SAN LEANDRO STEM ACADEMY

CHARTER PETITION

Submitted to:

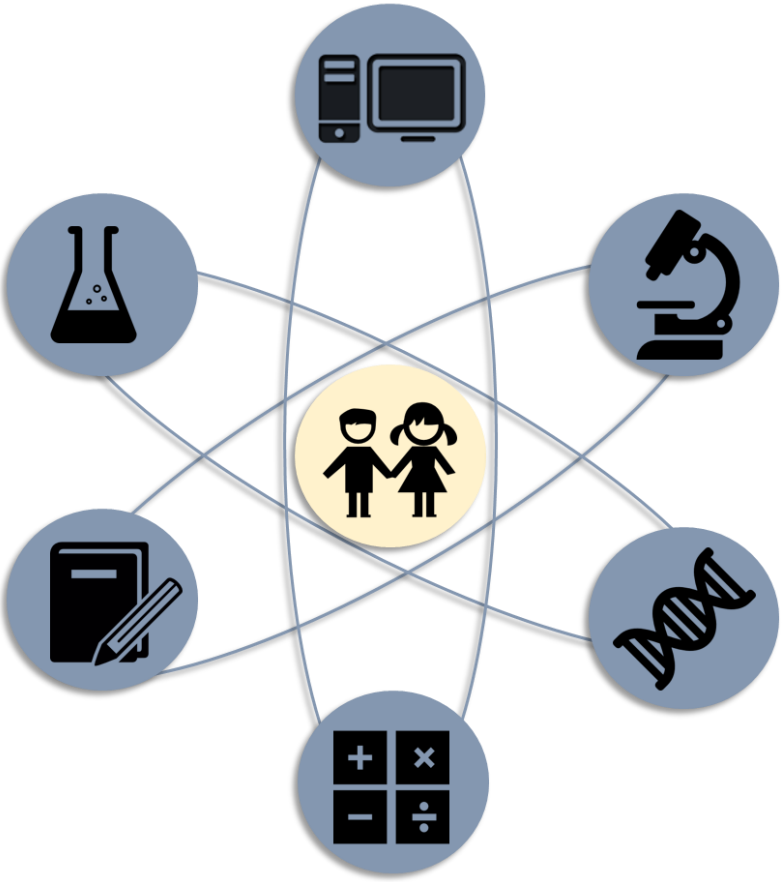
San Leandro Unified School District

Board of Education

Prepared by:

Benchmark Charter Management

June 23, 2015



Contact Information

San Leandro STEM Academy	
Primary Contact	Nephi B. Aiono
Telephone / Email	801.960.6124 / nbaiono@benchmarkchartermanagement.com
Address	29 South State Street Salt Lake City, UT 84111

Table of Contents

Contact Information **1**

Petition Submission **10**

District Priorities in Granting Charters 10

Assurances and Affirmations 10

Introduction **11**

Vision 11

Mission Statement 11

The Need for STEM Education 12

STEM Education 12

Aspirations of Our Proposed STEM Charter School 13

Improve Student Learning 13

Science / Technology / Engineering / Math 13

Element 1: The Educational Program **15**

STEM Education Difference 15

Increase learning opportunities in Science and Technology 15

Increase learning opportunities in Engineering and Math 15

Increase learning opportunities for all students 16

Create new professional opportunities for teachers 16

Provide parents and students with expanded choices 16

School Culture 16

Instructional Program 17

Educational Theory 17

Foundation of the Model 17

Proposed Offerings 18

Grade Level & Proficient Readers 19

Overview of Primary Disciplines 20

Summary of a K-6 STEM Educational Experience 21

The STEM Framework 21

How Learning Best Occurs 42

Administrators and Teacher Accountability 43

Educational Philosophy 43
Target Population/Community to be Served 44
Enrollment Projections 46
Instructional Minutes Chart 48
Instructional Calendar 49
Charter Implementation Plan 49
Parent Leadership Development 51
Instructional Strategy and Design 51
Project Based Learning 52
Crafting the Essential PBL Question 52
Designing a Plan for PBL Projects 52
Creating a Schedule 53
Monitoring Pupils and the Progress of the Project 53
Assessment of the Outcome 54
Evaluation of the Experience 54
Backward Mapping/Backward Design 55
Stage 1: Unpacking and Prioritizing State Content Standards 55
Stage 2: Aligning Assessments (formative and summative) to content standards 55
Stage 3: Differentiating Instruction to Meet the Needs of All Learners 56
Core Textbooks 57
Curriculum 57
Engineering Curriculum 57
Standards 58
Scope and Sequence of Skills 58
Language Arts 59
Writing 59
Language 60
Mathematics 61
Serving English Language Learners (ELLs) 68
Location and Recruitment 68
Admissions Process 68

Identification and Services Eligibility 68
Exiting from ELL Services 69
Instructional Approaches 70
Evaluation Plan 71
Teacher Qualifications 71
Parental Engagement and Communication 72
English Learner Master Plan 72
English Language Development (ELD) 72
History/Social Science 73
Science 73
Next Generation Science Standards 75
Technology 82
Physical Education 87
Health 88
Working with Diverse Populations 88
Gifted and Talented Education (GATE) Students 88
Process for Identifying Students as Gifted and Talented 89
Selection of GATE Students Based on High Achievement 89
GATE Outcomes 90
Student Outcomes 90
Administrator/Teacher Outcomes 90
Parent Education Outcomes 90
Counseling and Guidance Outcomes 91
Academically Low Achieving Students 91
Plan for Socio-economically Disadvantaged Students 91
Students at Risk of Retention 92
English Learners (EL) 92
Reclassification to FEP Status 94
Teaching Approach and Instructional Methods 95
Instructional Enrichment Approaches 97
Core Group 97

Enrichment Activity 97
School Improvement Committees (SICs) 97
Out-of-Class and After School Program Activities 97
Professional Development 98
Performance Objectives and Timeline 98
Improve student learning 99
Early Career Awareness 100
Tailored Studies 100
Career Planning 102
Relational Learning 102
Families as Partners 102
Service Leadership 103
High Expectations, High Support for All 103
Encourage use of different and innovative methods 105
Create Learning Opportunities 106
Provide ownership of learning to staff 106
Provide parents and students with expanded choices 107
Diverse Learners 109
Limited English Proficient Students 109
Students with Disabilities 109
Federal Law Compliance 111
Special Education Program 111
SELPA Reorganization 111
Compliance with Child Find Activities: Conversion and Public School Choice (PSC) Schools 112
Modified Consent Decree Requirements 112
Socioeconomically Disadvantaged Students 113
Students Achieving Below Grade Level 113
Element 2: Measurable Pupil Outcomes 114
Collection and Use of Assessment Data 114
Element 3: Measurement Methods 117
Standards and Assessments 118

AYP and AGT 118
CST Expectations 119
Expected ELA CST Targets for Renewal Term 2015-2020 119
Expected Math CST Targets for Renewal Term 2015-2020 119
English Learners 119
Support for Standards and Use of Data 120
Testing 121
Overview 122
Grading Policy 122
Assessment data is used to guide instruction 123
Professional Development for Teachers 124
Support for Standards and Use of Data 124
Discussion and Examples of Monitoring 124
Measurable Goals of the Educational Program 125
Standardized Testing 125
Local Control Funding Formula – LCFF 126
Element 4: Governance 139
General Provisions 139
Title IX, Section 504, and Uniform Complaint Procedures 139
Legal and Policy Compliance 140
Responding to Inquiries 140
Notification of the District 140
Transfer of student records 140
Charter School Incorporation 140
Charter School By-laws 141
Governance Structure 141
Organizational and Technical Designs 141
Governing Board Responsibilities 142
Process for Selecting Board Members 143
Frequency of Board Meetings 144
Procedure for Conducting Governing Board Meetings 144

Leadership and School Operations 144
Council and Committees 144
School Leadership Council 145
Curriculum Committee 145
Parent Involvement Committee 146
Professional Development Committee 146
Health and Safety Committee 146
Human Resources Committee 147
Organizational Chart 148
Element 5: Employee Opportunity 149
Equal Employment Opportunity 149
NCLB and Credentialing Requirements 149
Paraprofessionals, Substitute Teachers, and Interns 150
Background Check Assurance 151
Element 6: Health and Safety Procedures 153
Health, Safety and Emergency Plan 153
Family Educational Rights and Privacy Act (FERPA) 153
Criminal Background Checks and Fingerprinting 153
Immunization and Health Screening Requirements 153
Element 7: Means to Achieve Racial and Ethnic Balance 154
Court-ordered Integration 154
No Child Left Behind-Public School Choice (NCLB-PSC) Traveling Students 154
Federal Program Compliance 155
Outreach Efforts 156
Competitive Advantage 156
Outreach/Marketing Plan 157
Element 8: Admission Requirements 158
McKinney-Vento Homeless Assistance Act 158
Non-Discrimination 158
Admissions 158
Lottery 158

Transfer and Withdrawal Policy 159
Element 9: Annual Financial Audits 161
Fiscal Procedures 161
SLSA Business Manager Position Description 164
Element 10: Suspension/Expulsion Procedures 165
General Provisions 165
Students with Disabilities 165
Notification of the District 166
Outcome Data 166
Rehabilitation Plans 166
Readmission 167
Reinstatement 167
Gun Free Schools Act 167
Dismissal 167
Suspension of Students 167
Due Process 168
Procedural Due Process: 168
Substantive Due Process: 168
Suspension for More than Three Days 168
Element 11: Retirement Programs 169
State Teachers Retirement Systems (STRS) 169
Social Security 169
Salary Schedule 169
Work Calendar 169
Other 169
Element 12: Public School Attendance Alternatives 170
Element 13: Rights of District Employees 172
Element 14: Mandatory Dispute Resolution 173
Element 15: Exclusive Public School Employer 175
Element 16: Charter School Closure Procedures 176
Revocation of the Charter 176

Closure Action 176
Closure Procedures 176
Designation of Responsible Person(s) and Funding of Closure 177
Notification of Closure Action 177
School and Student Records Retention and Transfer 178
Financial Close-Out 179
Disposition of Liabilities and Assets 180

Petition Submission

San Leandro, Science Technology, Engineering and Mathematics Academy (also referred to herein as "San Leandro STEM Academy," "SLSA", "Academy," or "Charter School") is submitting this petition to the San Leandro Unified School District (hereinafter referred to as "the District" or "SLUSD") as its sponsoring district; we are also requesting charter approval for a period of five years from September 1, 2015 to June 30, 2020. The charter may be renewed for subsequent terms by the Board of Education of the San Leandro Unified School District.

As set forth in this charter petition, **San Leandro Science, Technology, Engineering and Mathematics Academy**, offers a comprehensive learning experience that is designed to serve the needs of students in its catchment area.

District Priorities in Granting Charters

San Leandro STEM Academy meets the vision and mission of the San Leandro Unified School District Charter School Policy priority in granting charters based on the following:

1. San Leandro STEM Academy will be a school that serves an area of need in the District where schools are heavily impacted by overcrowding, lack of seat space, and transportation out of the community.
2. San Leandro STEM Academy will be located in a community where schools have historically low academic performance with an Academic Performance Index (API) state rank in the ranges of 1-6, on a scale of 1 to 10.

Assurances and Affirmations

San Leandro STEM Academy shall:

- Be nonsectarian in its programs, admission policies, employment practices, and all other operations. EC 47605(d)(1)
- Be tuition free. EC 47605(d)(1)
- Be non-discriminatory; the Academy will not discriminate against any pupil on the basis of disability, gender, gender identity, gender expression, nationality, race or ethnicity, religion, sexual orientation, or any other characteristic that is contained in the definition of hate crimes set forth in Section 422.55 of the Penal Code. EC 47605(d)(1)
- Admit all pupils who wish to attend the school. EC 47605(d)(2)(A)
- Determine attendance by a public random drawing, if the number of pupils who wish to attend the charter school exceeds the school's capacity. Preference shall be extended to pupils who currently attend the charter school and pupils who reside in the District. EC 47605(d)(2)(B)
- Notify the superintendent of the school district of the pupil's last known address within 30 days, and shall, upon request, provide that school district with a copy of the cumulative record of the pupil, including a transcript of grades or report card, and health information, if a pupil is

expelled or leaves the charter school without graduating or completing the school year for any reason. EC 47605(d)(3)

- Meet all statewide standards and conduct the pupil assessments required pursuant to Education Code sections 60605 and 60851, and any other statewide standards authorized in statute or pupil assessments applicable to pupils in non-charter public schools. EC 47605(c)(1)
- Consult, on a regular basis, with the parents, legal guardians, and teachers regarding the school's educational programs. EC 47605(c)(2)

Local Control and Accountability Plan

San Leandro STEM Academy acknowledges and agrees that it must comply with all applicable laws and regulations related to AB 97 (Local Control Funding Formula), as they may be amended from time to time, which include the requirement that the Charter School submits a Local Control and Accountability Plan (LCAP) to the San Leandro Unified School District and the District's Superintendent of Schools on or before July 1, 2015. In accordance with California Education Code §§ 47604.33 and 47606.5, the Charter School shall annually update its goals and annual actions to achieve those goals identified in the charter pursuant to Education Code § 47605(b)(5)(A)(ii), using the Local Control and Accountability Plan template to be adopted by the State Board of Education. San Leandro STEM Academy shall submit its annual update to the San Leandro Unified School District on or before July 1 of each applicable year, beginning in 2016

San Leandro STEM Academy shall comply with all requirements of Education Code § 47606.5, including but not limited to the requirement that Charter School "shall consult with teachers, principals, administrators, other school personnel, parents, and pupils in developing the annual update." § 47606.5(e).

Introduction

Vision

For our children and their respective educational experience, if there is anything of great innovation, excitement, passion, inspiration, energy, invention, improvement, mastery, zeal and advancement we seek after these things.

Mission Statement

The mission of the San Leandro STEM Academy is as follows:

"San Leandro STEM Academy is a high energy, high quality, high performing, and high achieving innovative public charter school. Our mission is to provide students who enter our doors a specialized and innovative learning experience with an emphasis on acquiring the respect, inspiration, and advanced skill sets in Science, Technology, Engineering, and Math (STEM)."

As such, students will have the tools to be globally competitive for work in an increasingly technological world, prepared for postsecondary education and equipped for life in the 21st Century. San Leandro

STEM Academy will utilize an educational model that will encourage and support students in gaining the work ethics, attitudes, and skills to thrive in a high-tech global economy."

The Need for STEM Education

According to the 2009 study, *Organization for Economic Co-operation and Development's Programme for International Student Assessment (PISA)*[1], the United States ranked as low as 31st in Math and 23rd . PISA 2009 results as reported by the Organization for Economic Co-operation and Development (OECD) in Science amongst all industrialized nations. The 2009 PISA study also showed that the United States has an above-average gap between male and female proficiency in Science and Math. In addition, a report by the Commission of Professionals of Science and Technology indicates that less than 20 percent of the undergraduate engineering enrollments are women and that less than 10 percent are African American or Hispanic.[2]

The results of this study were a wake-up call for United States business and education communities; it generated awareness for the need for improved STEM education. In response, the President's Council of Advisors on Science and Technology (2010) made several strong recommendations to the White House, including the following:

- Create 1,000 new STEM-focused schools over the next decade.
- Create opportunities for inspiration through individual and group experiences outside the classroom
- Recruit and train 100,000 great STEM teachers over the next decade who are able to prepare and inspire students.[3]

Overall, as a nation, we need to improve the level of STEM education for all students with an extra focus on women and minorities. SLSA aims to do its part to meet this need in the San Leandro and East Bay areas.

STEM Education

STEM education is an approach to teaching and learning that integrates the content and skills of science, technology, engineering, and mathematics. STEM instruction is guided by the STEM Standards of Practice. This standard characterizes a student who is deemed to be proficient in STEM. It identifies the combination of behaviors and STEM content that, when integrated, enables proficiency in STEM. These behaviors include engagement in inquiry, logical reasoning, collaboration, and investigation. The goal of STEM education is to prepare students for post-secondary study, and ultimately, to be prepared for the 21st century workforce. A well-designed STEM education embodies the following traits:

- Removes the artificial barriers that isolate content and which then allows for an integrated instructional approach.
- Allows students to develop life skills and apply content knowledge within a real world context.

[1] http://www.oecd.org/document/0,3746,en_2649_201185_46462759_1_1_1_1,00.html
[2] http://www.cpst.org/
[3] http://whitehouse.gov/sites/default/files/microsites/ostp/pcast-stemed-report.pdf

- Focuses on a student-centered learning environment. Students engage in questioning, solving problems, collaborating, and completing hands-on activities using authentic exercises and activities.
- Utilizes teachers as classroom facilitators. They guide students through the problem-solving process and plan projects that lead to mastery of content and STEM proficiency.

Students are taught technology, engineering, and mathematics content and courses. They also learn scientific research methods and are provided with opportunities to practice application of STEM in a seamless fashion. Students proficient in STEM are able to answer complex questions, investigate global issues, and develop solutions for challenges and real-world problems. Not only can these students understand and generate data, they are also effective communicators, both written and verbal. These requirements teach and nurture students to become logical thinkers who are competent in technology, science, and math.

Aspirations of Our Proposed STEM Charter School

We believe that a STEM-focused education will improve student learning by setting high expectations, and prepare students to be competitive in the 21st century job market.

Improve Student Learning

A 2009 NAPCS study found that the best performing schools set high expectations and follow-up with their students. This will also be reflected at San Leandro STEM Academy. All students will be expected to master fundamental skills in the Common Core Standards and in the STEM curriculum during their K-6 tenure at the school. Additionally, these fundamental skills will be mastered prior to matriculation into middle school. Student learning and performance will be supported by highly trained educators in California.

In order for children to be academically successful, schools must identify and be prepared to serve their needs holistically. Academic needs will be supported with tutoring programs and similar activities. Family and other social needs will be supported by trained school counselors and mobilizing community resources so that SLSA can serve as a bridge to connect families to these services.

Science / Technology / Engineering / Math

Parents and Guardians of our students may ask the following questions. Why STEM? What is its significance in public school curriculum? How will my child be better off with the incorporation of a STEM curriculum into their mandated common core education? By the numbers STEM jobs will grow by 17 percent over the next 10 years compared to almost 10 percent for non-STEM positions.[4] People in STEM career fields can expect to earn 26 percent more in salary compensation on average and be less likely to experience job loss.[5] Sixty percent of new jobs will require skills possessed by only 20 percent of the current workforce.[6] It is imperative today that we prepare our children appropriately to be well

[4] U.S Commerce Department, 2011
[5] U.S. Commerce Department, 2011
[6] National Commission on Mathematics and Science for the Twenty-first Century, 2000

trained and equipped with the basis of a STEM education. This will carry them forward in the near term in their preparatory education and long term into higher education and beyond.

Element 1: The Educational Program

The Seven Behavioral Skills Students Need for Their Future[7] will be acquired by Students at SLSA. Coupled with a diverse, broad, innovative and advanced co-curriculum in Common Core and STEM- It's challenges and multi-plexities in science, technology, engineering and math, SLSA students will acquire attributes in problem solving, innovation, invention, self-reliance, and logical thinking. Attributes required of a STEM student seeking STEM higher education and an eventual career in STEM.

"A description of the educational program of the school, designed, among other things, to identify those whom the school is attempting to educate, what it means to be an "educated person" in the 21st Century, and how learning best occurs. The goals identified in that program shall include the objective of enabling pupils to become self-motivated, competent, and lifelong learners." Cal. Ed. Code § 47605(b)(5)(A)(i).

"A description, for the charter school, of annual goals, for all pupils and for each subgroup of pupils identified pursuant to Section 52052, to be achieved in the state priorities, as described in subdivision (d) of Section 52060, that apply for the grade levels served, or the nature of the program operated, by the charter school, and specific annual actions to achieve those goals. A charter petition may identify additional school priorities, the goals for the school priorities, and the specific annual actions to achieve those goals." Cal. Ed. Code § 47605(b)(5)(A)(ii).

STEM Education Difference

The STEM education provides learning opportunities to practice and increase knowledge through hands-on activities, project-based learning, field trips, and other experiential learning. Our school's culture and value of learning will be woven into our daily school activities; we want to instill a love of learning by infusing the STEM principles of curiosity, observation, and research in school and in the students' daily life where real-life STEM is always happening.

Increase learning opportunities in Science and Technology

Our students will receive a quality and in depth K-6 education in Science and Technology that will be instructional, hands on, interactive, on site, and extremely innovative and inspiring. It is our hope that our students become inspired by science and technology and this early love is ingrained in their hearts and souls. Our students will also receive training in computer science along with training in MS Office Applications that will enhance and better prepare them in their educational, research and presentational pursuits. Guest speakers will also visit the SLSA campus. These speakers will include scientists from the national laboratories, science and technology professors and fellows, and scientists and business leaders from some of the country's leading STEM companies including Google, Apple, Bayer and Proctor & Gamble.

Increase learning opportunities in Engineering and Math

Our students will receive a quality and in depth K-6 education in Engineering and Math. Our students will learn the multidimensional facets of engineering and math. They will learn to embrace, appreciate, respect, and become inspired, proficient in its creative, innovative and quantitative principles. Students

[7] Dr. Tony Wagner, Author, "The Global Achievement Gap"

will acquire these skills and attributes through demonstrations/presentations, discussions, interviews, model/prototype building, projects, open-ended questioning, guest speakers, lecturers, field trips and competitions in the discipline.

Increase learning opportunities for all students

According to various studies, results support that extended school days and alternative learning methods lead to better student success, particularly for at-risk students, and more consistent results for all students. SLSA will be offering after school programs which will include tutoring, enrichment and physical activities.

Create new professional opportunities for teachers

Professional development of the teaching staff will be an important element of the school with yearly Professional Development Plans created for each teacher. All teachers will collaborate in course development, but they will also have the flexibility to adjust within their classrooms.

Provide parents and students with expanded choices

Our school will offer more science, technology, engineering and math courses than is typically offered in the public school systems; increased opportunities to compete in scholastic events such as science fairs, robotics competitions, Odyssey of the Mind, Future Problem Solving, etc.

School Culture

The culture of the school—its mission, values, and practices—will be echoed in every aspect of our STEM focused School. In our physical surroundings-college banners and artifacts will be displayed throughout the school; student art work will prominently be displayed; inspirational messages will be integrated into classrooms and other spaces; and profiles of success stories (community, SLSA staff, community partners, and eventually SLSA graduates) will serve as motivators for students. Teachers continuously will look for opportunities to use curriculum to reinforce the mission. One school committee will be devoted to promoting college and career awareness. The mission will be intentionally integrated into all aspects of the school day.

The hallmark of an SLSA education will be that all students will be knowledgeable and prepared for a post-secondary experience that fits their talents and interests. Were a visitor to speak with any SLSA student, the student should be able to articulate the Core Expectations of the school:

"I am a scholar preparing for a productive career. I am a leader who serves others in my school and community. I am an active agent in achieving my educational goals. I am a positive member of the SLSA learning community who respects my community."

Students will be engaged in reflecting upon how they have met those core expectations on a regular basis by answering the question: what steps have I taken today to meet the core expectations of SLSA? The Core Expectations also will be a foundation for discussion at regular assessment and Student Goal Planning sessions administered by teachers. The founding members of SLSA understand that it is not enough merely to speak or publish these expectations within the school literature, but that administration and staff (and eventually the older students themselves) must orient students and their families as to the meaning and expression of these values.

Instructional Program

Educational Theory

SLSA is founded on the belief that all students are capable of being active learners, service leaders, mentors, and engaged members of their school community. Using the characteristics articulated by Henderson and Milstein (1996), school personnel and community partners will strive to integrate the twelve "external protective factors" that are characteristics of schools that foster resiliency, believing that as students' resiliency is maximized, they will be better equipped to exert leadership, set and achieve higher academic goals, and challenge and support their peers and younger classmates in doing the same. These twelve factors, mirrored in the component parts of the school philosophy and practices, are:

1. Promoting close interpersonal bonds
2. Valuing and encouraging education
3. Using a high warmth/low criticism style of interaction
4. Setting and enforcing clear boundaries (rules, norms, code of conduct)
5. Encouraging supportive relationships with many caring others
6. Promoting sharing of responsibilities and service to others
7. Providing access to resources for families' basic needs (employment, education, housing, etc.)
8. Expressing high, realistic expectations for success for all
9. Appreciating the unique talents of each individual.
10. Encouraging pro-social values (such as altruism) and life skills (such as cooperation)
11. Providing leadership, decision-making, and other opportunities for meaningful participation
12. Appreciating the unique talents of each individual.

Foundation of the Model

The school's offerings is founded on the inclusive STEM model, which includes the belief that math and science competencies can be developed and that students from traditionally underrepresented subpopulations need access to opportunities to develop these competencies to become full participants in a global economy. Consistent with its STEM focus, SLSA will provide a rigorous academic curriculum centered on science, technology, engineering and math that will prepare and inspire our students for a continued STEM education in middle school, high school and college. Perpetual and continual STEM training that will prepare our students for careers in STEM related fields in progressing forward science and technology, innovations in engineering and the use of mathematical concepts and principal in creating a better country and world and in solving real-world issues plaguing us today in the 21st century.

A hallmark of the school's approach is the blending of the inclusive STEM model with high, realistic expectations for success for all students in an encouraging, rewarding, high energy and positive environment.

Every child is a scientist, it is often noted.[8] Children are naturally curious and creative. When students realize that they can discover new things about the world and construct explanations about how the world works, discovery can become a deeply personal and lifelong passion. STEM education should build on the proclivities of young people to think carefully about profound issues, solve problems that pose risk to human societies, create and fix mechanical objects, observe or understand phenomena that no one has observed or understood before, probe the behaviors of people, or any of a wide variety of other activities. These personal experiences are an important source of inspiration and learning for students. They demonstrate the power and applicability of the material taught in mathematics and science classes. They show how continued study in these fields can lead to meaningful and productive careers. They give students a reason for studying STEM subjects and high goals toward which they can strive. T Research shows that boys and girls who show interest in STEM in eighth grade can be three times more likely to later pursue degrees in STEM fields. This underscores the importance of giving children exciting opportunities in STEM early in life, and shows that the effects of such experiences can be long lasting.[9] For example, Nobel laureates, when asked what had led them to pursue science, frequently cited experiences such as experiments done out of school (such as with home chemistry sets), books that had captured their imagination, and teacher who had inspired and guided their personal interests.[10] Teachers, families, and communities can all play a role in fostering children's experiences that spark interest in STEM. The large number of people in the scientific and engineering communities who are willing to devote time to aiding students, including the more than a million engineers and scientists in the United States over age 60 and the more than half a million doctoral students and postdoctoral trainees, could represent a great asset for such activities.

While shared standards can help ensure that all students reach certain levels of knowledge and capability in STEM subjects, standards alone are not sufficient to provide what the Nation needs in STEM education. Students need opportunities to establish deeper engagement with and to learn science and mathematics in non-standard, personal, and team-oriented ways that extend beyond the curriculum and the classroom. This is especially vital for identifying and nurturing high achievers and future STEM innovators.

Proposed Offerings

Our STEM curriculum will be aligned to the Common Core Standards recently adopted by the State of California with an emphasis on STEM. These standards are a foundation upon which the curriculum is built and constitutes a subset of the school standards mandatory for all students. Below is an example of some of the curriculum:

[8] Alison Gopnik, Andrew Meltzoff, and Patricia Kuhl. (1999). Scientist in the Crib: What Early Learning Tells Us About the Mind. New York: HarperCollins.

[9] A. V. Maltese and Tai, R.H. (2010). Eyeballs in the Fridge: Sources of Early Interest in Science. *International Journal of Science Education*, 32:669-685.

[10] István Hargittai. (2002). *The Road to Stockholm: Nobel Prizes, Science, and Scientists.* New York: Oxford University Press.

- The disciplines of Science, Technology, Engineering and Math will be ingrained in every aspect of SLSA curriculum offering. There is a correlation between all disciplines and our students will learn how both the Core Common Standard and STEM curriculum is intertwined between and complements each other.
- Students will have exposure to STEM-oriented themes and activities at SLSA, such as engineering and robotics, data and statistics in everyday, paper engineering, solar energy, science and engineering fairs, "mathathon's," etc., to name a few.
- Our students will have early exposure to computer science and will acquire the fundamental skills in operating a computer and be aged based proficient in MS Office applications including Excel, Word, and PowerPoint.
- Students will acquire technological savvy skills in the use of electronic hand held mediums in utilizing its efficiencies in accomplishing various daily tasks both inside and outside of school.
- Our students will also learn the proper etiquette in the use of all electronic mediums and will develop these habits early on campus at SLSA.
- Many of our classes will be inverted, with class presentations and notes being delivered online, while class time is spent on labs, problems, and group work.
- All students will be expected to master fundamental skills before moving on to more advanced courses and will be given tutoring and remediation will be offered to any student who may require it in their respective progress going forward.

Grade Level & Proficient Readers

We the founders of San Leandro STEM Academy believe wholeheartedly that it is vital that SLSA students become capable and on grade level readers. Learning to read is the most important skill students need to learn to be successful in school and life. Students with strong language and literacy skills at early grades develop stronger language and literacy skills and perform better on academic tests.

Therefore, the first years of school are critical for students to be proficient and skilled readers. Language art curriculum which facilitates students' proficiency in the five essential components of reading – phonemic awareness, phonics, fluency, vocabulary and comprehension will be implemented in this the curriculum reading offering of our School. Strength of this curricular focus is its scope which aims not only to teach word decoding and read fluently, but also develop comprehension and vocabulary skills. Once this basis is achieved and established we believe this will serve as a strong foundation in which we can then build a successful STEM educated student. Our educators will receive professional development in the areas of literacy instruction, interventions and STEM. Additionally, recruitment strategies for teachers will include recruiting teaching candidates with extensive STEM, reading and EL related backgrounds.

Supporting reading instruction and understanding how to improve students reading acumen, all teachers will understand that curricula and textbooks generally have only five organizational patterns. This knowledge will become an important teaching tool for teachers to share with students. Knowing and teaching about the type of material being used can support "struggling" readers because they can interpret the pattern that is repeated throughout the text. The use of a graphic organizer in conjunction with the type of text can be essential for organizing the important information presented in the text.

Concept mapping or graphic organizing is used to bring order to a task. The process has several distinct advantages for learning. First, it encourages the student to focus on the task and to lay out, relatively quickly, a framework for a planning or evaluation study. Second, it expresses the conceptual framework in the language of the student. Third, it results in a graphic representation which at a glance shows all of the major ideas and their interrelationships. Fourth, the graphic organizer is comprehensible to the learner.

Finally, if used with a group or presented to a group, it appears to increase group cohesiveness and morale. In all areas of study, SLSA will offer a curriculum that builds student competency over time using the tailored.

Overview of Primary Disciplines

In general the curriculum will be designed with the California mandated Common Core Curriculum as the base offering, a STEM centered education to our K-6 aged student population.

Mathematics	Students will learn to embrace, accept, and become inspired and proficient in a high energy, exciting math curriculum at SLSA. As will be detailed in our Standards of Practice students will build upon concepts acquired through in class instruction, group projects, demonstrations and discussions. Instructional aids will be placed in classrooms during math teaching blocks as to identify and assist students who maybe in need of additional attention and assistance. Students will be on math proficiencies with their age counterparts statewide.
Social Science and History	History will “come to life” using a story approach with as many hands on projects as possible. There will be emphasis on global education, a subject with infinite sources. The use of primary and secondary source materials will also be taught and heavily influence student learning.
English	Students will learn to speak and write effectively as well as listen and read with comprehension. Students will also be able to research, analyze, and evaluate information. The use of researched programs will assist those students who need to build basic reading skills, such as the Wilson Reading program.
Science	The instruction and curriculum in science and technology will be inquiry-based, hands on, project based, field trip based, guest speaker enhanced and rooted in the natural and technical world. Students will use critical thinking, problem solving and scientific exploration to connect science to their everyday lives. High interest will be developed in students by using hands-on approaches as well as real life challenges. Projects will be integrated with the interdisciplinary themes.
Technology and Engineering	We believe a basic understanding of technology and engineering is important, at a K-6 level, if our children are to contribute to and compete in a rapidly changing society and an increasingly interconnected global community. We also believe that there is an urgent need for well-designed courses in technology and engineering, with high-quality instructional materials, particularly in K-6 Schools. Computer-related courses should aim not just for technological literacy, which includes such utilitarian skills as keyboarding and the use of commercial software packages and the Internet, but for a deeper understanding of the essential concepts, methods and wide-ranging applications of computer science. Students should gain hands-on

	exposure to the process of algorithmic thinking and its realization in the form of a computer program, to the use of computational techniques for real-world problem solving, and to such pervasive computational themes as modeling and abstraction, modularity and reusability, computational efficiency, testing and debugging, and the management of complexity. Where feasible, active learning, higher-level thinking, and creative design should be encouraged by situating new concepts and techniques within the context of applications of particular interest to a given student or project team.

There exists a passion for comprehension, just as there is a passion for music. That passion is rather common in children, but gets lost in most people.

– Albert Einstein

To seize these opportunities, teachers and schools must connect students with the dynamic world of STEM. In turn, this requires that teachers, schools, and school systems have a deep understanding of STEM activities in American society and business and that they maintain direct connections to appropriate STEM expertise.

Summary of a K-6 STEM Educational Experience

STEM education in K-6 relies on our ability to motivate and inspire students. This involves creating exciting opportunities for students to have individual or team-oriented experiences with the ideas, discoveries, and emerging knowledge in STEM fields. Two key avenues can provide students with experiences that allow them to explore and challenge themselves with STEM. The first, is out-of-class and after school programs that includes activities such as tutoring, contests, laboratory experiments, computer science, field trips, science related movies, physical activities and much more. The second is advanced courses that press students to set ambitious goals and achieve at higher levels.

