instruction program is seamless across the grade levels. The school community through vertical and grade level articulation will meet regularly during planning time and PD to go through the Response to Teaching (RTC) model as described in the PD section to ensure that all students' needs are addressed and that instruction is modified to provide universal access to the core. The Sylmar STEM Academy K-8 Span model will benefit from the opportunities to collaborate among the different grade levels on the campus, helping our school community to align and implement the mission and vision of the Sylmar STEM Academy.

Our Kindergarten teachers along with the instructional team will be responsible for articulating with our neighboring schools that have pre-k programs. This articulation will serve the following purposes to 1) acquaint parents to our school mission and vision and 2) work with pre-k teachers to align curriculum and share specific student information. This articulation will occur once each semester. In the Spring, parents and students will be invited to a meet and greet to showcase our instructional program.

Our STEM 5-8 teachers will use their instructional team and leaders to serve as ambassadors to the neighboring schools to articulate in the areas of math, ELA, and ELD to ensure academic success for all students. The leadership team and a group of teachers will meet twice yearly with Sylmar High School and Valley Region High School #5 where the discussion of content, instruction, strategies, and examining student work samples will dominate the agenda to improve the success of our students. This type of off campus vertical articulation will serve to monitor and discuss the progress of students who have matriculated to the high schools.

Moreover, as part of our service learning and vertical articulation, the academy will involve students from the Sylmar STEM 6-8 grades who shall serve as student ambassadors and mentor the K-5 students on campus helping to create a college-going culture and a community of learners. The upper grades will implement this service learning through advisories and will occur on a bi-monthly basis for 6-8 students who have an elective or are members of student leadership council. Student-to-student collaboration encourages a seamless transition to the middle school academy.

Through our partnerships with Los Angeles Mission College, CSUN, and community groups throughout the Los Angeles area, the academy will assist our school community to articulate beyond the halls of LAUSD. These partnerships will instill a college and career ready culture among our K-8 students helping them to dream big and maintain high hopes and achieve their goals.

(f). Early Care and Education – Not Applicable

(g). Service Plan for Special Education

See Special Education Service Plan – Appendix E

B2. Professional Development

(a). Professional Culture

From the moment students and teachers set foot on the campus of the Sylmar Academy of Science, Technology, Engineering, and Math, they will notice a distinctive difference in the way learning takes place. Not only will they feel inspired to pursue the skills needed for success in the 21st century, they will be empowered to engage in rigorous and relevant studies through project-based lessons. Most of all, there will be a culture of collaboration and self-reflection. Taken together, these norms will propel students toward academic success in preparing them to be college- and career-ready citizens.

The culture that defines the Sylmar Academy of Science, Technology, Engineering, and Math is formed around an emphasis on critical thinking, creativity, communication, and collaboration, which are central to our mission and vision. In order to create this culture, our plan for professional learning begins in the teachers' own classrooms as the sites for conducting "practical inquiry" (Franke, Carpenter, Fennema, Ansell, & Behrend, 1998). Specifically, teachers will collaborate during the week in professional learning communities (PLCs) to analyze student work and to design strategic lessons to help students develop mastery and deeper understanding of the content. As teachers engage in this form of professional collaboration, they will deepen their own understanding of content and pedagogy and grow in their "pedagogical content knowledge" (Shulman, 1987) even as they focus on getting through to the students rather than just getting through a textbook. Such a collegial learning environment will model to the students the very attributes we intend to instill in their academic behaviors and perceptions. Classrooms, where teachers and students gain understanding through collaborative brainstorming, prior

knowledge sharing, cultural tolerance and integration and standards-aligned curricula, will flourish on our campus.

Our theory of change is based on research that suggests "teachers learn well just as students do—by studying, doing and reflecting; by collaborating with other teachers; by looking closely at students and their work; and by sharing what they see" (Darling-Hammond, 1999, p. 12). Research also suggests that teachers learn and grow more from the "construction" rather than the "consumption" of knowledge (Little, 1993, p. 135; Sparks, 1994; Knowles, 1990). Therefore, our school plan provides teachers the time and the resources that they need to rethink and revise their teaching strategies. Rather than have teachers leave the school site to get additional training, research indicates that our form of job-embedded development is more effective than traditional staff development workshops (Franke et al., 2001; Rényi, 1998, 1996).

Central to our theory of change is the Responsive Teaching Cycle (RTC), in which teams of teachers engage in a "Plan-Do-Check-Act" cycle of inquiry (Wilms, 2003). Activities at these RTC meetings include writing reflections, assessing student work samples, designing lessons, and rehearsing new teaching strategies. In short, these activities will allow teachers to explore different ways of teaching, experiment with new lesson activities or teaching strategies, examine their own performance in light of their students' understanding, and establish their expanding repertoire of effective teaching strategies.

One notable feature of the RTC process is that it is based on an inquiry approach similar to that of the Cognitively Guided Instruction (CGI) model, which helps teachers rehearse new strategies and reflect on their own practices based on careful examinations of student thinking (Franke, Carpenter, Levi, & Fennema, 2001; Carpenter, Fennema, Franke, Levi, & Empson, 2000; Carpenter, Fennema, & Franke, 1996). Research identifies CGI as one professional development model that is particularly effective in changing teacher beliefs and practices because this student-centered approach engages teachers in collaborative inquiry focused on improving student achievement. Teacher learning and professional growth are natural byproducts of this process. The advantages of our model are cost effectiveness and sustainability—teachers are providing their own professional development. Following this model will give us a powerful tool to reverse the trend of continued low percentages of reclassified English learners shown in the data overview.

The leadership of our school will present the professional expectations to all staff members during the hiring process along with the commitment to work and LIS #9 "mutual consent". The priorities and goals of the school will be revealed to all candidates who express interest in teaching at the Sylmar STEM Academy. Once hired, all teachers will be reintroduced in greater depth to the expansive, yet channeled, vision that teachers will learn by cooperative planning, collaborative observation and-reflection and ongoing professional development aimed at maintaining a highly-trained staff of dedicated teachers. This reintroduction will occur during a five to ten-day orientation and training prior to the start of the school year (contingent on funding), normally in mid-August. During that time, administration, teaching, and para-professional staff members will walk through the reflective process to understand:

- Mission and vision
- Dr. Daggett's instructional framework
- Interdisciplinary Instruction/Project Based Learning
- Common planning of lessons

- Procedures
- Designing formative assessments
- Measurable goals and high expectations
- Accountability for student goals
- Data-driven instruction
- Incorporating the 4 C's into the curriculum
- Research-based teaching strategies
- SDAIE and access to core strategies
- Implementing effective strategies for RTI 2 interventions
- District mandated annual presentations

This will ensure that all students are prepared to enter high school with the foundational skills, knowledge and academic behaviors essential for college and work-ready careers. As the new semester gets underway, content and grade level teachers from kindergarten to eighth grade will meet to discuss the opening week's events, successes and challenges. The framework of the school's vision and mission will be seen with new eyes and greater comprehension aiding the members of the leadership team in determining their next steps in delineating expectations and guidelines to staff members.

The culture of our school will naturally lead to retention of staff and improved attendance in that the cohesiveness engendered by staff members through their collaboration and the opportunity for students and teachers to cultivate the necessary triangulated relationships, i.e., teacher-teacher, teacher-student, and teacher-parent, will develop a critical component absent in many middle schools across the country. This will result in an investment in the success of the students. This investment would be strengthened in turn by student support, parental involvement and satisfaction, and enhanced connections with the community which surrounds the school. Our vision and mission is echoed here. Passionate teachers will bond with others who have become better at their craft thanks to colleague observations and feedback, curriculum co-planning, school-level decision making, setting academic, professional and personal goals, and establishing practical and universal methods of accountability.

At the same time we will also significantly increase efficiency in the use of time and resources that directly improve student learning. With the assistance of the Center for Teaching Quality (CTQ), we will provide online forums that allow teachers to communicate about issues of teaching throughout the year. This allows teachers to sustain the activities and practices developed from their meetings, as well as share their materials across the entire district. Such a use of online technology is one of the "emergent realities" described by Berry et al. (2011). Because teachers are no longer constrained by the clock and physical buildings, they are able to access the expertise of their colleagues in a "just-in-time" manner. As a result, teachers can be much more efficient in their use of time and productive in their preparation of effective lessons that support student learning.

Further, this school can serve as a model of the vision of the Center for Teaching Quality (CTQ), a key partner in our proposal. In fact, Wendy Schroeder is a fellow at the Center for Teaching Quality and is an indispensible part of our PD plan. In particular, RTC will help develop effective teachers as part of a transformed learning ecology where "teacherpreneurs" can help foster innovation in a self-sustaining professional development system (Berry et al., 2011).

(b). Professional Development

LIS Waiver #7

The Sylmar STEM Academy is determined in creating an educational environment that is conducive to social change, innovative, pragmatics, and one that puts the needs of children, the community and parents at the apex of our decision making process. Therefore, the following narrative consists of our school-determined PD plan that will improve pedagogy and student achievement and is aligned to our instructional program. It is our design team's belief that the autonomy given through LIS Wavier #7 will ensure and provide the Sylmar STEM Academy the necessary tools to achieve our mission and vision.

To ensure an effective approach to meeting the needs of our student demographics the school's design team and teaching staff members will provide a collaborative, strategic, comprehensible professional development plan that will address the school achievement data. Our plan will strengthen the academic programs, increase student support, enhance relations with the community and develop a school culture that ensures all students are prepared to enter high school with the foundational skills, knowledge and academic behaviors essential for college and work ready futures. Areas of need including low rate of English proficiency, low math scores surfacing at the middle school level, slow rate of reclassification for students who have shown minimal growth over five years of English instruction (LTEL), will be challenged by the staff at Sylmar STEM Academy. No student group can remain below the radar of the staff because they share the same students. Our program projects include the proficient and the below basic learners. Our teachers, as team members, enlighten, support, direct one another toward the solution, one that has been defined collectively and has the DNA of our vision and mission. We will identify areas of need within the instructional practice with an eye toward improving student learning outcomes and provide support through collaborative inquiry and peer coaching. Leadership, present in peer coaching, will find an atmosphere to develop and will become the backbone from which all professional learning and growing will articulate. Evidence shows that passionate and talented teachers are often the most effective peer trainers. All professional development activities will be practice-oriented with structured, reflective follow-up activities that yield the greatest returns.

Job-embedded professional development

Our professional development plan utilizes teachers' own classrooms as the learning environments in which they engage in a frequent Responsive Teaching Cycle (RTC) that informs and is informed by their increasing knowledge of student thinking. The RTC professional development model has two components: one during the summer, when intervention classes are provided for students who have been unsuccessful during the previous year in partnership with CSU Northridge; and a second component during the school year as part of the school's regular instructional program.

In the summer program, trained facilitators engage teams of teachers in daily collaboration immediately after teaching their morning class in order to plan the next day's instruction. During this time, faculty from the CSU Northridge will provide "just-in-time" support to strengthen the teachers' content knowledge. Specific content will depend on the trajectories of student learning and, thus, will be highly responsive to the immediate teaching needs of the teachers. Concurrently, College of Education faculty will assist teachers in integrating content with pedagogy. Because the focus is always on being responsive to students' learning needs, teachers will be highly receptive to their own learning experience. Then, during the school year, the teachers will continue to meet in school-based teams to collaborate in further adapting instruction around the learning needs of their own students. Research suggests that such professional learning communities contribute to instructional improvement and

school reform (Annenberg, n.d.; Little, 2003). Sustained school improvement efforts have been attributed to PLCs (DuFour & Eaker, 1998).

Teachers will be supported in this collaboration through professional learning communities (PLCs) because research clearly indicates that teacher collaboration is a powerful predictor of student outcomes (Berry et al., 2011). In fact, "a lion's share of an individual teacher's value-added gain to student learning, as measured by standardized test scores, was attributable to shared expertise" (p. 71). Thus, our professional development plan provides teachers with opportunities to discuss, reflect, develop and try out their ideas in an atmosphere of collegiality that is closely connected to their own classroom contexts (Lieberman, 1995; Guskey, 1994). In other words, teachers need to be involved in "the construction and not mere consumption of subject matter teaching knowledge" in order for their learning to be transformative (Little, 1993, p. 135). Planning common lessons and assessments will ensure a crucial bond between staff members and will infuse the tangible support often found wanting in traditional school settings; greatly diminishing teacher isolation inherent in the profession. In contrast to the traditional "fill the empty vessel" model of many professional development workshops, researchers agree that the most effective types of professional development are transformative and generative. This means professional development must change teacher beliefs and practice as well as enable them to continue developing their pedagogical content knowledge (Shulman, 1987). Teachers co-develop lessons plans and units and, subsequently, will have opportunities to observe their colleague(s) teaching the lessons and provide meaningful feedback. As results and data surface, staff may attach belonging to their students' success or failure and so evaluating outcomes via collaborative inquiry will assure an objectivity, vitality and resourcefulness to strengthen and validate the efforts, initiatives and decisions collectively voiced by teachers.

Data-driven professional development

Another important element of our professional development program will be using student data and implementing effective strategies for intervention. Our school will quickly identify students who need additional time and support. The RTC model, noted earlier, would allow teachers to rehearse new strategies and practices based on careful examinations of student results. With a new perspective, our plan would provide students with support soon after they experience difficulty rather than relying on assessments to identify needs. Progress checks scheduled around common conference periods and family meetings will help identify struggling students. Recognizing the importance of early action, our plan will require students to devote additional time and receive assistance until they demonstrate mastery of the standards or concepts. From there, when necessary, targeted tutoring sessions will be arranged and conducted by content teachers familiar with the challenges the students are facing. Intervention measures will not be exempt from the self-inquiry and reflection process. Improving on the intervention process, student identification through concept mastery will be made accountable via data and student outcomes. Teachers will work collaboratively to create a comprehensive plan to improve all student achievement.

Strategies for professional development

We previously described how Sylmar STEM Academy teachers will have common planning time built into the master schedule, and how PD time will be designed by the teachers to meet the needs of the students. Throughout the year, professional development will also include special sessions focusing on the needs of specialized student needs. Topics will include English learner students who struggle with

academic language and success, special education and needs of students with disabilities, and engaging parents of our community.

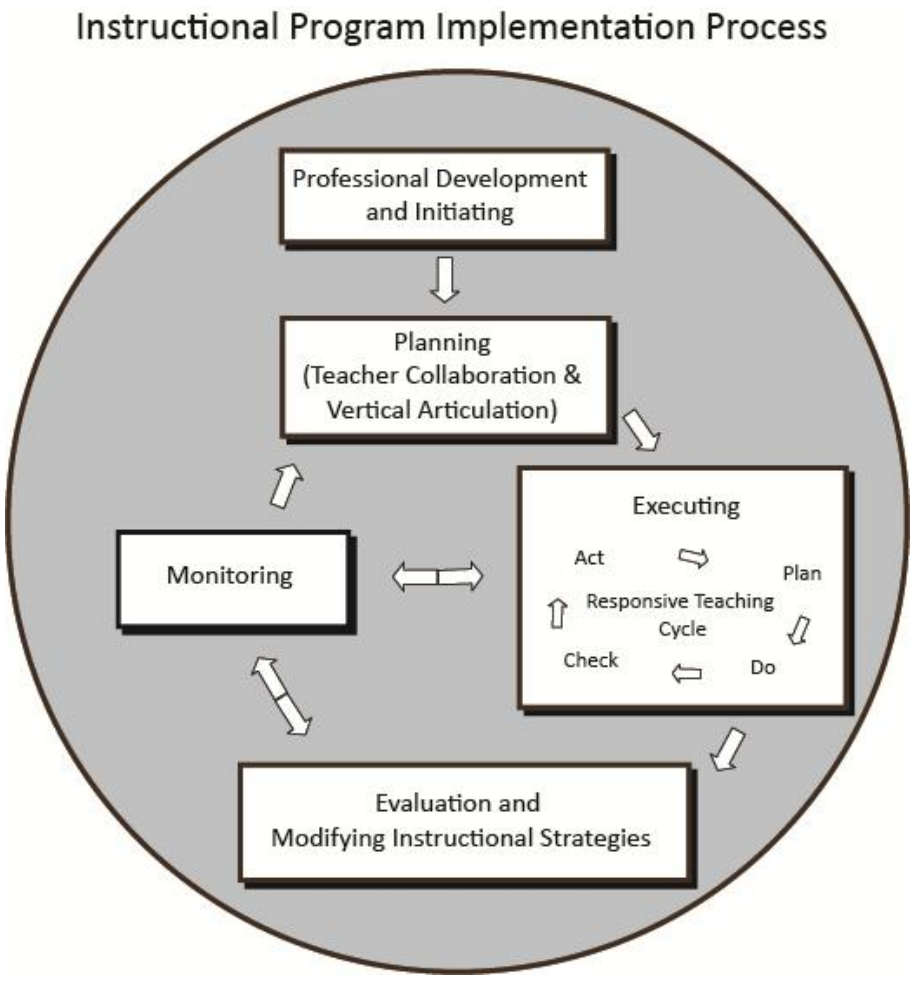
Professional development is not limited to curricular creativity. Technology will always usher in new horizons for even the most literate staff. Professional development must entail literacy skills enhancement, math awareness, record keeping, graphic organizer and cognitive thinking constructive maps, and the tools and programs of our future. On-site training will be a large part of the effort made to upgrade and maintain the staff's technological skills.

The professional development activities planned for our school demonstrate our awareness that meaningful and accountable training and development must be thoroughly integrated in the program. "Every professional…must engage with colleagues in the ongoing exploration of three crucial questions that drive the work of those within a professional learning community:

What do we want each student to learn?
How will we know when each student has learned it?
How will we respond when a student experiences difficulty in learning?"(DuFour, 2004)

The last question is the driving question for today's professional development. At Sylmar Academy ample time will be scheduled to support the staff. It will be our responsibility to collaborate and develop the most effective training for all. Since concept lessons are developed over sufficient periods of time and teachers using the Response to Teaching Cycle model participate in multiple, interactive, and collaborative experiences around them for two to three weeks before moving on to a new concept topic or area of study, useful results are obtained to successfully respond to that last question. As earlier noted, talent and passion communicated by colleagues who develop and implement in-house training is very powerful resources. With the support of district contributions to improved teaching methods, our school will be prepared and focused as the future unfolds. Such autonomy in professional development LIS #7 will ensure a high degree of commonality in terms of shared definitions of academic rigor, curricular relevance and personalized instruction. Additionally shared definitions and criteria for evaluating student progress will come from these school-wide professional development opportunities that are intended to be mutually reinforcing and align with each other. The common lexicon (lingua franca) will add meaning and momentum within the classroom as the research of Newmann, et al. (2001) suggests, "students are able to increase their achievement at higher rates…become more motivated…competent when they understand how what they are learning in one classroom is related to what they learned before…"

Outlined below are the projected professional development practices and instructional implementation process that Sylmar STEM Academy will follow. The activities include training but the preponderance is focused upon reflective practice in an environment where there is critical thinking, communication via collaborative efforts, rigor, relevance, and the use of meaningful data and creative and innovative discussion.



- The use of common instructional models, a form of school-wide professional uniformity, among staff members creates a rigorous, relevant and consistent learning environment. Professional development will assist all teachers to implement these models.
- A teacher buddy program, which allows one teacher to observe the teaching practices of a buddy teacher and thereby develop greater capacity and efficacy, will include a follow-up debriefing exchange between the two teachers. Ashton and Web (1986) found that teachers with a high sense of efficacy seem to employ strategies that promote an expectation of achievement and warm interpersonal relationships. Documentation will consist of the initial request by the observing teacher on which the teacher will ask to witness a particular practice, lesson, or intervention exercise in a buddy's room. While monitoring/observing, the teacher will make notation on a second document which will be brought to the debriefing exchange and annotated with information gleamed from reflections and discussions. This release will include one, two or four hours in one day and will occur once each semester or twice a year.
- Half- or full-day observation releases will occur between teachers in the lower grades and those in the 6th to 8th grade. Such vertical articulation measures will maintain a healthy appreciation and comprehension of teachers' goals and expectations as well as reveal the current challenges and best practices in which the colleagues are engaged. Observations and reflections will be communicated to both communities to assure a fully measured return.

- Semi-annual retreats or trainings are to be held most likely during June and August. The former will focus on the closing academic year, a time for reflection, data analysis, realignment and rejuvenation. The latter will lean more toward core values and beliefs, planning and training with an eye to the unfolding academic year.
- Mid-year gatherings will be considered to evaluate progress, reflect and accommodate any changes to the next semester's plan. Regarding the notion of change, the investigations of Bransford et. al. (2000), led to the conclusion that flexibility is one of the distinguishing characteristics of expertise. Sylmar STEM Academy will work flexibly to adapt their instruction to meet the needs of their students.
- Weekly staff development will be scheduled on the second day of each week. This time will be used by families and teams composed from grade, core and subject levels, and will be used for both vertical and horizontal articulation purposes. Such opportunities will furnish time for these groups to analyze data of recent results, effectively collaborate with lesson planning, calibrate rubrics with students' learning, evaluate assessments, culminating exercises and projects. Richard Elmore (2000) termed isolationisms as one of the "pathologies of the existing institution." Sharing of best practices would be most effective during such periods of collegial fellowship. At this time, underdeveloped or weak subject areas will be examined. Teams will work to provide enhanced and targeted professional development relevant to these concerns.
- RtI framework and practice for all students will be evaluated during professional development time. Targeted, strategic RtI, based upon effective use of frequent, formative assessment data and on-going monitoring of students' progress, will be presented and discussed. Successes will be noted and celebrated as will challenges be view in an objective light. RtI is not a stagnant entity and must be understood and supported by all shareholders. Such periods will provide an important opportunity to maintain relevant and measurable efforts, and a focused and enlightened staff.

Autonomy in professional development and LIS Waiver #7

One main guiding principle for our professional development plan is that there are no packaged solutions to the challenges faced by teachers. All solutions must be locally developed rather than externally imposed. According to Margaret Wheatley (1997), "Most change efforts fail when leaders take an innovation that has worked well in one area of the organization and attempt to roll it out to the entire organization. The desire to replicate success actually destroys local initiative." Our Responsive Teaching Cycle approach, however, can bring about dramatic changes in teacher practice because it empowers teachers to find their own solutions by building on their expertise. And because teachers construct their own learning through practical experiences, they are more likely to continue using their newly acquired repertoire of lesson ideas and change the way they teach all of their students (Costa & Garmston, 2002a; Lockwood, 1998). In short, teachers learn to get through to their students rather than simply get through a textbook.

In order sustain school-wide policies, procedures and practices that maintain a culture of high expectations for student behavior and academic achievement, teachers need to review and reflect upon the school's operations to date. Professional development time is ideal for such analysis because other stakeholders, e.g., administration, clerical, parental, community organizations can communicate to

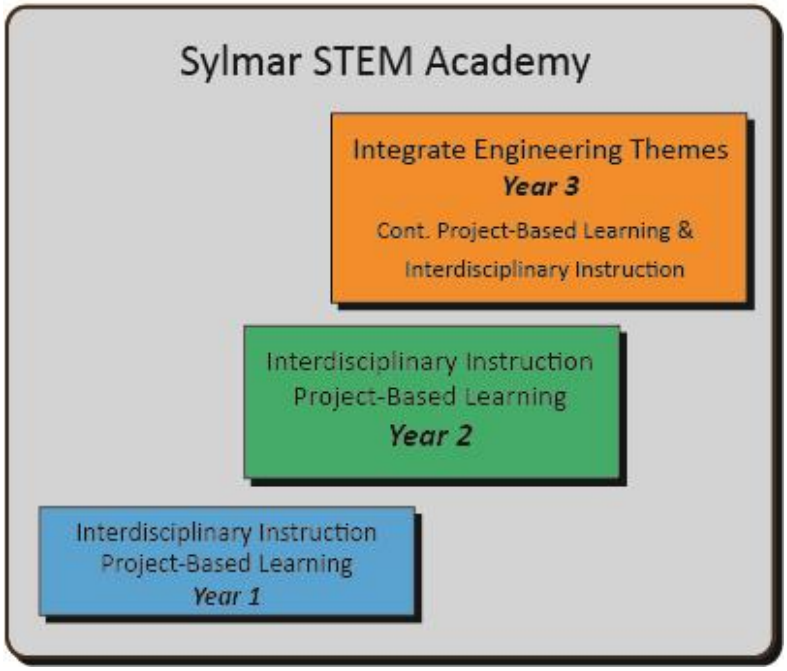
everyone. School employees need to hear from different sources to understand a school's impact and importance in a community.

Using an annual individual development plan, created by each teacher for each teacher, will drive differentiated professional development. Differentiated professional developed is required to support all teachers because all teachers are not at the same point in their careers. Although effective professional development must address social factors such as teacher ownership, trust and relationship building (Marsh, et al., 2005) that allow teachers to engage as a community of learners (Cwikla, 2002; Koppich, 2001; Porter, Garet, Desimone, Yoon, & Birman, 2000; Lieberman, 1995), professional development must also be teacher driven and allow for individualized learning trajectories while honoring teacher expertise (Ball, 1995; Corcoran, 1995; Sparks & Loucks-Horsley, 1989). Because collaborative time is spent focusing upon departmental, core, grade level lesson designing and planning, and the RtI problem-solution process, teachers will be engaged in self-oriented reflection and goals to challenge and nurture their capacity to grow. The data from feedback acquired during each semester's collaborative efforts will provide a wealth of indices for instructor guidance.