All students will have opportunities to have these two kinds of experiences at SLSA. In particular, girls and members of minority groups underrepresented in science and engineering can find inspiration in these activities and mentors and role models, paid for and invited by the School that encourage them to study STEM subjects and enter STEM professions. The dynamic nature of science, technology, engineering, and mathematics – where new advances are constantly expanding our knowledge of the physical, biological, and social world – has enormous implications for STEM education. By making abundantly clear to students how many discoveries remain to be made and the role students at SLSA can play in solving important problems, we are indeed confident that our tireless efforts and passions in STEM education will excite and motivate our students to learn, appreciate, become excited and inspired by science and mathematics and to pursue careers in STEM fields.

The STEM Framework

The development of STEM proficient students begins early in K-6 elementary school. In the elementary grades, our students will apply the rigors of science, technology, engineering, and mathematic content and the STEM Standards of Practice while engaged in learning activities that investigate the natural world. Students explore technology and engineering solutions and appropriately apply the concepts of mathematics in order to understand and address real life issues and solve problems or challenges. As

students' progress through San Leandro STEM Academy they will begin to independently integrate the STEM Standards of Practice. They will understand how to apply the roles and views of STEM career professionals and analyze real world STEM issues, problems, or challenges as they incorporate STEM content, skills, and practices and other disciplines such as social studies, arts, and health.

Our adopted STEM Standards of Practice[11] will serve as the framework to how San Leandro STEM Academy's curriculum is chosen, how lessons plans are designed, how extracurricular activities including field trips are planned, how guest speakers and lecturers are selected, how teachers are hired and continually trained, and how the extended after school programs will be patterned. The practices are comprised of seven (7) concepts detailed and expounded upon in principle and in projected achievements and results.

STEM Standard of Practice 1: Learn and Apply Rigorous Science, Technology, Engineering, and Mathematics Content		
A. Demonstrate an understanding of science, technology, engineering, and mathematics content.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Name concepts presented in grade level science, technology, engineering, and mathematics content. ▪ Match picture connections between content and real life. ▪ Retell which science practices and Standards for Mathematical Practices are being used when solving problems. ▪ Identify the steps of the engineering design process when engaged in STEM activities. ▪ Identify the California Technology Literacy Standards for Students.	▪ Recall and apply concepts presented in grade level science, technology, engineering, and mathematics content. ▪ Make connections between content and real life. ▪ Apply California Technology Literacy Standards for Students, science practices, or Standards for Mathematics Practices to use when solving problems. ▪ Use the engineering design process when engaged in STEM activities to solve real world problems.	▪ Explain concepts presented in grade level science, technology, engineering, and mathematics content. ▪ Describe connections between science, technology, engineering, and mathematics content and real life. ▪ Give examples of science practices or Standards for Mathematics Practices being used when solving problems. ▪ Write a plan using the engineering design process when engaged in STEM activities. ▪ Demonstrate an understanding of California Technology Literacy Standards for Students when engaged in STEM activities.

STEM Standard of Practice 1: Learn and Apply Rigorous Science, Technology, Engineering, and Mathematics Content

[11] Maryland Department of Education STEM Framework of Study

B. Apply science, technology, engineering, and mathematics content to answer complex questions, to investigate global issues, and to develop solutions for challenges, and real world problems.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Begin to think and ask questions about science and mathematics content. ▪ Recall science or mathematics content to answer questions or solve real world problems. ▪ Name science or mathematics content or practices when exploring global issues. ▪ Tell how science, technology, engineering, or mathematics content is used by people every day.	▪ Determine how science, technology, engineering, or mathematics content can be used to better human life. ▪ Apply science, technology, engineering, or mathematics content, practice, or process when identifying and defining global issues. ▪ Choose the appropriate science and mathematics content to ask and answer complex questions or solve real world problems. ▪ Apply problem-solving skills to science and mathematics content.	▪ Employ problem solving skills to science and mathematics content. ▪ Use the appropriate science, technology, engineering, and mathematics content to solve real world problems or ask and answer complex questions. ▪ Show the appropriate science, technology, or mathematics content when charting historical societal changes. ▪ Examine ways science, technology, engineering, or mathematics content knowledge is used to better human life.

STEM Standard of Practice 2: Integrate Science, Technology, Engineering, and Mathematics Content		
A. Analyze interdisciplinary connections that exist within the science, technology, engineering, and mathematics disciplines and other disciplines.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Discover the connections between science, technology, engineering, and mathematics disciplines and other disciplines. ▪ Retell information from science, technology, engineering, and mathematics information to answer questions, investigate global issues, or solve real world problems or challenges. ▪ Begin to understand science practices or Standards for	▪ Explain connections between science, technology, engineering, and mathematics disciplines and other disciplines. ▪ Illustrate the appropriate connections between science, technology, engineering, and mathematics content to answer complex questions, investigate global issues, or solve a real world problems or challenges.	▪ Demonstrate how to connect science, technology, engineering, and mathematics disciplines to other disciplines. ▪ Critique the appropriate connections between science, technology, engineering, and mathematics content to answer complex questions, investigate global issues, or solve real world problems or challenges. ▪ Explain the process of using science practices or Standards

Mathematical Practices when solving real world problems or challenges.	▪ Identify and apply science practices or Standards for Mathematical Practices when answering complex questions, investigating global issues, and solving real world problems or challenges.	for Mathematical Practices when answering complex questions, investigating global issues, or developing solutions to real world problems or challenges.

STEM Standard of Practice 2: Integrate Science, Technology, Engineering, and Mathematics Content		
B. Apply integrated science, technology, engineering, and mathematics content to answer complex questions, to investigate global issues, and to develop solutions for challenges and real world problems.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Recall connections between grade level science and mathematics content. ▪ Retell science or mathematics content to answer questions or solve problems ▪ Match one or more STEM content areas using pictures or objects to answer questions, explore global issues or solve real world problems or challenges.	▪ Identify and apply the appropriate science information when investigating global issues or solving real world problems or challenges. ▪ Compare and contrast information from science, technology, engineering, and mathematics to answer complex questions. ▪ Demonstrate the ability to connect multiple contents when answering complex questions, investigating global issues, or solving real world problems or challenges and justify those connections	▪ Summarize and apply science, technology, engineering, and mathematics content when answering complex questions, investigating global issues and solving real world problems or challenges. ▪ Demonstrate an understanding of how to integrate practices, as appropriate to other disciplines, when answering complex questions, investigating global issues, defining real world problems, developing models, or developing solutions to real world problems or challenges. ▪ Explain why one connects multiple contents when answering complex questions, investigating global issues, defining real world problems, developing models, and developing solutions to real world problems or challenges.

STEM Standard of Practice 3: Interpret and Communicate Information from Science, Technology, Engineering, and Mathematics

A. Identify, analyze, and evaluate appropriate science, technology, engineering, and mathematics information (text, visual, audio, etc.).		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Listen to text, visual or audio information from science, technology, engineering or mathematics content. ▪ Participate in conversation with adults and peers. ▪ Ask questions to clarify meaning. ▪ Recall global issues from text, visual, audio, etc. ▪ Discover real world problems through multiple sources.	▪ Identify and compile information from appropriate sources (text, visual, audio, etc.) from science, technology, engineering, or mathematics to aide in answering complex questions, investigating global issues, solving real world problems or challenges. ▪ Compare and contrast information gathered from multiple sources when, investigating global issues, real world problems or challenges.	▪ Read, listen or view (text, visual, audio, etc.) information related to science, technology, engineering, and mathematics to answer complex questions, investigate global issues, or solve real world problems, or challenges. ▪ Analyze multiple sources of information to understand complex questions, investigate global issues, real world problems or challenges

STEM Standard of Practice 3: Interpret and Communicate Information from Science, Technology, Engineering, and Mathematics		
B. Apply appropriate domain specific vocabulary when responding and discussing science, technology, engineering, and mathematics content.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ With modeling and support, answer questions about unknown words in text. ▪ With modeling and support, activate prior knowledge and experiences to determine the meaning of unknown words. ▪ With modeling and support, use text, illustrations, graphics aides (e.g. print features, size of print, illustrations/photographs, drawings, maps, graphs and diagrams) to identify meaning of unknown words. ▪ Draw or write symbols or words used in science,	▪ Access prior knowledge and experiences to determine and clarify meaning of words and phrases in a text. ▪ Comprehend symbols and words used in science, technology, engineering and mathematics. ▪ Determine the meaning of words, phrases, and or symbols in text relevant to grade 2 topics or subject areas. ▪ Use text features to clarify meaning of words and phrases and enhance comprehension of in informational text.	▪ Determine the meaning of general academic and domain-specific vocabulary or phrases in text relevant to grade 5 topic or subject areas. ▪ Determine the meaning of symbols, words or key terms used in science, technology, engineering, and mathematics. ▪ Apply appropriate academic and domain-specific vocabulary when responding either orally or in writing to text-specific questions. ▪ Use academic and domain-specific vocabulary when explaining either orally or in

technology, engineering or mathematics.		writing the organizational structure of a text or print of a text. ▪ Apply academic and domain-specific vocabulary when writing about or discussing informational texts. ▪ Apply academic and domain-specific vocabulary to discuss and/or write any types of relations

STEM Standard of Practice 3: Interpret and Communicate Information from Science, Technology, Engineering, and Mathematics		
C. Engage in critical reading and writing of technical information.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Develop awareness of strategies that are used to monitor understanding before, during, and after reading, viewing, or listening to informational text ▪ Listen to a wide variety of complex texts, (e.g. grade/age appropriate science, technology, engineering, or mathematics texts. Recognize that thoughts and ideas can be represented in drawing and writing. ▪ Generate ideas by using letter-like shapes, symbols, and letters, dictating words and phrases, and using drawings to represent ideas.	▪ Engage in critical reading of informational texts by Pre-reading/engaging with text. Reading words and symbols from informational text to examine meaning. ▪ Reread to identify central ideas and key supporting details. Comprehending informational text. Summarizing informational text ▪ Engage in writing informational texts by, Understanding the difference between narrative and technical writing. Writing informative/expository texts to answer complex questions, respond to global issues.or	▪ Apply appropriate strategies before reading, viewing, or listening to text ▪ Analyze words and symbols from informational text to examine meaning. ▪ Summarize an informational text, either orally or in writing, including the main ideas and significant supporting information from across the text ▪ Draft introduction that addresses audience needs and the writing purpose. Create models, graphics and drawings to communicate relevant textual evidence.

STEM Standard of Practice 3: Interpret and Communicate Information from Science, Technology, Engineering, and Mathematics
D. Evaluate and integrate sources of information (e.g.: quantitative data, video, and multimedia) presented in diverse formats.

Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	Grades: 1 – 2 Essential Skills and Knowledge By the end of grade 2, students should be able to:	Grades: 3 – 6 Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Name one or more sources of information from science, technology, engineering, or mathematics. ▪ List different sources of information. ▪ Match pictures to words using multiple sources of information. Use texts or sources to encourage students to ask and answer questions, explore global issues or solve real world problems or challenges.	▪ Identify and locate numerous information sources to answer complex questions, investigate global issues, and solve real world problems or challenges. ▪ Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently. ▪ Organize information from multiple texts or sources to answer complex questions, investigate global issues, or solve real world problems or challenges	▪ Sources of information from science, technology, and mathematics to address questions, investigate global issues or solve real world problems or challenges. ▪ Analyze multiple sources for accuracy and relevancy. ▪ Compare and contrast the overall structure (e.g. chronology, comparison, cause/effect, and problem/solution) of events, ideas, concepts, or information in two or more texts. ▪ Analyze information from multiple texts or sources to answer complex questions, investigate global issues, and solve real world problems or challenges.

STEM Standard of Practice 3: Interpret and Communicate Information from Science, Technology, Engineering, and Mathematics		
E. Develop an evidence-based opinion or argument.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Participate in a discussion about learning experiences that simulates and guides thinking to express an opinion. ▪ After discussion, express an opinion by completing a cloze sentence orally, with a drawing, dictation or developmentally appropriate writing. ▪ Listen to the opinion of others. ▪ After discussion, apply the prewriting and planning stages	▪ Form an opinion based on prior knowledge and information provided. ▪ Differentiate between facts and opinion within a specific source. ▪ Listen and respond appropriately to the opinion of individuals and/or groups. ▪ Draft a concluding statement that restates the opinion.	▪ Apply the prewriting and planning stages of the writing process to include formulating an opinion. ▪ Differentiate facts or reasons from opinion(s) and select facts and/or details that support reasons. ▪ Critique the opinions/arguments of individuals and/or group.

of the writing process to an opinion.		▪ Write a conclusion that paraphrases the opinion or point of view. ▪ Cite sources to support an evidence-based opinion.

STEM Standard of Practice 3: Interpret and Communicate Information from Science, Technology, Engineering, and Mathematics		
F: Communicate effectively and precisely with others.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Connect personal/prior knowledge and experiences. ▪ Choose appropriate visuals to match presentations. ▪ Use available technology appropriately to display ideas. ▪ Ability to formulate questions targeted to specific needs. ▪ Speak clearly enough to be heard and understood. ▪ Communicate thoughts and ideas.	▪ Distinguish between relevant and irrelevant details. ▪ Use a variety of formats to prepare the finding/conclusions of an information need for sharing. ▪ Use technology to record and organize data/information. ▪ Ask and answer questions such as who, what, where, when, why, and how to facilitate understanding of key details ▪ Use appropriate non-verbal techniques to enhance communication, e.g., posture, eye- contact, facial expressions, gestures. Communicate understanding of information to others	▪ Select print, online, and multimedia sources with appropriate facts and relevant descriptive details about topic. ▪ Share information in an appropriate format for written, oral, sound, and/or visual presentations. ▪ Differentiate media types for audience, environment, and purpose of presentation. ▪ Take notes and record information in a variety of formats as needed, including technology. ▪ Use appropriate non-verbal techniques to enhance communication, e.g., posture, eye- contact, facial expressions, gestures. ▪ Communicate thoughts and ideas through a variety of forms, e.g. written, visual or auditory.

STEM Standard of Practice 4: Engage in Inquiry		
A. Ask to identify and define global issues, challenges and real world real world problems.		
Grade: Kindergarten Essential Skills and Knowledge	**Grades: 1 – 2** Essential Skills and Knowledge	**Grades: 3 – 6** Essential Skills and Knowledge

With prompting and support, students will be able to:	By the end of grade 2, students should be able to:	By the end of grade 6, students should be able to:

▪ Ask and answer questions:
  ○ about content specific books.
  ○ related to global issues to solve real world problems or challenges.
▪ Pose/ask questions about the problem/situation.
▪ Ask and/or answer who, what, where, how, when and why questions.
▪ Make predictions based on personal interest, interests of others, or issues or problems around them.
▪ Ask questions to make sense of an issues or problem.
▪ Ask or change a question to address issues or to solve problems.
	▪ Ask multiple questions to identify and define:
	  ○ global issues.
	  ○ real world problems or challenges
	▪ Pose/ask questions about the problem/situation using question words (e.g. who, what, where, how, when and why)
	▪ Identify what did not make sense.
	▪ Make predictions or ask questions.
	▪ Ask additional or clarifying questions when relevant and appropriate to further investigate global issues or to solve real world problems or challenges.
		▪ Ask complex questions related to:
		  ○ science, technology, engineering, and mathematics.
		  ○ investigating global issues, solving real world problems or challenges.
		▪ Pose questions that elicit higher order thinking responses.
		▪ Use prior knowledge to individually formulate and refine questions to meet an informational needed.
		▪ Create research questions about global issues, social problems or challenges that are grade level appropriate and based on student or class interest.
		▪ Use background information to refine researchable questions.
		▪ Refine questions to investigate global issues or to solve real world problems or challenges.
		▪ Develop a plan for how the answer complex questions about real world problems or situations.

STEM Standard of Practice 4: Engage in Inquiry		
B. Conduct research to refine questions and develop new questions.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:

▪ With modeling and support,
  ○ Listen to information related to science, technology, engineering, or mathematics.
  ○ Discuss topic related to student, school or community interests, issues, or problems.
  ○ Ask and answer questions to better understand the questions, problems, or issues
▪ Explore books that have information about science, technology, engineering, and mathematics.
▪ Learn how to change individual or group questions and create new questions.
	▪ Identify and gather appropriate information from science, technology, engineering, and mathematics content to investigate global issues, real world problems, or challenges.
	▪ Begin to apply note-taking strategies when searching information related to STEM.
	▪ Critically review information to better understand complex questions, real world problems, or global issues.
	▪ Ask complex questions related to:
	  ○ Science, technology, engineering, and mathematics.
	  ○ Investigating global issues, solving real world problems, or challenges.
	▪ Create new questions using information from science, technology, engineering, and mathematics content, to further investigate global issues, real world problems, or challenges.
		▪ Identify evidence needed to solve real world problems, or challenges.
		▪ Collect information that may affect the understanding of complex questions, real world problems, or global issues.
		▪ Use keywords and text features to find information within a specific source.
		▪ Develop new questions using information from science, technology, engineering, and mathematics content.
		▪ Reflect on and refine research questions, theses, hypotheses, or positions based on new information discovered in the inquiry process.
		▪ Refine questions based on information/evidence found by individual and/or group researched.
		▪ Apply safe practices for both assignment-related and personal online searches.

STEM Standard of Practice 5: Engage in Logical Reasoning		
A. Engage in critical thinking.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Utilize the five senses; look, feel, taste, hear, and smell, while engaged in thinking	▪ Determine what information is important/relevant when	▪ Construct answers to complex questions while investigating global issues, and developing

about science, technology, engineering, and mathematics related topics. ▪ Engage in conversation with peers and adults using appropriate vocabulary and symbols in sentences. ▪ Verbally describe an object based on its physical characteristics. ▪ Draw and write words or symbols to communicate his/her thoughts, ideas or knowledge. ▪ Repeat one's own thoughts and the thoughts of others.	asking and answering complex questions. ▪ Make connections and explain relationships among the questions, global issues and real world problems. ▪ Reflect on one's own thoughts while engaged in decision-making, investigation, and/or problem-solving (e.g. what do I already know about this topic, or KWL strategy). ▪ Recognize and reflect upon the thoughts of others while engaged in decision- making, investigation, or problem-solving.	solutions to real world problems or challenges. ▪ Analyze the relationships and connections between the question and global issues, real world problems or challenges. ▪ Create a plan or strategy for answering complex questions, solving global issues, and/or addressing real world problems. ▪ Demonstrate an ability to reflect on one's own thoughts and the thoughts of others. ▪ Evaluate one's own reflection and the reflections of others while engaged in decision-making, investigation, or problem-solving.

STEM Standard of Practice 5: Engage in Logical Reasoning		
B. Evaluate, select, and apply appropriate systematic approaches (scientific investigations, engineering design processes, and science practices and Standards for Mathematical Practices).		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Begin to apply step by step strategies for practicing what is learned in science, technology, engineering, and mathematics. ▪ Begin asking questions, exploring global issues or solving real world problems. ▪ Find information to answer questions or solve real world problems. ▪ Refine steps to see a different answer or solution. ▪ Draw or write a picture of one's mental image of the steps when investigating global issues or solving real world problems or challenges.	▪ Identify grade appropriate systematic approaches that can be used to ask complex questions, investigate global issues, and solve real world problems or challenges. ▪ Compare systematic approaches to select the best approach to solving real world problems or challenges (e.g. Engineering Design Process, Scientific Process). ▪ Evaluate systematic approaches that can be used to explore questions, global issues or real world problems. ▪ Apply a systematic approach to answer complex questions,	▪ Select the grade appropriate systematic approach: scientific or engineering design process etc. to investigate global issues or solve real world problems or challenges. ▪ Determine whether systematic approaches can be applied to multiple disciplines. ▪ Evaluate systematic approaches that can be used to explore questions, global issues, or real world problems. ▪ Monitor the progress toward answering questions, investigating global issues or solving real world problems or challenges.

▪ Recall previous steps. ▪ Recognize ideas can be repeated. ▪ Begin to use science practices and Standards for Mathematical Practices to solve real world problems or challenges.	investigate global issues or solve real world problems. ▪ Evaluate the appropriateness and effectiveness of the selected systematic approaches and continue, modify, or replace the systematic approach.	▪ Analyze and interpret data accurately and appropriately ▪ Evaluate and explain why some information may not be found or known. ▪ Apply and evaluate systematic approaches when designing new or yet to be invented models, and to solve current or future real world problems. ▪ Apply science practices and Standards for Mathematical Practices to answer complex questions, investigate global issues, and solve real world problems.

STEM Standard of Practice 5: Engage in Logical Reasoning		
C. Apply science, technology, engineering, and mathematics content to construct creative and innovative ideas.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Explore products/models that use science, technology, engineering, and mathematics. ▪ Identify products/models. ▪ Manipulate materials to create new ideas. ▪ Build simple model. ▪ Use a mixture of tools to solve real world problems and meet challenges. ▪ Explain their model to others.	▪ Ask and answer questions through gathering and synthesizing information to construct new ideas. ▪ Ask questions to explore possible solutions to real world problems. ▪ Engage in projects to create products/models/prototypes that use the knowledge of science, technology, engineering, and mathematics content. ▪ Identify creative tools, products and current processes used today, or that may be invented in the future to solve real world problems and/or improve processes or systems.	▪ Create or improve upon innovative ideas or existing products that use the knowledge of science, technology, engineering, and mathematics content. ▪ Ask and answer complex questions to construct creative and innovative ideas. ▪ Imagine and brainstorm ways to find possible solutions to current real world problems or challenges. ▪ Design models that show innovation and creativity. ▪ Present finished models or future plans for designing and building creative and innovative models in a public speak, display or exhibit.

	▪ Develop solutions through creating products/models/prototypes for challenges and real world problems. ▪ Present finished products/models/prototypes through public speaking, displays or exhibits.	

STEM Standard of Practice 5: Engage in Logical Reasoning		
D. Analyze the impact of global issues and real world problems at the local, national, and international levels.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Identify home, school neighborhood and community through pictures and words. ▪ Identify and describe how a globe and maps can be used to help people locate places. ▪ Brainstorm real world problems that occur in the home, school, neighborhood or community. ▪ Understand the past and present when exploring global issues or real world problems. ▪ Discuss historical or current issues and topics using science, technology, engineering, and mathematics content that are relevant to students or other's home, school, neighborhood, or community.	▪ Identify age appropriate global issues that may impact local/national/global decisions. ▪ Use geographic tools to locate and describe places on Earth. ▪ Generate questions that could be asked about the local/national/global issues identified. ▪ Gather information, including data from a variety of print, digital and multimedia resources, to build background knowledge/awareness and answer complex questions about the local/national/global issues identified. ▪ Describe, in detail, and explain global issues past and present. ▪ Describe historical or current events that include science, technology, engineering and mathematics content that may have had an impact on	▪ Demonstrate an understanding of how history changes human life where you live and around the world. ▪ Use geographic tools to locate places and describe human and physical characteristics. ▪ Compare and contrast science, technology, and engineering used past and present. ▪ Research the history or origin of a global issues, real world problems, or challenges. ▪ Gather information, including data from a variety of print, digital and multimedia resources, to build background knowledge/awareness, and to answer complex questions about the global issues identified. ▪ Analyze historical or current events that include science, technology, engineering, and mathematics content and that may have had an impact on changing or making better the life of people, animals, environment at the local,

		national, and international levels.

STEM Standard of Practice 6: Collaborate as a STEM team		
A. Identify, analyze, and perform a science, technology, engineering, and mathematics specific subject matter experts role.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Identify a scientist, technologist, technician, engineer, and mathematician. ▪ Recognize workers as human resources. ▪ Explore different STEM specific subject matter experts' roles. ▪ Ask questions to learn what a scientist, technologist, technician, engineer, and mathematician does. ▪ Role play what a scientist, technologist, technician, engineer, and mathematician do in the work place. ▪ Work cooperatively with others when asking and answering questions, investigating global issues, or solving real world problems, or challenges.	▪ Identify a STEM team's goal before engaging in STEM activities. ▪ Identify examples of specialized jobs in local/national/global settings (e.g. nurses, truck drivers, lawyers, and postal workers ▪ Identify science, technology, engineering, and mathematics specific subject matter expert(s) and the knowledge they have that makes them experts in their given area. ▪ Determine which STEM professional each team member will play. ▪ Begin to apply knowledge from science, technology, engineering, and mathematics when performing SME roles. ▪ Role-play a scientist, technologist, technician, engineer, and mathematician while engaged in STEM activities/tasks such as working to solve real world problems. ▪ Demonstrate the willingness and positive behaviors to cooperate and collaborate with others.	▪ Analyze and apply knowledge using science, technology, engineering, and mathematics content while engaged in a specific subject matter expert role(s). ▪ Describe how available resources affect specialization and trade. ▪ Identify and analyze the different STEM professions. ▪ Identify and employ themselves or others as subject matter experts. ▪ Employ the willingness and positive behaviors to cooperate and collaborate with others. ▪ Perform multiple duties of the subject matter expert within a group or team to complete a task(s). ▪ Determine the STEM team's goal before engaging in STEM activities.

STEM Standard of Practice 6: Collaborate as a STEM team		
B. Share ideas and work effectively with a STEM focused multidisciplinary team to achieve a common goal.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Identify the importance of rules. ▪ Understand the rules and expectations of working in a group or team. ▪ Share ideas and work with others in a timely manner to complete a common task or goal. ▪ Identify a STEM role, such as time keeper. ▪ Perform a STEM role.	▪ Explain how rules promote orderliness, fairness, responsibility, privacy, and safety. ▪ Collaboratively generate ideas to achieve a common goal by: o Brainstorming ideas. o Asking questions and listening to questions from others. o Sharing ideas with others. o Receiving ideas and suggestions of others. ▪ Develop a plan of action in order to achieve a common goal by: o Working cooperatively with others. o Identifying a goal. o Designing a plan /selecting a systematic approach to use to meet set goal. o Implementing the plan/systematic approach to meet set goal o Sharing plans/approaches and finished products/models/prototypes with others.	▪ Explain the role of individuals and groups in creating rules and laws to maintain order, protect citizens, and provide services. ▪ Develop and follow group rules and procedures. ▪ Develop personal and group performance goals and expectations before and during STEM activities. ▪ Determine the team's focus to represent a multidisciplinary team. ▪ Comprehend and apply information from others within a STEM focus and multidisciplinary team to achieve a common goal. ▪ Demonstrate perseverance while working with others a STEM focus and multidisciplinary team to complete a task or common goal. ▪ Develop a plan of action to achieve a common goal. Assess individual or team's progress on meeting the goal of STEM activities.

STEM Standard of Practice 6: Collaborate as a STEM team *STEM proficient students will collaborate as a STEM team to answer complex questions, to investigate global issues, and to develop solutions for challenges, and real world problems.*		
C. Listen and be receptive to ideas of others.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Listen and respond appropriately to ideas of others and use other's ideas as appropriate when completing a team task. ▪ Listen to questions and ideas of others in a team. ▪ Respond to others ideas and questions. ▪ Take turns when others are speaking. ▪ Share ideas with others. ▪ Respect the ideas of others. ▪ Identify, discuss, and demonstrate appropriate social skills, such as listening to the speaker, taking turns, settling and taking turns that help people live, work and play together at home and in school.	▪ Listen to details and ideas generated by the group and respond appropriately to others ideas ▪ Ask questions to understand ideas and thoughts of others. ▪ Identify strategies that promote active listening. ▪ Synthesize information and use others ideas as appropriate when completing a team task. ▪ Identify and demonstrate appropriate social skills necessary for working in a cooperative group, such as sharing concern, care and respect among group members.	▪ Listen to and receive the *science*, *technology*, *engineering*, and *mathematics* content knowledge, personal experiences, ideas, and view point/perspectives of others in the team. ▪ Repeat and recall knowledge, experiences, and viewpoints and perspectives of others. ▪ Apply strategies that promote active listening. ▪ Identify the main idea of a group discussion. ▪ Listen and ask questions to get a deeper understanding of key ideas or thoughts of others. ▪ Clarify what others have shared and understand what others have said. ▪ Analyze how conflict affected relationships among individuals and groups, such as early settlers and Native Americans, free, and enslaved people.

STEM Standard of Practice 6: Collaborate as a STEM team *STEM proficient students will collaborate as a STEM team to answer complex questions, to investigate global issues, and to develop solutions for challenges, and real world problems.*		
D. Analyze career opportunities that exist in a variety of STEM fields relevant to the STEM focused multidisciplinary team's goal.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Name a STEM professional. ▪ Identify in picture and word a STEM professional. ▪ Listen to stories or media on STEM professionals. ▪ Make connections to similarities and differences among STEM professionals. ▪ Identify and role play different STEM career professions. ▪ Role play community STEM professionals.	▪ Identify and list several types of STEM professionals. ▪ Research the many roles STEM professional perform in the work place. ▪ Identify specific behaviors and knowledge needed by many STEM professionals to perform their job(s). ▪ Identify and explain how different STEM professionals perform their roles to work together to solve real world problems.	▪ Compare and analyze how assorted careers in the STEM fields engage in teams to solve real world problems and explore solutions to challenges. ▪ Demonstrate an understanding of the content knowledge, skills, and behaviors many STEM professions apply when working as a team to achieve common goal. ▪ Research several engineering careers in order to understand the career knowledge and behavioral expectations from a variety of engineering professions. ▪ Evaluate how different STEM professionals work together to solve real world problems. ▪ Perform the role of a STEM professional to accomplish STEM team goals.

STEM Standard of Practice 7: Apply Technology Strategically		
A. Identify and understand technologies needed to develop solutions to real world problems or construct answers to complex questions.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Explain what technology is.	▪ Define and explain the term technology.	▪ ▪ Demonstrate an understanding of how

▪ Begin to be aware of technology and how it affects life. ▪ Identify different types of technology people use every day. ▪ Sort pictures or objects that represent different types of technology.	▪ Identify examples of technology used by consumers (e.g. automobiles, cameras, telephones, microwaves, televisions, clocks and computers). ▪ Identify ways people use technology to solve real world problems.	technology can help improve human life. ▪ Explain how the development of new products and new technology affected the way people lived. ▪ Research a range of technological tools people use every day. ▪ Ask and answer complex questions about how technology can be used to solve real world problems or challenges. ▪ Identify and explain ways people use technology to solve real world problems or challenges. ▪ Create and write interview questions for professionals in the real world who use technology tools to solve real world problems. ▪ Present information on how technology works in many STEM field.

STEM Standard of Practice 7: Apply Technology Strategically		
B. Analyze the limits, risks, and impacts of technology.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Define the meaning of the words limits and risks. ▪ Identify there are limits using technology. ▪ Identify when risks happen when using technology. ▪ Recognize when technology doesn't work.	▪ Identify limits of technology. ▪ Identify factors that impact the use of technology. ▪ Identify risks in using technology. ▪ List and explain the limitations of technology. ▪ Conclude that all technology has positive and negative impacts and explain several.	▪ Analyze and explain the limits of using technology when searching information, investigating global issues, and solving real world problems or challenges. ▪ Identify and explain the risks in using technology when searching information, investigating global issues, and solving real world problems or challenges.

		▪ Evaluate how technology has positively or negatively impacts human life. ▪ Present to a public audience the limitations and risks of using or not using technology.

STEM Standard of Practice 7: Apply Technology Strategically *STEM proficient students will apply technology appropriately to answer complex questions, to investigate global issues, and to develop solutions for challenges, and real world problems.*		
C. Engage in responsible/ethical use of technology.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Learn and apply the rules of using technology and sharing technology with others. ▪ Use gentle and positive behaviors when using technology. ▪ Take turns when using technology. ▪ Apply the appropriate use ~ state and district policy.	▪ Know and apply rules when using a variety of technologies. ▪ Apply the appropriate use ~ state and district policy. ▪ Recognize and apply the policy of copyright protection. ▪ Develop positive social behaviors when using technology. ▪ Apply respectful and responsible behaviors while using technology. ▪ Identify and apply digital etiquette behaviors.	▪ Identify and demonstrate rules and responsibilities when using technology. ▪ Employ the policy of copyright protection when using information from numerous electronic devices ▪ Employ responsible and ethical behaviors when searching multiple online and digital resources using various technology tools, and sharing information while using different social media. ▪ Adhere to the safety guidelines, policies, and intended use of technological tools (e.g. copyright protections, cyber safety and ethics, school and school district technology use policy). ▪ Practice digital etiquette when sharing findings and conclusions. ▪ Apply the school and school district use of technology policy.

STEM Standard of Practice 7: Apply Technology Strategically *STEM proficient students will apply technology appropriately to answer complex questions, to investigate global issues, and to develop solutions for challenges, and real world problems.*		
D. Improve or create new technologies that extend human capacity.		
Grade: Kindergarten Essential Skills and Knowledge With prompting and support, students will be able to:	**Grades: 1 – 2** Essential Skills and Knowledge By the end of grade 2, students should be able to:	**Grades: 3 – 6** Essential Skills and Knowledge By the end of grade 6, students should be able to:
▪ Distinguish among past, present, and future times. ▪ Understand that technology changes over time. ▪ Identify past and present technology through pictures. ▪ Identify time or date using technology. ▪ Understand how timelines show a progression over time. ▪ Draw and write new ideas to better technology. ▪ Draw or build safe simple model using technology or technological tools. ▪ Explain how technology affects the way people live, work, and play. ▪ Begin to be aware of technology and how it affects life.	▪ Analyze the chronology and significance of key events (related to technology) during the age of European exploration (or today). ▪ Demonstrate an understanding of how technology can change. ▪ Create ideas and model products that can improve the life of people and animals. ▪ Share creative and innovative ideas and models to a public audience or view for public display. ▪ Design and build models using technological tools. ▪ Explain how the development of new	▪

Seven Behavioral Skills Students Need for Their Future

Concept Statement	Description	Projected Achievement Results
Learn and Apply Rigorous Science, Technology, Engineering, and Mathematics Content	STEM proficient students will learn and apply rigorous content within science, technology, engineering, and mathematics disciplines to answer complex questions, to investigate global issues, and to develop solutions for	▪ Demonstrate an understanding of science, technology, engineering, and mathematics content. ▪ Apply science, technology, engineering, or mathematics content to answer complex questions, to investigate global issues, and to develop solutions for challenges and real world problems.