Professional development will be designed and delivered by our teachers and sometimes outside experts who may be invited for specific skill building or as resources (e.g., CSUN or Mission College engineering, elementary and secondary education professors, guest speakers from the professional design fields or community of Sylmar). Surveys will be distributed at each school-wide or professional development committee's session to determine its effectiveness.

Important to note, the Local School Stabilization and Empowerment Initiative provides a three year window for setting the policy and direction of our school, and recognizes the belief that teaching professionals and parents at each school are best suited to face the needs and challenges of our students. With this powerful tool in hand, we the Sylmar STEM Academy has a three year window to strategically phase-in specific big idea curricular focuses while using professional development time, topics and calendar that will ensure a systemic implementation across the school of interdisciplinary instruction, project-based learning and engineering themes, which will ensure academic achievement for all.

Instructional Program Development and Implementation Phased in over 3 Years



The following list represents a proposed professional development calendar with tentative topics and responsible presenters:

August 2012 (Summer PD)

- Mission and vision
- Dr. Daggett's instructional framework
- Response to Teaching Cycle (RTC)
- Interdisciplinary Instruction team building and Project Based Learning
- Common planning of lessons
- Procedures
- Designing formative assessments
- Measurable goals and high expectations
- Accountability for student goals
- Data-driven instruction
- Incorporating the 4 C's into the curriculum
- Research-based teaching strategies
- SDAIE and access to core strategies
- Implementing effective strategies for RTI 2 interventions
- District mandated annual presentations
- CELDT schedule/activities/administration

Instructional leader, teachers, counselor, and partnership support

September 2012
- Analyzing CST Student Data
- Project Based Learning teams identify first semester's "project", begin planning project as well as assessment
- Writing across the content areas
- Academic Oral Language Development
- Parent Engagement Strategies
- STEM interdisciplinary integration
- Collaborative planning time
- Vertical and horizontal articulation

Instructional leader, teachers, counselor, and partnership support

October 2012
- Response to Instruction and Intervention (RTI2)
- Classroom observation protocol
- Data protocols and collaborative scoring of student work
- Criteria for identifying Gifted and Talented students
- Collaborative planning time
- Vertical and horizontal articulation
- SDAIE across all content areas

Instructional leader, teachers, counselor, and partnership support

November 2012
- Technology for learning
- SDAIE across all content areas
- Collaborative planning time
- Writing across the content areas
- Academic Oral Language Development
- Vertical and horizontal articulation
- SDAIE across all content areas
- Periodic Assessment

Instructional leader, teachers, counselor, and partnership support

December 2012
- Finals/Semester grades
- Student Presentations
- Collaborative planning time
- Vertical and horizontal articulation
- SDAIE across all content areas

Instructional leader, teachers, counselor, and partnership support

January 2013
- CST blueprints/power standards
- Teams reflect on 1st semester's project, identify & begin planning 2nd semester's "project"

- Mission and vision
- Dr. Daggett's instructional framework
- Responsive Teaching Cycle (RTC)
- Common planning of lessons
- Procedures
- Designing formative assessments
- Measurable goals and high expectations
- Accountability for student goals
- Data-driven instruction
- Incorporating the 4 C's into the curriculum
- Research-based teaching strategies
- SDAIE and access to core strategies
- Implementing effective strategies for RTI 2 interventions
- Collaborative planning time
- Vertical and horizontal articulation
- SDAIE across all content areas

Instructional leader, teachers, counselor, and partnership support

February 2013

- CST blueprints/nemesis standards
- Collaborative planning time
- Vertical and horizontal articulation
- SDAIE across all content areas

Instructional leader, teachers, counselor, and partnership support

March 2013

- CST schedule/activities/administration
- Criteria for identifying Gifted and Talented students
- Collaborative planning time
- Vertical and horizontal articulation
- SDAIE across all content areas

Instructional leader, teachers, counselor, and partnership support

April 2013

- CST blueprints/nemesis standards
- Collaborative planning time
- Vertical and horizontal articulation
- SDAIE across all content areas

Instructional leader, teachers, counselor, and partnership support

May 2013

- Departmental collaborative lesson design/Critical-friend protocol for feedback
- STEM and technology Fair
- Community Festival

- Revisit school mission and vision statements
- Collaborative planning time
- Vertical and horizontal articulation
- SDAIE across all content areas

Instructional leader, teachers, counselor, and partnership support

June 2013

- Finals/Semester grades
- Student performance portfolios/presentations
- Student/Staff/Stakeholder recognition
- Reflective evaluation of school performance
- Next steps and action plan for 2013-2014

Instructional leader, teachers, counselor, and partnership support

(c). Teacher Orientation

As noted in Professional Culture, teacher orientation begins during the hiring process. Subsequently, teacher orientation is woven into the activities and culture of our school. There will be an orientation program during the summer for all staff members. During that program, administration, teaching, and para-professional staff members unveil, discuss and come to an understanding of how common planning of lessons and procedures, designing measurable and high expectation student goals, utilizing data and outcomes and implementing effective strategies for direct intervention will be the universal vision so that all students are prepared to enter high school with the foundational skills, knowledge and academic behaviors essential for college and career futures. Workshops will introduce new and existing teachers to engage in team building exercises; interdisciplinary project based learning, advisory themes, activities and community involvement and strategies for diverse learners including SpEd, Gate and English learners.

Beyond developing an understanding of our vision, we will build and support a professional collaborative relationship with colleagues. Based on research that shows generative change in teacher beliefs and practices are more likely to occur in an environment that allows teachers to think, discuss, experiment, and reflect (Swafford, Jones, Thornton, Stump, & Miller, 1999; Chapin, 1994; Little, 1993), our professional development model focuses on providing teachers the time and resources (as shown in the tentative PD calendar) that they need to collaborate in thoughtful analysis and reflection of their instructional choices and teaching practices. New teachers will have a buddy teacher to act as a mentor and offer support integrating the mission and vision and guidance in implementing our school's strategies, core values and beliefs. In addition, new teachers will have the support of department chairs, coaches and coordinators and will observe modeled demo lessons. The school believes that good teaching consists of modeling and guided practice not only for our students but for our staff members as well. Such a co-teaching model moves seamlessly into lesson planning and teaching one another.

Peer mentoring is not limited to new teachers and their buddies. It is a means to strengthen and maintain a healthy staff of learners. Half- or full-day observation releases will occur between all staff members. Such a measure will maintain a healthy appreciation and comprehension between teachers. Observations and reflections will be communicated to both communities to assure a fully measured return. Lastly, semester workshops targeting the skills all new teachers must acquire, e.g., administrative

record keeping, professional evaluation measures, as well as up-to-date skills necessary for all teachers to learn will be part of teacher orientation.

(d). PD Program Evaluation

Evaluation of professional development is crucial to measure its effectiveness and maintain its accountability. Stakeholders will be encouraged to collectively undertake activities and reflection in order to constantly improve their pedagogy and instruction and thus their students' learning efficacy.

Our PD program has clear goals and explicit strategies. The overarching goals of the plan are to improve teacher effectiveness, increase student achievement, and increase student success in preparing for and entering postsecondary education in STEM fields.

Specifically, our objectives are to:

1. Increase the number and percentages of teachers who are highly effective by implementing RTC, a self-sustaining model of professional development, thereby increasing teaching effectiveness and productivity at school level.
2. Increase reclassification percentages for K-8 students.
3. Increase student achievement in the California Standards Test in comparison to students with similar demographic backgrounds.
4. Improve student access to college by facilitating their achievement in Algebra 1, a gateway course required for successful completion of a rigorous program of college prep courses in high school (University of California A – G courses).

Provided the STEM model, our specific measurable objectives are:

Objective 1: Algebra and mathematics teachers will be able to identify and address the learning needs of their students, and apply RTC to development of solution strategies, **as measured by**: reviews of teacher artifacts (e.g., lesson plans that are accessible, rigorous), assessment of teacher collaboration (e.g., surveys of team effectiveness), classroom observations, structured interviews. Measures of teacher effectiveness will be aligned with LAUSD's recently revised teacher evaluation system.

Objective 2: Increase scores by RTC students on the CST by 50%. Middle school students will be able to demonstrate improved performance in Algebra 1, **as measured by:** pass rates on the LAUSD End-of-Course Algebra 1 exam, scores on the California Standards Test (CST).

Objective 3: Increase enrollment of RTC Algebra 1 students into 9th grade Geometry by 50%. Students who complete Algebra 1 will be able to demonstrate improved access to college, **as measured by** pass rates in Algebra 1, proficiency on the California Standards Test (CST).

Additionally, evaluation will be an ongoing process based on the identified needs of students and staff. Periodic benchmark goals will be established. The plan will be revised as formative and summative student data and work products indicate measurable growth and attainment of benchmark metrics. Data from teacher-generated reflection journals, observations of class room practices and subsequent debriefings, identification of the next level of teacher skill learning, will be analyzed to evaluate how professional development is manifesting in the class room where so much of it is directed. How effectively has the training been implemented? What are the strengths and what are areas of focus previously unseen will be revealed? Student work analysis will show the extent to which classroom teaching and learning are aligned with professional development priorities. This holistic evaluation should mirror the impact of the professional development efforts

Another element of this evaluation process will include an analysis of formative and summative student data. Such an examination will reveal the evidence of what gains from professional development have been transferred to the learner. Teachers will receive timely feedback through documentation and dialogues with the administrator and other teachers to support and improve their practice. Teachers will also be using instructional rounds to observe the successful implementation of classroom strategies and methodologies shared during the professional development workshops. This protocol will ensure that pedagogy continues to be studied and perfected as a group throughout the school year.

B3. Assessments and School-wide Data

(a). Student Assessment Plan

The assessment plan of the Sylmar STEM Academy is aligned to the instructional framework and shall be based on teacher developed standards based common formative assessments, LASUD periodic assessments, state and local summative assessments, state mandated testing and authentic project-based assessments.

The Sylmar STEM Academy is committed to a culture of continuous improvement and accountability. Data analysis and decision making will inform our continuous improvement as various sources of data will be analyzed from qualitative (quality of instruction), outcome data such as formative and summative assessment results. Data-driven decisions will be made once the data is collected, analyzed and discussed to guide the next steps toward implementation of instructional strategies and methods that will produce high academic achievement.

The following is a matrix of our student assessment plan:

Assessment	Timeline/Date	Rational
Initial and Annual California English Language Development Test (CELDT)	Annual- October Initial - throughout the school year but within 30 days of enrollment.	Required state assessment identifying English Learners (initial) and the progress of identified ELs.
Pre-Las and Las Links	Within 30 days of initial enrollment	Required assessment to identify proficiency level in native language.
CA Fitness Test	February to April	Required state test for 5th and 7th grade students to measure health and fitness.
California Standards Test (CST)	March to May	Required state assessment for 2-8 grade students.
California Standards Writing Test for 4th and 7th Grade	March to May	Required state assessment for all 4th and 7th grade students.

California Modified Assessment (CMA)	March to May	Required state assessment for specific students who have it written into their IEP.
California Alternate Performance Assessment (CAPA)	March to May	Required state assessment for specific students who have it written into their IEP.
District Periodic Assessments	Three times per year	Required for all students
Grade-level Ongoing Common Formative Assessments	Ongoing	Required for all students
DIBELS	Ongoing	Required for all students in grade K-5.
Diagnostic Placement Test (DPI)	March	For matriculating fifth grade ELs who are entering middle school.
California Progress Monitoring Assessment	Ongoing	K-5 RLA students
Authentic Project-Based Assessments	Ongoing	Part of our instructional focus

Furthermore, the Sylmar STEM Academy will conduct a battery of assessments for matriculating Pre-K students to ensure that baseline data is utilized to develop the appropriate interventions that will address the specific needs of these students.

(b). Graduation Requirements

In order to meet the LAUSD culmination requirements, Sylmar STEM Academy will use a systematic plan for creating an environment and culture that supports improved student achievement and social and emotional growth. The Academy recognizes the value and importance that mastery of middle school standards play in high school and post-secondary educational success. In order for the students of the Academy to meet the increased expectations when culminating to the high school and passing the CAHSEE and meeting A-G Requirements, students will learn and master the California middle school standards and pass all classes in the 6th through 8th grades. These requirements are aligned with those of the District outlined in Policy Bulletin 3815.0 Middle School Culmination Activity and Certificate of Completion.

The students of the Academy will receive a District-approved Certificate of Completion when they meet the requirements for grades six through eight or utilize one of the options open to students who do not meet minimum requirements. Students who do not initially meet requirement for participation in the Culmination Activity and earning the Certificate during these grades may utilize the following five options:

1. Earn a "C" or better in the second semester of the same course that demonstrates significant improvement to counter-balance a first semester "Fail"
2. Attend and pass intersession and/or summer school to offset a "Fail"
3. Engage in and successfully complete a pre-approved community service to raise work habits and cooperation marks
4. Present culminating authentic project that showcases mastery of curricular standards
5. Participate in a District-provided attendance recover program
6. Request review by the school site Culmination Appeals Committee

Participation in the 8th grade Culmination Activity requires that students meet the following five requirements:

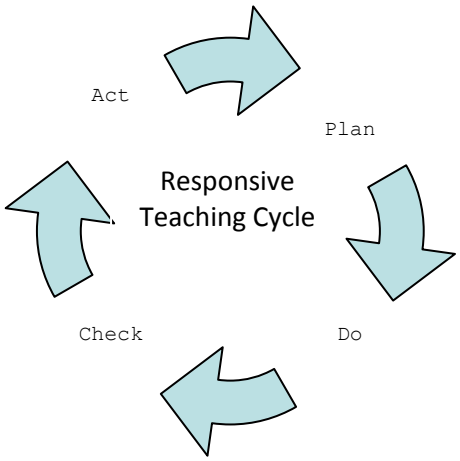
1. Pass all courses in grades six through eight
2. Have no more than two "U"s (unsatisfactory grades) in Cooperation during the 8th grade year (The "U"s cannot come from the same teacher.)
3. Have no more than two "U"s in Work Habits for the 8th grade year (The "U"s cannot come from the same teacher.)
4. Have an attendance rate of 95% for grades six through eight excluding a serious, chronic, or major illness
5. Abide by school and District policies with respect for student conduct and school property

The leadership team along with the instructional leader will conduct ongoing sessions with students to inform them of middle school culmination requirements, to initiate self-reflection and analysis for moving forward to high school, and articulate with the future high school counselor.
The STEM Academy will have programs beginning in the 6th grade to

- Celebrate and reinforce student achievement
- Indentify at-risk students early and enroll them in appropriate interventions
- Provide academic intervention programs during the school day
- Provide an attendance recovery program
- Provide alternate instructional settings and option programs
- Ensure frequent and consistent school-to-home communication
- Initiate clubs and/or activities to motivate students to stay in school
- Institute an adult mentoring program for at-risk students

(c). Data Collection and Monitoring

The STEM Academy will implement a timely, systematic process to refine the instructional program once assessment data has been evaluated. Teachers, instructional leaders, and the school community will use a cyclical approach that focuses on "what learners are to know or to be able to do when the instruction is concluded." There is "careful linkage . . . between the instructional strategy and the desired learning outcomes where an empirical and replicable process is utilized" (Dick, Carey, & Carey, 2001.)



This systematic process will ensure that teachers, instructional leaders and the school community will utilize the assessment plan and the Response to Teaching Cycle to focus on student learning outcomes rather than assessment for assessment sake. We will constantly refine our instructional strategies to meet the accountabilities for student learning. Professional development will be driven by assessment results and student learning, whereby meeting the needs of all students through a continuous improvement cycle.

Adequate time for assessment review to inform instructional practices is part of the autonomy of the Pilot Model. In our "elect to work" agreement the Sylmar STEM Academy has woven the necessary time to collaborate, analyze, evaluate, design, develop, and create the necessary common formative assessments that will assess and guide future instruction.

Lastly, progress monitoring will be utilized during the year to determine whether students are making adequate progress in critical skills, content areas and to identify any students who may be falling behind or need to be challenged.

B4. School Culture and Climate
(a). Description of School Culture

The Sylmar STEM Academy embraces a diverse culture, in which students' backgrounds are honored and integrated into a multiethnic experience for all students, teachers, parents, staff and community members. Our mission/vision at the Sylmar STEM Academy emphasizes high behavioral and academic expectations for both teachers, students and community members; collaboration, accountability and mutual respect among all stakeholders; providing a safe and nurturing environment; and extensive involvement with our local community. Such a small school context accommodates the demand for higher accountability from all stakeholders. All stakeholders seek collaboration and mutual respect in order to provide a safe and nurturing environment that supports the instructional program. Sylmar STEM Academy is committed to becoming a center of culture and education that provides an anchor for the community.

Sylmar STEM Academy will create a collaborative environment where all stakeholders share accountability for student success. Successful partnerships are predicated upon mutually beneficial relationships where the collective whole is exponentially stronger and far reaching than its individual components. Students can expect to learn in a safe, creative, and supportive environment. Small schools help ensure that no students fall through the gaps and allow them to receive the personalized attention they need to learn effectively. Students and teachers will interact with each other to develop protocols and procedures that build trust, promote order, assure safety, and support the growth of knowledge. The tone set in the daily interactions that teachers and other adults have with students is critical. Two interrelated concepts are woven into the cultural fabric at Sylmar STEM Academy:

- collaboration at all levels which ensures transparency

- all students will experience a more personalized learning environment (PLE)

in which to thrive and maximize their potential. A collaborative environment in which accountability for student success is shared by all stakeholders and leadership is distributed among all stakeholders. Collaboration in daily school life for students, teachers and staff, instructional leaders, community partners and engaged parents and community members, both formal structures:

- professional learning communities
- college fairs
- governance council
- interdisciplinary planning
- collaboration and vertical articulation
- parent center, workshops, volunteer opportunities
- student showcase of project-based learning
- community outreach events

less formal structures:

- breakfast with teachers/parents
- coffee with leadership team
- potlucks, BBQ's
- murals that promote college culture
- classrooms named after colleges

These efforts will develop relationships that are mutually beneficial, genuine and reinforce that each member is a valued partner in the success of the school.

In order for students to thrive and meet their academic and behavioral potential, they will experience PLE focused on the whole child which continuously reinforces high expectations. In addition, advisory period will provide the opportunity for each student to maintain a vigilance of their academic progress by reviewing assessment results, setting goals and building relationships with their teacher.

Creating a strong community for staff and faculty via communication, peer observation, collaboration, and team building opportunities will ensure effective program and curricular implementation. Our growth will be a model for what is expected from the students and will demonstrate appropriate behaviors needed to be successful in a college bound culture, matriculating with 21st Century skills. Summer team building opportunities will foster an operative community of professionals.

Celebrating success while developing a passion for learning at the Sylmar STEM Academy will include a myriad of affirming ceremonies, rituals and motivating activities designed to facilitate greater success for students and staff members. These choreographed structures, activities, traditions and routines listed below will help build strong foundations for the crucial pro-social behavior that recognizes true growth and character development. We believe appropriately modeled behavior decreases inter- and intra-student conflict. In addition, the school will support self-regulating behaviors, positive peer interactions, and conflict resolution through discussions in their advisory periods and other school wide efforts:

- Weekly announcements of high achieving, most improved and good citizenship awardees
- Monday wear your college T-Shirt
- Friday "Heavy Medal" wear your CST medal/ribbons

- CELDT Band Jumper
- CST Band Jumper
- Reclassification ceremony
- Student of the Month, formally nominated by teachers or departments, dines with teachers at lunch. Photo is taken, posted, and sent home with certificate
- 5, 10, 15, 20 week Progress Report Honor List (3.0 GPA or citizen marks). Awardees enjoy special activity or meal
- End of Semester Award. Formally nominated high achieving and most improved students for a medal and parent invited ceremony
- STEM family nights that showcase Science, Technology, Engineering and Literacy; hosted events for students, parents, stakeholders, and community partners to celebrate our students' achievement
- Authentic culminating student presentations incorporating technology to present for parents. Students present in teams and families judge projects using rubrics
- Do the Right Things Days; To ensure appropriate behavior and developing a thoughtful character, Sylmar STEM Academy invite a host of community groups to help students develop these important skills through lunch and assembly activities
- College Days; College-themed events, guest speakers from local universities and colleges, field and virtual field trips to colleges
- Career Days; Events and activities focusing on career opportunity will be hosted. These career-themed activities will have input from our community partner companies
- Test Prep Pep Rally; Pre-CST testing events will be planned to build enthusiasm and convey the importance of best test practices

(b). Student Support and Success

Dr. Daggett's rigor, relevance and relationships are the fundamental components of our instructional framework that play the key role in the support and success of students at the STEM Academy. Our students will develop a willingness to engage themselves to achieve an excellent education. They will want to attend the Sylmar STEM Academy because it will be a school where they can learn relevant, new, innovative, and fun challenging skills, and where each adult cares about their future. Students and parents through word of mouth will serve as ambassadors for the school based on student success and the relationships that have been built. Motivation will be borne from a student-centered culture that will be responsive to students' needs and interests and driven by their aptitudes and skills. Moreover, the Sylmar STEM Academy will encourage creativity, innovation and expression which are characteristics of motivated learning that flourish in the PBL programs at the Sylmar STEM Academy.

The Sylmar STEM Academy's primary focus is on student achievement. Students will clearly understand how their Advisory teacher (elementary students will have advisory with their classroom teacher and middle school students will keep their advisory teacher for more than a year to ensure continuity of the student teacher relationship) will act as a mentor and tutor, one that is fully involved and aware of how each student is doing in each class. Students will come to realize how grade level teachers will create interdisciplinary lessons, project-based learning and assessments. Students at the Sylmar STEM Academy will also realize that failures will be overcome whereby struggling students will be systematically supported throughout the K-8 years. In line with Dr. Daggett's relationships, each student, parent and teacher will sign a formal compact whereby all parties will be provided with clear

expectations, responsibilities and actions that promote relationships that lead to student emotional and academic success. Staff will develop personal relationships with students and their families. Also, research demonstrates that when students have solid relationships with caring adults and each other at school, they are more likely to take an interest in school, be motivated to complete rigorous projects and assignments and find school more relevant. Such a culture and climate can be readily fostered and sustained because of the smaller, safer, personal nature of the Sylmar STEM K-8 Academy.

A firm commitment to serve all students, including those with the highest academic need is coveted by all staff members at the Sylmar STEM Academy. Services and support for special education, English Language Learners and At-Risk students will be provided through RTI2 programs and highly qualified teachers. Special intervention courses based on specific needs will be readily implemented and, when needed, regularly adapted. In addition, other supports and services will be in place to provide further assistance such as:

- Before- and after school-tutoring in the core subjects will be targeted, short-term, and based on data
- Homework assistance
- Supplemental Educational Services (SES)
- Partnerships with Youth Speak Collective

Furthermore, in our efforts to promote oral language development the Sylmar STEM Academy will provide opportunities to acquire mastery of strong oral presentation skills for Student Led Conferences through our partnership with Rodolfo Casarez, Professor of Speech Communications at CSULA. In addition, Otto "Tito" Sturcke will conduct training for teachers and students who show an interest in theater arts through our YSC after school programs.

(c). Social and Emotional Needs

The first step in our coordinated approach to meeting the social and emotional needs of our students is creating a close bond often found in our elementary schools. In middle school we will utilize Advisory periods. The instructional leader will be responsible for coordinating and monitoring the advisory teachers and implementation of the interventions. Students and teachers will focus on developing a relationship based on trust and responsibility. During our parent outreach meetings, students-teacher relationships was a topic of conversation with parents suggesting that positive relationships and adults caring for their children was one of the most important issues they faced.

Students at Sylmar STEM Academy will be supported by the entire school community from the instructional leaders to the building and grounds staff. The K-8 Span model will facilitate the opportunity to know each child's goals, dreams, ambitions, and more importantly learning style. This close knit school community will support the social emotional needs of each child.

The nutritional needs of students will continue to be met through the meal program of LAUSD Food Services. A school-wide Positive Progressive Behavioral Support Program will be the positive and proactive approaches to classroom and campus management and will in turn support academic achievement for all students.

Advisory period serves two purposes: academic and social-emotional support. In Elementary grades, students will participate in advisory with their classroom teacher. In Middle grade, students will

remain in the same advisory group looping with the same teacher from 6th through 8th grade. In this way, the students and advisory teacher can better build a relationship (similar to the elementary grade experience. Advisory period will consist of morning meeting time (R. Kriete) where a daily half hour ritual builds community and expresses important beliefs about the value of relationships in the classroom. During these morning meetings, students and teachers gather in a circle to greet one another, to listen and respond to one another's news, to practice academics and social skills and to look forward to the day's events. The meetings include opportunities to practice the skills of being a caring community. Additionally, beginning in the 3rd grade, advisory will serve as a time in which interventions can be strategically implemented to keep students on grade level. Students will receive support in Advisory period from their teacher and peers in preparation of learning study skills and test taking strategies, communication tools which will enable them to succeed along their academic and career pathway.