Concept Statement	Description	Projected Achievement Results
	challenges and real world problems.	
Integrate Science, Technology, Engineering and Mathematics Content	STEM proficient students will integrate content from science, technology, engineering, and mathematics disciplines as appropriate to answer complex questions, to investigate global issues, and to develop solutions for challenges and real world problems.	▪ Analyze interdisciplinary connections that exist within science, technology, engineering, and mathematics disciplines and other disciplines. ▪ Apply integrated science, technology, engineering, mathematics content, and other content as appropriate to answer complex questions, to investigate global issues, and to develop solutions for challenges and real world problems.
Interpret and Communicate Information from Science, Technology, Engineering, and Mathematics	STEM proficient students will interpret and communicate information from science, technology, engineering, and mathematics to answer complex questions, to investigate global issues, and to develop solutions for challenges and real world problems.	▪ Identify, analyze, and synthesize appropriate science, technology, engineering, and mathematics information (text, visual, audio, etc.) ▪ Apply appropriate domain-specific vocabulary when communicating science, technology, engineering, and mathematics content. ▪ Engage in critical reading and writing of technical information. ▪ Evaluate and integrate multiple sources of information (e.g.: quantitative data, video and multimedia) presented in diverse formats. ▪ Develop an evidence-based opinion or argument. ▪ Communicate effectively and precisely with others.
Engage in Inquiry	STEM proficient students will engage in inquiry to investigate global issues, challenges, and real world problems.	▪ Ask questions to identify and define global issues, challenges, and real world problems. ▪ Conduct research to refine questions and develop new questions.
Engage in Logical Reasoning	STEM proficient students will engage in logical reasoning to answer complex questions, to investigate global issues,	▪ Engage in critical thinking. ▪ Evaluate, select, and apply appropriate systematic approaches (scientific and engineering practices, engineering design

Concept Statement	Description	Projected Achievement Results
	and to develop solutions for challenges and real world problems.	process, and/or Standards for mathematical Practices). ▪ Apply science, technology, engineering, and mathematics content to construct creative and innovative ideas. ▪ Analyze the impact of global issues and real world problems at the local, state, national, and international levels.
Collaborates as a STEM Team	STEM proficient students will collaborate as a STEM team to answer complex questions, to investigate global issues, and to develop solutions for challenges and real world problems.	▪ Identify, analyze, and perform a STEM specific subject matter expert role. ▪ Share ideas and work effectively with a STEM focused multidisciplinary team to achieve a common goal. ▪ Listen and be receptive to ideas of others. ▪ Analyze career opportunities that exist in a variety of STEM fields relevant to the STEM focused multidisciplinary team's goal.
Apply Technology Strategically	STEM proficient students will apply technology appropriately to answer complex questions, to investigate global issues, and to develop solutions for challenges and real world problems.	▪ Identify and understand technologies needed to develop solutions to problems or construct answers to complex questions. ▪ Analyze the limits, risks, and impacts of technology. ▪ Engage in responsible/ethical use of technology. ▪ Improve or create new technologies that extend human capability.

How Learning Best Occurs

Through project-based instructional approaches with engineering experiences integrated across the curriculum and technology use infused in all core and elective courses, San Leandro STEM Academy will offer a reform approach that is grounded in research for 21st century learning. We will implement a researched-based curriculum in which students participate in challenging, hands-on, project-based learning opportunities that are initiated and fostered by the guided inquiry approach. Classroom, school grounds and community will be utilized as a teaching and learning laboratory that enables students to build real solutions (artifacts) and apply their skills to solve relevant community issues.

San Leandro STEM Academy promotes the idea that learning occurs in an environment where there are shared high expectations for academic performance and proper behavior, and a strong community of individuals dedicated to the support of STEM based education. Robert Marzano, who coordinated a

research team to study instructional techniques in the classroom, published the findings in his book titled Classroom Instruction that Works (2001). Through a meta-analysis of hundreds of studies conducted over the years, conclusions were drawn that supported nine instructional practices which were particularly effective in raising student achievement. The practices identified as effective are the following:

- Identifying similarities and differences
- Summarizing and note taking
- Reinforcing effort and providing recognition
- Providing appropriate homework and practice
- Modeling and allowing for nonlinguistic representations
- Promoting cooperative learning
- Setting objectives and providing feedback
- Generating and testing hypotheses
- Presenting cues, questions, and advance organizers

Teachers will be provided professional development in the use of the practices identified above in order to enhance learning in the classroom. In addition we believe that learning best occurs:

- When students are active participants in the educational program through hands-on lessons, an integrated curriculum, and project-based learning.
- When students are intrinsically motivated by the process of learning, as facilitated by a constructive educational environment, and flexible curriculum adaptive to the needs of individual students.
- When students are engaged in collaborative and cooperative learning, and encounter with their peers under the guidance of knowledgeable adults.
- When students have the opportunity to transition from concrete to abstract thought;

Administrators and Teacher Accountability

The principal and his administrative team as well as all teachers are collectively held accountable to San Leandro STEM Academy and to the school community for implementing the core values, beliefs and best practices, insuring that each and every student gets what they need to achieve their individual and school performance goals. Administrators and teachers are individually and collectively held accountable for meeting multiple targets for academic achievement.

Educational Philosophy

For America to remain economically competitive, our next generation of leaders must develop the critical-reasoning and problem-solving skills that will help make them the most productive in the world. San Leandro STEM Academy will prepare students to be the most innovative and productive leaders in

Science, Technology, Engineering and Mathematics and to make meaningful contributions to our community and the world at large. We believe in providing students a solid foundation and proven path to college and career success especially in STEM related fields. By offering an innovative curriculum we wish to instill and nurture ingenuity, creativity and innovation within all of our students.

Our interdisciplinary STEM curriculum provides an approach to learning where rigorous academic concepts are coupled with real-world problem-based and performance-based lessons. The benefit gained from this interdisciplinary approach exemplifies the axiom "the whole is more than the sum of the parts". There will be support for students who are behind, extra challenge for those who are ready for more advanced work.

Target Population/Community to be Served

SLSA seeks to establish a transformative model for education in the Century. We are creating a model that is designed to address the individual needs and preferences of each child, in every sub- group. We want to demonstrate, quantitatively, that our approach to education produces greater gains in student achievement across the full spectrum of students—from the low achieving students who enter the school with significant deficits, many of whom may have special needs identified in IEPs, to the students who are already performing above grade level.

It is our hope to have a student population that is generally reflective of the overall student population in San Leandro and the East Bay area in terms of special needs, ethnicity, and socio-economic status. So, who in particular is our initial target population? We will seek to attract children whose parents are first and second generation Americans, from families where they are first or second generation prospects to attend college, and those who believe would function optimally in a more flexible, student-centric learning environment, as well as parents who wish to see science, technology, engineering and mathematics utilized more effectively to enhance their respective student's learning experience.

Also, it is our hope that the school's unique orientation, including a strong ELL program, will help attract local families of diverse international backgrounds, including many with limited English language proficiencies.

Surrounding Schools Demographic and Performance Data											
SLUSD Schools	**# Students 2011-2012**	**% eligible for free/reduced lunch**	**% of special Ed.**	**% English Language Learners**	**% African American**	**% Latino**	**% Filipino**	**2013 Growth API**	**2013 API Similar Schools Rank**	**Met school wide growth target?**	**Met subgroup growth target?**
Garfield Elem	422	69.4	12.4	47.4	12.3	47.4	7.6	769	3	No	No
Wilson Elem	789	77.8	6.2	61.9	5.1	55.8	11.1	782	4	2	No
No Charter Schools											

Enrollment Projections

The school will provide instruction to students in grades K-6. During the first year it will enroll 500 students in grades K-6 and follow the enrollment projection shown in the chart below until it enrolls 700 students.

Grade	2014 – 2015	2015 – 2016	2016 – 2017	2017 – 2018	2018 – 2019
K	100	100	100	100	110
1	100	100	100	100	110
2	80	100	100	100	100
3	75	80	100	100	100
4	75	75	100	100	100
5	50	65	70	100	100
6	40	50	50	70	100
Total	**520**	**570**	**620**	**670**	**720**

Instructional Time and Academic Calendar

A number of research studies have demonstrated the relationship between the time on task and student achievement (Stigler, Lee and Stevenson 1987:1283). The academic year will be based on a 180-day semester schedule with 55,860 minutes of instruction exceeding the minimum required by the state of California. Our daily instructional schedule and yearly calendar would have the following features:

Faculty and staff will meet from 2:00 pm to 5:00 pm every other Tuesday, for curriculum planning purposes.

Our instructional time shall be maximized through a reduction in interruptions such as a call to the office, public address announcements, and extra-curricular activities.

Students, faculty and staff will participate in advisory meetings and student assemblies.

Regular Schedule – Rotating Day 1		
Start	End	Activity
7:30	8:00	Breakfast
8:00	8:20	Core Group
8:20	9:35	Math
9:35	10:50	Language Arts Literacy Readers and Writers Workshop

10:50	11:30	Lunch/Recess
11:30	12:30	Science
12:30	1:10	Engineering
1:10	1:25	Recess/Snack
1:25	2:25	Technology
2:25	3:30	Enrichment Activity
Total: 395 Minutes		

Regular Schedule – Rotating Day 2		
Start	End	Activity
7:30	8:00	Breakfast
8:00	8:20	Core Group
8:20	9:35	Math
9:35	10:50	Language Arts Literacy Readers and Writers Workshop
10:50	11:30	Lunch/Recess
11:30	12:30	Science
12:30	1:10	History
1:10	1:25	Recess/Snack
1:25	2:25	Engineering
2:25	3:30	SIC
Total:395 Minutes		

Shortened Day Schedule		
Start	End	Activity
8:20	8:40	Breakfast
8:50	9:00	Circle Time Opening Day
9:00	10:30	Language Arts Literacy Readers and Writers Workshop

10:30	10:50	Snack/Recess
10:55	11:55	Math
12:00	12:35	Lunch & Recess
12:40	1:50	Engineering Social Studies Science
1:50	2:00	Circle Time
Total: 240 Minutes		

Instructional Minutes Chart

Below is the instructional minutes chart for San Leandro STEM Academy:

Number of Instruction Minutes	Grades							
	K	1	2	3	4	5	6	7-12
Days	159	159	159	159	159	159	159	Not offered
Instructional Minutes per Day	320	320	320	320	320	320	320	Not offered
Dismissal Days	1	1	1	1	1	1	1	Not offered
Instructional Minutes Dismissal Days	180	180	180	180	180	180	180	Not offered
Minimum Days	20	20	20	20	20	20	20	Not offered
Instructional per Minimum Days	240	240	240	240	240	240	240	Not offered
Other Days	0	0	0	0	0	0	0	Not offered
Instructional Other Days	0	0	0	0	0	0	0	Not offered
Instructional Days	180	180	180	180	180	180	180	Not offered
State Law	3,600	50,400	50,400	50,400	54,000	54,000	54,000	Not offered
Instructional Minutes	55,860	55,860	55,860	55,860	55,860	55,860	55,860	Not offered
Instructional Minutes Above/Below Required	19,860	5,460	5,460	5,460	1,860	1,860	1,860	Not offered

Instructional Calendar

The instructional Calendar for 2016-2017 is shown below:

2016 – 2017 School Year		
Event	**Description**	**Date**
2016		
Professional Development	▪ Administrators and Staff Training	July 27 – 30
	▪ Faculty Professional Development	August 1 – 5
Back to School	▪ New Parent Orientation	August 1
	▪ New Student Orientation	August 4-5
Semester 1	First and last day of Semester 1	August 18 to December 16
Labor Day	Holiday	September 5
Veteran's Day Observed	Holiday	November 8
Thanksgiving	Holiday	November 2325
Winter Break	Break	December 19 – January 2, 2016
2016		
Semester 2	First and last day of Semester 2	January 3 – June 3
Spring Break		April 10 – April 14
Dr. Martin L. King Jr.'s Birthday Observed	Holiday	January 16
President's Day	Holiday	February 20
Memorial Day Observed	Holiday	May 29

Charter Implementation Plan

Immediately following charter authorization students will be recruited from the target area. Recruitment activities will include an open house community picnic, ice cream social, school marketing presentations in preschools and community centers. A random public enrollment lottery shall be used when admission requests exceed the available space, as expressly described in Education Code § 47605(d) (2). All students who do not gain admission to the school shall be placed on a waiting list. If vacancy occurs during the academic year the parent of the student at the top of the list will be notified immediately and offered the first chance to enroll.

Before being eligible to commence school, all students and their parents or guardians shall meet with a school employee to review the student handbook so that they are informed about the school policies. After reviewing the handbook, the student and parents shall sign a parent and student compact with each accepting to meet the school's expectations. Besides student recruitment other implementation strategies include the following:

Task	Time Frame	Special Notes
1. Develop school-wide goals based on base-line data	August 2015	Utilize student learning results to formulate goals
2. Administrators begin search for facility	January – March 2015	Real Estate Developer partners will assist in this process
3. Administrators communicate the Charter vision	August 2015	All Charter staff revise the missions and values
4. Teachers and staff set goals	September 2015	Should align to the school- wide goals
5. Administrators develop and roll out the accountability plan	September 2015	Teachers will be responsible for submitting the data from their monthly evaluation
6. Each class develops its own mission statement and set of core values	September 2015	Should align to the school mission, visions and values
7. Each employee writes their own personal mission statement	September 2015	Aligned to school mission
8. Teachers will meet and review goals and achievement data weekly	On going	Make necessary adjustments to monthly goals based on data
9. Leadership team will review and analyze the benchmark data three times during the year	October 2015 February 2016 April 2016	Students identified as at risk will receive additional support as recommended by the teachers of the cohorts
10. Parent workshops about STEM will be offered by the school.	September and Ongoing	Invite parents to learn about data portfolios and how to help their children at home
11. Classroom teachers send home first student created newsletter	September and monthly	Improve communication with parents
12. Student led parent conferences	October 2015	Using their data portfolios the students lead their parent conferences under the teachers direction
13. Create awareness among stakeholders for Smarter Balanced Assessment.	April 2016	Improve Standardized Test Scores

14. Parent satisfaction survey	May 2016	Use data to set operational action plans for 2015-16 school year
15. Employee satisfaction survey	May 2016	Use data to set operational action plans for 2015-16 school year
16. Develop school-wide goals for 2015-2016	June 2015	Using school-wide end of year data, determine new targets for 2015-2016

Parent Leadership Development

As partners in education, parents will be active participants and valued partners in our STEM education programs. They will be expected to attend and participate in Parent Advisory Council (PAC) meetings or activities and serve as PAC leaders and/or members. In addition, all parents will have opportunities to participate in the school science fair, math night, family literacy nights, technology night, fundraising opportunities, art and engineering exhibits and various extended day options. Parents will be provided with workshops and other opportunities to develop their understanding of STEM concepts and content. Frequent and meaningful connections with parents and engaging them in conversations about their child's education will also ensure that the academic program reflects the diversity of the community being served.

Through the Parent Advisory Council, parents will be intimately involved in the learning activities of their children. Administrators will facilitate the creation of a Parent Advisory Council (PAC). Through PAC the school will promote parent involvement by offering workshops on parenting that would equip parents to assist their children to be successful in our school and beyond.

SLSA will encourage parents and other responsible adults to provide volunteer service to the school for about 30 hours annually. Attendance at school meetings and participation as chaperones for field trips will count towards this commitment. We will ensure the fullest participation of our Spanish-speaking parents by providing translation services at all meetings. In addition all communication materials including brochures, newsletters, and handbooks will be translated into Spanish. The parent volunteer commitment will not be a condition for student enrollment and nor will it be a requirement for student enrollment. Through parent training workshops, the school will convey the message on how parents can help their children develop good classroom and home study habits. Through parent conferences, and back to school nights, parents will be given an opportunity to know more about the school's academic program as well as their children's performance.

Instructional Strategy and Design

The school is designed to enable students confront challenges, and investigate the world around them at an early age. Teachers will use problem-based instruction to deliver an innovative, hands-on curriculum. Instruction will center on learning Science, Technology, Engineering, and Mathematics, as they impact the real world. The Engineering curriculum will allow students to work, design, and construct the instructional strategies to be employed include the following:

Project Based Learning

Project-based Learning uses an integrated curriculum approach. The goal is to help students formulate and answer meaningful questions using the principles of investigation and drawing on knowledge across subject areas. Students are provided with the tools and support necessary for research and application of new and prior knowledge. In a PBL environment, teachers become coaches and facilitators, while students work on constructing their own knowledge. Students are provided with the tools and support based on developmental level of the students. Project-based learning provides opportunities for all students to develop their own projects as well as assessments. Teachers serve as guides through this process to assure rich and academically rigorous experiences for students.

Research shows that Project-based Learning (PBL) has positive outcomes for student learning in the areas of content knowledge, collaborative skills, engagement and motivation, critical thinking, and problem-solving skills. According to Aral, N., Kandir, A.et.al. (2010) PBL projects promotes students centeredness and allows students to take charge of the learning process. In addition it enables students to develop expert knowledge while exploring a variety of problem. It also allows students to utilize technological tools. The PBL approach and curriculum will be adapted to the needs and abilities of San Leandro STEM Academy K-6 students using the following implementing steps:[12] [13]

1. Crafting essential questions
2. Planning
3. Scheduling
4. Monitoring
5. Assessing
6. Evaluation

Crafting the Essential PBL Question

PBL lessons will begin by posing age, skill and ability appropriate questions that will engage pupils. Questions are designed to be open ended and posed to answer a real-world problem familiar to students. Students will be instructed to understand that “there is no one answer or singular solution to the question posed”.

Thus each project begins with a real-world topic and prompts an in-depth investigation into an authentic situation or topic. Depending on the grade level, such questions could include: What is happening in the classroom? What is happening in the community? Such questions allow students to believe that, by answering, they are having an impact on a real problem that is relevant to them and has meaning in their lives.

Designing a Plan for PBL Projects

Projects will be designed with content standards in mind. Students will be actively involved in planning in such a way as to create a sense of ownership in the project. Activities will be selected by the Teacher

[12] Textbook: https://www.mheonline.com/program/view/1/7/18/0076185524

[13] Textbook: http://www.hmhco.com/shop/education-curriculum/math/saxon-math

to support the question and that utilize a broad curriculum, thus fueling the process. Designs will integrate as many relevant subjects as possible into the project. Teachers must know what materials and resources will be accessible to the students to assist them.

Teachers must be prepared to delve deeper into new topics and new issues that arise as the students become increasingly involved in the active pursuit of answers.

Creating a Schedule

Teachers will design a timeline for project components, accepting that changes to the schedule will happen. Schedules must be flexible, but help the students realize that a time will come when they need to finalize their thoughts, findings, and evaluations. Teachers will consider the following when creating a schedule:

- What time allotment will be given to the project?
- Will this project be conducted during the entire school day or during dedicated blocks of time?
- How many days will be devoted to the project?

Teachers will enable success by practicing the following tactics:

- Help students who may not perceive time limits.
- Set benchmarks.
- Give students direction for managing their time.
- Teach them how to schedule their tasks.
- Remind them of the timeline.
- Help them set deadlines.
- Keep the essential question simple and age appropriate.
- Initiate projects that will let all students meet with success.

Also, teachers will allow students to go in new directions with their project, but guide them when they appear to digress from the project's topic. When a group seems to be going in a different direction, teachers will ask students to explain the reasoning behind their actions. They may have an insight to a solution that teachers did not expect; therefore teachers must help pupils stay on course without accidentally setting limitations.

Monitoring Pupils and the Progress of the Project

To maintain control without preventing students from taking responsibility for their work, teachers will take these steps:

1. Facilitate the process and the love of learning.
2. Teach the students how to work collaboratively.
3. Designate fluid roles for group members.

4. Have students choose their primary roles, but assume responsibility and interactivity for all group roles.
5. Remind them that every part of the process belongs to each individual and needs each student's total involvement.
6. Provide resources and guidance.
7. Assess the process by creating team and project rubrics.

Team rubrics will state the expectations of each team member: Teachers will watch the group dynamics and understand how well members are participating and how engaged pupils are in the process. Finally teachers will assess the outcome.

Project rubrics, on the other hand, will cause teachers to ask these questions: What is required for project completion? What is the final product: A document? A multimedia presentation (where age and skill appropriate)? A poster? A combination of products? What does a good report, multimedia presentation, poster, or other product need to look like? Teachers will make requirements clear to the students so that all pupils can meet with success.

Assessment of the Outcome

Assessment meets many needs. It accomplishes the following:

- Provides diagnostic feedback.
- Helps educators set standards.
- Allows one to evaluate progress and relate that progress to others.
- Gives students feedback on how well they understand the information and on what they need to improve.
- Helps the teacher design instruction to teach more effectively.

Whenever possible, students will be given the opportunity to conduct self-assessment. When a student's assessment and the teacher's assessment don't agree, teachers will schedule a student-teacher conference to let the student explain in more detail his or her understanding of the content and justify the outcome.

Evaluation of the Experience

Students must be able to synthesize new knowledge and therefore must be given time to reflect on what they have discovered. Teachers must designate a time for reflection of the daily activities to allow for individual reflection, such as journaling, as well as group reflection and discussion. (For example, validate what students have learned and make suggestions for improvements.)

To enable effective self-evaluation, teachers will follow these steps:

1. Take time to reflect, individually and as a group.
2. Share feelings and experiences.

3. Discuss what worked well.
4. Discuss what needs change.
5. Share ideas that will lead to new questions and new projects.

Backward Mapping/Backward Design

Backward Mapping/Backward Design is a process in which teachers start with the desired results (goals or standards) – and then derive the curriculum from the evidence of learning (performances) called for by the standard and the teaching needed to equip students to perform. There are three distinct stages of this process that San Leandro STEM Academy will use. The three stages are as follows:

Stage 1: Unpacking and Prioritizing State Content Standards

Teachers and administrators will apply specific tools necessary to —unpack and prioritize content standards and Common Core Standards. This is a necessary pre-requisite step to effectively design assessments that are aligned to standards. Specifically, teachers will:

- Understand the three steps of the backward design process (identifying desired results, designing and aligning assessments to those results, and differentiating instruction to meet the needs of all learners).
- Apply a concrete process for analyzing standards which helps teachers internalize the standards, as well as determine the following information:
    - Level of Cognitive Demands (based on Bloom's Taxonomy) required by students to reach mastery of the standard (this will be tied to creating assessments)
    - STAR exam and the pre-release questions from the Smarter Balance Assessment that relate to each strand of the current Common State Standards (this will be tied to creating assessments)
    - Identification of standards that will serve as —anchors upon which units can be based. Other standards are tied to these —anchor standards within each unit designed by teachers (this will be tied to creating assessments for units as well as individual lessons within the unit).

Teachers in each of the content areas, including Physical Education, Visual and Performing Arts, Engineering, and Technology will use both the California State Content Standards and the Common Core Standards as part of this process.

Stage 2: Aligning Assessments (formative and summative) to content standards

San Leandro STEM Academy's teachers will design effective assessments that are aligned to Common Core Standards and other relevant standards, in order to provide an accurate measure of a student's ability to engage in the level of thinking that is required by each standard. Specifically, teachers will:

- Identify four overarching assessment methods (selected response, constructed response, performance assessment, and personal communication) from which to choose when designing

standards-based assessments (both formative and summative) that include Common Core Standards.

- Analyze content standards to determine the —achievement target embedded within each standard (achievement targets are the link between standards and assessment)
- Match an appropriate assessment method to each standard
- Establish and articulate clear criteria for reaching proficient performance on standards

Stage 3: Differentiating Instruction to Meet the Needs of All Learners

Teachers will design innovative instructional strategies by:

- Differentiating the content, process, and products delivered to students in order to provide equal access to standards-based education for all learners
- Writing effective standards-based lesson plans
- Exploring how all learners (including ELs and special needs students) vary in their readiness, interests and learning profiles).

Using a repertoire of research-based instructional strategies proven to increase student achievement in a standards-based system (e.g. latest research from Marzano, Pickering, Pollock, Schmoker, Tomlinson) Ensuring that all coursework will involve a rich repertoire of instructional strategies, curriculum, and materials. Many of the sample instructional strategies listed below incorporate one or more of the nine research-based strategies proven to have a positive effect on student learning as described in Classroom Instruction that Works (Marzano, Pickering, Pollock, 2001).

- Examples of instructional strategies will include:
- Small projects and other ways of experiencing real-world problems
- Collaborative investigations and demonstrations
- Mini-lessons that address specific skills within the context of larger projects
- Giving guidance and adequate time to self-reflect and self-assess
- Democratic classrooms and school structure
- Authentic assessments
- Direct instruction
- Research based projects
- Cooperative group work and projects

As a result of implementing and using this process, educational objectives become the criteria by which materials are selected, content is outlined, instructional procedures are developed, and tests and examinations are prepared. Teachers will use the process on a continual basis to evaluate if students are mastering content. Specifically, all teachers will be charged with the responsibility of meeting weekly, as

a staff, to engage in lesson study and the examination of student work in order to critically examine lessons to determine their effectiveness.

Core Textbooks

San Leandro STEM Academy proposes to adopt the following textbooks for the core subject areas:

Subject	Publisher/Title	Grade Level
English Language Arts	SRA-McGraw Hill-Imagine It	K-6
Mathematics	California Saxon	K-6
Science	Harcourt (California edition)	K-6
Social Studies	McGraw Hill- Time Links	K-6
ELD	McMillian/McGraw-Tesoros de Lectura	K-6

Curriculum

Our curriculum will give children the opportunity to become natural learners. We believe that growth is developmental and that San Leandro STEM Academy will be prepared to assist students at different developmental levels socially and emotionally. Technology use and training will be infused into all core and elective courses.

Taken separately, the four STEM subjects are defined by the National Research Council as:

- Science is the study of the natural world, including the laws of nature associated with physics, chemistry, and biology and the treatment or application of facts, principles, concepts, or conventions associated with these disciplines.
- Technology comprises of the entire system of people and organizations, knowledge, processes, and devices that go into creating and operating technological artifacts, as well as the artifacts themselves.
- Engineering is a body of knowledge about the design and creation of products and a process for solving problems. Engineering utilizes concepts in science and mathematics and technological tools.
- Mathematics is the study of patterns and relationships among quantities, numbers, and shapes. Mathematics includes theoretical mathematics and applied mathematics.

Engineering Curriculum

Early engineering experiences will be integrated across the curriculum. In addition to the Project Lead the Way (PLTW) curriculum, San Leandro STEM Academy will utilize Engineering is Elementary (EiE). EiE is one of the first engineering curricula in the United States designed for elementary school- aged children. The curriculum incorporates engineering and science inquiry with regional case studies. Developed by educators with the Museum of Science's National Center for Technological Literacy Integrated Science Labs ® (National Center for Technological Literacy, NCTL http://nctl.org), the focus is

to enhance society's knowledge of engineering and technology. The EiE curriculum underscores the following:

- Scientists investigate the natural world and generate scientific knowledge using the scientific method.
- Technologies are the products and processes created by engineers who apply mathematics and science knowledge. Almost everything made by humans to meet a need is a technology, e.g., a telephone, a drainage system, a bridge.
- Engineers typically find solutions for societal problems. Engineers create the designs and Instruments used daily, based on what scientists have found.
- Engineering entails design and problem solving under constraints, such as project goals, budget, deadlines, and the limits of knowledge itself. Both scientists and engineers deal with society's needs and values, the environment and the economy.

Standards

San Leandro STEM Academy curriculum will align with Common Core State Standards (California Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects (Modified March 2013 Publication Version) in all core subject areas in grades 1-5. In addition, our courses will incorporate other relevant standards including those listed below.

- Spanish Translation of California Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects.
- California Common Core State Standards for Mathematics (Modified January 2013 Publication Version.)
- Spanish Translation of California Common Core State Standards for Mathematics.
- History–Social Science for California Public Schools California State Board October, 1998 Content Standards Kindergarten – Grade 5.
- Visual and Performing Arts Content Standards for California Public Schools Pre-Kindergarten – Grade 5: Dance, Music, Theatre, Visual Arts.
- NGSS for California Public Schools, K-12 Learning Progressions for Elementary (K- 5) Science Content Standards for California Public Schools Kindergarten Through Grade Twelve (Adopted October 1998.)

Scope and Sequence of Skills

The school’s curriculum ensures that students will receive instruction in, and will be expected to master, all grade level standards including English Language Arts, Mathematics, ELD, Social Studies, Science, Visual and Performing Arts and Physical Education.

Language Arts

San Leandro STEM Academy will provide a rigorous K-5 curriculum that meets or exceeds the State Common Core standards for Reading Literature, Reading Informational Text, Speaking and Listening Skills, Language and Writing Standards.

Reading: Key Ideas and Details

- Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
- Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
- Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

Craft and Structure

- Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
- Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
- Assess how point of view or purpose shapes the content and style of a text.

Integration of Knowledge and Ideas

- Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
- Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
- Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.
- Read and comprehend complex literary and informational texts independently and proficiently.

Writing

Text types and Purposes

- Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
- Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

- Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

Production and Distribution of Writing

- Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
- Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others. Research to Build and Present Knowledge
- Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
- Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
- Draw evidence from literary or informational texts to support analysis, reflection, and research.
- Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

Listening and Speaking

- Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others ideas and expressing their own clearly and persuasively.
- Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
- Evaluate a speaker‘s point of view, reasoning, and use of evidence and rhetoric.

Presentation of Knowledge and Ideas

- Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
- Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
- Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

Language

Conventions of Standard English

- Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.
- Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing.

Knowledge of Language

Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

Vocabulary acquisition and Use

- Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.
- Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
- Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.

Mathematics

Please find below an overview of the California Common Core State Standards in Mathematics for Kindergarten through fifth grade.

Kindergarten Common Core Math Standards By the end of Kindergarten, students will understand two critical areas: 1. Representing, relating, and operating on whole numbers, initially with sets of objects. 2. Describing shapes and space.	
Counting and Cardinality	▪ Know number names and the count sequence. ▪ Count to tell the number of objects. ▪ Compare numbers
Operations and Algebraic Thinking	▪ Understand addition as putting together and adding to ▪ Understand subtraction as taking apart and taking
Number and Operation in Base Ten	▪ Work with numbers 11-19 to gain foundations for place value
Measurement and Data	▪ Measurement and Data Describe and compare measurable attributes ▪ Classify objects and count the number of objects in categories
Geometry	▪ Identify and describe shapes ▪ Analyze, compare, create, and compare shapes
Mathematical Practices	1. Make sense of problems and persevere in solving them 2. Reason abstractly and quantitatively 3. Construct viable arguments and critique the reasoning of others 4. Model with Mathematics 5. Use appropriate tools strategically 6. Attend to precision 7. Look for and make use of structure 8. Look for and express regularity in repeated reasoning

Grade 1 Mathematics Standards By the end of Grade 1, students will understand four critical areas: 1. Developing understanding of addition, subtraction, and strategies for addition and subtraction within 20 2. Developing understanding of whole number relationships and place value, including grouping in tens and ones 3. Developing understanding of linear measurement and measuring lengths as iterating length units 4. Reasoning about attributes of, and composing and decomposing geometric shapes.	
Operations and Algebraic Thinking	▪ Represent and solve problems involving addition and sub-Mathematical Practices traction. ▪ Understand and apply properties of operations and the relationship between addition and subtraction. ▪ Add and subtract within 20. ▪ Work with addition and subtraction equations.
Number and Operations in Base Ten	▪ Extend the counting sequence. ▪ Use place value ▪ Use place value understanding and properties of operations to add and subtract.
Measurement and Data	▪ Measure lengths indirectly and by iterating length units. ▪ Tell and write time. ▪ Represent and interpret data.
Geometry	▪ Reason with shapes and their attributes.
Mathematical Practices	1. Make sense of problems and persevere in solving them 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning

Grade 2 Mathematics Standards By the end of Grade 2, students will understand four critical areas: 1. Extending understanding of base-ten notation. 2. Building fluency with addition and subtraction. 3. Using standard units of measure. 4. Describing and analyzing shapes.	
Operations and Algebraic Thinking	▪ Represent and solve problems involving addition and subtraction. ▪ Add and subtract within 20. ▪ Work with equal groups of objects to gain foundations for multiplication.
Number and Operations in Base Ten	▪ Understand place value. ▪ Use place value understanding and properties of operations to add and subtract.
Measurement and Data	▪ Measure and estimate lengths in standard units. ▪ Relate addition and subtraction to length. ▪ Work with time and money. ▪ Represent and interpret data.
Geometry	▪ Reason with shapes and their attributes.
Mathematical Practices	1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.

Grade 3 Mathematics Standards By the end of grade 3, students will understand four critical areas: 1. Developing understanding of multiplication and division and strategies for multiplication and division within 100. 2. Developing understanding of fractions, especially unit fractions (fractions with numerator 1.) 3. Developing understanding of the structure of rectangular arrays and of area. 4. Describing and analyzing two-dimensional shapes.	
Operations and Algebraic Thinking	▪ Represent and solve problems involving multiplication and division. ▪ Understand properties of multiplication and the relationship between multiplication and division. ▪ Multiply and divide within 100. ▪ Solve problems involving the four operations, and identify and explain patterns in arithmetic
Number and Operations in Base Ten	▪ Use place value understanding and properties of operations to perform multi-digit arithmetic.
Number and Operations— Fractions	▪ Develop understanding of fractions as numbers.
Measurement and Data	▪ Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. ▪ Represent and interpret data. ▪ Geometric measurement: understand concepts of area and relate area to multiplication and to addition. ▪ Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.
Geometry	▪ Reason with shapes and their attributes.
Mathematical Practices	1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.

Grade 4 Mathematics Standards By the end of grade 4, students will understand three critical areas: 1. Developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends. 2. Developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers. 3. Understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.	
Operations and Algebraic Thinking	▪ Use the four operations with whole numbers to solve problems. ▪ Gain familiarity with factors and multiples. ▪ Generate and analyze patterns.
Number and Operations in Base Ten	▪ Generalize place value understanding for multi- digit whole numbers. ▪ Use place value understanding and properties of operations to perform multi-digit arithmetic.
Number and Operations— Fractions	▪ Extend understanding of fraction equivalence and ordering. ▪ Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. ▪ Understand decimal notation for fractions, and compare decimal fractions.
Measurement and Data	▪ Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. ▪ Represent and interpret data. ▪ Geometric measurement: understand concepts of angles and measure angles.
Geometry	▪ Draw and identify lines and angles, and classify shapes by properties of their lines and angles.
Mathematical Practices	1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.

Grade 5 Mathematics Standards By the end of grade 5, students will understand three critical areas: 1. Developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions.) 2. Extending division to two-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations. 3. Developing understanding of volume.	
Operations and Algebraic Thinking	▪ Write and interpret numerical expressions. ▪ Analyze patterns and relationships.
Number and Operations in Base Ten	▪ Understand the place value system. ▪ Perform operations with multi-digit whole numbers and with decimals to hundredths place.
Number and Operations— Fractions	▪ Use equivalent fractions as a strategy to add and subtract fractions. ▪ Apply and extend previous understandings of multiplication and division to multiply and divide fractions.
Measurement and Data	▪ Convert like measurement units within a given measurement system. ▪ Represent and interpret data. ▪ Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.
Geometry	▪ Graph points on the coordinate plane to solve real- world and mathematical problems. ▪ Classify two-dimensional figures into categories based on their properties.
Mathematical Practices	1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.

Serving English Language Learners (ELLs)

San Leandro STEM Academy strongly believes in bringing STEM education to children who are from under-privileged communities. SLSA is prepared to meet the California Department of Education's requirements for providing effective teaching and instruction to students who are identified as English Language Learners. In addition to California requirements, SLSA will also meet federal requirements for providing English Language Learners equal access to curriculum content. The ELL instructional plan utilizes approaches and strategies, such as scaffolding strategies, to achieve grade level and graduation standards; in the same proportion as native English speaking students.

The ELL instructional program is based on sound educational theory, supported by appropriate materials and resources, and taught by qualified teachers. The instructional plan also includes an evaluation component to identify gaps and opportunities for improvement.

Location and Recruitment

With purposeful selection of locations in inner-city neighborhoods, rural areas, and underserved ethnic communities, SLSA demonstrates its commitment in bringing STEM education to communities seeking a strong STEM focus as part of their children's education. All recruitment activities and events will be supported with interpreters and/or staff who are capable of providing individual assistance to parents and families of potential students.

Admissions Process

As a publicly funded school, SLSA is mandated to admit all students who desire to enroll in the school. Our admissions process makes considerations for parents and families who do not read or write English; for instance, easy-to-use admission forms and translated brochures.

The registration packet would also list a variety of acceptable documents so that the required documents would not bar any child from applying. For example, a parent who does not provide a social security number for their child would not be barred from attending SLSA.

Identification and Services Eligibility

SLSA will use the Home Language Survey tool to identify potential ELLs. Once identified, ELLs will receive further testing to determine the level and services needed to support the student.

Identifying ELLs

Upon enrollment, the school reviews the student's registration packet and other essential information to determine if ELL services will be needed. For example, a student will be considered a potential ELL student if his/her parent indicated that English is not the language spoken at home. This student/parent would be given the Home Language Survey (HLS) to fill out. If the student/parent has previously completed an HLS, the student/parent would not need to complete a new survey; instead, SLSA would request the student's records and make the determination based on the existing survey responses.

Testing for ELL Services Eligibility

If the Home Language Survey qualifies a student for additional testing, SLSA will administer the California English Language Development Test (CELDT) to determine if the student is in need of

specialized English instruction or other services. The CELDT assesses the student's proficiency in reading, writing, speaking, and listening. This placement test generates a score that suggests the placement level for these language domains. The placement levels are Beginning, Early Intermediate, Intermediate, Early Advanced, and Advanced. With the placement level identified, a multi-faceted learning plan can be developed and implemented for the student.

SLSA will notify the parents, within 30 calendar days, of their child's test results. A parent-teacher conference will be scheduled with the purpose to provide information on ELL services to the parents, outline the role of the parent, teachers, and the school in supporting the student to succeed in the classroom and at home. The student's learning plan will be monitored and adjusted to support the student's progression with language acquisition and learning core curriculum content.

Exiting from ELL Services

ELL students will be supported and receive the necessary services until the student is determined to be proficient and no longer needing ELL services. Exits tests and other factors will be examined to see if the learner can exit from the program. However, exited ELL learners will continue to be monitored and they will receive interventions, if needed, so that students can be assured success.

Exiting

The California English Language Development Test (CELDT) will be administered during the Annual Assessment testing window to each ELL student to measure his/her progress. The test scores will be used to reclassify current ELL students as Reclassified Fluent English Proficient (RFEP): ELL students who have demonstrated English proficiency.

SLSA will follow the CELDT guidelines for reclassifying an ELL student; the student's status is examined for the following:

- A passing CELDT score is achieved:
    - Overall score is Early Advanced.
    - Sub-skill areas (Reading, Writing, Speaking, Listening) are Intermediate or above.
- The ELL student's performance on basic skills is compared with non-ELL students of the same age.
    - The ELL student demonstrates sufficient English proficiency to participate in core curriculum content.
    - The Smarter Balanced Assessment score in English Language Arts is used to collect this data— a "Basic" score is achieved.
- Teachers and other certified staff evaluation of the student. At minimum, a letter grade of "C" is achieved.
- Input from parents. If the student has satisfied the reclassification criteria, the parents/guardians are notified about the reclassification process and solicited for their feedback and opinions.

If all of the reclassification expectations are met, the parents/guardians are notified and school records are updated.

Post-exit Monitoring

A reclassified student will receive on-going monitoring for at least two years from his/her reclassification date to be certain the student's academic achievement and progress is continuing to improve. If the student fails to improve, appropriate interventions will be implemented for the student to ensure success.

Continued measurement and observations will be made on the student to monitor their academic performance when compared to their non-ELL peers. Student evaluation processes will prompt teachers and other staff who interact with the student to provide evaluation. Aggregated school-level data will also be collected to understand the overall retention and performance of ELLs who have exited from ELL services.

Instructional Approaches

San Leandro STEM Academy will use the sheltered instruction approach to teach core curriculum content to ELLs. Along with specific scaffolding strategies, a teacher using sheltered instruction would communicate and instruct using clear, direct, and simple English. San Leandro STEM Academy will recruit and hire teachers experienced with sheltered instruction; however, all teachers will receive professional development and training with sheltered instruction and teaching ELLs, in general.

The content area would be taught using a wide range of scaffolding strategies, which could include the following:

- Demonstrating the activity.
- Asking students to share their own experiences, hunches, or ideas about the topic.
- Using visual aids.
- Pre-teaching vocabulary.
- Checking for understanding by pausing, asking questions, and reviewing content.

An example of scaffolding reading would be to have ELLs preview the text and discuss key vocabulary with the teacher or within small groups, prior to reading the assigned selection.

Sheltered instruction has been proven to be a "best practice" for teaching both ELL and non-ELL students; hence, the ELLs would be receiving appropriate instruction by attending the same core content classes as their non-ELL classmates. However, sheltered instruction works best with ELLs above the beginner level. SLSA is prepared to provide sheltered instruction for ELLs who are below the beginner level, or who are struggling in the classrooms. The ELLs would be taught in separate instructional sessions by qualified ESL teachers so that the students can be brought up to the level where they can function successfully in the main core content classes.

In addition to sheltered instruction, SLSA will also incorporate these teaching and learning strategies:

- Designing a curriculum that weaves culture and diversity into the lessons and topics.
- Securing resources/materials to support teachers in teaching English in the classroom.

- Identifying and/or creating resources to support students and parents learning English in the home.

Evaluation Plan

San Leandro STEM Academy proposes an evaluation plan that collects data using an objective measurement tool and also collects data using a subjective tool such as a surveys and questionnaire, so that qualitative and anecdotal data can be captured. San Leandro shall provide to the SLUSD an annual report of its ELL program evaluation. Upon request, San Leandro shall provide a copy of its current ELL Master Plan to SLUSD.

It is anticipated that each ELL who has been in continuous enrollment from the first day of school will advance at least one level; for example, Beginning to Early Intermediate; Early Advanced to Advanced.

Objective Measurement

- The CELDT will be administered to ELLs during the Annual Assessment timeframe.
- The scores from the CELDT will be used to reclassify ELLs, as well as demonstrate alignment with the Title III Annual Measureable Achievement Objective (AMAO) targets.
- SLSA will comply with Title III Accountability guidelines, if there is a failure to meet any AMAOs.

Qualitative Measurement

- Surveys for parents to complete (with the help of an interpreter) that asks them questions such as:
    - *What has your child shared with you about being part of the ELL program?*
    - *How do you rate the ELL services your child has received?* (Based on a Likert scale.)
    - *In what ways have your child improved his/her reading/writing/speaking/listening skills?*
- Observations of ELL students.
- Interview ELL students on their experience with the materials, teaching strategies, sessions, etc.

Teacher Qualifications

A teacher does not need special certification to use sheltered instructional strategies. Licensed teachers for the core content areas will be trained on sheltered instructional strategies so that teachers can be knowledge and intentional in using this approach. Additionally, teachers who will be teaching ELLs will meet California teacher credentialing requirements—in all likelihood, these will be the same teachers who are responsible for teaching the core content areas. Teachers hired specifically to work with ELLs will be required to meet the proper credentials and be experienced in teaching STEM to limited English proficient students using sheltered instruction.

In recruiting teachers, SLSA will also look for teachers who are culturally competent, familiar with the communities being served, and understand how these factors contribute to student learning, and possibly, influence their own teaching styles.

The *SLUSD ELD Handbook* will be used as a resource guide for curriculum planning. New teachers will be trained to use the English Language Development (ELD) state standards. Where possible, our teachers

will participate in any available workshops organized by the SLUSD for ELD and/or core content teachers, such as the STEM teachers.

Parental Engagement and Communication

All parents are critical partners in ensuring student success. For parents of ELLs, the obvious challenge is the language barrier, and some not-so-obvious challenges such as parents holding down two jobs, not familiar with the U.S. American school systems, or cultural differences and expectations about education.

San Leandro STEM Academy proposes these elements to its overall parent engagement model so that our school can make itself more accessible to parents of ELLs:

- Learn about the culture, language, country, etc., of the ELL population at the school.
- Integrate cultural arts, stories, celebrations, and traditions into the "daily life" of the school. For example, being mindful of cultural or religious holidays and not scheduling important events during that time.
- Establish a communication plan that strives to make school announcements, messages, documents, and events accessible for all parents. SLSA is prepared to hire bilingual staff or source interpreting/translating agencies to assist with this work.
- Identify ways for parents to help their child with homework and other aspects of their schoolwork.
- Create opportunities for ELL families and non-ELL families to socialize through student performances, celebrations, and other fun type of events.
- Invite and encourage ELL parents to become parent leaders.[14]

English Learner Master Plan

Because there is an option to implement the SLUSD's English Learner Master Plan, San Leandro will submit a certification to the San Leandro Unified School District, in early October, to indicate its decision. If SLSA chooses to implement a custom English Learner Master Plan, the plan shall include, but not limited, the following:

- Details on how ELL needs will be identified.
- Description of the services offered.
- Explanation of how, where, and by whom the services will be provided.
- Detailed evaluation plan describing how the evaluation will be used to improve the program and the provisions of ELL services.

English Language Development (ELD)

Curriculum for English Language Development will be provided by the Macmillan publication. Macmillan provides a comprehensive curriculum that is connected to the language arts series, Treasures. The ELD curriculum includes a comprehensive Teacher's Edition with daily lessons for small and whole group instruction. Resources available for small group instruction include the Progress Monitoring Assessment,

[14] Taken from "Engaging ELL Families: 20 Strategies for School Leaders" http://www.adlit.org/article/42781/

Language Transfers Handbook, and My New Words Picture Word Book. Curriculum for whole group instruction includes Visual Vocabulary and Interactive Question-Response lessons to bridge gaps in language acquisition. In addition, the curriculum includes ELD Student Practice Books, Decodable Readers, and Sheltered Leveled Readers. Using multiple SDAIE strategies within each lesson will use the Mutt-i-grees curriculum to support ELD instruction. Using teacher/peer modeling, realia, visual support, small group learning opportunities, and a total physical response approach will enhance basic interpersonal communication skills. Standards-based direct instruction lessons are delineated in the ELD curriculum, empowering teachers to use a variety of formative and summative assessment data to monitor student growth to guide teaching and learning.

History/Social Science

Students in kindergarten are introduced to basic spatial, temporal, and causal relationships, emphasizing the geographic and historical connections between the world today and the world long ago. Students in grade one continue a more detailed treatment of the broad concepts of rights and responsibilities in the contemporary world. Students in grade two explore the lives of actual people who make a difference in their everyday lives and learn the stories of extraordinary people from history whose achievements have touched them, directly or indirectly. Students in grade three learn more about our connections to the past and the ways in which particularly local, but also regional and national, government and traditions have developed and left their marks on current society, providing common memories. Students in grade four learn the story of their home state, unique in American history in terms of its vast and varied geography, its many waves of immigration beginning with pre Columbian societies, its continuous diversity, economic energy, and rapid growth. Students in grade five study the development of the nation up to 1850, with an emphasis on the people who were already here, when and from where others arrived, and why they came.

Science

Teachers will address the California Science standards in physical science, Earth Science, Life Science and the scientific process. In addition, San Leandro STEM Academy will utilize the Next Generation Science as a critical guide for our Science and Engineering curriculum.

Grade Level	Description
Kindergarten	▪ Properties of materials can be observed, measured, and predicted. ▪ Different types of plants and animals inhabit the earth. ▪ Concepts that cover Earth compositional elements of land, air, and water ▪ Asking meaningful questions and conducting careful investigations in weather, water, plants, and animals to make scientific progress.
First Grade	▪ Materials come in different forms (states), including solids, liquids, and gases. ▪ Plants and animals meet their needs in different ways. ▪ Weather can be observed, measured, and described. ▪ Scientific progress is made by asking meaningful questions and conducting careful investigations

Second Grade	▪ The motion of objects can be observed and measured. ▪ Plants and animals have predictable life cycles. ▪ Earth is made of materials that have distinct properties and provide resources for human activities. ▪ Scientific progress is made by asking meaningful questions and conducting careful investigations.
Third Grade	▪ Energy and matter have multiple forms and can be changed from one form to another. ▪ Light has a source and travels in a direction. ▪ Adaptations in physical structure or behavior may improve an organism‘s chance for survival. ▪ Asking meaningful questions and conducting careful investigations to drive scientific progress
Fourth Grade	▪ Electricity and magnetism are related effects that have many useful applications in everyday life. ▪ All organisms need energy and matter to live and grow. ▪ Living organisms depend on one another and on their environment for survival. ▪ The properties of rocks and minerals reflect the processes that formed them. ▪ Waves, wind, water, and ice shape and reshape Earth‘s land surface. ▪ Scientific progress is made by asking meaningful questions and conducting careful investigations
Fifth Grade	▪ Elements and their combinations account for all the varied types of matter in the world. ▪ Plants and animals have structures for respiration, digestion, waste disposal, and transport of materials. ▪ Water on Earth moves between the oceans and land through the processes of evaporation and condensation. ▪ Energy from the Sun heats Earth unevenly, causing air movements that result in changing weather patterns. ▪ The solar system consists of planets and other bodies that orbit the Sun in predictable paths.

Next Generation Science Standards

The following section lays out the Next Generation Science Standards that will be reflected in the SLSA curriculum of study.

Science and Engineering Practices: Asking Questions and Defining Problems

- A practice of science is to ask and refine questions that lead to descriptions and explanations of how the natural and designed world(s) works and which can be empirically tested.
- Engineering questions clarify problems to determine criteria for successful solutions and identify constraints to solve problems about the designed world.
- Both scientists and engineers ??

Grades K-2 Condensed Practices	Grades 3-6 Condensed Practices
Asking questions and defining problems in K-2 builds on prior experiences and progresses to simple descriptive questions that can be tested.	Asking questions and defining problems in 3-6 builds on K-2 experiences and progresses to specifying qualitative relationships.
Ask questions based on observations to find more information about the natural and/or designed world(s).	Ask questions about what would happen if a variable is changed.
Ask and/or identify questions that can be answered by an investigation.	Identify scientific (testable) and non-scientific (non- testable) questions. Ask questions that can be investigated and predict reasonable outcomes
Define a simple problem that can be solved through the development of a new or improved object or tool.	Use prior knowledge to describe problems that can be solved. Define a simple design problem solving model

Science and Engineering Practices: *Developing and Using Models*

- A practice of both science and engineering is to use and construct models as helpful tools for representing ideas and explanations. These tools include diagrams, drawings, physical replicas, mathematical representations, analogies, and computer simulations.
- Modeling tools are used to develop questions, predictions and explanations; analyze and identify flaws in system; and communicate ideas. Models are used to build and revise scientific explanations and proposed engineered systems. Measurements and observations are used to revise models and designs.

Grades K-2 Condensed Practices	Grades 3-6 Condensed Practices
Modeling in K-2 buildings on prior experiences and progresses to include using and developing	Modeling in 3-6 builds on K-2 experiences and progresses to building and revising simple models

models (i.e., diagram, drawing, physical replica, diorama, dramatization, or storyboard) that	and using models to represent events and design solutions.
Distinguish between a model and the actual object, process, and/or events the model represents. Compare models to identify common features	Identify limitations of models.
Develop and/or use a model to represent amounts, relationships, relative scales (bigger, smaller) and/or patterns in the natural and designed world(s).	Collaboratively develop and/or revise a model based on evidence that shows the relationship among variables for frequent and regular occurring events. Develop a model using an analogy, example, or abstract representations to describe a scientific principle or design solution.
Define a simple problem that can be solved through the development of a new or improved object or tool.	Use prior knowledge to describe problems that can be solved. Define a simple design problem that can be solved through the development of system and includes several criteria for success and constraints on materials, time, or cost.
Develop a simple model based on evidence to represent a proposed object or tool.	Develop a diagram or simple physical prototype to convey a proposed object, tool, or process. Use a model to test cause and effect relationships or interactions concerning the functioning of a

Science and Engineering Practices: Planning and Carrying Out Investigations

- Scientists and engineers plan and carry out investigations in the field or laboratory, working collaboratively as well as individually. Their investigations are systematic and require clarifying what counts as data and identifying variables or parameters.
- Engineering investigations identify the effectiveness, efficiency, and durability of designs under different conditions.

Grades K-2 Condensed Practices	Grades 3-6 Condensed Practices
Planning and carrying out investigations to answer questions or test solutions to problems in K-2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provides data to support	Planning and carrying out investigations to answer questions or test solutions to problems in 3-6 builds on K-2 experiences and progresses to include investigations that evidence to support explanations or design solutions.
With guidance, plan and conduct an investigation in collaboration with peers (for K).	Plan and conduct an investigation collaboratively to produce data to serve as the basis for

Plan and conduct an investigation collaboratively to produce data to serve as the basis for	evidence, using fair tests in which variables are controlled and the number of trials considered.
Evaluate different ways of observing and/or measuring a phenomenon to determine which way can answer a questions.	Evaluate appropriate methods and/or tools for collecting data.
Make observations (firsthand or from media) and/or collect data that can be used to make comparisons. Make observations (firsthand or from media) and/or measurements of a proposed object or tool or solution to determine if it solves a problem or meets a goal. Make predictions based on prior experiences.	Make observations and/or measurements to produce data to serve as the basis for evidence. Make predictions about what would happen if a variable changes. Test two different models of the same proposed object, tool, or process to determine which better meets criteria for success.

Science and Engineering Practices: *Analyzing and Interpreting Data*

- Scientific investigations produce data that must be analyzed in order to derive meaning. Because data patterns and trends are not always obvious, scientists use a range of tools – including tabulation, graphical interpretation, visualization, and statistical analysis – to identify the significant features and patterns in the data. Scientists identify sources of error in the investigations and calculate the degree of certainty in the results. Modern technology makes the collection of large data sets much earlier, providing secondary sources for analysis.
- Engineering investigations include analysis of data collected in the tests of designs. This allows comparisons of different solutions and determines how well each meets specific design criteria; or which design best solves the problem within given constraints.
- Like scientists, engineers require a range of tools to identify patterns within data and interpret the results.

Grades K-2 Condensed Practices	Grades 3-6 Condensed Practices
Analyzing data in K-2 builds on prior experiences and progresses to collecting, recording, and sharing observations.	Analyzing data in 3-6 builds on K-2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible digital tools should be used.
	Represent data in tables and/or various graphical displays (bar graphs, pictographs, and/or pie charts to reveal patterns that indicate relationships. Analyze and interpret data to make sense of phenomena, using logical reasoning, mathematics, and/or computation.

Analyze data from tests of an object or tool to determine if it works as intended.	Analyze data to refine a problem statement design of a proposed object, tool, or process. Use data to evaluate and refine design solutions.

Science and Engineering Practices: Using Mathematics and Computational Thinking

- In both science and engineering, mathematics and computation are fundamental tools for representing physical variables and their relationships. They are used for a range of tasks such as constructing simulations; solving equations exactly or approximately; and recognizing, expressing, and applying quantitative relationships.
- Mathematical and computational approaches enable scientists and engineers to produce the behavior of systems and test the validity of such predictions.

Grades K-2 Condensed Practices	Grades 3-6 Condensed Practices
Mathematical and computational thinking in K- 2 builds on prior experience and progresses to recognizing that mathematics can be used to describe the natural and designed world(s).	Mathematical and computational thinking in 3-6 builds on K-2 experiences and progresses to extending quantitative measurements to a variety of physical properties and using computation and mathematics to analyze data and compare alternative design solutions
Decide when to use qualitative vs. quantitative data.	Decide if qualitative or quantitative data are best to determine whether a proposed object or tool meets criteria for success.
Use counting and numbers to identify and describe patterns in the natural and designed world(s).	Organize simple data sets to reveal patterns that suggest relationships.
Describe measure and/or compare quantitative attributes of different objects and display the data.	Describe, measure, estimate, and/or graph quantities such as area, volume, weight, and time to address scientific and engineering questions and problems.
Use quantitative data to compare two alternative solutions to a problem.	Create and/or use graphs and/or charts generated from simple algorithms to compare alternative solutions to an engineering problem.

Science and Engineering Practices: Constructing Explanations and Designing Solutions

- The end products of science products of engineering are solutions.
- The goal of science is the construction of theories that provide explanatory accounts of the world. A theory becomes accepted when it has multiple lines of empirical evidence and greater explanatory power of phenomena than previous theories.
- The goal of engineering design is to find a systematic solution to problems that is based on scientific knowledge and models of the material world.
- Each proposed solution results from a process of balancing competing criteria of desired functions, technical feasibility, cost, safety, aesthetics, and compliance with legal requirements. The optimal choice depends on how well the proposed solutions meet criteria and constraints.

Grades K-2 Condensed Practices	Grades 3-6 Condensed Practices
Constructing explanations and designing solutions in K-2 builds on prior experiences and progresses to the use of ideas in constructing evidence-based accounts of natural phenomena and designing solutions.	Constructing explanations and designing solutions in 3-6 builds on K-2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.
Use information from observations (firsthand and from media) to construct an evidence- based account for natural phenomena.	Construct an explanation of observed relationships (e.g., the distribution of plants in the backyard.) Use evidence (e.g., measurements, observations, patterns) to construct or support an explanation or design a solution to a problem. Identify the evidence that supports particular points in an explanation.
Use tools and/or materials to design and/or build a device that solves a specific problem or a solution to a specific problem. Generate and/or compare multiple solutions to a	Apply scientific ideas to solve design problems. Generate and compare multiple solutions to a problem based on how well they meet the criteria and constraints of the design solution.

Science and Engineering Practices: *Engaging in Argument from Evidence*

- Argumentation is the process by which evidence-based conclusions and
- In science and engineering, reasoning in argument based on evidence is essential to identifying the best explanation for a natural phenomenon or the best scientists and engineers use argumentation to listen to, compare, and evaluate competing ideas and methods based on merits.
- Scientists and engineers engage in argumentation when investigating a phenomenon, testing a design solution, resolving questions about measurements, building data models, and using evidence to evaluate claims.

Grades K-2 Condensed Practices	Grades 3-6 Condensed Practices
Engaging in argument from evidence in K-2 builds on prior experiences and progresses to comparing ideas and representations about the natural and designed world(s).	Engaging in argument from evidence in 3-5 builds on K-2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence.
Identify arguments that are supported by evidence. Distinguish between explanations that account for all gathered evidence and those that do not. Analyze why some evidence is relevant to a scientific question and some is not.	Compare and refine arguments based on an evaluation of the evidence presented. Distinguish among facts, reasoned judgment based on research findings.
Listen actively to arguments to indicate agreement or disagreement based on evidence, and/or to retell the main points of the argument.	Respectfully provide and receive critiques from peers about a proposed procedures, explanation or model by citing relevant evidence and posing specific questions.
Construct an argument with evidence to support a claim.	Construct and/or support an agreement with evidence, data, and/or a model. Use data to evaluate claims about cause and
Make a claim about the effectiveness of an object, tool, or solution that is supported by relevant evidence.	Make a claim about the merit of a solution to a problem by citing relevant evidence about how it meets the criteria and constraints of the problem.

Science and Engineering Practices: Obtaining, Evaluating, and Communicating Information

- Scientists and engineers must be able to communicate clearly and persuasively the ideas and methods they generate. Critiquing and communicating ideas individually and in groups is a critical professional activity.
- Communicating information and ideas can be done in multiple ways; using tables, diagrams, graphs, models, and equations as well as orally, in writing, and through extended discussions. Scientists and engineers employ multiple sources to obtain information that is used to evaluate the merit and validity of claims, methods, and designs.

Grades K-2 Condensed Practices	Grades 3-6 Condensed Practices
Obtaining, evaluating, and communicating information in K-2 builds on prior experiences and uses observations and texts to communicate new information.	Obtaining, evaluating and communicating information in 3-6 builds on K-2 experiences and progresses to evaluating the merit and accuracy of ideas and methods.
Read grade-appropriate tests and/or use media to obtain scientific and/or technical information to determine patterns in and/or evidence about the natural and designed world(s).	Read and comprehend grade-appropriate complex tests and/or other reliable media to summarize and obtain scientific and technical ideas and describe how they are supported by evidence. Compare and/or combine across complex tests and/or other reliable media to support the engagement in other scientific and/or engineering practices.
Describe how specific images (e.g., a diagram showing how a machine works) support a scientific or engineering idea.	Combine information in written text with that contained in corresponding tables, diagrams, and/or charts to support the engagement in other scientific and/or engineering practices.
Obtain information using various texts, text features (e.g., headings, tables of contents, glossaries, electronic menus, icons), and other media that will be useful in answering a scientific question and/or supporting a scientific claim.	Obtain and combine information from books and/or other reliable media to explain phenomena or solutions to a design problem.
Communicate information or design ideas and/or solutions with others in oral and/or written forms.	Communicate scientific and/or technical information orally and/or in written form.
Describe how specific images (e.g., a diagram showing how a machine works) support a scientific or engineering idea.	Combine information in written text with that contained in corresponding tables, diagrams, and/or charts to support the engagement in other scientific and/or engineering practices.
Obtain information using various texts, text features (e.g., headings, tables of contents, glossaries, electronic menus, icons), and other media that will be useful in answering a scientific question and/or supporting a scientific claim.	Obtain and combine information from books and/or other reliable media to explain phenomena or solutions to a design problem.

Communicate information or design ideas and/or solutions with others in oral and/or written forms using models, drawings, writing, or numbers that provide detail about scientific ideas, practices, and/or design ideas.	Communicate scientific and/or technical information orally and/or in written formats, including various forms of media as well as table, diagrams, and charts.

Technology

Kindergarteners will learn basic computer skills including:

Kindergarten	
Unit Title	**Content Area**
Unit 1 – Word Processing and Personal Relationships	Computer and Program terminology. They will be creating projects. Identify commonly used programs and program tools. Create a word processing document with ABC order or simple sentence such as "I can see." Learn location of the alphabet and numbers on the keyboard within their word processing projects.
Unit 2 – Spreadsheets and Databases	Sort and categorize in simple databases that discuss how to make groups of items. Learning the basics of databases including columns, rows and cells.
Unit 3 – Multimedia and Family Relationships	The Kindergarten students will be creating a presentation that will discuss the concept of family relationships. The students will be identifying people they love and people that love them. They will be able to add animation and transitions to their presentations. The students will also be reviewing the keyboarding skills learned in the first unit.
Unit 4 – Desktop Publishing - My Relationships	The Kindergarten students will be creating a book that brings together all the topics learned this year. They will be using their skills to insert and format text information as well as graphics. This unit will review many of the objectives covered throughout the year
Skills	▪ Recognize and label major components of a computer ▪ Use the keyboard to write their names, locate letter that represent sounds, and ▪ numbers that identify specific quantities ▪ How to manipulate a mouse and curser ▪ Create digital art with paint program, such as Kidpix

First graders will continue to build on their kindergarten experiences in computer skills including:

Grade 1	
Unit Title	**Content Area**
Unit 1 – Word Processing - Personal Responsibility	The 1st grade students will be learning proper terminology for common parts of the computer and program tools. They will be creating projects identifying commonly used programs and program tools. The 1st Grade students will be creating a word processing document about seasons and/or animals. The ideas that are covered in this unit are describing the season or an animal of their choice. They will begin learning location of the alphabet and numbers on the keyboard within their word processing projects.
Unit 2 – Spreadsheets and Databases - Financial Responsibility	The 1st grade students will be working on sorting and categorizing skills in simple databases that discuss financial responsibility. They will be learning the basics of databases including columns, rows and cells. They will sort and categorize the types of animals land, water, or air. They will categorize these into graphs.
Unit 3 – Multimedia - Social Responsibility	First grade students will be creating a presentation that will introduce the concept of social responsibilities. During this unit the theme covers family, environmental and community responsibilities. They will be able to add animation and transitions to their presentations. The students will also be reviewing the keyboarding skills learned in the first unit.
Unit 4 – Desktop Publishing – My Responsibilities	First grade students will be creating a book that brings together all the topics learned this year. They will be using their skills to insert and format text information as well as graphics. This unit will review many of the objectives covered throughout the year.
Skills	▪ Identify and locate all letters and numbers on the keyboard. ▪ Proficiency manipulate a mouse and cursor. ▪ Type one sentence and their names using the shift key for capital letters. ▪ Improve the time it takes to find letters on a keyboard. ▪ How to use basic software that develops reading and math skills. Demonstrate beginnings skills in the manipulation of digital imagery, generates art, digital photography. ▪ Create simple bar graphs and charts on computer programs Second graders will learn basic computer.

Grade 2	
Unit Title	**Content Area**
Unit 1 – Word Processing - Personal Goals	The 2nd grade students will be learning proper terminology for common parts of the computer and program tools. They will be creating projects identifying commonly used programs and program tools. The students will be creating a word processing document about Personal Goals. They will be defining, setting and measuring personal goals. Keyboarding skills will be covered in this unit. The students will be using a keyboarding program to teach them proper finger placement and keystrokes.
Unit 2 – Spreadsheets and Databases - Measuring Goals	Second grade students will be creating spreadsheets and databases about measuring personal goals. They will be setting goals, tracking goals and charting their progress. They will be learning the basics of databases and simple formulas.
Unit 3 – Multimedia - Mission Statement	Second grade students will be creating a presentation developing a personal mission statement. They will be evaluating how to represent their mission statement. They will be able to add animation and transitions to their presentations. The students will also be reviewing the keyboarding skills learned in the first unit.
Unit 4 – Desktop Publishing – My Goals	The students in 2nd grade will be creating multiple projects on goals. They will be developing their desktop publishing skills within each project. They will review and capture examples of their work from the entire year to be included in a presentation portfolio. The students will be able to be creative in designing their projects and final portfolio. They will be producing a CD at the end of this unit that will include the file versions of all of their projects from this year.
Skills	▪ Begin to use appropriate keyboard finger positions when typing ▪ Identify and locate all letters, numbers, punctuate and use the shift key for capital letters ▪ Use a word document to write simple stories ▪ Use computer program to create simple graphs that represent data they have collect in science and math problems ▪ Gather information and pictures for a project in a controlled environment created by the teacher ▪ Understand how to shut off, save files and organize folders on a desktop ▪ Use learning software to develop mathematical skills

Grade 3	
Unit Title	**Content Area**
Unit 1: Word Processing - Personal Responsibility	The 3rd grade students will be learning proper terminology for common parts of the computer and program tools. The 3rd grade students will be creating word processing about a book report. They will describe the characters, setting, and plot of the story. The students will be using a keyboarding program to teach them proper finger placement and keystrokes.
Unit 2 – Spreadsheets and Databases	The 3rd grade students will be creating a spreadsheet that will categorize the various forms of literature. They will create graphs from class surveys and categorize various genres. They will be learning the basics of databases and simple formulas.
Unit 3 – Multimedia – Social Responsibility	The 3rd grade students will be creating a presentation that will introduce the concept of artistic expression. Student will create a collage of a visual artist. They will be able to add animation and transitions to their presentations. The students will also be reviewing the keyboarding skills learned in the first unit.
Unit 4 – Desktop Publishing – My Responsibilities	The 3rd grade students will develop their desktop publishing skills within each project. They will review and capture examples of their work from the entire year to be included in a presentation portfolio. The students will be able to be creative in designing their projects and final portfolio. They will be producing a CD at the end of this unit that will include the file versions of all of their projects from this year.
Skills	▪ Gaining fluency in using the keyboard for typing by using appropriate keyboard positions ▪ Use a word document to write simple stories and letters. ▪ Search the Internet for pictures and download them into documents. Collect, analyze and represent data in a variety for graph (pictographs, bar graphs, and pie charts.) ▪ Save files and organize folders on a desktop ▪ Conduct research for information and pictures by subject/category ▪ Develop problem solving and critical thinking skills to enhance basic skills and organize ideas using software and multimedia presentation software.