During Advisory period, students will discuss pressure from peers and society and important character-building intersections that students are obliged to consider will be surfaced or introduced in a small and secure environment. Reflective activities and projects will animate self-understanding, resulting in a more tolerant and cohesive community. Many of these complex issues encountered outside of school and within the school community have been studied and reported in the literature. Taking Center Stage Act II states that applying ideals of fairness, equity and justice to school and classroom relationships and the larger world about them are important elements that support and promote honor, civility and service. Teaching common expectations and social skills school-wide will promote and maintain a safe and positive school climate.

(d). College and Career Readiness

The intensive focus of our mission and vision on college readiness aligns with one of the three key recommendations found in the United Way of Greater Los Angeles' 1998 report: Seizing the Middle Ground: Why Middle School Creates the pathway to College and the Workforce. In that report, it was recommended that schools prepare middle grade youth for college and high-paying jobs and careers of the 21st century by providing students the academic foundation for future success. Sylmar STEM Academy is committed to preparing its young learners to attend college and develop career enhancing skills. The curriculum, professional development, and the culture of the school are focused upon this central goal.

The centerpiece of our College-Readiness focus will be the Educational Talent Search, partnerships with CSUN EOP office and Los Angeles Mission College. Sylmar STEM Academy will provide targeted college preparedness support through the various programs, and career planning, mentorship, and peer leadership opportunities will be integrated into every aspect of our students' school years. An AVID advisory will available at levels 6th through 8th and AVID practices will be incorporated into Advisory period and electives.

Our Career Development programs will be designed to assist our students build the essential skills for success in the working world. Working closely with the Los Angeles Chamber of Commerce, we will establish partnerships with local businesses, provide guest speakers, and develop crucial marketable skills in our students. In addition, our community partners that consist of attorneys, urban planners, engineers, elected officials and college professors will help mentor and guide students to high expectations of self.

Our mission and vision statements reflect our expectation that our students will attend college or some other form of post-secondary education and it's our responsibility to prepare them for high school and post-secondary careers. Sylmar STEM Academy is dedicated to maintaining the connections between classroom learning and future careers and make explicit that education is the pathway to well paying careers. A large majority of our students will be the first in their families to attend college or post-secondary education. National and statewide data on college achievement indicate that Latinos lag behind other ethnic groups. According to a 2002 study by the Pew Hispanic Center, only sixteen (16) percent of Latino high school graduates obtain a college degree. Sylmar STEM Academy will engage students, parents, the school and community of Sylmar to generate and sustain a college-bound culture.

Using a four-pronged approach, the community school model we envision will engage the entire community. Firstly, Academic Support and Enrichment: activities that provide high quality, academically rigorous, hands-on learning activities, i.e., project based learning (PBL) in Math, Language Arts and Science. Secondly, Parent Engagement: activities designed for parents to enhance and increase their rate of involvement in their child's education and to teach parents their child's post-secondary options and how to navigate the education system in the decision-making process. Thirdly, School, district, and Community Relationships: Sylmar STEM Academy believes that strong relationships in these domains are vital in order to catalyze systemic change in education. Sylmar STEM Academy aims to sustain existing relationships and foster development of future ones. Finally, College Awareness, Access, and Scholarship: activities that are designed to reveal and teach middle school youth and their families about their post-secondary options, to inspire and support them to achieve their goals, and lead them to the financial support in pursuit of their education. College and career related activities will include workshops for students and parents on A-G requirements, the demands of high school and navigation of the educational system, guest speakers to meet with students and families, field trips and virtual trips to local university and college campuses, local career venues (workplaces), community outreach activities, and something called College Days when teachers and staff discuss college their experiences and anecdotal occurrences and display or wear college-themed gear. Furthermore, students will develop a portfolio that outlines the pathways to college that include knowledge of A-G requirements, financial aid, housing, career options, university programs specializing in the hard sciences as well as setting post-secondary goals with the school counselor.

(e). School Calendar and Schedule

The Sylmar STEM Academy shall follow the District's early start traditional calendar.

All students at the Sylmar STEM Academy K-8 will continue to be on a two-semester instructional calendar. Under the District-wide Early Start Instructional Calendar, the first day of instruction for students will be August 14, 2012 and the last day of instruction will be June 4, 2013. Summer school and other important holidays to note include:

Admission Day observed on August 31, 2012

Labor Day observed on September 3, 2012

Veterans Day observed on November 12, 2012

Thanksgiving observed on November 22, 2012 and November 23, 2012

Winter Recess from December 17, 2012 through January 6, 2013

Dr. Martin Luther King, Jr. Day observed on January 21, 2013

Presidents' Day observed on February 18, 2013

Spring Break from March 25, 2013 through March 29, 2013

Memorial Day observed on May 27, 2013

Sylmar STEM Academy Bell Schedule

The district single-track calendar provides 180 days of instruction. Our elementary bell schedule will follow the traditional schedule that provides students with the minimum 55,100 minutes of instructional time per year. As mentioned, we will be adding an extra 30 minutes to the instructional time for elementary in order to create the time for collaboration and planning. The Sylmar STEM Academy is requesting LIS #5 modified instructional day and is mentioned in our "Commitment to Work Agreement", teachers will be required to work 30 minutes extra daily which is critical to the professional development and collaboration time, the Sylmar STEM Academy needs to meet the vision and mission of the school. In addition, this allows the Sylmar STEM Academy to provide teachers with opportunities for collaboration time to provide targeted instruction to students in need of filling gaps in achievement.

The middle school block schedule that the Sylmar STEM Academy will follow meets LAUSD's requirement of 65,300 minutes. In addition to these minutes we are requesting that teachers work an additional 30 minutes to ensure vertical articulation with our primary grade teachers and middle school collaboration time. The block schedule also aligns itself to our mission and vision providing for an innovative, flexible schedule that is designed to promote academic success and relationship building for all students. The longer instructional periods in the block schedule are aligned to support our mission/vision and instructional strategies. Moreover, the Sylmar STEM Academy will utilize a block schedule to support the implementation of interdisciplinary and project-based learning; students will have longer periods to fully engage and submerse themselves in the rigorous and relevant material they are learning. The 61 minute Advisory period will be used to develop a personalized relationship between teacher and students.

As part of our ongoing partnership with Youth Speak Collective we will offer a wealth of after-school extracurricular activities: athletics, tutoring, clubs, leadership activities, service learning, just to list a few. Our schedule will also provide us with the time for professional development Tuesdays to allow vertical articulation and grade level/department team collaboration. Our extended teacher work day will also provide the opportunity for PD that was discussed in detail in the professional development section. The following is a snapshot of our school schedule.

Regular Day Bell Schedule K-5 **Start Time** 8:15AM **1st Recess/Nutrition (5th -8th)** 9:42-9:57AM **2nd Recess (K-4th)** 10:02-10:22AM **Lunch (5th-8th)** 11:44- 12:24PM **Kinder Lunch** 12:00-12:40PM **Lunch (1st-4th)** 12:15-12:55PM **Dismissal** 2:34PM	**Bank Time Tuesday** **Start Time** 8:15AM **1st Recess/Nutrition (5th -8th)** 9:42-9:57AM **2nd Recess (K-4th)** 10:02-10:22AM **Kinder Lunch** 12:00-12:40PM **Lunch (1st-5th)** 12:15-12:55PM **Dismissal** 1:34PM
Middle School Schedule *Monday and Thursday* **UCLA -I** (8:00AM-9:42AM) Nutrition (9:42-9:57AM) **STANFORD -II** (10:02AM -11:44AM) Lunch 11:44AM – 12:14PM **CSUN -III** (12:19PM-2:02PM) Advisory (2:02PM-3:03PM)	**Middle School Schedule** *Wednesday and Fridays* **PEPPERDINE -IV** (8:00AM-9:42AM) Nutrition (9:42-9:57AM) **USC -V** (10:02AM -11:44AM) Lunch 11:44AM – 12:14PM **HARVARD -VI** (12:19PM-2:02PM) Advisory (2:02PM-3:03PM)
Middle School Schedule *Bank Time Tuesdays* **UCLA- I** (8:00AM – 8:45AM) **STANFORD- II** (8:50AM – 9:35AM) **Nutrition** (9:35AM – 9:50AM) **CSUN-III** (9:55AM – 10:40AM) **PEPPERDINE- IV (**10:45AM – 11:30AM) **Lunch** (11:30AM – 12:00PM) **USC -V** (12:05PM – 12:50PM) **HARVARD- VI (**12:55PM – 1:40PM)	

(f). Policies

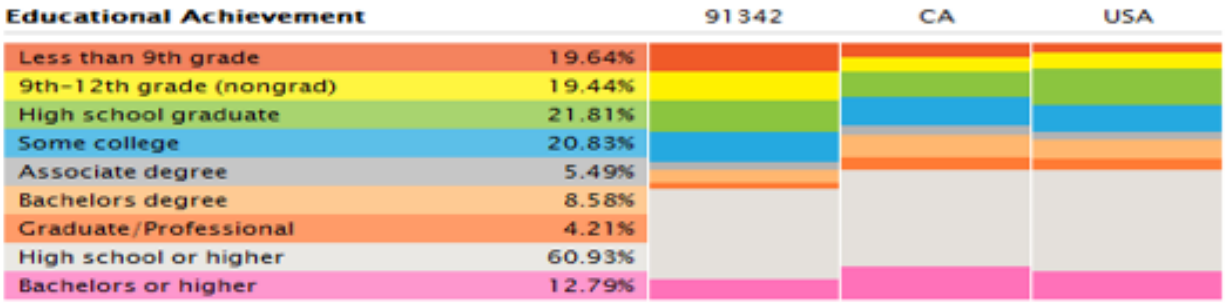
The Sylmar STEM Academy shall adhere to all LAUSD District policies with respect to graduation, student behavior, due process rights, and school safety.

B5. Parent and Community Engagement

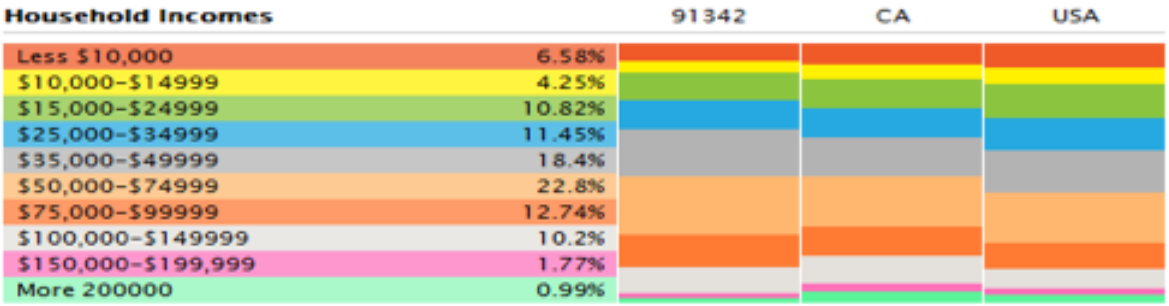
(a). Background

The Sylmar community

Sylmar STEM Academy is located in the north-eastern part of the San Fernando Valley in the city of Sylmar, within the geographic boundaries of Local District 2 of LAUSD. The enrollment will draw from the surrounding elementary schools of Sylmar, Herrick, Dyer and Hubbard as well as Olive Vista Middle School. The Academy will have approximately 1050 students in a kindergarten through eighth grade configuration. According to 2000 Census data 67% of the residents of Sylmar are Hispanic with about 30% renter occupied housing. Moreover, 61% speak a language other than English at home and 20% have an educational attainment of less than ninth grade. A marginal group of only 9% responded to having a bachelor's degree. Lastly, in 2000 24% of the Sylmar community was living below the poverty line. The following graph taken from ZIPgrahics.com tells the dire picture of the educational achievement of Sylmar area.



Those that earn less than $10,000 account for 6.58% of the population. 4.25% of inhabitants in Sylmar have a family income that amounts to $10,000-$14,999, while those that have an income of $15,000-$24,000 are 10.82%. 11.45% of the populace of 91342 has a total family earning of $25,000-$34,999, 18.4% earn $35,000-$49,999, and 22.8% have a household earning from $50,000-$74,999. In Sylmar the population that has a household income that ranges from $75,000-$99,999 is 12.74%, those who earn in the range of $100,000-$149,999 constitutes for 10.2% of households, and 1.77% have total incomes of $150,000-$199,999. Those with household earnings over more than $200,000 are 0.99% of the population in Sylmar.



Lastly the crime rate in Sylmar is one of the highest in the Northeast San Fernando Valley. The following graph illustrates the point. Sylmar also has a gang injunction on the oldest gang in the Valley, (SanFer) and parents fear their children will be recruited into the lifestyle of gang culture. Many of the parents we spoke to would like to live elsewhere but their economic conditions forbid it.