Grade 4	
Unit Title	**Content Area**
Unit 1: Word Processing – Evaluating Choices	Fourth grade students will be learning proper terminology for common parts of the computer and program tools. The students will be creating word processing documents about the process of making an informed choice. The steps in the process that are covered in this unit are: You Always Have a Choice, Think Through Your Options, Make a Decision and Accept Responsibility for Your Decision. The students will be using a keyboarding program to learn proper finger placement and keystrokes.
Unit 2 Spreadsheets and Databases – Time Choices	Fourth grade students will be creating a spreadsheet that will introduce the concept of prioritizing their time. The skills they will be covering will be creating a calendar, analyzing their time commitments, and scheduling. They will be learning the basics of databases and simple formulas.
Unit 3 – Multimedia – Personal Choices	Fourth grade students will be creating a presentation which will have them looking at their own personal choices. The choices they will be reviewing will be decisions on food, appearance, and entertainment. They will be able to add animation and transitions to their presentations. The students will also be reviewing the keyboarding skills learned in the first unit.
Unit 4 – Desktop Publishing – Communication Choices	Fourth grade will be creating a newsletter on communication choices. They will be developing their desktop publishing skills within each project. They will review and capture examples of their work from the entire year to be included in a presentation portfolio. The students will be able to be creative in designing their projects and final portfolio. They will be producing a CD at the end of this unit that will include the file versions of all of their projects from this year.
Skills	▪ Gaining fluency in using the keyboard for typing and type 8-10 words per minute Use a word document to write essays and reports ▪ Research information by subject/category and keywords/phrases using teacher approved website, digital/online encyclopedias and dictionaries and files ▪ Collecting and analyzing data ▪ Use programs for presentations ▪ Save files and organize folders on a desktop Use learning software to develop mathematical

Grade 5-6	
Unit Title	**Content Area**
Unit 1 Word Processing: Personal Goals	Fifth & Sixth grade students will be learning proper terminology for common parts of the computer and program tools. They will be creating projects identifying commonly used programs and program tools. The students will be creating a word processing document about Personal Goals. They will be defining, setting and measuring personal goals. Keyboarding skills will be covered in this unit. The students will be using a keyboarding program to teach them proper finger placement and keystrokes.
Unit 2 Spreadsheets and Databases: Measuring Goals	Fifth & Sixth grade students will be creating spreadsheets and databases about measuring personal goals. They will be setting goals, tracking goals and charting their progress. They will be learning the basics of databases and simple formulas.
Unit 3 Multimedia: Mission Statement	Fifth & Sixth grade students will be creating a presentation developing a personal mission statement. They will be evaluating how to represent their mission statement. They will learn to add animation and transitions to their presentations. The students will also be reviewing the keyboarding skills learned in the first unit.
Unit 4 Desktop Publishing: My Goals	The students in 5th & 6th grade will be creating multiple projects on goals. They will be developing their desktop publishing skills within each project. They will review and capture examples of their work from the entire year to be included in a presentation portfolio. The students will be able to be creative in designing their projects and final portfolio. They will be producing a CD at the end of this unit that will include the file versions of all of their projects from this year.
Skills	▪ Gaining fluency in using the keyboard for typing. ▪ Use a word document to write essays and reports. ▪ Search the Internet for pictures to be used in school projects. ▪ Collecting and analyzing data. ▪ Use programs for presentations. ▪ Use digital photography and video in presentations with simple editing. ▪ Save files and organize folders on a desktop. ▪ Use learning software to develop mathematical skills.

Physical Education

The San Leandro STEM Academy learning community acknowledges both the immediate and the lifelong benefits of physical education for children. The Physical Education Framework for California Public Schools states that children who are well educated in health and physical activity become healthy

adults. Our physical education program encourages effort, cooperation, and sportsmanship. Students in K-5th grade participate in psychomotor activities. Additionally, the dance and drama program provides for additional minutes of physical activity. Teachers provide additional minutes of physical activity throughout the week at various times. Physical Education lessons, aligned to the California frameworks, will be taught by classroom teachers and during our psychomotor program. This sequential physical education program provides all students with weekly lessons in game skills, sportsmanship, and fitness to develop positive social norms of equity and fairness. Healthy living is encouraged through a variety of other events like Jump Rope for Heart and the President's Fifth Grade Physical Fitness Program.

Health

We believe that a positive, health-oriented school environment is intimately linked to successful learning. According to the Health Framework for California Public Schools, children may make lifestyle choices that adversely affect their current and future health. We will take the kind of active role set forth in the Framework by developing and promoting the physical, mental, emotional, and social health of our students.

Working with Diverse Populations

San Leandro STEM Academy expects to serve the following categories of students with special needs: Gifted and Talented Education (GATE) students, academically low achieving students, socio-economically disadvantaged students, students at risk of retention, and English Language Learners.

Gifted and Talented Education (GATE) Students

San Leandro STEM Academy will address the needs of gifted and talented students whose learning characteristics, thinking aptitudes, and abilities differ significantly from those of their same-aged peers. They will receive a content rich and rigorous educational experience that prepares them for middle school. Gifted students will receive differentiated instruction in which they can acquire skills and understanding at advanced levels matching their potentials.

Differentiated instruction includes complexity (making connections or seeing relationships), acceleration (advanced content through curriculum compacting), novelty (introducing new areas of study), and depth (exploring a subject in greater depth).

Assessment and identification of gifted and talented students will be based on intellectual, creative, leadership ability, achievement, talent in the visual and performing arts, along with other criteria that the school finds appropriate. Through professional development teachers will be trained to utilize differentiation strategies embedded in their curriculum. This includes content organized by themes, scholarliness, depth and complexity and independent study based on allocation of time. Activities may also be self-selected based on area of study relevant to the core curriculum. Essential instructional elements are inclusive of integrated curriculum, universal themes, tiered assignments, open-ended questioning, student choice, and different models of teaching (direct, inquiry, deductive and inductive).

Strategies for implementing effective GATE program will include:

- Flexible grouping of students
- Establishing an Honors programs

- Differentiating instruction in the classroom in all areas of the core curriculum
- Increasing parent involvement
- Providing professional development activities for coordinators, teachers, administrators and support staff to support academic and talent excellence in students

Process for Identifying Students as Gifted and Talented

The identification process begins with a referral by the student's teacher or parent. The Counselor will gather documentation including any standardized test scores, cumulative records, report cards from teachers and parents. The Counselor will make a preliminary recommendation for consideration on the eligibility of the student. The recommendation is used as a basis for Intellectual Ability testing, or for High Achievement or Specific Ability designation. When a decision has been made, the parent will be notified in writing of the student's eligibility.

Categories under which a student may be identified as gifted include intellectual ability in which the student's general intellectual development is markedly advanced in relation to their chronological peers. This category includes those students designated Highly Gifted who have scored 145 or above on an individualized intelligence test, or 99.9 on a group intelligence test.

A student may also be identified under the category of High Achievement. These students consistently function for two consecutive years at highly advanced levels in Total Reading and Total Math on standardized tests such as the Smarter Balanced Assessment. Another criterion considered is a GPA of 3.5 or above. A student may also be identified under the category of Specific Academic Ability. These students consistently function for three consecutive years at highly advanced levels in either Reading or Math on standardized tests such as the Smarter Balanced Assessment. Students may also be referred in either science or social science.

Selection of GATE Students Based on High Achievement

To participate in the GATE program students must demonstrate ability in all four critical- thinking and problem-solving skills in their primary language. These skills may include the ability to:

- Explain meanings or relationships among facts, information, or concepts that demonstrate depth and complexity
- Formulate new ideas or solutions and elaborate on the information
- Use alternative methods in approaching new or unfamiliar mathematical problems
- Use extensive vocabulary easily and accurately to express creative ideas. In addition they must meet one of the following criteria:
- Percentile scores of 78 or above in both total reading and total mathematics on standardized test
- Norm-reference tests

Scaled scores on CST or its equivalent as follows:

- A scaled score of 392 or above in English-Language Arts, grades 2-5, **and**

- A scaled score of 401 or above in mathematics, grades 2-5. Identification as gifted in any of the categories by a licensed school psychologist.

GATE Outcomes

San Leandro STEM Academy expects the following outcomes in our GATE program:

Student Outcomes

- Continuous progress based on ability and performance
- Accelerated student performance
- Development of independence and self-direction
- Acceleration in a discipline or across disciplines
- Increased use of technology for research and multi-media presentations
- Increased participation in state and national tests and competitions
- Success in making original contributions to a field of study
- Grade advancement

Administrator/TeacherOutcomes

- Increased knowledge of cognitive and social emotional needs of gifted students
- Increased knowledge and use of program options and strategies for teaching gifted students
- Improved professional development leading to teacher certification
- Alternative assessment procedures (recognizing individual differences)
- Increased use of resources for working with gifted students
- Alternative evaluation processes

Parent Education Outcomes

Parents have access to monthly parent education workshops and meetings where the following topics are to be covered:

- Knowledge and informational updates of the GATE program
- Increased knowledge of the characteristics, strategies, resources and programs parents can use to foster and promote the cognitive, social-emotional and developmental needs of gifted students
- Awareness of organizations, associations, programs which serve as a resource for parents of gifted students
- Access to specific curriculum examples and projected strategies including summer preparation strategies

- Knowledge of the assessment and identification process at San Leandro STEM Academy.

Counseling and Guidance Outcomes

The guidance/counseling process is a product of the collaborative efforts of teachers, administrators, support personnel, specialists, and parents. Everyone who lives or works with the gifted child often serves one or more functions in the guidance/counseling program for maximal effectiveness. These functions may include being a: mentor, facilitator, listener, advocate, consultant, instructor, role model, and program coordinator. The guidance/counseling services are differentiated for the gifted student to include:

- Orientation of individual gifts and talents to special programs/services
- Information services about giftedness, summer and extra-curricular enrichment, and scholastic services/scholarships
- Placement in program options and educational alternatives

Academically Low Achieving Students

San Leandro STEM Academy will enhance learning opportunities for all students, with special emphasis on expanded learning experiences for students who are identified as academically low achieving. The initial component of San Leandro STEM Academy plan for low-achieving students will be early identification of student deficiencies in any academic subject, especially Mathematics, Science, and English Language. Through cross data analysis from a variety of sources, low-achieving students will be identified for targeted intervention. The school will establish a Response to Intervention (RTI) program aimed at ensuring that such students are provided support during the regular school day and after school.

Professional development for teachers will include specific training in recognizing academically low-achieving students, understanding how they can be helped to raise their achievement levels, and applying appropriate methodologies including differentiation in the classroom. Upon identification of any student as low-achieving, parents will be informed of the student's academic standing within one week of identification, by the counselor. Within two weeks of identification, the counselor will schedule a conference between the student, parent, and teacher(s) to develop an action plan. The action plan will have specific responsibilities for the student, parent, and teacher(s).

In those areas where the student is struggling most, one-to-one instruction will be offered by the classroom teacher and/or teacher assistant, and the student may participate in a computer- assisted learning program like "Study Island". Paraprofessionals and/or trained tutors (recruited from the business community, the college/university community, and volunteer organizations) will provide remedial tutoring through individualized and/or small group assistance

Plan for Socio-economically Disadvantaged Students

Over 75 percent of our student population is expected to come from low socio-economic backgrounds. The school will implement strategies that enhance the development of parent skills and knowledge to support their children within the traditional school setting. The School will offer workshops during the school day and in the evenings to help parents gain the necessary confidence to support their children's

education. Additional workshops and training opportunities will include homework help, computer skills, gang prevention, and parenting. In addition, the school will engage students in academic enrichment activities, such as field trips to museums and libraries. We believe it is never too early to create a college going culture among urban school students. Beginning in fourth grade our students will undertake field trips to local universities.

Students at Risk of Retention

San Leandro STEM Academy will have high expectations for all students. There will be no social promotions at the school. Students at risk of failing to meet state adopted standards or who are at risk of retention will receive extra assistance involving some combination of differentiated instruction, required supplemental education classes, before or after school tutoring, and summer remediation. Emphasis will be placed on methods that allow low achieving and at-risk students to gain new knowledge, learn new strategies for acquiring information, solve problems, and enhance their perspective on the value and excitement of STEM.

Faculty, staff and administrators will work together to ensure that no individual student will fall behind. By instituting comprehensive support system for all students, including tutoring before and after school, procedures will be established that help guarantee that students do not fall through the cracks. Parents will be notified in writing first before retention decision is made.

Promotion and retention of students will be based on several assessment measures. In the case that a student must be retained, the Principal and the teacher will prepare a written determination to specify the reasons for retention. Such written determination will include recommendations for interventions that are necessary to assist the student in attaining acceptable levels of academic achievement. The written determination will be provided to and discussed with the parent(s) at a special meeting arranged for that purpose.

Students identified for retention will participate in a support program (i.e. before and after-school tutoring). The student's academic performance will be reassessed at the end of the support program, and the decision to retain or promote the student will be re-evaluated at that time.

English Language Learners (ELL)

San Leandro STEM Academy is required to timely identify potential English Language Learners (ELLs) and provide them with an effective English language acquisition program that affords meaningful access to the school's academic core curriculum. Instructional plans for English Language Learners must be

- Based on sound educational theory.
- Adequately supported with trained teachers and appropriate materials and resources.
- Periodically evaluated to make sure the program is successful and modified when the program is not successful.

On an annual basis (on or about October 1), San Leandro STEM Academy shall submit a certification to the San Leandro Unified School District that certifies that Charter School will either adopt and implement SLUSD's English Learner Master Plan or implement Charter School's own English Learner

Master Plan. If Charter School chooses to implement its own EL plan, the instructional plan shall include, but is not limited to, the following:

- How English Learners' needs will be identified
- What services will be offered
- How, where, and by whom the services will be provided
- How the school will evaluate its ELL program each year, and how the results of this evaluation will be used to improve the program, including the provision of EL services

San Leandro shall provide to the SLUSD an annual report of its ELL program assessment. Upon request, San Leandro shall provide a copy of its current ELL Master Plan to SLUSD.

San Leandro STEM Academy shall administer the CELDT annually in accordance with federal and state requirements.

San Leandro STEM Academy shall ensure that it will provide parent outreach services and meaningfully inform parents with limited English proficiency of important information regarding school matters to the same extent as other parents.

San Leandro STEM Academy will meet all requirements of Federal and State law relative to equal access to the curriculum for English Learners. We will develop high quality instructional programs and services for English Learners that will allow them, within a reasonable amount of time, to achieve the same challenging grade level and graduation standards, in the same proportion, as native English speaking students.

The California English Language Development Test (CELDT) will be administered to all new students with a home language other than English (as indicated on their Home Language Survey) and to all English Language Learners annually to determine student's individual proficiency level in order to reclassify them as Fluent English Proficient (FEP). The CELDT is designed to initially identify students as English learners, to determine individual student level of English proficiency, and to assess student progress in acquiring English proficiency. Listening, speaking, reading, and writing skills are assessed. Students receive a score identifying their English proficiency level according to the following State Board of Education standards:

- Beginning
- Early Intermediate
- Intermediate
- Early Advanced
- Advanced

Once an English Learner student is identified, a conference is scheduled with the parent to outline the role of the parent, teachers and the school in supporting the student to succeed. It is anticipated that each academic year, every EL student at San Leandro STEM Academy who has been continuously

enrolled from the first day of school will advance at least one level (i.e. from beginning to early intermediate or early advanced to advanced).

San Leandro STEM Academy will offer the core content areas in a sheltered English environment for students who are not proficient in English. Sheltered content classes are subject matter content courses designed specifically for EL students. The curriculum content for the sheltered English classes is the same as in the regular classroom. All core content area teachers will be familiar with appropriate methods for teaching EL students at various levels of proficiency. San Leandro STEM Academy will make every effort to bilingual or ELL endorsement (state authorization to teach English learners such as SDAIE, BCLAD, CLAD, SB 1969), and who not only have training in second language pedagogy but also have experience teaching English Learners and sheltered English classes.

The SLUSD ELD Handbook will be used as a resource guide for curriculum planning. New teachers will be trained to use the English Language Development state standards. Where possible our teachers will participate in any available workshops organized by the SLUSD for ELD teachers.

Reclassification to FEP Status

San Leandro STEM Academy will comply with legal requirements regarding standardized testing and other required assessments. In addition, San Leandro STEM Academy will monitor on an on-going basis the academic success for reclassified students for at least three years from their reclassification date.

Reclassification procedures utilize multiple criteria in determining whether to classify a pupil as proficient in English including, but not limited to, all of the following:

- Assessment of language proficiency using an objective assessment instrument including, but not limited to, the CELDT.
- Participation of the pupil's classroom teacher and any other certificated staff with direct responsibility for teaching or placement decisions of the pupil to evaluate the pupil's curriculum mastery.
- Parental opinion and consultation, achieved through notice to parents or guardians of the language reclassification and placement.
- Comparison of the pupil's performance in basic skills against an empirically established range of performance and basic skills based upon the performance of English proficient pupils of the same age that demonstrate to others that the pupil is sufficiently proficient in English to participate effectively in a curriculum designed for pupils of the same age whose native language is English.

San Leandro STEM Academy will follow the following steps in reclassifying English Language Learner students:

1. The first step is to review the annual CELDT results for English-language proficiency. In order to be reclassified, a student must meet the CELDT definition of proficiency, which is an overall score of early advanced or advanced, and scores are intermediate or above for each of the sub-skill areas: listening, speaking, reading, and writing. If the student meets this criterion, we will

move on to the next step in the reclassification process otherwise the student will remain as an English learner.

2. The second step in the reclassification process is to review the comparison of performance in basic skills. This review will focus on the student's results on the latest Smarter Balanced Assessment score in English Language Arts. If the student attains at least "basic" on the results of the latest Smarter Balanced Assessment we will move on to the next step in the decision process. If this criterion is not met, the student would remain an English Learner.
3. The third step in the process is a review of the teacher evaluation of student academic performance. This review looks at whether the student meets the academic performance indicators set by the school that include the student's grades in English Language and Arts. If the student attains a grade of at least "c," we will then move on to the next step in the reclassification process. If not, the student would remain an English Learner.
4. The fourth step in the process is parental opinion and consultation. If the student has satisfied all criteria for reclassification, then we will notify parent(s) and guardians of their rights to participate in the reclassification process.
5. Finally, the student would be reclassified to Fluent English Proficient (RFEP). As part of this process, parents and guardians should be notified, school records would be updated, and the student's progress would be monitored for two years to be certain the student's academic achievement and progress is continuing to improve. If the student fails to improve, we will intervene and not allow him or her to fall behind.

Teaching Approach and Instructional Methods

In order to ensure success for each student, the staff at SLSA must use multiple means of reaching students—relying first on students' identified learning preferences and cultural styles, and gradually stretching each student to be able to adapt to a variety of teaching styles that might present themselves in post-secondary education and/or job training. Among these methods are:

- **Differentiated Instruction**. In differentiated classrooms, teachers begin where students are, instead of a curriculum guide. Because each student is unique when it comes to learning profile, teachers will provide differentiated instruction that takes into account many factors. Among these are varying the modes of curriculum delivery, offering students choices in materials, and allowing a variety of styles of demonstration of knowledge. At SLSA, students will be given information about various learning and teaching styles, multiple intelligences, and cultural styles. They will be helped to create a learning profile for themselves by teachers and parents. Although instruction will be differentiated to allow students to master core content and skills, as they progress, students will be expected to challenge themselves to stretch beyond their most comfortable modalities, so that they are prepared for what they may encounter in college and/or careers.
- **Inquiry-Based Learning**. The internal questions, interests, and career goals that each student holds are the most powerful motivators to want to learn. Although all students must master the common core of skills and cognate knowledge, this core can be mastered and expressed in a

variety of unique ways. Students come alive when they are trained to be researchers in search of answers to their driving questions. Our curriculum will have the additional intent of teaching such research stances and approaches so that students can become lifelong pursuers of knowledge that has a meaningful place in their lives.

- **Theme and Project-Based Learning**. Frequently, students will be exposed to thematic units that are approached from a multi-disciplinary perspective; faculty will collaborate to develop several thematic units per grade/per year to help students recognize the ways in which different disciplinary lenses can be brought to bear on a single question under inquiry. For example, students will have the opportunity to develop projects that relate to interests and demonstrate mastery of content and skills. As SLSA strives to develop students' 21st Century skills it will be important to coach students in how to work productively on teams and use interdisciplinary approaches to problem-solving.

- **Mentored Study**. Mentoring another and being mentored are two of the oldest forms of both classical and vocational education. At SLSA, students will have the opportunity to be mentored by teachers, staff, community members, parents, volunteers or other students; in turn, many of them will be trained to mentor others at the school. Peer mentoring has been found to be one of the most effective tools to increase academic performance, boost self-esteem, and model social skills. The practice produces positive gains for mentors and mentees. The mentor must be a master of the material (academic and social awareness) before sharing it with another; the mentee receives much-needed tutoring and role modeling from an admired older person.

At SLSA, peer mentoring will be encouraged to improve student performance, build community, enhance leadership, and support students as they go through important developmental-transitions.[15]

- **Technologically-based Learning**. In preparation both for full participation in our global society and for access to online STEM materials, students will take part in learning and demonstrating knowledge through technologically enhanced means and communicating through multiple media, such as online classrooms, apps, and social media.[16]

- **Community-Centered Learning**. Whenever possible, SLSA students will be exposed to community sites and resources as learning experiences. Those might include inviting local engineers, scientists, physicians, business people, entrepreneurs, and community leaders to school or visiting historic sites.

[15] See In our voice: How peer mentoring is changing lives. College for Every Student. www.collegefes.org.27 Joyce, B., Weil, M., (2000). Models of teaching. Needham Heights, MA.: Allyn &Bacon

[16] Jones,B.F.,Valdez,G.,Nowakowski,J.,&Rasmussen, C.(1995). Plugging in: Choosing and using educational technology. Washington, DC: Council for Educational Development and Research, and North Central Regional Educational Laboratory. Available online: http://www.ncrel.org/sdrs/edtalk/toc.htm

Instructional Enrichment Approaches

Core Group

This is an advisory group, in which students have a peer group assigned to one teacher or staff member who acts as a mentor and guide throughout the student's school year. The group can function in a variety of ways, based upon its collective desires, and provides a check in point to begin each day.

Enrichment Activity

This time may be used in myriad ways that support the school's STEM mission. It may include additional STEM related lessons and activities, health and wellness activities, leadership or peer mediation training, service opportunities, or supplemental support instruction for special learners or those who request additional learning support time. Interest groups may also be offered during these slots.

School Improvement Committees (SICs)

As part of their service leadership requirement, students join or form SIC's, which may take many shapes: advisory; curricular; social; environmental; school culture; mentoring; community outreach; public relations and communications, and the likes. Students are expected to begin participation in these activities at fourth grade.

Out-of-Class and After School Program Activities

SLSA after-school programs will be oriented towards STEM experiences, and support for lessons, projects, contests and programs in STEM will be prevalent in the After School day programs funded by SLSA. Tutoring and mentoring will also be made available to students who participate in these programs at SLSA. SLSA administration will seek to hire current college students to serve as tutors during the after school-extended school programs. Tutors will be able to provide supplemental assistance to students in all subjects. Tutors hired will be STEM proficient and are currently pursuing college degrees and careers related to STEM.

Out-of-class and After School activities in science, technology, engineering, and mathematics can take many forms and can serve students regardless of their level of achievement in a formal learning environment. Students could participate in school-based mathematics contests, science fairs, or robotics competitions. They could attend after-school programs in which they connect mathematics with household activities, build robots using Legos, tell stories with animation technology, or study wildlife.

They could visit museums, zoos, and aquaria or work as interns in science centers and state parks. They could enroll in weekend programs or summer camps on engineering, astronomy, or number theory. They could work as interns with STEM-oriented companies in their cities and towns, attend lectures by STEM practitioners, or be mentored or tutored by people in their communities who work in STEM fields. They could use design labs that give them access to sophisticated fabrication laboratories. Evaluations of such programs rated as high quality show that they are associated with increases in student achievement and other positive outcomes.

Opportunities to learn STEM outside of regular school hours and perhaps settings are especially important for members of groups underrepresented in science and engineering, including girls, Hispanics, African Americans, and Pacific Islanders. As early as elementary school many students from

these groups begin to think that they will not or cannot excel at STEM. These messages sap the natural interest and lower the performance of groups underrepresented in STEM fields. Out of class activities can counter these messages by showing students that they can succeed at STEM and that STEM is not reserved for certain types of students. Also, they can connect students with role models and mentors who take an interest in their success in those fields and believe in their promise. In addition SLSA group-based STEM activities can play an important role in forming peer groups interested in STEM and in changing the culture of STEM to attract students with diverse backgrounds, interests, personalities, and learning styles. In this way, out- of-class activities can build interest and persistence in STEM subjects for girls and the members of minority groups.

Professional Development

As a part of on-going staff professional development, there will be workshops and sessions to learn about best practice in assessment, disaggregation of data, interpretation of data, and using data to drive curricular reform. Initial professional development will focus on enabling school personnel to learn the philosophy and tenets of the SLSA and how to communicate it effectively to all stakeholders, including students at the start-up of the SLSA all teachers will participate in intensive professional development regarding the following topics.

- Best practices in teaching and supporting literacy
- Responsiveness to Instruction model
- Positive Behavior Intervention and Supports
- Mechanisms for fostering student resiliency
- Effective strategies for strengthening and integrating math and science instruction
- Working with English language-learners using the Sheltered Instruction Observation Protocol(SIOP)

Performance Objectives and Timeline

SLSA seeks to ensure that every student's achievement is measured with an assessment system that assess and evaluates our student's skill sets, knowledge, STEM curriculum proficiency and performance needed to advance our students to the next phase of their educational progression. Specific measurable performance objectives are listed below. Year 1 of the Charter is treated in these objectives as the baseline for measuring future improvement.

- **Performance Objective 1**: In each of Years Two through Five of the charter, student assessment performance will increase at least three percent each consecutive year for students who are "proficient." For example, if 75 percent of students met the proficiency standard on reading in grade 2 during Year One, then at least 78 percent are expected to meet proficiency standards in Year Two of the Charter.
- **Performance Objective 2**: In each of Years Two through Five of the Charter, student performance on the reading and math portions of the Iowa Test of Basic Skills will improve by at least three percent each, as measured by the percentage of students at each grade level who

score at or above the national mean for their grade. This objective requires that each grade level meet the standard of improving by three percent in order to meet the objective.

- **Performance Objective 3**: In each of Years One through Five of the charter, the school will meet the "Expected Growth" standard set by the San Leandro Unified School District.
- **Performance Objective 4**: After seven years of operation, SLSA will track its first graduating class. SLSA seeks to have a minimum of 90% of its school population graduate within four years. SLSA also seeks to have 100% of its graduating seniors leave school with a full-time job or a confirmed acceptance to post-secondary education.
- **Performance Objective 5**: SLSA aims to have a connection between core and STEM curriculum and content and real world, century application of what students are learning. One of the major goals for SLSA is to expose their students to career possibilities in grades 5-6 in order to help each student find his/her strengths, areas of passion, and possible careers that have help students to be good citizens. In doing so, students will begin to recognize the link between possible career tracks and what they are studying in middle school; the necessity of taking appropriate curriculum at the high school level; and the role that post-secondary education can play in advancing their career aspirations.
    - One hundred percent of students will develop a Personal Portfolio, which will include a career section.
    - Throughout the course of each school year, local business leaders, college personnel and students, parents, and community members will be asked to provide in-school presentations and workshops on topics related to career choice.
    - Such presentations will take place at least four times per year for students in grades 5-6.
- **Performance Objective 6**: Parents/families' satisfaction with the charter will be evaluated formally each year with a questionnaire; a parent committee will help to draft that evaluation. Results will be shared with families and the committee will solicit ideas for improvement. All results of satisfaction surveys will be published in the newsletter, on the web site, and in appropriate local media.

SLSA aims to have 90 percent of parents very satisfied at the end of Year One and maintain or improve that level of satisfaction for each year of operation.

Improve student learning

We expect students who attend SLSA to translate the mission and philosophy into daily educational practice, students and staff will utilize the following practices:

1. Early Career Awareness.
2. Tailored Studies.
3. Preparation to pursue careers in to Science, Technology, Engineering, and Math (STEM).
4. Relational Learning.

5. Families as Partners.
6. Service Leadership.
7. High Expectations, High Support for All.

Early Career Awareness

As stated previously: one of the major goals of the school is to expose our students to career possibilities in grades 5-6 in order to help each student find his/her strengths, areas of passion, and possible careers. In doing so, students will begin to recognize the link between possible career tracks and what they are studying in middle school; the necessity of taking appropriate curriculum at the high school level; and the role that post-secondary education can play in advancing their career aspirations. The school will introduce sixth grade students to potential STEM careers and will connect those careers to courses of study. Each student will develop a Personal Portfolio, which will include a career section.

Sandria Rodriguez (2003)[17] finds "positive naming" one of the most powerful tools to promote college aspirations and access in underserved populations. Rodriguez (2003) investigated factors that contributed to the success of first-generation college students by interviewing seventeen first-generation students from a variety of backgrounds. She found three key factors that helped first-generation students apply to college, gain admission, and graduate.

Rodriguez (2003) refers to the first factor as *special status*. Students in her study were typically singled out, in a positive way, during childhood. This special treatment gave students the self-confidence to take risks. Risk-taking led the students to experience things that were not typical of other family members and positively impacted their decisions to move away from home and begin college.

Rodriguez identified *positive naming* as a second factor that contributed to student success. Positive naming involves someone in the student's life who recognizes his or her potential, connects the student's natural strengths and characteristics to a profession, and helps the student learn how to enter that particular field. The third factor that Rodriguez identified involves *encouragement, assistance, and advocacy of mentors in the student's life*. SLSA will use positive naming—recognizing students' potential, connecting them to their natural strengths, linking those strengths to professions, and showing students how to enter those professions—in all aspects of its early career and college awareness programming.

Tailored Studies

- **Small School Atmosphere.** SLSA will offer small grade cohorts and small classes so that students are known and valued as unique individuals. Such a setting will permit teachers to recognize areas of strength to build upon, fundamental skills and cognate areas that need strengthening to achieve competency, and students' goals and aspirations, so that assignments, when possible, can be individualized. All students will be assigned to a Core Group with a teacher serving as the Advisor.
- **Learning Profiles.** In conjunction with their Core Group advisors, all students starting at third grade will develop an Individualized Learning Profile (ILP) that articulates their learning "assets" (strengths to build upon), preferred learning styles, challenges, and strategies to address those

[17] Rodriguez, S. (2003). Positive naming. About Campus, 17-22

learning challenges. Advisors will disseminate information at the beginning of the year and use sessions in those early weeks to help students develop the ILP's, which will be revisited during the year.

- **Student Goals Plan.** Each student will reflect upon his/her individual academic and social talents, passions and needs, leadership through service activities, career path, and post-secondary plans and develop a PGP that includes clear and measurable goals.

- **Individualized Educational Plan (IEP).** When one hears the term "IEP," s/he most likely thinks about the plan of a "special needs" student. We imagine each individual learner as a "special promise/special needs" student. Therefore, each student, in conjunction with his/her Core Group Advisor, family, and teachers, will construct a clearly-articulated IEP for each year. In the case of identified students with disabilities, all procedures for mandated IEP's (i.e., Individualized Education Program) will be followed. Each student will engage in the process of IEP review at points during the year. IEP's are focused on academic goals and the curriculum necessary to achieve them, while PGP's include personal, social, leadership and service goals, as well. Reinforcing the commonalities among students, by engaging all in goal-setting, identifying learning styles, developing personal portfolios, and having an IEP, supports inclusive a nature of STEM learning at SLSA.

- **Differentiated Instruction.** Using differentiated instruction, according to Hall, Strangman, and Meyer (2009), "is to recognize students' varying background knowledge, readiness, language, preferences in learning and interests, and to react responsively."[18] The intent of differentiating instruction is to maximize each student's growth and individual success by meeting each student where he or she is and assisting in the learning process. Doing so allows teaching and learning in a classroom where there are students of different abilities and levels of preparation. Instruction at SLSA will be based on the Universal Design for Learning [UDL] approach.[19] The purpose of UDL curricula is not simply to help students master a specific body of knowledge or a specific set of skills, but to help them master learning itself—in short, to become expert learners. Expert learners have developed three broad characteristics. They are: a) strategic, skillful and goal directed; b) knowledgeable, and c) purposeful and motivated to learn more. Designing curricula using UDL allows teachers to remove potential barriers that could prevent learners from meeting this important goal. Teachers will become proficient in UDL so that they can tailor their teaching to individual differences within each of the three brain networks. They will use "multiple means of representation" to help students acquire knowledge and skills; "multiple means of action and expression" to allow for a variety of ways of demonstrating one's knowledge; and "multiple ways of engagement" to tap individual students' interests and passions, and challenge and motivate them to relate their learning to these unique qualities.

[18] Hall, T. Strangman, N., & Meyer, A. (2009). Differentiated instruction and implications for EDL implementation. Wakefield, MA: National Center on Accessing the General Curriculum. Retrieved 10/16/10 from http://www.cast.org/publications/ncac_diffinstructu dl.html

19 Ibid

Relational Learning

The essence of all meaningful learning lies in relationships—between the learner and the material studied, between the learner and "teacher" or "teaching environment," between the learner and others in his/her learning community, and between the learner and him/herself. In a recent Harvard Education Press study of five, high-performing charter schools in low-income districts, Merseth et al. cited a culture in which warm relationships existed among school members was a hallmark of successful charters.[21] In a study on developing resiliency in high poverty youth, Linda Winfield discovered that "academically resilient adolescents developed strong support networks that provided assistance for success in and out of school."[22] SLSA takes each of these relational aspects in earnest in its planning of the curriculum and extra-curricular activities. Establishing post-secondary and career goals helps to provide a logical connection between the learner and the material studied. Teachers and mentors help to continuously reinforce the rationale and the relationship between what is being studied now and who each student hopes to become in the future, thus strengthening the motivation to master the common core and other required materials. Small class size, core groups, mentoring opportunities, and service activities that engage with other school and community members make up the teaching environment at SLSA. Students also are able to see that relationships can shift—for example, that one may be the mentee in a particular subject area and yet mentor another student in a different topic. Relationships between the student and others in SLSA learning community are enhanced through core groups, all – school activities, class activities, and family activities; they also are strengthened by the expectation that each student is a valued leader— albeit a unique leader—within the community, thus revamping traditional school hierarchies in which only a few students are seen as the leaders. The students grow in relation to themselves as they reflect on who they are, who they are becoming, how they are gaining in knowledge and skills, and what steps they are taking towards the college and career pathways that they have articulated for themselves. Such reflection takes place in activities such as goal setting, family meetings, and portfolio building. In essence, the relational model that undergirds SLSA is derived from the concept of "distributive counseling," which asserts that all staff, not simply those credentialed as "counselors," play an important role in guiding, mentoring, supporting, encouraging, and nurturing the dreams and talents of all students.

Families as Partners

SLSA recognizes that no child can fully blossom into the unique individual that he or she is meant to be without support and involvement from "family," in whatever way the child defines "family." The founders are further aware that for many of these family members, "school" is not an inviting place, based on their own past experiences. For these reasons, SLSA will strive to establish an environment in which family members feel valued, respected, and integral members of their child's learning team.

SLSA is insistent on high expectations for families. Family support and involvement is also a critical component of success.

---

[21] Merseth, K., Cooper, K, Roberts, J., Tieken, M.C., Valant, J., & Wynne, C. (2010). Inside urban charter schools: Promising practices from five high-performing schools. Cambridge, MA: Harvard University Press.

[22] Winfield, L.F. (1994). Developing resilience in urban youth. Monograph published by NCREL's Urban Education Program as part of its Urban Education Monograph Series.

Families will be invited to take part in such regular events as: First Night's Eve Celebration (to open the school year); STEM Information sessions, quarterly Student Recognition Breakfasts; school committees; Student Goal Planning; early college and career workshops; and school social events and celebrations. Family members who desire leadership roles and personal development can serve on the Family Advisory Board, for example, or take part in monthly presentations that relate to current topics in educational and schooling. Such presentations are intended to provide support to family members so that they can be active agents in their children's learning, as well as keep them abreast of local, state and national trends in education.

Service Leadership

Service Leadership represents the belief that all students are potential service leaders—those who use their leadership abilities to improve their schools, communities, and environment---but that young people, need opportunities to discover what kind of leader they want to be, learn skills that effective leaders possess, and have access to volunteer and service activities that help them refine their skills and grow in confidence. Such experiences, in some cases, may also provide career exposure. Leadership and service are experiences that are highly prized both by colleges and employers, but all youth do not have equal access to those experiences; thus schools must be active agents in leveling the playing field. A 2005 Corporation for National &Community Service survey found that students with fewer family resources were far less likely to participate in service leadership, but when they were afforded the opportunity, the benefits to their lives appeared to be greater than those with more resources.[23] Students who participated in service leadership were more likely to volunteer again, believe they can help solve community problems, take a greater interest in current events, discuss politics more often, believe people can be trusted, and have a more positive view of their future. All students will have opportunities to fulfill a leadership in service requirement in a variety of venues—community organizations, school committees, or churches. College personnel, mentors, and community members will be vital links to leadership training and service opportunities for our students. The school will be pervaded by the expectation that all members are leaders and that there are multiple ways to be service leaders.

High Expectations, High Support for All

Merseth (2010, p.136) summarizes her findings across the five high-performing charters in low-income districts with high-poverty students that she studied: "In all of the classrooms in all of these schools, the expectations for student engagement and behavior are palpable. Students are expected to work hard, behave, and participate at all levels." Teachers' in schools who hold high expectations in the ability of all students to achieve desired outcomes, find their students rise to the level of expectation. Not only do such schools hold high expectations, but they know that they must create an infrastructure that supports diverse learners academically and socially.

Increase learning opportunities for all students, with special emphasis on expanded learning experiences for students who are identified as at risk of academic failure or academically gifted

[23] National Center for Children in Poverty (2006). Retrieved February 27, 2012 from http://nccp.org/publications/pub_687.html

SLSA is an inclusive school that embraces underserved students, students at risk and students with disabilities, as well as students identified as academically gifted. SLSA will expand learning opportunities through the following special characteristics and offerings of the school:

- Support for behavioral and mental health of children.
- SLSA will provide mental health support within the school, including providing therapeutic and behavioral interventions, as well as connecting students and families to the community resources they need. Because children and youth from low-income households are at increased risk for mental health problems, SLSA will provide research-based behavioral interventions, including the use of the Positive Behavior Interventions and Supports. SLSA will also assist in coordinating assistance for students and families who need services or resources from multiple human service agencies. The Board is experienced in the provision of such services and can connect students with services directly.
- Individualized Education Plans and Individual Goal Plans for all students.
- As explained in the "Purposes" section above, all students will have individual education plans that are focused on academic goals and the curriculum necessary to achieve them. All students will also have Personal Goal Plans (PGPs) that will include personal, social, leadership and service goals. All students will be part of a team that creates and oversees their Individual Education Plans. Because the plans are unique to each student, they articulate personal academic goals and the ways in which those goals will be met. Frequent review of IEP's will permit teachers and students to adjust instruction, curriculum or other learning processes to achieve success. Students who are academically gifted will participate in this process that articulates personal academic, social, leadership, and service goals. Because SLSA extends the school day and tailors instruction to meet the needs of all students, academically gifted students will be challenged in classes and will have the opportunity to be involved in experiences that are challenging and appropriate to their achievement level.
- Embedding and leveraging technology throughout all aspects of the program. School-wide Internet access and the creation of physical spaces that support team teaching and student collaboration are intended to help teachers and students learn through utilizing technology, working together, and solving problems as a team. Such an approach to teaching and learning can support students with learning difficulties while also meeting the needs of academically gifted students. A network that is used daily by teachers, students, and parents is also intended to "level the playing field" by providing access to resources and facilitate authentic student assessment.
- Individualized learning experience that emphasizes both 21st Century skills and the development of student character, leadership, and community responsibility. The school endeavors to provide excellent teachers who are well-prepared to lay the foundation for future STEM learning. We will recruit and provide in-service staff development so that teachers will be prepared to encourage students' curiosity and confidence in science and mathematics.

We have high expectations for all students and believe that students must study and practice skills that will lead them to be leaders and productive citizens. All students will receive direct instruction in

leadership skills, mediation skills, and mentoring. Additionally, students with disabilities will be integrated into the full experience of the school community through the expectation that they will take part in mentoring, service, leadership and career planning.

A school culture that focuses on early interventions and supports. SLSA will utilize the Responsiveness to Instruction (RTI) model. In the RTI model, classroom teachers and special education teachers design and apply research-based interventions to help student meet classroom goals. Intervention plans will include additional support, personalized approaches and materials, and additional time to complete tasks, or other strategies deemed viable in assisting the student achieve without further, more formal intervention. SLSA will also utilize cognitive-behavioral interventions for students who experience significant social, emotional, and/or behavioral challenges. From its beginning SLSA will put into practice School-wide Positive Behavioral Interventions and Supports (PBIS). This research-based system focuses on establishing rules, routines, and physical arrangements from Day 1 that are developed to prevent initial occurrences of behavior the school would like to target for change. The system is founded on the assumption and belief that all children can exhibit appropriate behavior.

Encourage use of different and innovative methods

In order to ensure success for each student, the staff at SLSA must use multiple means of reaching students—relying first on students' identified learning preferences and cultural styles, and gradually stretching each student to be able to adapt to a variety of teaching styles that might present themselves in post-secondary education and/or job training. The methods that will be utilized are listed below. Each of these methods is described in detail in the Education Plan section of this application.

- Differentiated instruction
- Inquiry-based learning
- Technologically-based learning
- Theme and project-based learning
- Mentored study by teachers, community members, and/or other students, and community-based learning.

The following activities are examples of innovative practices that will be utilized at SLSA that reflect the school's relentless focus on student academic growth and achievement:

- All students will be assigned to a Core Group Advisor and Core Group. The Advisor will act as a daily check in and will track student progress of his/her advisees to ensure that all advisees are on track for academic success.
- The school will maintain low student-staff ratios to ensure that all students are known and that their learning needs are met with tailored instruction.
- All students will attend daily Achievement Center, where they will have access to homework help and tutoring.
- All students will be part of a team that creates and oversees each student's Individual Education Plan. Because the plans are unique to each student, they articulate personal academic goals and

the ways in which those goals will be met. Frequent review of IEPs will permit teachers and students to adjust instruction, curriculum or other learning processes to achieve success.

- Teachers will work according to the principles of Universal Design for Learning (UDL), which aims to tailor teaching and assessment to students' learning styles, cultures, interests and strengths. Utilizing UDL "provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged "
- Family members will have access to their children's current academic status on a daily basis, will have opportunities to conference with their children and their teachers, and will be able to attend presentations and workshops that increase their skills and confidence in supporting their children through homework monitoring and other interventions.
- All students will be integrated into leadership and service activities, giving them equal access to roles that can increase self-esteem and sense of belonging to the school community.

Create Learning Opportunities

SLSA will be a school that nurtures and cultivates staff's pride and ownership with the quality of teaching and learning. We intend to recruit teachers who are passionate about teaching and who, themselves, are lifelong learners. We realize that these very special types of teachers need to be continuously supported in their quest to grow and to be the best at their craft.

Provide ownership of learning to staff

It is the Board's hope and expectation that there will be competitive recruitment and hiring, resulting in a passionate, talented cadre of teachers who are drawn to the school's mission. But all good educators must be challenged and supported in their growth, and professional development (PD) activities at SLSA should be the vehicle for such growth. In addition, novice teachers need to be supported in their growth and understanding of their profession. To this end, a variety of in-house and external activities will take place. At SLSA, teachers will have weekly common planning time to discuss school-wide issues or work in teams or grade levels on curriculum and instruction. Each teacher, as part of his/her annual evaluation process, will articulate individual professional development goals; these will be shared with colleagues at various times during the year.

In-house professional development opportunities will be identified based on teacher need and interest, as well as common needs related to school mission; these needs will be gauged by a survey administered by the Professional Development Committee during the spring of each year and re-visited at mid -year. On a rotating basis, all teachers will serve on an administration/teacher/parent Professional Development Committee that gathers information about professional development needs and interests and locates resources and provides scheduling for the year's programming. Attendance/presentation at conferences, visits to other schools, and meeting with field experts will be proposed on an individual basis and supported whenever possible. All teachers will take part in one week of professional collaboration prior to the opening of school.

Professional development that is planned in order to develop a common understanding of the way in which the SLSA philosophy and the school's learning program includes:

- Universal Design for Learning
- Project Based Learning and best practices for STEM Instruction
- Positive Behavior and Intervention Supports
- Responsiveness to Instruction
- Implementing the Common Core Standards in Mathematics and English Language Arts
- System of Care Collaborations: Ways to work in partnership families who need services or resources from multiple human service agencies to be safe and successful at home, in school, and in the community, and through this assistance, make the community
- Formative and classroom assessment principles and methods
- Several books will be read as a faculty group and discussed at faculty meetings. These might include:
    - Understanding by Design
    - Revisiting Professional Learning Communities at Work ™: New insights for Improving Schools, and Beyond Monet

Professional Development in the topics above will be ongoing, as opposed to one-day sessions. The combination of topics is intended to continuously invigorate and challenge teachers and staff with the end result of an innovative learning environment that improves student outcomes.

Provide parents and students with expanded choices

The Region in which SLSA will be located presents many challenges for traditional public schools, which do an admirable job in meeting those challenges. SLSA provides a choice for families, particularly for low income parents and for parents who have not enrolled in any education beyond high school. The characteristics of the school that are outlined above (After School Program, support for behavioral and mental health needs of students, Individualized Education Plans and Individual Goal Plans for all students, STEM-focused instruction, and direct programming regarding college and career choices and opportunities for students and their families) are unique characteristics that are grounded in research as ways to meet the needs of students with the particular challenges faced by students in the Region. Hold the schools established under this part accountable for meeting measurable student achievement results and provide the schools with a method to change from rule-based to performance-based accountability systems.

Accountability for high student achievement is a core goal of SLSA. Teachers, staff, and administrators will collect and review student performance data on an ongoing basis. Cumulative student and school-wide performance data, such as standardized test scores and student highlights, will be disseminated annually to all stakeholders (the Board will receive quarterly updates during Board meetings). Individual student performance data (e.g., formal report cards, narrative evaluations of students' academic performance, and progress toward individual goals) will be disseminated quarterly to students and their parents. Students' achievements and successes will be celebrated at quarterly Recognition Breakfasts to which stakeholders will be invited. Cumulative and individual performance data will be synthesized and

explained, detailing strengths and weaknesses as well as action steps for improvement. All reports will be shared in the native language of parents/guardians. In many instances, data will be disaggregated according to important variables, so that a more comprehensive understanding can be reached. Sub-scores on a particular test, mastery of particular sub-skills within a content area, and group performance on an assessment are examples of how this might occur.

In addition to meeting goals that are rule-based (e.g., percentage of students meeting or exceeding a standard) that are described in a previous section, SLSA aims to gather and report other important student performance indicators.

SLSA will collect data and report regularly regarding the following indicators:

- Student attendance rate.
- Student community service rate and descriptive data about type of service.
- Transition after high school (to higher education or employment) rates and descriptors.
- Student-staff ratio.
- Parental involvement data (e.g., number of parent-attended events, absolute number of parents attending events, rate of parents visiting the school, rate of parents attending meetings via conference call, rate of website use (see discussion in next paragraph.)
- Community involvement data (e.g., number of events at which community representatives, such are present, number of community sponsored events conducted at the school.)
- The school website will be an important source of information for parents and guardians, as it is there that they will have secure access to their children's test scores, report cards, and teacher feedback. All parents/guardians can attend orientations to become familiarized with the system. Although the website will be the main source of these data, parents also will receive at least bi-monthly communications from their children's teachers; will be invited to attend quarterly conferences; and will receive a newsletter highlighting accomplishments of students and the school.
- Community business partners and local college representatives also will be regularly included in discussions about outcomes, as they are crucial to enhancing students' success once they have graduated from SLSA.
- The school website will post information about the indicators above on an annual basis and will contain information comparing current year data to prior years.

New Forms of Accountability and Measurement Tools

SLSA will use the Northwest Evaluation Association's Measures of Academic Performance (NWEA MAP) both to assist with data-based decision making for teachers and administrators and to evaluate overall school performance. The NWEA MAP, a computerized adaptive test that accurately and efficiently assesses student performance on basic skills, provides nationally norm-referenced projections for annual student growth. This allows the school to measure its "value added" for each student on an annual basis. Our goal is to consistently outperform expectations.

SLSA will follow the California Common Core Curriculum Standards and will use a comprehensive learning management program to aid teachers, parents, and students in their collaborative efforts to help all students meet or exceed these standards. We will offer a variety of program elements tailored to the needs of each individual student. Central to SLSA efforts to "personalize" learning is offering multiple pathways for students to meet content standards. For example, SLSA will not adopt a particular math series—our students will have access to multiple approaches, facilitated by technology, teacher-provided instruction, labs equipped with manipulatives and other hands-on applications, and tutors. Students can use what works best for them.

Diverse Learners

SLSA welcomes and is designed to serve a diverse population: students with cultural, ethnic, physical, religious, and learning differences. Our inclusive approach—which includes tailored and personalized instruction, modifying curriculum and instruction to best suit students' varied intelligences, tutoring, mentoring, and core group advising—is aimed at reducing the number of problems that atypical learners might encounter in a more traditional learning environment.

However, no matter how well designed and inclusive SLSA may be, some students will need additional supports in order to achieve academic success: more specifically, English Language Learners (ELL) and students with educational disabilities. In addition, students who are academically gifted will also need supports in order to achieve their potential. In order to address their unique needs, SLSA will be fully compliant with state and federal regulations for special student populations and, endemic in the instructional practices and culture of the school, programming will exceed what is required by law. The Least Restrictive Environment (LRE) paradigm, in which students' instructional needs are met within the regular classroom, will always be used when appropriate and will be the default mode. In some cases, pull out from the classroom for more intensive support will be deemed the best course of action. However, our emphasis is upon the exceptional children (EC) staff (comprising both special education teachers and all related service providers) working within the regular classroom and engaging the family support structure of each student to provide out-of-school follow through. In this regard, these strategy experts will also be available to typical learners as well, assuring their expertise is optimized for the entire student body. In effect, their presence also provides a logistical platform for an embedded Responsiveness to Instruction model, whereby struggling learners not as identified as needing special education supports may have their needs met in "real time."

Special education staff and general education teachers are partners who collaborate to design, implement, and assess effective strategies that best meet the needs of all students. The special education staff will train all general education teachers in identifying and implementing instructional strategies for special needs students, as well as typical learners. These teaching teams will also have regularly scheduled common planning sessions to provide ongoing support for students needing modifications. Family members and upper grades peer mentors, who are identified as especially skilled at working with special needs populations, also will be able to receive education and training, and are valued as important components of a high-functioning team.

Students with Disabilities

SLSA will serve students of all ability levels. Students and families desiring a learning community that recognizes scholarship, academic achievement, and creativity, while respecting each student as a valued

individual of great potential and promise, will find they fit at SLSA. The founders of SLSA intend to meet each student's individual needs with ongoing assessment, ability grouping, and Individual Education Plans (IEP), per federal and state law. The school believes these tools will allow students to set and achieve individual goals and be supported in creating their own success. Several elements of the school's instructional approach are inherent in the design of the school. They are designed to enable the school to more effectively and efficiently respond to diverse demands and help accelerate the learning of lower achieving students. These include:

- **Computerized-Adaptive Learning**. SLSA HOPE learning system will integrate a variety of instructional technologies designed to personalize instruction and optimize learning. We will make use of the best tools available—products that are marketed by various service providers, open source offerings, and our own proprietary system. For many years, computerized-adaptive tests such as the NWEA MAP have been used to efficiently and accurately assess student performance. Such computerized testing systems adjust questions based on previous responses.
    - The evolution of analytics engines integrated into learning management systems will now allow this same basic approach to be applied to instruction at very sophisticated levels.
    - Learning systems can adapt challenges embedded in lessons to the appropriate level of difficulty for individual students. Options for developing background knowledge can be presented so as to reflect an individual student's learning style or preferences. The capacity of computers to individualize and enhance student learning has the potential to transform education. SLSA will provide the environment, structure, systems and resources necessary to realize this potential.
- **Cooperative learning**. A significant body of research has shown that cooperative learning instructional strategies produce greater academic achievement, enhance self- esteem, and improve relationships between mainstreamed academically handicapped students and normal- progress students. The approach enables all students to experience success and places students in a position in which they more naturally learn from their peers.
- **Hands-on, experiential learning**. These types of activities enhance learning for all students, but they are often particularly helpful for students that struggle with more traditional instructional approaches. Students have greater opportunity to employ their "multiple intelligences" to gain understanding of key concepts. In addition to the work of Howard Gardner, these activities are supported by research in the cognitive sciences.
- **High expectations**. All students will be expected to set and achieve challenging academic goals designed to accelerate their learning. Progress will be charted in their student portfolios.
- **Tutoring assistance**. In addition to the After School Tutors that will be hired to run the Program. SLSA additionally will seek parent/community and student volunteers to provide tutoring before, during, and after school. Peer Tutoring with school student leaders will also be accessible for those needing extra assistance or extended learning time. Peer tutoring will also enhance the social well-being of those involved in the Special Education program.

SLSA feels an obligation to ensure that each student is treated as an individual, with special gifts and needs. Appropriate accommodations will be made for students with disabilities in order to ensure access to all activities.

Federal Law Compliance

Charter School shall adhere to all provisions of federal law related to students with disabilities including, but not limited to, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, and the Individuals with Disabilities Education Improvement Act of 2004.

Special Education Program

All SLUSD-authorized charter schools must adhere to all terms and conditions of the Chanda Smith Modified Consent Decree ("MCD") and any other court orders and/or consent decrees imposed upon the SLUSD as they pertain to special education. Charter schools must ensure that no student otherwise eligible to enroll in their charter school will be denied enrollment due to a disability or to the charter school's inability to provide necessary services. Policies and procedures are in place to ensure the recruitment, enrollment and retention of students with disabilities at charter schools.

Prior to SLUSD Board of Education approval, SLSA will execute a Memorandum of Understanding ("MOU") by and between SLUSD and SLSA regarding the provision and funding of special education services consistent with the requirements of the SLUSD Special Education Local Plan Area ("SELPA") Local Plan for Special Education.

SELPA Reorganization

The San Leandro Unified School District is approved to operate as a single-District SELPA under the provisions of Education Code § 56195.1(a) and intends to continue operating as a single-District SELPA as in the current structure but has created two school sections (District-operated Programs and Charter-operated Programs) under the administration of one single Administrative Unit pursuant to a reorganization plan approved by the Board of Education on January 4, 2011 (149/10-11). Full implementation of the reorganized San Leandro Unified School District SELPA commenced in the 2013-2014 school year requiring all District-authorized charter schools to elect one of the three options available under the SLUSD SELPA. Prior to an Option election, all District-authorized charter schools were required to participate as a school of the District under the District-Operated Programs Unit. Prior to the beginning of the 2013-2014 school year, all District-authorized charter schools, other than those that have previously executed an Option 3 Memorandum of Understanding ("MOU"), were required to execute a new MOU setting forth the SLUSD SELPA option election for the remainder of the charter petition term.

The Charter-operated Program schools will not have a LEA status but will function in a similar role in that each charter school will be responsible for all special education issues including services, placement, due process, related services, special education classes, and special education supports. Charter schools may apply for membership in the Charter-operated Program section of the SELPA. These schools will receive support from a Special Education Director for the Charter-operated Programs.

Compliance with Child Find Activities: Conversion and Public School Choice (PSC) Schools

District-authorized conversion and PSC charter schools must conduct Child Find activities for students residing in their pre-charter and/or PSC attendance areas (including private school students), so that students who have or are suspected of having a disability and needing special education and related services are appropriately identified and, if necessary, referred for evaluation in accordance with state and federal law. Conversion and PSC charter schools must distribute the District's brochure, "Are You Puzzled by Your Child's Special Needs," prominently display the Parent Resource Network poster, and use other District materials to address the search and serve requirement of the law (e.g., "The IEP and You").

Modified Consent Decree Requirements

All charter schools approved by the SLUSD Board of Education are bound by and must adhere to the terms, conditions and requirements of the Chanda Smith Modified Consent Decree ("MCD") and other court orders imposed upon the District pertaining to special education. The MCD is a consent decree entered in a federal court class action lawsuit initially brought on behalf of students with disabilities in SLUSD. It is an agreement of the parties approved by the federal court and monitored by a court-appointed independent monitor. The MCD includes nineteen statistically measureable outcomes and facilities obligations that the District has to achieve to disengage from the MCD and federal court oversight. All charter schools are required to use the District's Special Education Policies and Procedures Manual and Welligent, the District-wide web-based software system used for online Individualized Education Programs ("IEPs") and tracking of related services provided to students during the course of their education.

As part of fulfilling the District's obligations under the MCD, student level data requests from District-operated and Charter-operated schools are made on a regular basis. The requested data must be submitted in the Office of the Independent Monitor's required format and are as follows:

- End of Year Suspension.
- District ID, CSIS ID, last name, first name, date of birth, gender, grade, date of suspension, number of days suspended, and reason for suspension.
- STAR – Preliminary and Final. (Including Charter Schools) The usual file including District ID.
- Norm day – 2013
- District ID, CSIS ID, last name, first name, date of birth, gender, grade, location code, school name and local district for all students enrolled on norm day.
- CBEDS – 2013 (Including Charter Schools)
- All Students enrolled December 1, 2013.
- District ID, CSIS ID, last name, first name, date of birth, gender, grade, location code, school name and local district for all students enrolled on norm day.
- Dropout 2012-13 (Including Charter Schools)

- District ID, CSIS ID, last name, first name, middle name, date of birth, grade, last location, school name and local district
- Monthly SESAC and Suspension data from non-SIS schools (Including Charter Schools)
- Graduation roster from all SLUSD schools (Including Charter Schools) with 12th grade SWD

The MCD requires charter schools to implement the District's Integrated Student Information System (ISIS) which is now referred to as My Integrated Student Information System (MiSiS). MiSiS is a suite of applications which is designed to capture all District student data.

Socioeconomically Disadvantaged Students

SLSA seeks to serve a population comprised in most part with students who are socioeconomically disadvantaged. Research indicates that children from low socioeconomically challenged households and communities develop academic skills more slowly compared to children from higher socioeconomically groups (Morgan, Farkas, Hillemeier, & Maczuga, 2009).[25] The school's program is designed to meet the needs of students with this designation and is based on research driven curriculum and practices that work best with this targeted population. In addition, the school's mission and instructional programs are designed to provide and ensure equal access for all students particularly those students who are designated as socioeconomically disadvantaged based upon the poverty index. At its core, SLSA believes in high expectations for each of its students regardless of background.

Students Achieving Below Grade Level

Students who are performing below grade level in each of the content areas as measured by informal and formal classroom assessments using DIBELS/IDEL (Fall, Winter, Spring) and NWEA MAP assessments (Fall, Winter, Spring), will receive individual and flexible small group instruction to target their individual needs. Because of the Student Learning model (SCL), the student in conjunction with their teacher will differentiate instruction based upon students' needs, interests, readiness, and learning profile.

[25] Morgan, P. L., Farkas, G., Hillemeier, M. M., & Maczuga, S. (2009). Risk factors for learning-related behavior problems at 24 months of age: Population-based estimates. *Journal of Abnormal Child Psychology, 37*, 401-413.

Element 2: Measurable Pupil Outcomes

San Leandro STEM Academy seeks to emphasize personalized learning and increasing access to a globally competitive education for students who enter school with challenges and who are frequently underperforming. The school also seeks to ensure that students have successful early experiences with science, technology, engineering and math, the basis of our focused curriculum, thus encouraging proficiency and confidence in the areas that are needed to pursue careers in STEM fields.

The school will utilize an assessment system that will support students and provide them, their families, and staff with the information they need to meet high academic standards and make continuous improvement. SLSA will monitor student and school data to ensure that students remain on a successful achievement track and if there are any students who are falling behind or in need of additional academic assistance that they indeed receive the additional support required to getting them back on track.

"The measurable pupil outcomes identified for use by the charter school." Pupil outcomes," for purposes of this part, means the extent to which all pupils of the school demonstrate that they have attained the skills, knowledge, and attitudes specified as goals in the school's educational program. Pupil outcomes shall include outcomes that address increases in pupil academic achievement both schoolwide and for all groups of pupils served by the charter school, as that term is defined in subparagraph (B) of paragraph (3) of subdivision (a) of Section 47607. The pupil outcomes shall align with the state priorities, as described in subdivision (d) of Section 52060, that apply for the grade levels served, or the nature of the program operated, by the charter school." Cal. Ed. Code §

Collection and Use of Assessment Data

Too often assessment is conducted and analyzed but the results are never disseminated in ways that make sense for the learning community or that subsequently are used to improve professional practice. At SLSA, we will strive to make the results of our assessment efforts widely publicized, presented in a manner that all stakeholders can understand, and used as the basis for continuous improvement. The following guide our assessment strategies:

- **Articulated Objectives and Rubrics.** Every member of the learning community will be able to access clearly articulated learning objectives for each course and grade level, as well as the rubrics, which indicate the quantity and quality of work necessary to meet these learning objectives. Students and family members will receive training in how to understand and use rubrics to interpret and evaluate their own work.
- **Traditional Assessments**. See below for a description of the traditional assessments to be used. Workshops and conferences will be held with parents and students to educate them on interpreting the results and developing strategies for making improvements, where needed.
- **Student Self-Assessment**. All students will be educated in how to use the rubrics and other measurements to assess their own work at appropriate times during the school year. Additionally, students will measure success via self- generated goals and will be able to reflect upon their growth as part of their personal portfolio, which they will compile.

- **Authentic Assessment**. Wiggins (1998) defines authentic assessment as having students use their knowledge to create performances that are effective and creative. These performances are demonstrations of knowledge in response to tasks that replicate, or are analogous to, real-life problems that adults or professionals face in everyday life or in their field. Such demonstrations may take a variety of forms and use multiple intelligences or styles in their expression.[26] Utilizing assessments for learning includes shared learning targets and criteria for success; effective questioning and dialogue; descriptive feedback; active peer and self-assessment.

- **Assessments-in-Practice**. Educational personnel and students can point to ways in which they have used the results of ongoing assessments to improve their practice or their scholarly outputs. The following Evidence of Practice will be used: What did the teacher use to clarify and share learning intentions and criteria for success? (Examples include: rubrics, checklists, exemplars); How did the teacher engineer effective discussions, questions and learning tasks? (Examples include: triangulation of information gathering such as products, observations, communication/conversations); what feedback was provided by the teacher that moves students forward in their learning? (examples include evidence of: moving away from grading everything by providing risk free practice and descriptive feedback about learning-what teachers observe, review or discuss and share in whole group, small group, or individually with students to guide them to next steps); What activated the students as the owners of their learning? (Examples include evidence of: ways students are engaged in thinking about and assessing their own learning.)

- **Formative Assessment**. Understanding formative assessment as an intentional process used by teachers and students during instruction that provides feedback to adjust ongoing teaching and learning to improve students' achievement.

- **Planning for Formative Assessment**. Formative assessment includes having a clear understanding of the content standards and grade level expectations by; establishing content standards and grade level expectations to develop learning targets for students in the form of objectives, outcomes and goals; utilizing various sources of assessment data to help identify curricular targets for planning whole group instruction.

    - Formative assessment also includes learning targets that can be linked to the content standards or grade level expectations by; understanding common misconceptions student may have relative to specific learning targets (checking for understanding); presenting learning targets in clear, student friendly language and sharing those learning targets with students (and parents via the web); and checking that students can articulate the learning targets for specific lessons, or sequences of lessons.

    - Formative assessment centers on being able to move students forward with criteria to adjust ongoing teaching and learning and to improve students' achievement by being able to; identify the criteria for success associated with each learning target in advance of the instruction; involve students in setting success criteria based on learning targets; provide students with opportunities to evaluate their own work against established

[26] Wiggins,G.P.,McTighe,J.,(1998).Understandingbydesign.SanFrancisco,CA:Jossey-Bass

criteria for success (such as rubrics, exemplars, models); establish individual learning goals with students based on learning targets and success criteria.

- Formative assessment allows teachers to be able to move students forward with effective feedback to adjust ongoing teaching and learning and to improve students' achievement by being able to give oral written descriptive feedback to students in a timely manner and based on shared criteria; use the feedback to develop a deeper understanding of the students' instructional needs; use the feedback to monitor and adjust instruction; ensure that the feedback helps students know what they need to do next to reach a learning target; and give students the opportunity to respond and act on the feedback before giving a grade.

- **External Assessments**. As required by state law, SLSA will administer end of grade and end of course tests according to the state schedule. In addition, SLSA will administer the Iowa Test of Basic Skills to annually assess reading and mathematics skills at the beginning and end of the school year. This instrument provides the valid and reliable tool needed for objective measurement of achievement. Teachers will identify students at risk of being left behind, and families will understand what their children know and can achieve, as well as areas in which they need help and additional family academic support. These results will provide diagnostic information critical to objectively measuring students' success in these basic skills areas and will allow teachers to measure student progress and provide necessary interventions.

  - SLSA also will administer *The Diagnostic Assessment of Reading (DAR)* to all incoming students to diagnostically assess reading skills and help guide instruction and support.

  - This assessment also will be given at the end of the student's first year to show progress and afterwards will be given afterwards only if students are deemed to need specialized diagnostic reading testing.

- **Internal Assessments**. There are numerous internal assessments that will be ongoing at SLSA. Among these are Classroom Assessments(tests, quizzes, scholarly papers, PowerPoint presentations, demonstrations, oral presentations, projects, homework, etc.); Student Self-Assessments (processes and discussions such as parent conferences, rubric use in classes, conferences with teachers, conferences with classmates, portfolios,)Feedback from Others (mentor feedback, assessments from job site supervisors, internship supervisors); Student Exhibitions (which may take the form of essays, oral presentations, creative art work, models, debates, simulations, videos, and/or other dramatic presentations); and Goals Assessments (how the student and others view the student in relation to the school values of community, mentoring, service leadership, individual goal setting, and caring for others).