During our parent meetings in the Sylmar area, a common theme that was discussed was the need for their children to attend college and have good paying jobs. Parents spoke about their exodus from their country and coming to Los Angeles to seek opportunity and better futures for their children. The Sylmar STEM Academy developed our mission and vision with these ideals in mind. We knew that education could help to uplift the Sylmar area but it would take time and a group of people with the passion to bring about reform education to the area. We feel there is no need to leave the area and that good paying careers will change the synergy of the area. We believe it starts with educational attainment and we are committed to that end.

Most of our design team has taught in the Sylmar area for many years. Its members understand the assets and challenges of the students as well of those of their families in this community. Many members of the team have lived or continue to live in the community. These team members' experiences as active community members added to the quantitative data as well as the input we received at our parent-community meetings sum up to a picture of a community with specific needs and visions. Our families strongly value education, community involvement and have pride in their familial commitment, language and culture. However, they continue to express the need for support and guidance with a view to become more engaged in their children's place of education. Equally important is the need to provide multiple forms of communication between community and school that remain open in both directions and are maintained and easy for families to access.

Aligning our plan with community needs

Part of STEM Academy's mission is to empower our students to be academically competitive for future educational and career opportunities. This is a common goal we share with our students' parents as well as our surrounding community. Moreover, it is the collective goal that our students emerge as socially responsible and successful academically and serve both their local and global communities. We envision our parent and community engagement process as a vital part of our school and have put considerable thought into what form it will take and how it will be achieved. We intend to utilize the strengths and assets of our teachers, students, parents and community partners in order to meet these goals. We intend to bring back the "HOPE" inherent in attaining post secondary education the career opportunities that come along with it.

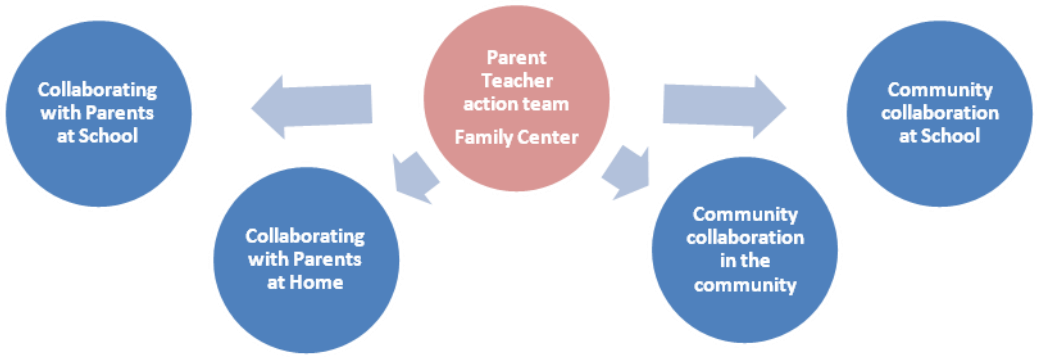
(b). Strategies

Our team and community partnerships bring a diverse range of experiences in understanding and collaborating with both this community as well as communities with similar needs. Our strength is sourced from our understanding of the community and a passionate belief in our mission and vision. We are a united team of seasoned of professionals. Many of us are currently working in the Sylmar area schools. One of our lead designers is Ivan Cheng a Professor at California State University at Northridge (CSUN), and has spent much of his professional life, first as a LAUSD teacher (Pacoima and Maclay Middle Schools) and now as a university professor, serving the students and faculties in schools of Local District 2. Professor Cheng has a long history of working and engaging parents around the benefits of math education as it relates to post secondary education. Richard S. Ramos, Categorical Programs Coordinator at Olive Vista Middle School brings a wealth of community and educational experience, was San Fernando City Councilman and Mayor Pro- Tem; he has worked with parents throughout his 15 years in LAUSD to promote parent engagement and creating college bound culture at the home. While working at Project GRAD Los Angeles, he worked on developing parent nights that focused on a litany of topics including A-G requirements, hands-on math, literacy and navigating through school politics. Richard also works at Los Angeles Mission College where he teaches adults who are returning to education to seek career opportunities but that need a high school diploma. Lastly, Richard brings an entrepreneurial background having owned and operated a business in the Pacoima area prior to going into education. Henry Cuaz:, ESL/English Teacher for twelve years in the Northeast San Fernando Valley communities. He brings dedication, enthusiasm and experience in working with students, parents and staff. He has been involved in the annual Relay-For-Life event held at Olive Vista Middle School, a member of that school's annual Santa Monica Bay clean-up team, staffed the annual campout at LAUSD's Clear Creek Outdoor facilities and played in concerts and festivals as a member of the Olive Vista Middle School Band. He has also conducted evening parent workshops from literacy to parent engagement while working at OVMS. We have compiled a long list of teachers who would love to voluntarily transfer to the Sylmar STEM Academy which we believe will ensure strength and capacity when unified into a passionate, collaborative team with a common mission and vision.

Engaging our Families and Community

At the heart of our vision for engaging families and community is the central idea that we are a community school. As our team discussed the various strategies for engaging these constituencies, an organizational structure emerged; the focus of which is an Action Team for Partnership (ATP) a part of the National Network of Partnership Schools model (NNPS) which will be based in the Family and Community Center at our school. This ATP model and Family Center will serve as the point from which four types of programs will originate: Collaborating with families at school and at home, collaborating with the community at school and connecting with the community beyond the school.

CS-STEM Parent/Community Engagement model



Engaging our families

Too many Latino parents have expressed a sense of helplessness or impotence as they look to ameliorate the educational choices available to their children. All parents want to see their kids thrive, but are often unsure how to provide guidance. Schools can be intimidating places where procedure and culture are unfamiliar and mysterious. On the other hand, parents who understand how to access school (and later university) based services, become invaluable resources for their children as well as the school's staff. Once parents become informed and involved, they feel more empowered and able to find help for their children (PALMS, 2005).

Strategies that Work

When parents have information about their child's school, they are far more likely to seek help from school staff members as the problems arise. Studies have shown that getting information to families can be successfully done via multiple strategies: home visits, parent-child activities, skill building parent classes, providing a bilingual, assigned staff member as a parent liaison, and encouraging parent ownership (PALMS, 2005). Parent Information Booths will be set up at every school event and a Parent Handbook, complete with detailed information regarding important dates, contact numbers, a calendar, community partners, will be produced and given to each family.

Action Team for Partnership (ATP) and Family-Community Center

We envision the hub of our family engagement plan to be our ATP and Family-Community center beyond what has been known as a parent center. There will be one parent liaison to work collaboratively with K-8 parents helping to maintain the continuity of relationships. This will create opportunities for all parents to function well together in order to maintain a seamless transition when parent's children move from one academy to another. Within the ATP, we will have parent and teachers working in a variety of areas: as parent leaders, coordinating various parent-student activities, coordinating community based activities, staffing our Family-Community resource center and computer lab. A significant part of this process is to provide training and to build capacity. We plan to enlist NNPS model as well as utilizing the Postsecondary Access for Latino Middle-grade Students (PALMS) materials in building our capacity of the ATP teams and all our parents, faculty, and staff.

Collaborating with families at school and home

Our plans for engaging families at school fall into four areas: parent-child activities (such as student led conferences, Bring Your Dad to School Day, My Day With My Dad (during parent outreach; getting fathers involved was a big topic), family math night are activities which are effective and popular for all shareholders, volunteering at the school (working alongside school staff), receiving skill-building support or serving in various leadership roles. Classroom teachers will work in their teams with the support of the Parent-Teacher Action Team and provide opportunities for families to participate in many parent-child activities as well as coming to our student advisories and sharing life experiences or helping with a class' service learning project. Additionally, our ATP team will work with classroom teachers in developing avenues for involvement at our campus such as assisting in classrooms, the library, campus activities and the ATP Family Center. This will be accomplished with the help and guidance of NNPS model as well as our PALMS resources.

Parent skill-building will be an ongoing part of our school outreach. We will provide workshops for our parents on topics such as those related to communication, leadership, technology and English-language literacy. Studies have linked this type of skill-building with increased participation in their children's education (Delgado-Gaitan, 1991; PALMS, 2005). We will work with Families in Schools and Parent Institute for Quality Education in developing college awareness through a series of workshops and field trips to local colleges in conjunction with the staff at California State University at Northridge.

Finally, parents will be provided multiple opportunities to acquire authority and impact their children's education. Various committees provide seats for parents in our school's governance council.

(c). Key Community Partnerships

Engaging the community

A college culture

Sylmar STEM Academy's vision of being a collaborative learning community includes a wide group of participants. Of course, the staff, students and families are included in this vision, but so are numerous student teachers (a vital part of our partnership with CSUN), other university students (from the math and various engineering departments), university professors and members of the region's business community. We envision our school as having a college culture. This will be seen in all areas of our campus life: teacher teams involved in lesson study, teacher teams working with student teachers and professors, student teams working on projects, families attending Families in Schools College Awareness training, fieldtrips to CSUN and other colleges and similar programs not yet defined. Our partnership with CSUN has its roots in the existing relationships which exist between our design team and various professors in the College of Education and the Engineering and Sciences & Mathematics. In the course of writing this proposal, those relationships have deepened and new connections forged resulting in an increased awareness of and enthusiasm for new opportunities that will provide exciting learning options to our school community (which includes students, families, student teachers and teachers).

To further support our teachers and students our first year of operation will include working with numerous CSUN student teachers in all content areas. At Sylmar STEM Academy, student teachers will have the unique opportunity to become team members and collaborate with either our elementary grade level interdisciplinary core teams, or our middle school interdisciplinary teams. This type of

experience is seldom possible for most student teachers yet is invaluable for developing a skill-set in collaboration and PBL lesson development both 21st century teaching skills.

Additionally, we will be working with CSUN's College of Engineering. Incorporating engineering curricula necessitates enlisting outside support in providing our teachers professional development. CSUN's College of Engineering will support our teachers in this area as well as supporting their various engineering projects and PBL curriculum development.

Future plans for partnering with CSUN include working with engineering students in developing various STEM clubs like robotics, working with the Elementary Education department in implementing a numeracy center on site to support the mathematics education of our early adolescents as well as skill-building of our families. We also foresee a deeper bond developing with the university where potentially, our staff and student teachers can participate in site-based college courses (either as adjunct professors or students), participate in or lead National Board Certification support groups, and engage in virtual, web-based professional development available to the surrounding schools' faculties as well as our own. As a result of close, collaborative relationship with CSUN (Dr. Ivan Cheng design team member is a professor here), we envision our school becoming the center of a highly qualified staff development model available to the surrounding schools. Ultimately, we would like to extend the site-based, collaborative, teaching experience to the teaching staff of our neighboring schools; perhaps in an apprenticeship-like model where teachers teach at the Academy for a period of three years, and then return to their original school, with new skills which they in turn can help develop in their own school.

Finally, Sylmar STEM Academy shares the closest proximity with Mission College, part of the Los Angeles Community College system. Furthermore, one of our design team is an adjunct instructor (Richard Ramos) there. We also plan on developing a relationship with Mission College's staff and students. The opportunities are broad: from working with the Education department, to Engineering department, to their physical education program.

Other strategic partnerships

Sylmar STEM Academy will become part of the existing full-service community schools network Valley Neighborhoods Collaborative (VNC), started at San Fernando High School (San Fernando Neighborhood Partnership), and expanded to Sylmar High School (Sylmar Neighborhood Partnership), San Fernando Middle School (San Fernando Middle School Neighborhood Partnership), and opening progressively at MaClay Middle School and Arleta High School. The community schools model (as supported by research from The Coalition for Community Schools' Community Agenda) ensures that all resources a student or family needs are available through the school. This is achieved by holistically supporting educators, families, and students by streamlining and networking current resources to meet needs and fill gaps. This is an adaptive approach—as school and community needs evolve, we refine our methods to direct resources to where they are most needed and adapt resources to what is most needed. The overarching goal of the VNC, which aligns with that of Sylmar Academy, is to empower our students to competitively prepare for future educational and career opportunities as well as develop into socially responsible citizens.

In addition to partnering with institutes of higher education, STEM Academy will also look to developing relationships with local business in fields that connect with our technology, engineering, arts, mathematics and science focus. The connections with these businesses would fill many purposes. First, it would allow our school to become a thriving member of the larger community. Second, it would

provide our students with opportunities to make more tangible connections between what they learn at school and what they encounter in the world beyond**.** We plan to enlist local business people to speak to our students at school; to lead our students, either virtually, on the web, or on-site field trips; to mentor our students and support our teacher team, particularly in engineering. These individuals and businesses would be located and connected by our collaborative teacher teams that share common groups of students, both in our elementary and middle school academies.

As mentioned, our design team member Richard Ramos is an Adjunct Instructor at Los Angeles Mission College where they have just received a multi-million dollar grant to provide for a STEM center on the campus of Mission College. The Sylmar STEM Academy with it close proximity to the campus will partner up with the college to expose our students to the college environment and STEM related education.