Element 3: Measurement Methods

School-wide benchmark assessments that are aligned with the curriculum will be utilized. The benchmark assessments will be administered quarterly. The results will guide instruction, grouping, enrichment, and re-teaching. They will also provide a mechanism for measuring students' progress through the curriculum.

Because SLSA does not wish to simply prepare students to do well on tests, the benchmarks will include a focus on processing information, higher-order thinking skills, and real-world applications of the curriculum content.

> *"The method by which pupil progress in meeting those pupil outcomes is to be measured. To the extent practicable, the method for measuring pupil outcomes for state priorities shall be consistent with the way information is reported on a school accountability report card."* Cal. Ed. Code § 47605(b)(5)(C).

In addition to state and /or federally mandated tests, SLSA will administer the Iowa Test of Basic Skills to annually assess reading and mathematics skills at the beginning and end of the school year. These results will provide diagnostic information critical to objectively measuring students' success in these basic skills areas and will allow teachers to measure student progress and make necessary interventions.

SLSA also will administer *The Diagnostic Assessment of Reading (DAR)* to all incoming students to diagnostically assess reading skills and help guide instruction and support. This assessment also will be given at the end of the student's first year to show progress and afterwards will be given only if students are deemed to need specialized diagnostic reading testing.

Throughout the school year, students will participate in formative assessments as discussed in "Goals for the Proposed Charter School" section, above. Whenever it is advisable, pre and post tests will be administered as a part of classroom instruction. The information gathered by the teacher will guide instruction.

School-wide benchmark assessments will be developed and aligned with the state curriculum standards. They will be administered quarterly. The results will guide instruction, grouping, enrichment, and re-teaching.

SLSA will contract with a nationally renowned company that will provide comprehensive professional development and tailored technical assistance. In addition, experts will utilize an instructional coaching model to provide feedback and support to developing teachers. After the first year of operation, these topics will be reviewed periodically with all teachers and will be intensively addressed for new teachers on an annual basis.

SLSA will continuously assess the progress of students through formative evaluations and differentiated instructional methods. The school will also utilize the "Responsiveness to Instruction" model, or RTI, as a means of providing early intervention to students at risk for school failure. The RTI framework can prevent chronic school failure and can also reduce the number of students who are identified as disabled when the interventions are successful and effective.

In planning time and other scheduled meetings, teachers, core advisors, and Special Education staff will identify students whom they feel might require additional support. For students experiencing difficulty, the first step will be to follow the required Responsiveness to Instruction (RTI) model. In the RTI model,

classroom teachers and special education teachers design and apply research-based interventions to help student meet classroom goals. In order to have all members of the student's "team" working together, appropriate faculty and family will be notified. Intervention plans will include additional support, personalized approaches and materials, and additional time to complete tasks, or other strategies deemed viable in assisting the student achieve without further, more intrusive intervention.

Although the founders of SLSA believe that teachers, and core advisors will be well aware of student progress and will utilize the RTI model for students who are struggling academically, the school will also utilize data as a formal mechanism for "double checking" students who might require additional instructional support. School-wide benchmark assessments will be a prime indicator of students who require additional supports; the Iowa Test of Basic Skills will provide information at the beginning of the school year regarding students who are not performing at grade level, and the Diagnostic Assessment of Reading will be utilized to determine those students who need extra support and instruction in literacy skills. SLSA philosophy of high expectations for all means that any student who is not performing at grade level or who is not demonstrating mastery of a subject will immediately be provided with extra support. The school schedule is designed to provide time for that support for any and all students who need it.

To ensure that all staff has the information and tools needed to provide students with necessary supports, teachers will attend professional development on appropriate classroom modifications, effective instructional needs practices for special and general education students, and their roles and responsibilities in the RTI process. SLSA instructional leader and special education staff will also be available to provide ongoing consultation and support to regular education teachers regarding best practices in modifying classroom instruction for at-risk students along with their role in offering effective IEP-related instructional services and supports.

Standards and Assessments

SLSA will participate in all state sponsored testing programs including the *CA Assessment of Student Performance and Progress (CAASPP)*. While maintaining the expectation that each SLSA student will show continuous improvement as measured by instruments adopted by the State of California, SLSA commits to the following goals for all content areas tested through the California Standardized Testing Program:

- SLSA will rank at or above the average for similar schools in the San Leandro Unified School District (SLUSD) on the Academic Performance Index (API).
- SLSA will achieve an API target of 800 by spring 2015.

AYP and AGT

Students not making Adequate Yearly Progress (AYP) toward the California Common Core Curriculum standards will be identified through DIBELS and CST's, and appropriate measures for improvement will be instituted, as signified in their ILP. These measures may include, but are not limited to: one-on-one remediation, small group tutoring, third party tutoring, and ability group re-teaching. Ongoing communication regarding student achievement will occur between the school and parents through regular contact via technological means, progress reports, parent-teacher conferences, SEOP, and mentor/teacher phone calls, emails, Skype, etc.

CST Expectations

Our goal is to be 55 percent proficient/advanced in ELA and 75 percent proficient/advanced in Math by the 2016 CST test administration; the goal is to grow a minimum of 10% proficiency in ELA and 8 percent Math each year schoolwide effectively meeting AYP goals for each year. An achievement gap is not present in the Latino/Hispanic and Socioeconomic subgroups to the overall ELA/Math achievement (<3%), but an achievement gap is present in the English Language Learners for ELA (>10%) and math (>5%). Our goal is to close this achievement gap by focusing on EL CST performance and tracking EL performance through or data management system. We currently have instituted an EL Master Plan and provide specific classes tailored to EL students. Our goal is also to transition over into Smarter Balanced Assessments/Common Core State Standards within the next two years.

Expected ELA CST Targets for Renewal Term 2016-2021

- Schoolwide ELA will increase a minimum of 10 percent every year for the 2016-2021 school years, by 2021 our target will be 100 percent proficiency.
- Hispanic or Latino will increase a minimum of 10 percent every year for the 2016-2021 school years, by 2021 our target will be 100 percent proficiency.
- Socioeconomically Disadvantaged will increase a minimum of 10 percent every year for the 2016-2021 school years, by 2021 our target will be 100 percent proficiency.
- English Learners (AMAO 3) will increase a minimum of 10 percent every year for the 2016-2021 school years, by 2021 our target will be 94 percent proficiency.

Expected Math CST Targets for Renewal Term 2015-2020

- Schoolwide Math will increase a minimum of 8 percent every year for the 2016-2021 school years, by 2021 our target will be 100 percent proficiency.
- Hispanic or Latino will increase a minimum of 8 percent every year for the 2016-2021 school years, by 2021 our target will be 100 percent proficiency.
- Socioeconomically Disadvantaged will increase a minimum of 8% every year for the 2016-2021 school years, by 2021 our target will be 100 percent proficiency.
- English Learners will increase a minimum of 9 percent every year for the 2016-2021 school years, by 2021 our target will be 100 percent proficiency.

English Learners

The San Leandro STEM Academy will work diligently to ensure English Learners achieve at the highest level. Given the demographic that surrounds SLSA, it is expected that we will always have a high population of English Learners. In serving these students, expected outcomes include:

- CELDT scores for English Language Learners will increase at a level equal to or better than the SLUSD average for similar schools.
- ELL subgroup Academic Performance growth targets will increase at a level equal to or better than the SLUSD average for similar schools.

Support for Standards and Use of Data

Students in K-3 will be assessed on a formative and summative basis using DIBELS, to determine achievement levels in language arts, specifically reading. Based on the results of DIBELS, the school will use ability grouping to help move students toward grade proficiency levels determined by SLSA and state guidelines. Students will be placed in ability grouping based on competency and will be evaluated three to four times per year. This is one index that will allow us to determine if other interventions should be used (i.e. IEP or G/T testing).

Student progress will be monitored in a comprehensive manner to determine the effectiveness of our program of instruction and its alignment with the California Common Core Curriculum.

Continuous assessment and monitoring will be done through a variety of curriculum-based assessments given by the teacher/mentor. We will also perform all assessments required by the state. SLUSD's computer adaptive tests will be used to gain insights into students' knowledge of core math and reading, and other subjects when available. Data from these assessments will also be used to evaluate curriculum and instruction practices.

Curriculum-based assessments used to monitor our program will include traditional methods, but will also include authentic assessments such as student-driven projects, journals, simulations, and debates. Language arts skills in the areas of spelling, grammar, and vocabulary will also be monitored regularly through periodic tests and/or writing assignments.

APASC staff will gather and analyze data from a variety of assessments, both formative and summative, looking for trends in student learning and instructional effectiveness. Staff members will meet in teams on a regular basis to review data, discuss findings, and establish improvement plans. These team meetings will also be used to collaborate and align curriculum and instruction, both horizontally and vertically. Another item on the team meeting agenda will be to discuss the data findings in relation to success for all student populations, including but not limited to, ELL, special education, gifted and talented, gender, ethnicity, etc.

SLSA staff will take information learned from the data, and adjust the scope and sequence of instruction as necessary, to ensure student success. Understanding which standards need to be reviewed or presented in a different way and which standards the students have mastered, will impact the mode of differentiation by the mentor/teacher. The results of the data will also enable teachers to provide students with individualized practice to be completed in conjunction with students' individualized learning plans.

These assignments will primarily be used to provide the necessary amount of practice requisite for standards mastery for the student. Only after mastery is the student allowed to progress and matriculate through his/her personal development plan.

Utilizing multiple assessments provides more data points to increase the reliability of the assessment data, giving a more comprehensive look at academic achievement for an individual student. The data gained through testing will be used to track student progress longitudinally and provide comparative data between SLSA and other public schools in California. Again, the data analysis will be used to improve future instruction practices, curriculum, and/or teacher evaluations.

For students in special education, an Individual Educational Program (IEP) team made up of the student, parent(s), a regular education teacher, a special education teacher, and LEA representative will meet to determine appropriate action with regard to assessment accommodations. If the IEP team determines standard administration can take place with allowable accommodations, those accommodations will be put into action within the normal testing environment. All accommodations and modifications will be included and agreed upon in the IEP.

Annual IEP goals will be measured, with progress reported to parents in accordance with IDEA. The IEP team will meet at a minimum annually, to review student progress and initiate new goals. If student progress is not sufficient then additional services may be identified and agreed upon by the IEP team. Services may include, but are not limited to, speech therapy, occupational therapy, counseling, psychological and consultative services, etc.

A student in need of accommodations under ADA Section 504 (2008) would qualify if his/her impairment substantially limits one or more major life activities. Examples of major life activities include, but are not limited to:

- Thinking
- Concentrating
- Communicating
- Breathing
- Reading
- Hearing

The three-section definition for ADA Section 504 identification criteria includes:

- **Section One**: With a physical or mental impairment that substantially limits one or more major life activities
- **Section Two**: Record of impairment
- **Section Three**: Regarded as having an impairment

If the student does not meet requirements for an IEP, SLSA will use a 504 plan to help determine needs to be facilitated by school personnel.

SLSA may continue to research and evaluate new assessment models, which have been shown to improve student achievement. SLSA school curriculum, instruction, and corresponding assessments will always be evaluated to ensure alignment with the California Common Core Curriculum standards and objectives.

Testing

The Charter School agrees to comply with and adhere to the State requirements for participation and administration of all state mandated tests. If the Charter School does not test (i.e., STAR, CELDT,

CAHSEE) with the District, the Charter School hereby grants authority to the state of California to provide a copy of all test results directly to the District as well as the Charter School.

Overview

Measurement of desired student outcomes is critical for continuous improvement at all programmatic levels, including school-wide evaluation, various subject areas, specific classes and programs, subgroups of students (disaggregated by gender, race, income levels, and English proficiency), individual teachers, and individual students. The SLSA instructional team is committed to growing a school culture that embraces the information attained through valid assessment processes.

To ensure that valid collection is completed and pupil assessments conducted, SLSA will identify an on-site testing coordinator to manage our testing program. The testing coordinator will work with grade level chairs to ensure that students meet statewide performance standards and develop plans to improve pupil learning. While there are many ongoing assessments designed to measure student outcomes, this section will focus on the measurable outcomes detailed in Element 2.

Grading Policy

Student's graded work will be recorded in grade books and the schools data management system. At the end of each nine weeks, scores will be averaged and converted to percentage scores to determine the student's grade. Report cards will be distributed at the end of January and June.

- Raw scores and grade averages resulting with .5 will be rounded up to the next whole number.
- The grading scale follows a numerical system based on students achieving 80 percent or above (3), needs improvement 60 percent (2) or at risk 0-50 percent (1).
- A minimum of 8 grades will be recorded in grade book for each 9-week period. Mid-nine weeks grades are to reflect a minimum of 3 grades. Nine weeks grades are to reflect tests and/or quizzes.
- Graded class assignments, projects, homework/participation and other activities assigned by the teacher may be included. In classes where homework is assigned, homework is to be part of the 9 weeks grade, however, it is to count for no more than 20 percent of the overall grade.
- Teachers will meet the following suggested percentages: 60 percent tests and quizzes, 20 percent homework, and 20 percent projects/writing. The following data/assessments/observations are used at SLSA to determine report card scores:
    - Language Arts: language arts portfolios, GUM (grammar, usage, mechanics), unit assessment scores including reading comprehension, vocabulary, and fluency tests (DRA level, DIBELS, IDEL)
    - Math: quizzes and end of chapter tests
    - Writing: Published writing with rubrics/checklists
    - Participation, social cooperation
    - DRA, DIBELS, IDEL assessments

- ELD portfolios (ELD Grade)
- Effort (separate grade from academics)
- Homework
- Projects

Assessment data is used to guide instruction

In order to assure continuous academic growth in the area of English Language Arts and Mathematics, SLSA will implement a comprehensive student monitoring process using OARS (Online Assessment Reporting System) for the 2015-16 school year. Through this monitoring system the teachers and administrator are able to measure students' progress towards achieving proficiency in meeting state standards.

OARS Implementation Goals:

- To create a systematic way to monitor student growth.
- To use assessment results as a means to predict student outcomes on the CST in ELA and math for grades 2-6.
- To monitor the academic progress of students in grades K & 1 and 2-6.
- To identify and articulate student and teacher needs.
- To use assessment results to plan meaningful instruction.

Evidence

- Weekly, monthly, unit, and diagnostic assessment results in OARS ELA & Math Blueprint Form A; given during Semester 1.
- ELA & Math Blueprint Form B; given during Semester 2.

Teachers will analyze data collected in OARS weekly and monthly utilizing meetings regularly. It is expected that each meeting teachers will analyze their weekly formative assessments that have been scanned into the data management system, these assessments inform the teacher of the progress of students in the curriculum. Teachers will modify lessons and reteach as necessary as indicated in their grade level meeting model. The principal will also analyze data weekly and meet with staff monthly to analyze and provide feedback on the weekly data analysis meetings. Through analysis and dialogue of data results, teams will better understand the diverse needs and challenges our students face. With consultation with the principal, professional development will be customized to meet the diverse needs of the staff such as curriculum training or effective interventions. Professional development activities will also center around how to utilize universal access time more effectively to meet the needs of selected focus groups based on areas of need indicated through assessment results.

Each teacher maintains a comprehensive gradebook/portfolio for each student. Portfolios include teacher-selected and student-selected work. With both informal and formal assessments, teachers at

SLSA work to make instructional decisions based on student needs. Assessment data gathered provokes self-reflection and modifications to the professional development plan.

If the charter school does not test (i.e., STAR, CELDT, CAHSEE) with the District, the charter school hereby grants authority to the state of California to provide a copy of all test results directly to the District as well as the charter school.

Professional Development for Teachers

SLSA will implement an educational program that is significantly different than that which is employed in traditional schools. Teachers at SLSA will require an expanded skill set. The school will aggressively recruit teachers with experience in similar programs in order to enhance internal capacity among our teaching staff. However, a significant amount of training will be necessary to position teachers for success in their roles of curriculum development, use of SLSA instructional technologies, assessment, data-based decision making, mentoring/coaching, etc.

Teachers hired to work at SLSA during its initial year of operation will be required to start work as of August 1, 2015. An initial concentrated professional development plan will be implemented that will be integrated into the planning and implementation activities associated with opening the school and launching the instructional program. The school will continue to build on this foundation with professional development activities continuing throughout the school year.

SLSA teachers will receive training and professional development opportunities in the California Common Core Curriculum, to ensure standards are integrated into curriculum design and instruction. In addition to the curricular emphasis, teachers will also receive training on the mission and effectiveness goals of the school in accordance with industry best practices and accreditation requirements.

Support for Standards and Use of Data

Summative assessments will be used at the end of programs of study to ensure students have achieved program objectives and goals. SLSA will utilize summative assessments to (1) evaluate the student's Personal Development Plan (and IEP if applicable); (2) determine the effectiveness of curriculum and instruction; and, evaluate the effectiveness of the teaching and learning, which will benefit students for the long-term.

Discussion and Examples of Monitoring

SLSA is fully committed to fully aligning the Program of Study to all California Common Core Curriculum requirements. The faculty and staff will undergo professional development in the area of standards, to facilitate communication with students and parents the objectives contained therein. Teacher evaluations will have components based on the appropriate integration of California Common Core Curriculum standards into their instructional practices.

Teachers will be provided with an understanding of SLSA's student achievement goals, and will be encouraged to develop strategies to enhance the school's ability to meet those goals. Teacher's training and supervision will guide them in providing instruction and facilitating student learning aligned with the California Common Core Curriculum, and in helping students achieve subject mastery in meeting or exceeding the California Common Core Curriculum requirements.

Measurable Goals of the Educational Program

San Leandro STEM Academy shall comply with all applicable laws and regulations related to AB 97 (Local Control Funding Formula), as they may be amended from time to time, including all requirements pertaining to pupil outcomes.

Charter School shall meet all statewide content and performance standards and targets. Cal. Ed. Code §§47605(c)(1), 60605.

Standardized Testing

San Leandro STEM Academy agrees to comply with and adhere to state requirements for participation and administration of all state mandated tests. If San Leandro STEM Academy does not test with the District, Charter School hereby grants authority to the State of California to provide a copy of all test results directly to the District as well as San Leandro STEM Academy.

Local Control Funding Formula (LCFF)

STATE PRIORITY #1— BASIC SERVICES The degree to which teachers are appropriately assigned (E.C. §44258.9) and fully credentialed, and every pupil has sufficient access to standards-aligned instructional materials (E.C. § 60119), and school facilities are maintained in good repair (E.C. §17002(d).)			
Sub-priority A: Teachers			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
100% of core teachers will hold a valid CA Teaching Credential with appropriate English learner authorization as defined by the CA Commission on Teaching Credentialing, and will be appropriately assigned.	All core teacher candidates screened for employment will hold valid CA Teaching Credential with appropriate English learner authorization; Business Manager will annually review credential status.	100% of core teachers will hold a valid CA Teaching Credential with appropriate English learner authorization as defined by the CA Commission on Teaching Credentialing, and will be appropriately assigned.	Initial and annual verification of core teacher credential as reported by the CA Commission on Teacher Credentialing; CALPADS Report 3.5 NCLB Core Course Section Compliance; Annual publication of School Accountability Report Card.
Sub-priority B: Instructional Materials			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
100% of pupils will have access to standards-aligned materials and additional instructional materials as outlined in our charter petition.	All instructional materials purchased will be aligned to CA Common Core State Standards and aligned with our charter petition.	100% of pupils will have access to standards-aligned materials and additional instructional materials as outlined in our charter petition.	Principal and faculty review all instructional materials before purchase pursuant to E.C. § 60119.
Sub-priority C: Facilities			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
Maintain a clean, functional and safe school facility.	Daily general cleaning by custodial staff will maintain campus cleanliness; Annual and monthly facility inspections will screen for safety hazards.	Annually, 90% all items on Monthly site inspection checklists and 90% of Facility Inspection checklists will be in compliance/good standing and 100% of identified Required Corrections will be corrected within three months. Daily cleanliness spot checks will also be performed.	Monthly site inspection documents prepared by Principal; Annual Facility Inspection Reports.

STATE PRIORITY #2— IMPLEMENTATION OF COMMON CORE STATE STANDARDS Implementation of Common Core State Standards, including how ELL students will be enabled to gain academic content knowledge and English language proficiency.			
Sub-priority A: CCSS Implementation			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
100% of teachers will participate in annual professional development on the implementation of Common Core State Standards.	Identify and participate in intensive professional development and trainings on the CCSS and Technology in Teaching and Learning.	Annually, 100% of teachers will participate in at least five hours of Professional Development and trainings in CCSS and three hours of Technology in Teaching and Learning professional development.	Professional Development calendar and rosters will evidence participation by teachers in professional development activities.
Sub-priority B: ELL Students & Academic Content Knowledge			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
100% of EL students will gain academic content knowledge through the implementation of the CCSS.	EL students participate in English Language Arts/Literacy instruction with appropriate instructional support.	Annually, 100% of EL students will gain academic content knowledge through the implementation of the CCSS.	EL student performance on the CAASPP statewide assessments; CELDT/ELPAC Assessments; ILP folder; teacher assessments; annual report cards.
Sub-priority C: ELL Students & English Language Proficiency			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
100% ELL students will gain English language proficiency through the implementation of the ELD curriculum and related instructional strategies.	EL students participate in English Language Arts/Literacy instruction with appropriate instructional support. ELL students have access to ELD curriculum. Teachers of EL students participate in professional development activities to bridge the 2012 ELD standards and the existing ELD curriculum, Into English and High Point.	100% ELL students will reach English language proficiency within four years of initial classification as English learner through the implementation of the CCSS, and Into English and High Point ELD curriculum and related instructional strategies.	Student performance on CELDT/ELPAC Assessment, Into English and High Point curriculum assessments, ELD folder and reclassification documentation.

STATE PRIORITY #3— PARENTAL INVOLVEMENT Parental involvement, including efforts to seek parent input for making decisions for schools, and how the school will promote parent participation.			
Sub-priority A: Achieving/Maintaining Parental Involvement			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
Maintain parent representation on the Charter School Governing Board.	As vacant seats become available on the Governing Board, the School's Nominating Committee nominates parents to serve as Governing Board Parent members to the Governing Board.	Annually, the Governing Board will have, at minimum, two parent members.	Governing Board meeting agendas and minutes identify Parent Members.
Sub-priority B: Promoting Parent Participation			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
Maintain the Parent Involvement Committee (PIC.)	School administration will work with the School Leadership Council (SLC) to recruit parents to the PIC via flyers, classroom newsletters, and monthly parent meetings.	Annually, the School Leadership Council will be comprised of at least 5 parents and the Parent Involvement Committee will be comprised of 100% Parents.	Governing Board meeting agendas and minutes identify parents who form part of the SLC and PIC.
Sub-priority C: [Optional]			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
Solicit parent feedback via annual satisfaction surveys.	Annually, CHARTER SCHOOL administration as well as teachers will conduct school and classroom satisfaction assessments to generate strategies for improvement. Results of parent satisfaction surveys will be presented to the Governing Board for discussion and implementation.	Campus community surveys will generate a consistent rate of return of at least 25% unduplicated community members.	Results and reports of community satisfaction surveys will be shared with parents, Governing Board members, and staff upon completion of its results and analysis.
Sub-priority D: [Optional]			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
Charter School will co-sponsor at least five community events annually in conjunction with the Charter School	CHARTER SCHOOL Administration will meet with leadership of the Parent Participation Group to identify opportunities and events	At least five campus community events will be held throughout the academic year.	The calendar of school events may include events such as Science & Engineering Fairs, Family Pot-luck Day, Dr. Seuss Day, Parent Orientation

Parent Participation Group.	to create and nurture community on campus.		& Back to School Events, School Luau, Ethnic Appreciation Day, Dad & Donuts/Mom & Muffins morning, School Talent Show and among others.

STATE PRIORITY #4— STUDENT ACHIEVEMENT

Pupil achievement, as measured by all of the following, as applicable:

A. CA Assessment of Student Performance and Progress (CAASPP) statewide assessment.

B. The Academic Performance Index (API.)

C. Percentage of pupils who have successfully completed courses that satisfy UC/CSU entrance requirements, or career technical education.

D. Percentage of ELs who make progress toward English language proficiency as measured by the California English Language Development Test (CELDT) and/or English Language Proficiency Assessment for California (ELPAC.)

E. EL reclassification rate.

F. Percentage of pupils who have passed an AP exam with a score of 3 or higher.

G. Percentage of pupils who participate in and demonstrate college preparedness pursuant to the Early Assessment Program (E.C. §99300 et seq.) or any subsequent assessment of college preparedness.

Sub-priority A: CAASPP – ELA/Literacy and Mathematics			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
75% of students at every applicable grade level, including all student subgroups, score proficient or higher on the CAASPP statewide assessment in the area of English Language Arts/Literacy and Mathematics.	Classroom instruction conducive to student learning; adequate learning environments; appropriate CCSS aligned instructional materials; implementation of a Reading Intervention program to assist at-risk students; use of instructional technology in the area of mathematics; teacher assistants in classrooms to support instruction and student learning	Annually, at least 95% participation rate in the CAASPP statewide assessments; at least 75% of students at every applicable grade level, including all subgroups, score proficient or higher on the CAASPP statewide assessment in the areas of English Language Arts/Literacy and Mathematics.	CAASPP Score reports; evidence of student learning as demonstrated on Individualized Learning Plan Folders; DAR Reading Assessments; NWEA MAP and Iowa Basic Skills Assessments; Teacher observations, Pre and post unit test results, Unit assessments, Assignment and project rubrics.
Sub-priority B: API			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
100% of students, including all student subgroups, will meet the	Classroom instruction will incorporate testing	100% of students, including all student subgroups, will meet the	CAASPP Score reports; CA Data Quest summary and API Reports or equivalent

annual API Growth Target, or equivalent, as mandated by the CA State Board of Education.	strategies in preparation for the CAASPP.	annual API Growth Target or equivalent as mandated by the CA State Board of Education.	as determined by the CA Department of Education.
Sub-priority C: UC/CSU Course Grade Requirements (or CTE)			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
Grade levels not applicable to Charter School.			
Sub-priority D: ELL Proficiency Rates			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
ELL students will advance at least one performance level per the CELDT/ELPAC each academic year.	EL students will receive in-class instructional support which includes 1-on-1 teacher support, 1-on-1 teacher assistant support, small group work, usage of SDAIE and ELD instructional strategies.	80% of EL students will advance at least one performance level per the CELDT/ELPAC each academic year.	CELDT/ELPAC Score Reports; EL Reclassification documentation maintained by ELPAC/CELDT Coordinator; ELD Folder in conjunction with ELD curriculum assessments and annual report cards.
Sub-priority E: ELL Reclassification Rates			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
ELL students will be reclassified as Fluent English Proficient annually and perform at grade level on the CAASPP statewide assessment.	ELL students will receive in-class instructional support which includes 1-on-1 teacher support, 1-on-1 teacher assistant support, and small group work, usage of SDAIE and ELD instructional strategies.	80% of ELL students will advance at least one performance level per the CELDT/ELPAC each academic year At least 25% of ELL students will be reclassified as Fluent English Proficient annually and perform at grade level on the CAASPP statewide assessment.	Analysis and review of CELDT/ELPAC results, and CAASPP statewide assessment scores.
Sub-priority F: AP Exam Passage Rate			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
Grade levels not applicable to Charter School.			
Sub-priority G: College Preparedness/EAP			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
Grade levels not applicable to Charter School.			

STATE PRIORITY #5— STUDENT ENGAGEMENT

Pupil engagement, as measured by all of the following, as applicable:

A. School attendance rates
B. Chronic absenteeism rates
C. Middle school dropout rates (EC §52052.1(a)(3))
D. High school dropout rates
E. High school graduation rates

Sub-priority A: Student Attendance Rates

Goal to Achieve Sub-priority	Actions to Achieve Goal	Measurable Outcome	Methods of Measurement
Charter School will maintain a 95% ADA rate.	Charter School will provide a safe and engaging learning environment for all its students and families, including those of the various subgroups enrolled.	Annual Average Daily Attendance will be at least 95%.	Monthly, Quarterly, and Annual ADA reports; Periodic attendance updates to families reminding them of the importance of in-school attendance as the primary way of learning and success.

Sub-priority B: Student Absenteeism Rates

Goal to Achieve Sub-priority	Actions to Achieve Goal	Measurable Outcome	Methods of Measurement
Students will not have more than three absences in any school year.	Parents will be informed of chronic absences as specified in Attendance and Truancy Policy.	90% of enrolled students will have fewer than three absences during any one school year.	End of term absence and tardy reports from our student information system. Periodic attendance updates to families reminding them of the importance of in-school attendance as the primary way of learning and success. Evidence of success, is determined by monthly, quarterly, and annual attendance reports.

Sub-priority C: Middle School Dropout Rate

Goal to Achieve Sub-priority	Actions to Achieve Goal	Measurable Outcome	Methods of Measurement
Grade levels not applicable to Charter School.			

Sub-priority D: High School Dropout Rates

Goal to Achieve Sub-priority	Actions to Achieve Goal	Measurable Outcome	Methods of Measurement
Grade levels not applicable to Charter School.			

Sub-priority E: High School Graduation Rates

Goal to Achieve Sub-priority	Actions to Achieve Goal	Measurable Outcome	Methods of Measurement
Grade levels not applicable to Charter School.			

STATE PRIORITY #6— SCHOOL CLIMATE

School climate, as measured by all of the following, as applicable:

A. Pupil suspension rates
B. Pupil expulsion rates
C. Other local measures, including surveys of pupils, parents, and teachers on the sense of safety and school connectedness

Sub-priority A: Pupil Suspension Rates			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
Charter School will maintain an annual suspension rate of less than 1%.	Teachers will be trained and follow the Social Emotional Wellbeing component of our Charter which outlines our classroom management and behavior approach. Principal will work with teachers and families to manage student behavior issues and concerns.	Annually, 1% or fewer of all enrolled students will be suspended.	Annual School Accountability Report Card & Annual Report and CALPADS Report 7.1 Discipline Incidents will be used as evidence.
Sub-priority B: Pupil Expulsion Rates			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
SLSA will maintain an annual expulsion rate of less than 1%.	Teachers will be trained and follow the Social Emotional Wellbeing component of our Charter School which outlines our classroom management and behavior approach. Principal will work with teachers and families to manage student behavior issues and concerns.	Annually, 1% or fewer of enrolled students will be expelled.	Annual School Accountability Report Card & Annual Report and CALPADS Report 7.1 Discipline Incidents will be used as evidence.
Sub-priority C: Other School Safety and School Connectedness Measures (Surveys)			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
Charter School students and staff will adhere to the School Safe Plan.	Annually, all school employees will be trained on the elements of the School Safe Plan. Students will participate in monthly Fire, Earthquake, and safety drills.	100% of staff will participate in at least four hours of Safe School training; Students will participate in at least eight fire, earthquake or safety drills annually.	Professional Development agenda and annual drill calendars.
Sub-priority D: [Optional]			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**

Charter School staff and parents will host various community building events and activities throughout the year.	Charter School will host at least five community events annually in conjunction with the Parent Participation Group.	At least five campus community events will be held throughout the academic year.	Annual Report and school events and activity calendar. The calendar of school events may include events such as Science Fairs, Family Pot-luck Day, Dr. Seuss Day, Parent Orientation & Back to School Events, School Luau, Ethnic Appreciation Day, Dad & Donuts/Mom & Muffins morning, School Talent Show, Math and Engineering competitions among others.
Sub-priority E: [Optional]			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
Students, parents and teachers will feel a sense of community on campus, and within their classroom community.	Students actively participate in Responsive Classroom activities throughout the school year in their classroom. SLSA administration will devise and administer satisfaction surveys to parents, students, and teachers annually. A variety of fun and engaging co-curricular opportunities will further enhance students' sense of belonging and community.	Annually, at least 95% of students and families will be retained. Enrollment waiting list will be comprised of at least 200 students and families wishing to enroll in the school.	Responsive Classroom assessments and evaluation documents will demonstrate students' sense of connectedness. Parent, student and teacher satisfaction surveys will provide information regarding their sense of connectedness and community. Attendance and participation by students in campus events will evidence their sense of belonging and engagement. Annual reenrollment documentation and class lists will reflect a return rate of at least 95% Enrollment waitlists will have at least 200 students and families interested in enrolling in the school.

STATE PRIORITY #7— COURSE ACCESS

The extent to which pupils have access to, and are enrolled in, a broad course of study, including programs and services developed and provided to unduplicated students (classified as EL, FRPM-eligible, or foster youth; E.C. §42238.02) and students with exceptional needs. "Broad course of study" includes the following, as applicable:

- Grades 1-6: English, mathematics, social sciences, science, visual and performing arts, health, physical education, and other as prescribed by the governing board. (E.C. §51210)
- Grades 7-12: English, social sciences, foreign language(s), physical education, science, mathematics, visual and performing arts, applied arts, and career technical education. (E.C. §51220(a)-(i))

Sub-priority A:

Goal to Achieve Sub-priority	Actions to Achieve Goal	Measurable Outcome	Methods of Measurement
Charter School students, including all student subgroups, unduplicated students, and students with exceptional needs, will have access to and enroll in our CCSS and STEM academic and educational program as outlined in the school's Charter.	All academic content areas will be available to all students, including student subgroups, at all grade levels.	Annually, 100% of students, including all student subgroups, unduplicated students, and students with exceptional needs, will have access to and enroll in all CCSS & STEM curriculum at Charter School.	Student, teacher, course, and grade level schedules.

STATE PRIORITY #8— PUPIL OUTCOMES- ACADEMIC EXCELLENCE DOMAIN: ENGLISH LANGUAGE ARTS

From the subject areas described above in #7, as applicable.