We also plan on identifying and partnering with non-profit institutions (Youth Speak Collective) in the neighborhood that are available to our students as they develop service learning projects in their student advisory classes or at school wide events. These institutions would be identified and contacted by the instructional leader (see leadership selection), or an individual teacher team: depending on the scope of the project and the size of the student group being involved.

Finally, our community partners will have a presence in our governing body. We will have certain seats reserved for members of our community partners (see Governance section for more details.). A community school in more than name, Sylmar STEM Academy will be led by all stakeholders, including families and community members.

The matrix below outlines our strategic partners.

Organization	Length of Partnership	Description of organizational programs	People responsible for monitoring
Center for Teacher Quality	2 years	Provides expertise and feedback on educational reform initiatives	Instructional Leader, Dr. Cheng and governing council
Youth Speak Collective	2 years	Run after school enrichment programs and community outreach	Instructional Leader and governing council
North Valley Health Corporation	2 years	Parent and students training around health care	Instructional Leader and governing council
CSUN College of Education (Dr. Cheng)	4 years	Teacher Prep Candidates—student teachers, Professional Development	Instructional Leader and governing council
CSULA Professor Rodolfo Casarez	2 years	Provide public speaking training for students	Instructional Leader and governing council

Families in Schools	2 years	Provide parent workshops and parent engagement out reach	Instructional Leader and governing council
Project GRAD LA	2 years	Provide college bound culture through GEAR UP grant	Instructional Leader and governing council
CSUN College of Engineering	2 years	Mentor and guide STEM program to integrate engineering themes in advisory	Instructional Leader and governing council
LA Mission College STEM Center	2 years	Serve as a conduit for STEM services	Instructional Leader and governing council
Valley Neighborhood Collaborative	2 years	Community outreach partner facilitating transparency between the community and school.	Instructional Leader and governing council
LA Mission College Non-Credit Classes	4 years	Provide ESL and GED classes to community at Mission College	Instructional Leader and governing council
City of San Fernando Urban Planning Dept	2 years	Provide opportunities for students to learn about civil engineering and urban planning	Instructional Leader and governing council
Tia Chuchas Centro and Cultural Bookstore	2 years	Offers pro-community cultural activities, youth development programs, family programs, access to technology, arts, music, and empowerment programming for at-risk youth.	Instructional Leader and governing council
Educational Talent Search	4 years	Provide college access and awareness programming to students and parents through case management, parent trainings, and community collaboration efforts	Instructional Leader and governing council
Parent Institute for Quality Education	1 year	Provide workshops for parents on college access	Instructional Leader and governing council
Otto “Tito” Sturcke	2 years	Provide theater arts training for students and teachers	
Total Family Support	2 years	Provide drug intervention and health services to students and	Instructional Leader and

Clinic		families	governing council
Community in Schools	2 years	Works with at risk youth in the community	Instructional Leader and governing council

B6. School Governance and Oversight
(a). School Type
Not Applicable

(b). School Level Committees:

The STEM Academy distributive leadership model will facilitate the duties and responsibilities of the committees responsible for managing the daily operational issues and needs as mandated by the governing council in accordance with the mission and vision. Each committee will be created through an orientation and election held at the beginning the academic year. The committees will be represented by six members comprised of two parents and four teachers.

- **Professional Development:** This committee will work closely with the instructional leader and all stakeholders to develop the PD calendar. The committee will utilize a needs assessment approach to gather data and design a PD plan to meet the specific needs of parents, teachers, students and community.
- **Budget:** This committee will be responsible for developing, communicating and adjusting the budget plan as needed to meet the Academy's vision and mission.
- **Education Resources:** This committee will be responsible for organizing, monitoring, inventorying, and securing the appropriate resources to assist teachers, students and parents to meet the vision and mission of the Academy. It is imperative that the appropriate resources such as textbooks, computers, projectors, smartboards, Elmo and office/classroom supplies are in place to maximum instruction and learning.
- **Testing:** The testing committee will be responsible for creating the testing calendar according to District and State guidelines which includes CELDT, CST, NAEP, Periodic Assessments, Fitness Test, DPI, DIBELS and other assessments.
- **Title One:** This committee will be primarily responsible for assuring that all federal compliance areas are met according to Federal and State program monitoring including but not limited to collection of the meal applications.
- **Bilingual:** This committee will be responsible for ensuring that ELs have the appropriate supports in place to provide for universal access so that ELs will have access to the core curriculum.
- **Discipline:** This committee will be responsible for developing, facilitating, and implementing a progressive positive behavior support plan. The instructional leader, committee and parents will work collaboratively to secure that students receive the necessary supports to create a positive and safe learning environment that maximizes student achievement.

Advisory Committees:

CEAC and ELAC, parents shall not constitute less than 51% of the committee. Teachers and community members will also serve on the committees.

Compensatory Education Advisory Committee (CEAC)- Committee will meet monthly with a minimum of six meetings a year. CEAC will be responsible for recommendations to develop the SPSA,

review/update the parent involvement policy, conduct the Annual Title 1 parent meeting, and review/update the school-student-parent compact.

English Learner Advisory Committee (ELAC)- ELAC will meet monthly with a minimum of six meetings a year. The ELAC will advise and make recommendations on the following four (4) legally required topics:

•Advise the governing council on the development of the SPSA, especially those sections related to English learners.

• Assist in the development of the school's needs assessment.

• Assist in the development of the school's language census (R-30).

• Assist in the development of the school's efforts to make parents aware of the importance of regular school attendance.

(c). Governing Council

Composition—Instructional leader (2), grade level rep teachers K-8 (6), parents (5) community partner (1) and students (2) – 16 total members. Through an election process members will be elected to serve on the governing council for the term of the academic year. The instructional leaders automatically sit on the governance council and can veto the consensus decisions made by council if it is found to be illegal or noncompliant with district, state or federal mandates. All members have equal voting rights and are elected by their represented group.

The roles and responsibilities of the Governing School Council include the following:

- Selection of the Instructional leader (2)
- Evaluation of the Instructional leader
- Designing school policies
- Approval of budgets
- Designing campus-wide positive behavior support plan
- Maintaining and supporting the mission and vision
- Review and set annual performance indicators of the school
- Review annual "Elect-to-Work Agreement"
- Institute by-laws governing the selection of members and terms of office

The governing council will meet the legal requirements and compliance issues with state regulations. This council will meet monthly and as needed to ensure the success of the Academy's mission and vision.

B7. School Leadership

(a). Instructional leader (Principal) Selection

The instructional leader candidate shall meet all the guidelines to be an instructional leader in LAUSD these include 1) Masters Degree and Administrative Credential 2) Multicultural Coursework 3) District Master Plan Requirements met. The candidate shall have both instructional and coordinatorship experience as this person shall be responsible for instructional leadership and school operations as it relates to federal and state compliance. The candidate shall share the mission/vision of creating and establishing a reform model school, committed to the instructional framework and interdisciplinary/PBL model of the STEM Academy. The instructional leader shall serve as the STEM Academy Ambassador to create partnerships with community groups and universities to support the vision and mission.

The instructional leader for the K-8 STEM Academy will have ten years of successful public school certificated experience including five years of verifiable experience as a teacher. The candidate

shall also have a minimum of three years out-of-the-classroom leadership experience serving as a coordinator and instructional coach.

The instructional leader will have experience teaching and working with EL students including Long Term English Learners to assist in reclassification and academic success. The candidate shall also have expertise in data analysis to drive instruction and professional development. In addition, the candidate shall have experience presenting school-wide professional development and teach demonstration lessons with proven instructional strategies inside the classroom, modeling research based strategies in action. Moreover, the instructional leader shall have knowledge of coordinating and implementing effective interventions programs. The ideal candidate shall also have experience in interdisciplinary instruction and project-based learning.

The instructional leader selection process will follow the district timetable and include a job description posting on teachinla.com. The academy will form an instructional leader hiring committee consisting of a one elementary teacher, one secondary teacher, one parent, a representative from one of our partner organizations. Will coordinate due diligence with LASUD Human Resources and collaborate with a local district 2 representative. The committee will meet prior to interviewing perspective candidates to develop a comprehensive set of questions to ensure the hiring of a dynamic and innovative instructional leader. The hiring committee will conduct their due diligence by conducting an initial resume screening of applicants for those that have met all the LAUSD requirements whereby selecting candidates that meet the ideals of an instructional leader. The hiring committee with discuss their applicant choices and through a democratic process select 3-5 candidates (elementary and secondary) to invite for an interview. The interviews shall occur in March and once the committee has reached consensus, the selected candidates (elementary and secondary) shall be agreed upon and informed. The two candidates shall be submitted to the Superintendent for approval. Upon the Superintendent's approval the candidates shall formally be offered the positions. Furthermore, at the onset, candidates shall be informed that in accordance with the LAUSD Memorandum of Understanding for Pilot Schools, the instructional leader will be evaluated and reviewed on an annual basis by the STEM Academy Governing Council and her/his elect-to-work agreement shall be reviewed/revised annually. The principal shall serve at the will of the Governing Council and can be excessed at the term of the contract.

(b) Leadership team

The instructional leader of the STEM Academy shall use distributive leadership to operate the school on a daily basis. The leadership team shall consist of aforementioned school level committees along with one lead teacher for the Span K-8 school.

This lead teacher shall assist the instructional leaders to help ensure that there is STEM focused interdisciplinary project based integration of curriculum both horizontally through the K-8 academies and vertically across grade level disciplines and families at the middle school. The responsibilities include:

- Assist in data analysis to determine performance meter goals
- Work in conjunction with instructional leaders to design and deliver professional development
- Work in conjunction with instructional leaders to provide quality intervention programs for students

- Serve as lead teacher during grade level and core subject planning time to ensure systemic implementation of interdisciplinary project based teaching and learning
- Support and mentor the efforts of teachers from all disciplines in grade levels and families
- Assess and evaluate the effectiveness of instructional goals and strategies

B8. Staff Recruitment and Evaluation

(a). Staffing Model

The Sylmar STEM Academy proposes to select teachers that reflect the needs of our student population that is aligned to the academy's instructional program. Based on the Valley Region Span K-8 "space plan," the school will consist of five kindergarten classrooms, twenty-five 1st through 5th grade classrooms. The middle school "space plan" consists of seven classrooms, two science labs, one drama/dance classroom and one "flexible classroom." To ensure that adequate instruction and services meet the developmental, linguistic and special education needs of our students; we propose the following matrix:

Grade Level	# of students per class	# of classes	Total # of students	# of teachers
Kindergarten	24	5	120	5
First	24	5	120	5
Second	24	5	120	5
Third	24	5	120	5
Fourth	29	5	145	5
Fifth	29	5	145	5
Sixth	33	3	99	3
Seventh	30	4		3
Eighth	Not Applicable	for first year	of operation.	
Middle School PE Teacher				1

30 multiple subject teachers
3 middle school teachers multiple subject teachers for 6th grade
5 middle school single subject teachers for the following classes (1 science, 1 math, 1 P.E., 1 English, 1 Social Studies)
1 performing arts teacher
1 RSP teacher
1 Lead Teacher
41 Teachers total
1 instructional leader as described in (B)(7)
1 school psychologist as provided by district
1 nurse as provided by district
*Incumbent on 120 students per grade level

(b). Recruitment and Selection of Teachers
LIS Waiver #9

The Sylmar STEM Academy is determined in creating an educational environment that is conducive to social change, innovative, pragmatics, and one that puts the needs of children, the community and parents at the apex of our decision making process. Therefore, the following narrative consists of our school-determined methods to filling UTLA-represented, site-based openings at the Sylmar STEM Academy. It is our design team's belief that the autonomy given through LIS Wavier #9 will ensure and provide the Sylmar STEM Academy the necessary autonomy to achieve our mission and vision.

The teachers whom are selected to the Sylmar STEM Academy will be motivated and inspired by the school's vision and mission and shall agree to the "Mutual Consent" LIS #9 agreement. Teachers who are selected shall be reform minded educators with a passion to "do whatever it takes" to ensure that our students reach their maximum academic potential. Upon entering the Sylmar STEM Academy teachers will take ownership of the curriculum, utilize the autonomies and the spirit of collaboration that is fostered through the school culture and climate.

Desirable Qualifications and Competencies:

- Demonstrates the ability to engage and support all students in learning
- Creates and maintains effective environments for student learning
- Understands and organizes subject matter for student learning
- Plans instruction and designs learning experiences for all students
- Assesses and modifies instruction for student achievement
- Develops as a professional educator
- Possess a strong personal ideology that is aligned with our mission/vision and instructional framework
- Provides evidence of student success on CST, CELDT and other assessment categories
- Maintains strong and consistent attendance and punctuality
- Exhibits strong leadership qualities
- Demonstrates strong support for parent engagement
- Is collaborative and open to reform model of governance
- Be willing and available to work beyond traditional school day hours

The following criteria for selecting teachers shall be:

1) Flyer teaching positions and collect resumes
2) Resumes will be evaluated to create a pool of potential candidates
3) Selected candidates shall be given a hypothetical situation (related to instruction) to respond in writing within 48 hours
4) Based on written response to the hypothetical situation, the candidate shall be asked to attend an interview
5) If the candidate passes the oral interview they shall be asked to deliver a demonstration lesson
6) Selected candidates shall be given a formal offer of employment once the hiring committee has reached consensus
7) If selected teacher accepts the offer of employment they shall agree to sign the "elect to work agreement"

Positions shall be posted on the LAUSD website, UTLA newsletter and through personnel specialist. Selection of the teachers will be done through interview panels that include members of the Instructional Leadership Team. All teachers will hold the appropriate credentials for their positions and all teacher qualifications will meet state and federal requirements. Sylmar STEM Academy shall follow the guidelines listed under the UTLA/District Contract to determine the mix of experienced/new teachers.

(c). Performance Review for Teachers

The Sylmar STEM Academy will utilize the California Standards for the Teaching Profession to provide for a comprehensive evaluation system that will focus on staff development and support of certificated staff to ensure that instructional practices are aligned with the mission/vision of preparing students that are college bound and possess 21st century skills to participate in our global society.

The Sylmar STEM Academy evaluation model will incorporate the New Teacher Project Six Design Standards that are a rigorous and fair evaluation. It offers schools a blueprint for better evaluations that can help every teacher thrive in the classroom, and give every student the best chance at success. These six standards include:

Annual process	All teachers shall be evaluated on an ongoing basis by the instructional leader and peers. Based on observational data, student performance and stakeholder input; teachers will be provided the necessary professional development plan to develop those areas that are in need of improvement. This plan will be monitored on an ongoing basis.
Clear, rigorous expectations	Evaluations shall include the following standards of instructional excellence that prioritize student learning. These standards and competencies shall serve as the rubric for evaluation utilizing a Likert 4 point scale. • Standard 1: Engaging and Supporting All Students in Learning • Standard 2: Creating and Maintaining Effective Environments for Student Learning • Standard 3: Understanding and Organizing Subject Matter for Student Learning • Standard 4: Planning Instruction and Designing Learning Experiences for All Students • Standard 5: Assessing Students for Learning • Standard 6: Developing as a Professional Educator • Possess a strong personal ideology that is aligned with our mission/vision and instructional framework • Provides evidence of student success on CST, CELDT and other assessment categories • Maintains strong and consistent attendance and punctuality • Exhibits strong leadership qualities • Demonstrates strong support for parent engagement • Is collaborative and open to the Pilot model of governance
Multiple	Evaluations shall include multiple measures of performance, primarily the

measures	teacher's impact on student academic growth. • Observation of teacher practice by instructional leader • Peer Observation by other educators • Self-evaluation (results and data driven goals shall not solely be based on CST results, but will also include formative assessments, etc.) • Parent and Student Feedback • Community involvement
Multiple ratings	Evaluations should employ four to five rating levels to describe differences in teacher effectiveness. The following Likert Scale shall be utilized to rate the implementation of the California Standards for the Teaching Profession. **4) Exemplary 3) Proficient 2) Progressing 1)Not Meeting Standards**
Regular feedback	Evaluations should encourage frequent observations and constructive critical feedback. • Pre-conference • Observation • Debrief • Monitoring • Next Steps
Significance	***Evaluation outcomes must matter; evaluation data should be a major factor in key employment decisions about teachers.***

(c). Performance Review for Instructional Leader

The Sylmar STEM Academy will utilize the California Professional Standards for Educational Leaders to provide for a comprehensive evaluation system that will focus on the development and support of the instructional leader to ensure that a comprehensive educational program is in place and aligned with the mission/vision of preparing students that are college bound and possess 21st century skills to participate in our global society. These six standards include:

S t a n d a r d 1 *A school administrator is an educational leader who promotes the success of all students by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school community.*	• Facilitate the development of a shared vision for the achievement of all students based upon data from multiple measures of student learning and relevant qualitative indicators. • Communicate the shared vision so the entire school community understands and acts on the school's mission to become standards based education system. • Use the influence of diversity to improve teaching and learning. • Identify and address any barriers to accomplishing the vision. • Shape school programs, plans, and activities to ensure that

	they are integrated, articulated through the grades, and consistent with the vision. • Leverage and marshal sufficient resources, including technology, to implement and attain the vision for all students and all subgroups of students.
S t a n d a r d 2 *A school administrator is an educational leader who promotes the success of all students by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth.*	• Shape a culture in which high expectations are the norm for each student as evident in rigorous academic work. • Promote equity, fairness, and respect among all members of the school community. • Facilitate the use of a variety of appropriate content-based learning materials and learning strategies that recognize students as active learners, value reflection and inquiry, emphasize the quality versus the amount of student application and performance, and utilize appropriate and effective technology. • Guide and support the long-term professional development of all staff consistent with the ongoing effort to improve the learning of all students relative to the content standards. • Provide opportunities for all members of the school community to develop and use skills in collaboration, distributed leadership, and shared responsibility. • Create an accountability system grounded in standards-based teaching and learning. • Utilize multiple assessments to evaluate student learning in an ongoing process focused on improving the academic performance of each student.
S t a n d a r d 3 *A school administrator is an educational leader who promotes the success of all students by ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment.*	• Sustain a safe, efficient, clean, well-maintained, and productive school environment that nurtures student learning and supports the professional growth of teachers and support staff. • Utilize effective and nurturing practices in establishing student behavior management systems. • Establish school structures and processes that support student learning. • Utilize effective systems management, organizational development, and problem-solving and decision-making techniques. • Align fiscal, human, and material resources to support the learning of all subgroups of students. • Monitor and evaluate the program and staff. • Manage legal and contractual agreements and records in ways that foster a professional work environment and secure privacy and confidentiality for all students and staff.
S t a n d a r d 4 *A school administrator is an*	• Recognize and respect the goals and aspirations of diverse family and community groups.

educational leader who promotes the success of all students by collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources.	• Treat diverse community stakeholder groups with fairness and respect. • Incorporate information about family and community expectations into school decision-making and activities. • Strengthen the school through the establishment of community, business, institutional, and civic partnerships. • Communicate information about the school on a regular and predictable basis through a variety of media. • Support the equitable success of all students and all subgroups of students by mobilizing and leveraging community support services.
S t a n d a r d 5 *A school administrator is an educational leader who promotes the success of all students by modeling a personal code of ethics and developing professional leadership capacity.*	• Model personal and professional ethics, integrity, justice, and fairness, and expect the same behaviors from others. • Protect the rights and confidentiality of students and staff. • Use the influence of office to enhance the educational program, not personal gain. • Make and communicate decisions based upon relevant data and research about effective teaching and learning, leadership, management practices, and equity. • Demonstrate knowledge of the standards-based curriculum and the ability to integrate and articulate programs throughout the grades. • Demonstrate skills in decision-making, problem solving, change management, planning, conflict management, and evaluation. • Reflect on personal leadership practices and recognize their impact and influence on the performance of others. • Engage in professional and personal development. • Encourage and inspire others to higher levels of performance, commitment, and motivation. • Sustain personal motivation, commitment, energy, and health by balancing professional and personal responsibilities.
S t a n d a r d 6 *A school administrator is an educational leader who promotes the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context.*	• Work with the governing board and district and local leaders to influence policies that benefit students and support the improvement of teaching and learning. • Influence and support public policies that ensure the equitable distribution of resources and support for all subgroups of students. • Ensure that the school operates consistently within the parameters of federal, state, and local laws, policies, regulations, and statutory requirements. • Generate support for the school by two-way communication with key decision-makers in the school community. • Collect and report accurate records of school performance.

	• View oneself as a leader of a team and also as a member of a larger team. • Open the school to the public and welcome and facilitate constructive conversations about how to improve student learning and achievement.

The following Likert 4 point rating scale will be used for evaluating the Sylmar STEM Academy instructional leaders:

4) Exemplary	**3) Proficient**	**2) Progressing**	**1)Not Meeting Standards**
Principal consistently and significantly exceeded basic competence on standards of performance.	Principal exceeded basic competence on standards for performance most of the time.	Principal demonstrated basic competence on standards of performance.	Principal did not meet standards for performance, but demonstrated adequate growth toward meeting standards during the period of performance.

B9. Sharing a Campus – Not Applicable

C Internal Management

C1. Waivers- See Attachment 1

The waivers the Sylmar STEM Academy is applying for are LIS # 2,3,5,7,9 and budgeting control.

C2. Budget Development

The Sylmar STEM Academy has planned to receive limited categorical funding during the first part of our first year. The budget will be based on the Budgeting for Student Achievement (BSA) initiative which is one of the four strategies LAUSD identified for ensuring students are college-prepared and career-ready. The Sylmar STEM Academy will adhere to the BSA initiative which is "comprised of four key elements: transparency, by building stakeholder understanding of revenue and costs; flexibility, by allowing schools to make individualized spending decisions to improve student outcomes;

accountability and support, through more support and accountability structures for schools, and; equity, so that the needs of all students are met."

Based on the aforementioned BSA initiative, the Sylmar STEM Academy will budget through inclusion, transparent, flexible, accountability/support and equity budgetary process. The governing council and budget committee will be trained on budgetary processes to be able to make decisions based on data and student needs. The academy will use ADA to fill the classrooms with teachers that are the *most* qualified and who are focused on helping the school community meet the goals of the vision and mission. We will be able to maintain focus on our mission and vision with a limited budget because the hiring process will ensure that teachers that are hired will take on the responsibilities normally filled by out-of classroom personnel through the distributive leadership and committee model.

Our hiring process will focus on finding teachers whose expertise and ability will eliminate the need for other positions such as testing coordinator, Title One/English Learner coordinator, instructional coaches and RTI coordinator. Furthermore, teachers who agree to work under the "elect-to-work" agreement will be part of the solution to maintain budget viability because the Academy rely on the collective expertise and distributive leadership of its staff as a source for professional development.

Additionally, a team of teachers via committee work will administer the spending of categorical funding instead of an out-of-classroom support staff, bringing the decision-making process around funding closer to the classroom. In order to find the most effective team members to carry out these vital tasks, we will focus on finding teachers who are most able to help the STEM Academy meet the objectives described in our mission and vision.

The first year of the STEM Academy will focus on maximizing the one-time start-up funds and per-pupil budget. Through a transparent budget process, consultation with all stakeholders through the governing council and budget committee will ensure the fulfillment of our vision and mission. During this first year we will also look to acquire all government provided funding including Title One and English Learners monies to deliver direct services to students and classrooms.

In year two and three, the budget will be revised based on the change in per-pupil funding, total anticipated enrollment, categorical funding, analysis of student data, and additional funding. The governing council along with the budget committee will deal with necessary increases or cuts that focus on the vision and mission of our student-centered school. The STEM Academy will use additional funds to increase the quality of instruction and direct services to our students. Programs and interventions will be analyzed using student data to determine if they will be continued, improved or entirely eliminated based on data monitoring and collection. This will ensure that funds are applied to increase student achievement and best practices are being expanded. Increases and cuts in specific areas will be guided by relevant data so that budgets continually focus on improving areas of weakness. Having the autonomy to make decisions at the school level makes this vision-focused budgetary possible in turn allowing the Academy to maximize student achievement.

As mentioned, the budget process will be comprised of four key elements: transparency, by building stakeholder understanding of revenue and costs; flexibility, by allowing the STEM Academy to make individualized spending decisions to improve student outcomes; accountability and support, by providing internal structures to support the STEM Academy, and; equity, so that the needs of all students are met.

For these reasons, during the creation of the budget, we will focus on two major goals: transparency to meet the vision and mission. First, we will make the budget process transparent to ensure that all stakeholders know how all parts of the budget are directed toward student achievement. All stakeholders will have a direct voice in this process through their voting role on the governing council; this would include teachers, parents, students, and other community members. Throughout the school year, and as we begin to project the budget for the subsequent school year, school community meetings will be held to gain input from all stakeholders on all aspects of the school and specifically, the use of funding.

Second, all budget items will be evaluated to make sure that they are focused on meeting a specific need of our vision and/or mission. Budget proposals and requests will be evaluated by members of the governing council and budget committee using a rubric to make sure that funds are meeting this requirement. Budget creation and evaluation will be an on-going basis.

D. Operational Management- Not Applicable

D1. Portfolio Development - Not Applicable
D2. Organizational Responsibilities and Goals - Not Applicable