Sub-priority A: English

Goal to Achieve Sub-priority	Actions to Achieve Goal	Measurable Outcome	Methods of Measurement
All students, including all student subgroups, unduplicated students, and students with exceptional needs, will demonstrate grade level proficiency in English Language Arts/Literacy.	All students participate in SLSA's Readers Workshop, Writers Workshop, and Word Study programs 5 days per week. Instructional strategies implemented throughout Reading & Writing Workshop include: small group work, one-to one conferring, reading intervention program; speaking skills to present information, narrative and response to literature; consultation with the inclusion specialist and collaboration with colleagues to support student learning goals.	Annually, 85% of Kindergarten through 6th grade students will progress one grade/skill level each academic year, as evidenced by the ELA/Literacy section of the Individualized Learning Plan folder, including Fountas and Pinnell Benchmark Assessments. Annually, 75% of 3rd through 6th grade students, including all student subgroups, unduplicated students, and students with exceptional needs, at every grade level score Proficient or higher on	SLSA's authentic creation of Individualized Learning folders is used to monitor and track student progress throughout the year. ILP folders include, but are not limited to,: CAASPP test results, NWEA MAP, DAR & Iowa Basic Skills benchmark assessments, pre and post unit testing, spelling inventories, student writing journals, response to literature journals, published writing and oral presentations.

		the CAASPP statewide .test in the area of English Language Arts/Literacy.	
Sub-priority B: Mathematics			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
All students, including all student subgroups, unduplicated students, and students with exceptional needs, will demonstrate grade level proficiency in Mathematics.	All students participate in Math Workshop 5 days per week. Instructional strategies implemented in Math Workshop include: focused and designed instruction; STEM and spiraling math curriculum; small group work, one-to one assistance, peer tutorial support, small group after-school tutorial; consultation with the inclusion specialist and collaboration with colleagues to support student goals and learning.	Annually, 85% of Kindergarten through 6th grade students will progress one grade/skill level each academic year, as evidenced by the Mathematics section of the Individualized Learning Plan folder, including Dreambox Learning assessment reports. Annually, 80% of 3rd through 6th grade students, including all student subgroups, unduplicated students, and students with exceptional needs, at every grade level score proficient or higher on the CAASPP statewide test in the area of Mathematics.	SLSA's authentic creation of Individualized Learning folders is used to monitor and track student progress throughout the year. ILP folders include, but are not limited to: CAASPP test, Curricular benchmark assessments, Singapore Math pre and post unit testing, Dreambox Learning assessment reports, math journals demonstrating mathematical thinking, in class math presentations showcasing students' mathematical reasoning and critical thinking skills.
Sub-priority C: Social Sciences			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
All students, including all student subgroups, unduplicated students, and students with exceptional needs, will demonstrate grade level skills and content knowledge in history, civic and social science.	Through direct instruction and an integrated approach, students will study a blend of American history, world history, government, geography and economics using the CA History-Social Science Content Standards or presently approved state standards. Strategies included in an integrated approach are: non-fiction and historical fiction texts; mini research projects and presentations, computer based information	Annually, 75% of all students, including all student subgroups, unduplicated students, and students with exceptional needs, will demonstrate proficiency through formal assessments.	Formal assessments include: pre and post testing, end of unit quizzes, and essay exams. Authentic assessments include: presentations, projects, rubrics, peer feedback and teacher feedback as a form of assessment to demonstrate proficiency.

	(articles, videos); field trip experiences, debates, and hands-on projects.		
Sub-priority D: Science			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
All students, including all student subgroups, unduplicated students, and students with exceptional needs, will demonstrate grade level skills and content knowledge in life, earth and space, and physical science.	Utilizing an inquiry based approach students will develop an understanding of science and engineering practices, disciplinary core ideas and crosscutting practices. Strategies include: hands-on learning, gathering and analyzing data, and integrating skills and concepts as they apply to different subjects.	Annually, 80% of all students, including all student subgroups, unduplicated students, and students with exceptional needs, will demonstrate proficiency through formal assessments.	Formal assessments include: pre and post testing, end of unit quizzes, and reports. Authentic assessments include: experimentations, presentations, projects, rubrics, peer feedback and teacher feedback as a form of assessment to demonstrate proficiency.
Sub-priority D: Visual and Performing Arts			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
Not applicable.			
Sub-priority F: Physical Education			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
Not applicable.			
Sub-priority G: Health			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
Not applicable.			
Sub-priority H: Foreign Languages			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
Not applicable.			
Sub-priority I: Applied Arts			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
Not applicable.			
Sub-priority J: CTE			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
Not applicable.			
Sub-priority K (1): Other Subjects - Technology			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**

All students, including all student subgroups, unduplicated students, and students with exceptional needs, will demonstrate grade level skills and content knowledge in STEM technology curriculum. Which includes computer science, computer software applications, hand held electronic devices, alternative fuels, alternative energy, aerospace	Utilizing an inquiry based approach students will develop an understanding of technology with modern and advanced disciplinary core ideas and crosscutting practices in this discipline. Strategies include: hands-on learning, projects, guest speakers and lecturers, gathering and analyzing data, and integrating skills and concepts as they apply to different subjects.	Annually, 80% of all students, including all student subgroups, unduplicated students, and students with exceptional needs, will demonstrate proficiency through formal assessments.	Formal assessments include: pre and post testing, end of unit quizzes, and reports. Authentic assessments include: reports, proficiency demonstration, experimentations, presentations, projects, rubrics, peer feedback and teacher feedback as a form of assessment to demonstrate proficiency.
Sub-priority K (2): Other Subjects - Engineering			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
All students, including all student subgroups, unduplicated students, and students with exceptional needs, will demonstrate grade level skills and content knowledge in STEM engineering curriculum. Which includes planning, problem solving, designing, construction, testing, and reporting	Utilizing an inquiry based approach students will develop an understanding of engineering with modern and advanced disciplinary core ideas and crosscutting practices in this discipline. Strategies include: hands-on learning with design and constructions, projects, guest speakers and lecturers, gathering and analyzing data, and integrating skills and concepts, field trips as they apply to different subjects.	Annually, 80% of all students, including all student subgroups, unduplicated students, and students with exceptional needs, will demonstrate proficiency through formal assessments.	Formal assessments include: pre and post testing, end of unit quizzes, and reports. Authentic assessments include: reports, proficiency demonstration, experimentations, presentations, projects, rubrics, peer feedback and teacher feedback as a form of assessment to demonstrate proficiency.
Sub-priority K (3): Other Subjects – Social Responsibility Domain			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
All students will demonstrate social responsibility by working to improve their school and community environments	Throughout the school year, all students engage in various community service project activities	Throughout various times and holidays during the academic year 100% of classrooms will participate in various service projects with our community partners including local homeless shelters and food banks.	Donation acknowledgements from our charitable organizations partners, and from the families and patients to whom they serve

Sub-priority K (5): Other Subjects – Social Responsibility Domain			
Goal to Achieve Sub-priority	**Actions to Achieve Goal**	**Measurable Outcome**	**Methods of Measurement**
Students will demonstrate the capacity to perceive social needs and global concerns and address these through leadership skills to make a positive contribution to their school and community.	Teachers will discuss current events and global social issues; Students will gain awareness of their community and surroundings through field trips. Students will develop community building and mentoring relationships through various community service projects.	100% of classrooms participate in at least two off-campus field trips annually; Annually, 100% of classrooms participate in community based service projects which are designed to build community and mentoring relationships.	Field trip rosters and schedules show participation in field trips Community service project parings will demonstrate participation in this activity.

Element 4: Governance

General Provisions

As an independent charter school, San Leandro STEM Academy (SLSA), operated as or by its nonprofit public benefit corporation, is a separate legal entity and shall be solely responsible for the debts and obligations of Charter School. San Leandro STEM Academy shall comply with the Brown Act and the Public Records Act.

All employees and representatives of SLSA, including members of the San Leandro STEM Academy governing board, members of school or governing board committees or councils, school administrators, and managers, shall comply with federal and state laws, nonprofit integrity standards, and SLUSD's charter school policies, regarding ethics and conflicts of interest.

SLSA shall ensure that, at all times throughout the term of the Charter, the bylaws of its governing board and/or nonprofit corporation are and remain consistent with the provisions of this Charter. In the event that SLSA amends its bylaws, it shall provide a copy of the amended bylaws to SLUSD within 30 days of adoption.

Charter School shall send to the District copies of all governing board meeting agendas at the same time that they are posted in accordance with the Brown Act. Charter School shall also send to the SLUSD copies of all board meeting minutes within one week of governing board approval of the minutes.

The SLUSD reserves the right to appoint a single representative to the Charter School governing board pursuant to Education Code section 47604(b).

Title IX, Section 504, and Uniform Complaint Procedures

San Leandro STEM Academy shall designate at least one employee to coordinate its efforts to comply with and carry out its responsibilities under Title IX of the Education Amendments of 1972 (Title IX) and Section 504 of the Rehabilitation Act of 1973 (Section 504), including any investigation of any complaint filed with SLSA alleging its noncompliance with these laws or alleging any actions which would be prohibited by these laws. SLSA shall notify all its students and employees of the name, office address, and telephone number of the designated employee or employees.

- SLSA shall adopt and publish complaint procedures providing for prompt and equitable resolution of student and employee complaints alleging any action which would be prohibited by Title IX or Section 504.
- SLSA shall adopt and implement specific and continuing procedures for notifying applicants for admission and employment, students and parents of elementary and secondary school students, employees, sources of referral of applicants for admission and employment, and all unions or professional organizations holding collective bargaining or professional agreements with SLSA, that San Leandro STEM Academy does not discriminate on the basis of sex or mental or physical disability in the educational programs or activities which it operates, and that it is required by Title IX and Section 504 not to discriminate on any such basis.

- SLSA shall establish and provide a uniform complaint procedure in accordance with applicable federal and state laws and regulations, including all applicable requirements of Cal. Admin. Code, tit. 5, §§ 4600 et seq.
- SLSA shall adhere to all applicable federal and state laws and regulations regarding pupil fees, including Cal. Educ. Code sections 49010 – 49013, and extend its uniform complaint procedure to complaints filed pursuant to Cal. Educ. Code section 49013.
- SLSA shall extend its uniform complaint procedure to complaints pursuant to the local control funding formula. (Cal. Educ. Code section 52075).

Legal and Policy Compliance

San Leandro STEM Academy shall comply with all applicable federal and state laws and regulations, and District policy as it relates to charter schools.

Responding to Inquiries

San Leandro STEM Academy, including its nonprofit corporation, shall promptly respond to all inquiries, including but not limited to inquiries regarding financial records from the District, and shall cooperate with the District regarding any inquiries. San Leandro STEM Academy, including its nonprofit corporation, acknowledges that it is subject to audit by SLUSD, including, without limitation, audit by the District Office of the Inspector General.

If an allegation or other evidence of waste, fraud, abuse, or other material violation of law related to San Leandro STEM Academy's operations is received or discovered by the District, SLSA shall cooperate with any resulting investigation undertaken by the District and/or the Office of the Inspector General Investigations Unit.

Notification of the District

San Leandro STEM Academy shall notify the SLUSD in writing of any citations or notices of workplace hazards, investigations by outside regulatory or investigative agencies, lawsuits, or other formal complaints, within one week of receipt of such notices by San Leandro STEM Academy. SLSA shall also notify the SLUSD in writing of any internal investigations within one week of commencing investigation.

Transfer of student records

When a student transfers for any reason from SLSA to any other school, SLSA shall transfer the student's complete cumulative record within 10 school days of receiving a records request from the receiving school. In the event SLSA closes, SLSA shall comply with the student records transfer provisions in Element 16.

Charter School Incorporation

San Leandro STEM Academy shall be operated by Mana 7 Charities, Inc., a California 501 (c) (3) non-profit benefit corporation. The Articles of Incorporation are filed with the California Secretary of State.

San Leandro STEM Academy shall be governed pursuant to its Corporate Bylaws which shall be consistent with the California Charter Schools Association and compliant with the Brown Act: Education

Code Section 47604 (c). San Leandro STEM Academy shall operate autonomously from the San Leandro Unified School District (SLUSD) with the exception of supervisorial oversight and Special Education services as required by the statute. The SLUSD shall not be liable for the debts and obligations of San Leandro STEM Academy, operated as a California non-profit, public benefit corporation.

Charter School By-laws

Mana 7 Charities, Inc. is an independent, non-governmental and non-sectarian organization that operates charter schools and provides educational services to the public in general. San Leandro STEM Academy will comply with the District policy related to charter schools. Any amendments to the Mana 7 Charities, Inc. bylaws that affect or impact the Approved charter or the charter school operations must be approved through the District's petition amendment process. Please find the Articles of Incorporation, the Corporate Bylaws and Conflicts Code of San Leandro STEM Academy included as attachments with the submitted Petition.

Governance Structure

This section discusses the organization design and how the governing Board is selected and details their responsibilities. Included in this section is an organization chart.

Organizational and Technical Designs

The governance structure of San Leandro STEM Academy shall include processes to ensure parental involvement as stated in California Education Code Section 47605 (b) (5) D). San Leandro STEM Academy's success will depend on broad-based community partnerships, collaboration, creativity, and most importantly a respect for the diverse cultures of our community. As San Leandro STEM Academy opens its doors and grows in size, opportunities will be provided for parent and community participation on the Board and school committees.

San Leandro STEM Academy Charter School's Governing Board, administrators, employees, and all committees of the San Leandro STEM Academy shall comply with federal and state laws, nonprofit integrity standards and Charter School policies and regulations regarding ethics and conflict of interest of SLUSD. All meetings of the San Leandro STEM Academy Governing Board shall be held in accordance with the Brown Act. All approvals need an affirmative vote of the majority of the Governing Board members. San Leandro STEM Academy Governing Board will create a functioning structure that supports educational goals through a vigorous process of decision-making and consensus building, in which representatives from all stakeholder groups are represented. The San Leandro STEM Academy Governing Board shall have ultimate responsibility for the overall operation of San Leandro STEM Academy, while the School Principal governs the day-to-day activities of the school. Board members have the responsibility to solicit input/opinions from the parents regarding issues of significance and to weigh the input/opinions carefully before taking action. The primary method for executing their responsibility is the adoption of policies that offer guidance and interpretation of the charter and procedures to assist the staff in facilitating the implementation of such policies. San Leandro STEM Academy will operate autonomously from the District, with the exception of the supervisory oversight as required by statute and other contracted services as negotiated between the District and San Leandro STEM Academy. Pursuant to California Education Code Section 47604(c), the District shall not be liable for the debts and obligations of San Leandro STEM Academy, operated by a California non- profit benefit

corporation or for claims arising from the performance of acts, errors, or omissions by San Leandro STEM Academy as long as the District has complied with all oversight responsibilities required by law. Any amendments to the San Leandro STEM Academy charter petition must first be approved by the San Leandro STEM Academy Governing Board with input from school staff and parents. The San Leandro STEM Academy Governing Board would then be responsible to submit the changed request for approval to the Charter School's Division of SLUSD. If this change is a substantive change, then the Board of Education of SLUSD will have to approve it. Once the request for change has been approved, San Leandro STEM Academy may implement the change at the school site.

San Leandro STEM Academy will be managed by a Governing Board in accordance with its adopted corporate bylaws, which shall be consistent with the terms of this Charter. The San Leandro STEM Academy Governing Board will make policy decisions for San Leandro STEM Academy Charter School and the School's principal will act in an advisory capacity to the Governing Board. Although it is important to point out that policy decisions are made by the San Leandro STEM Academy Governing Board, the Principal will make recommendations and the San Leandro STEM Academy Governing Board will make the final decision. San Leandro STEM Academy petitioners collectively have held a variety of professional educational positions and have accumulated a great deal of educational experiences to be capable of designing curriculum and making financial decisions that will support its educational vision. The San Leandro STEM Academy Governing Board will consist of at least five (5) and no more than nine voting community representatives including one parent representative. In addition, in accordance with Education Code Section 47604(b), the authority that grants the charter to a charter school to be operated by a nonprofit public benefit corporation shall be entitled to a single representative on the Governing Board of the nonprofit public benefit corporation. San Leandro STEM Academy will seek additional community members with expertise in areas critical to school success including but not limited to education, school finance, fundraising, facilities, government, and business and legal practices to serve on the Board.

Governing Board Responsibilities

Responsibilities of the Governing Board include, but are not limited to, the following:

1. Adopting, evaluating, and updating school policies consistent with the law San Leandro STEM Academy's mission.
2. Adopting a fiscally responsible budget based on the school's vision and goals.
3. Review of the recommendations from San Leandro STEM Academy's principal for the hiring of school personnel or independent contractors.
4. Monitoring the fiscal health of San Leandro STEM Academy on a monthly basis and approving budget expenditure recommendations in excess of one thousand dollars ($1,000).
5. Approval of annual fiscal and performance audits.
6. Development of school calendar and the scheduling of Board meetings.
7. Development of Board policies and procedures.
8. Development and approval of the annual budget.

9. Review of requests for educational field trips.
10. Review and recommend curriculum changes as needed.
11. Maintaining accountability for student learning by monitoring student progress
12. Ensuring that a safe and appropriate educational environment is provided to all students.
13. Hiring, supervising, and evaluating the Principal and if necessary, terminating
14. Meeting corporate requirements
15. Overseeing and approving San Leandro STEM Academy School's annual budget, fiscal affairs, and audits.
16. Review of quarterly financial reports.
17. Election of Governing Board members once every three years or as necessary.
18. Assessing and determining salary increases.
19. Overseeing the dispute resolution and compliant procedures when necessary
20. Approval of school proposed charter amendments, with material revisions to be submitted for approval by the chartering agency, pursuant of Education Code Section 47607.
21. Approval of personnel discipline (suspensions or dismissals) as needed
22. Appointing an administrative panel, from the Governing Board, to act as a hearing body to take action on recommended student expulsions.
23. Creation of Advisory Councils, sub-committees as needed including but not limited to a hiring committee, a compensation committee, and an audit committee.

The Board may initiate and carry on any program, activity or may otherwise act in any manner which is not in conflict with or inconsistent with, or preempted by, any law and which are not in conflict with them purposes for which schools are established.

Process for Selecting Board Members

The selection process of members of the San Leandro STEM Academy Governing Board shall be conducted through nomination by a Nominating Committee. The Nominating Committee could include members from the San Leandro STEM Academy Governing Board, the various sub-committees within the School's organizational chart, Parents & Community representatives. The Nominating Committee will recruit and interview prospective candidates and recommend qualified candidates to the Governing Board, which will make the final selection. The San Leandro STEM Academy Governing Board members will serve for a term of three (3) years. At the end of third (3rd) year, for staggering purpose & by lottery, three (2) of the members' terms will end. This way, at any given time Board members, with experience, will continue to serve on the Board. However, upon expiration of their term, the San Leandro STEM Academy Governing Board members could be reelected to serve additional terms.

Frequency of Board Meetings

The San Leandro STEM Academy Governing Board will meet at least once a month (in the beginning few months the Board will meet twice per month or as needed to ensure that San Leandro STEM Academy Charter School starts on a strong footing) to review the San Leandro STEM Academy Charter School achievements and provide support in achieving short term and long term goals set by San Leandro STEM Academy Charter School. This team is responsible for sound management of School's resources and is accountable for student learning goals. This oversight will ensure the success of the San Leandro STEM Academy Charter School. All meetings will comply with the Brown Act.

Procedure for Conducting Governing Board Meetings

All meetings will be scheduled in advance. All meeting dates, times and agendas will be posted in the San Leandro STEM Academy's office at least 72 hours prior to the meeting and 24 hours prior to a special meeting. All Board meetings will have minutes taken as required and will be kept in a binder in San Leandro STEM Academy's main office. In compliance with the Brown Act, some of the San Leandro STEM Academy Charter School Board meetings will be held in closed session. San Leandro STEM Academy Charter School committee meetings will also be held in compliance of Brown Act requirements.

Leadership and School Operations

School-based decision-making at San Leandro STEM Academy is designed to:

- Ensure that all decisions regarding policy and practice made at San Leandro STEM Academy Charter School have a single focus: to achieve the learning outcomes delineated for students in the charter
- Ensure that staff members are involved in the decision-making process at San Leandro STEM Academy School Ensure that stakeholders (parents, community members, and all school personnel) are involved as active partners in the decision-making process
- Ensure long-term effectiveness of local school control and accountability
- Ensure that a collaborative, consensus building model is applied to all decision-making processes at San Leandro STEM Academy Charter School.
- Ensure that San Leandro STEM Academy Charter School principal be an integral part of the decision-making process throughout discussions on key issues on a daily basis. If consensus from the Administrative team on an issue cannot be reached, the Governing Board will have final authority.

Council and Committees

The role of the principal in all councils and committees is to help support and maintain San Leandro STEM Academy Charter School's vision and also be the conduit to the San Leandro STEM Academy Charter School Governing Board for recommendations or requests. In the interest of creating a large base of input from the staff, and to ensure that grade level and program needs are met, a different representative will be selected for each of the Councils. During the first 3 weeks of the school year new

representatives will be selected for the committees by school staff or parents (as appropriate). Recognizing that the first year of teaching is a crucial one, first year teachers are not required to be family representatives or serve on committees. Interested teachers will be nominated or nominate themselves and the teaching staff will select their representatives. Charter Schools are not required to establish a School Site Council (Education Code 47605).

School Leadership Council

The day-to-day decisions of the San Leandro STEM Academy to operational issues such as: school-wide decision making that supports the vision, budget revisions/expenditures up to a thousand dollars ($1,000), student achievement, assessment dates, instructional program review, student placement, consensus building, student traffic flows, lunch schedules, etc. This committee advises the School Principal on the aforementioned matters. SLC teacher representatives, elected by the principal and teachers, are committed to serve for a two year period. Classified and parent representatives are elected once every two years. Classified representatives are elected by their peers and parent representatives will be elected by the parents of San Leandro STEM Academy Charter School. The parent involvement committee representative will facilitate the elections. SLC meetings are scheduled in advance for the entire year in an alternating week cycle (twice per month). From time to time there may be a need to change a scheduled meeting. However, any change in a meeting schedule will take place with at least a 72 hour notice. SLC meeting agendas are always posted 72 hours in advance and the minutes of the meetings will be kept in the main office along with the agendas and sign-ins. Our underlying belief about shared decision making is that consensus is crucial to building stakeholder buy-in. All decisions made by the SLC will be made by consensus.

The School Leadership Council includes:

- 1 principal
- 1 teacher representative from each grade level
- 5 parent representatives

Curriculum Committee

The Curriculum Committee acts as an advisory body to the School Principal, in which their work is to make decisions about the San Leandro STEM Academy Charter School's educational and instructional program and develop curriculum and Staff Development plans. Additionally, this committee will address the educational needs of English language learners, gifted and talented students, and students with special needs. Curriculum Committee members, elected by the principal and teachers, are committed to serve for a two year period. Parent representatives are elected on a bi-annual basis elected by the parents of San Leandro STEM Academy Charter School, and the parent involvement committee representative will facilitate the elections. This committee will meet on an as needed basis.

The Curriculum Committee includes:

- 1 principal
- 1 teacher from each grade level

- 2 parent representatives

Parent Involvement Committee

The Parent Involvement Committee (PIC) acts as an advisory body to the School Principal. Parents are partners in the education of San Leandro STEM Academy Charter School and are encouraged to actively participate in decision making processes of San Leandro STEM Academy Charter School. The purpose of the PIC is to coordinate all parents' involvement in the parent center, on campus, as well as participation in parent training workshops. Additionally, PIC will recruit volunteers, engage parents in educational issues that affect San Leandro STEM Academy Charter School, families, and students, and assist in the fundraising activities for the school. Every enrolled family becomes a member of this group and is encouraged to participate in meetings and activities. It will be the largest committee of San Leandro STEM Academy Charter School. Elections will be held once every two years. PIC members will be elected by their peers. The PIC meets once per month.

The Parent Involvement Committee includes:

- 1 principal
- All parents
- 2 teachers
- 1 classified

Professional Development Committee

The Professional Development Committee (PDC) plans and develops quality staff developments that keep teachers and staff abreast of new research, strategies, and techniques that are geared to improve student achievement. Also, the PDC will be involved in seeking out and attending cutting-edge workshops and conferences as well as encourage the participation of faculty and parents.

The Professional Development Committee includes:

- 1 principal
- 3 teachers
- 1 nurse
- 1 classified
- Consultants from the Governing Board

The PDC officially meets twice a month to plan and develop relevant/quality staff development.

Health and Safety Committee

The Health and Safety Committee (HSC) is responsible for the creation and implementation of the Health and School Safety Plan. This plan includes monthly emergency fire drills, earthquake preparedness and drills, blood borne pathogens, hate crimes, child abuse and reporting procedures, and

annual follow-up on students' health and growth status (i.e., eye, ear, teeth, growth, gait, and spinal check).

The Health and Safety Committee includes:

- 1 principal
- 1 nurse
- 1 teacher
- 1 parent
- 1 classified

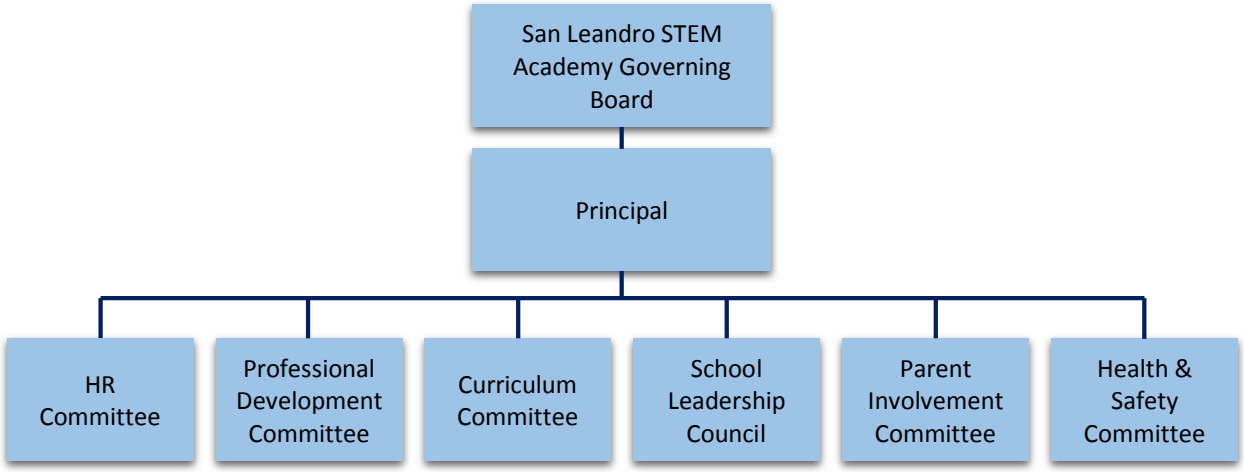
Human Resources Committee

The Human Resources Committee (HRC) is in charge of recruiting, interviewing, and recommending all new certificated and classified employees. HRC assists in the induction of new staff members. HRC continually reviews the effectiveness of personnel policies and makes recommendations to the School Principal, who then takes the recommendations to the Governing Board.

The Human Resources Committee includes:

- 1 principal
- 2 teachers
- 1 parent
- 1 classified
- Consultant from Governing Board as needed

Organizational Chart



Element 5: Employee Opportunity

Equal Employment Opportunity

San Leandro STEM Academy acknowledges and agrees that all persons are entitled to equal employment opportunity. Charter School shall not discriminate against applicants or employees on the basis of race, color, religion, sex, gender identity, sexual orientation, pregnancy, national origin, ancestry, citizenship, age, marital status, physical disability, mental disability, medical condition, or any other characteristic protected by California or federal law. Equal employment opportunity shall be extended to all aspects of the employer-employee relationship, including recruitment, selection, hiring, upgrading, training, promotion, transfer, discipline, layoff, recall, and dismissal from employment.

NCLB and Credentialing Requirements

San Leandro STEM Academy shall adhere to all requirements of the Elementary and Secondary Education Act (ESEA, also known as No Child Left Behind (NCLB)) that are applicable to teachers and paraprofessional employees. Charter School shall ensure that all teachers meet the requirements for employment set forth in California Education Code section 47605(l). Teachers of core and/or college preparatory subjects, and special education teachers, must hold and maintain a Commission on Teacher Credentialing certificate, permit or other document equivalent to that which a teacher in a non-charter public school would be required to hold in the same assignment. Charter School shall maintain current copies of all teacher credentials and make them readily available for inspection.

SLSA is committed to educating the whole child by utilizing proven educational philosophy and methodology. Teachers at SLSA will have received certification from the State Board of Education. Teachers will be certified on the level they are teaching and display expertise in all aspects of the curriculum on that level. All teachers will also hold appropriate licenses and endorsements as outlined in California law. We will work with the state board and licensing office to qualify our SLSA teachers for California licensing. SLSA will employ a special education coordinator to ensure that students with special needs are experiencing success within the inclusion of the school environment. Because of the nature of the unique classroom, all student teachers and paraprofessionals will have the necessary education and background checks to ensure the highest level of education for the students.

Following are the standards that SLSA will require of the educators on staff:

- **Principal Qualifications**. SLSA will seek a principal with, at minimum, a master's degree in a field of study related to education. The candidate for this position must display an understanding of school financial matters, the ability to develop positive relationships with parents and staff, knowledge of the California Core Curriculum standards, an understanding of special education programs and the law. We will seek an individual that also has experience working with a non-profit board of directors, strong communication skills, and is culturally sensitive to the population of the school.
- **Educational Background and Qualifications**. All teachers will have bachelor's degrees or higher and have current California teaching credentials and endorsements and must be highly

qualified. Each student teacher will also be certified or in process of certification from an accredited higher education institute.

- **Instructional Skills**. SLSA teachers will have a clear understanding of how the California Core Curriculum standards align with the California Core Curriculum. Teachers must be able to develop lessons to meet the core standards and lessons in keeping with the individualized, hands-on approach of the California Core Curriculum method of education.
- **STEM**. The SLSA staff will be primarily selected and hired based upon each prospective candidates experience, training, knowledge, educational background, professional experience and acumen of the STEM related disciplines and related curriculum as well as each teacher's ability in supporting and executing SLSA's mission in STEM based K-6 education.
- **Interpersonal Skills**. The SLSA staff will demonstrate their abilities to work and communicate effectively and respectfully with parents or guardians, students, other staff members, administrators and the board of directors in order to develop a cohesive and committed school.
- **Leadership Skills**. SLSA will provide opportunities for all staff members to develop personal leadership skills. Staff members will be required to attend pertinent staff meetings and training, conferences and workshops, which will improve their professional competencies and leadership skills. All staff members will model and encourage leadership development of the students at SLSA. It is important that all staff members understand their potential to influence the students of our school.
- **Collaboration Skills**. Teachers will keep accurate and complete student records that will meet California state standards. These records will be updated consistently and will be readily available to parents and the administration of SLSA. Teachers will also assist paraprofessionals in understanding the policies and procedures of the school in support of our mission. Each teacher will work as a partner with a paraprofessional to develop an ideal learning environment. Paraprofessionals will be encouraged to work with the lead teacher to develop their leadership abilities so that in the event of the teacher's absence the classroom will continue to run smoothly.
- **No Child Left Behind**. Teachers who do not qualify as "highly qualified" under No Child Left Behind (NCLB) will be required to achieve that status by their third year of teaching. SLSA will assist each teacher to meet this status by offering further training and assistance during our after school program hours.

Paraprofessionals, Substitute Teachers, and Interns

All paraprofessionals will be required to complete the 50-hour Introduction to the SLSA philosophy prior to the first day of school. All SLSA paraprofessionals shall meet the requirements and perform the duties as it applies to employment at SLSA. In addition, all paraprofessionals and interns will work under the supervision and direction of a qualified SLSA teacher. SLSA's paraprofessionals will not be paid through Title I funds. Interns will be accepted from accredited educational institutions that will provide adequate field supervision. Substitute teachers will be required to attend substitute training prior to employment at SLSA.

Background Check Assurance

Any individual who has unsupervised time with students, including teachers, paraprofessionals, staff members, board members, volunteers, etc., will be required to submit to a standard criminal background check. Copies of the background check forms and results will be stored in the school office under the supervision of the office staff. The building will be designed so that the office staff will be able to monitor all incoming and outgoing visitors. All visitors will wear a prominent visitor's badge unless they have a background check form on file in the school office. The Principal will review all background checks at the beginning of each year to keep them current. A summary of the status of the background checks will be reported to the principal of the school.

Element 6: Health and Safety Procedures

Health, Safety and Emergency Plan

San Leandro STEM Academy shall have a comprehensive site-specific Health, Safety and Emergency Plan, including the acquisition and maintenance of adequate onsite emergency supplies, in place prior to beginning operation of the charter school. San Leandro STEM Academy shall ensure that staff receives annual training on Charter School's health, safety, and emergency procedures, and shall maintain a calendar for, and conduct, emergency response drills for students and staff. Charter School shall periodically review, and modify as necessary, its Health, Safety and Emergency Plan, and keep it readily available for use and review upon SLUSD request.

Family Educational Rights and Privacy Act (FERPA)

San Leandro STEM Academy, including its employees and officers, shall comply with the Family Educational Rights and Privacy Act (FERPA) at all times.

Criminal Background Checks and Fingerprinting

SLSA shall require all employees of Charter School, all volunteers who will be performing services that are not under the direct supervision of a Charter School employee, and any onsite independent contractors or vendors having unsupervised contact with students, to submit to criminal background checks and fingerprinting in accordance with state law. Charter School shall maintain on file and available for inspection evidence that Charter School has performed criminal background checks and cleared for employment all employees prior to employment, and documentation that independent contractors and vendors have conducted required criminal background checks for their employees prior to any unsupervised contact with students. Charter School shall also ensure that it requests and receives subsequent arrest notifications from the California Department of Justice to ensure the ongoing safety of its students.

Immunization and Health Screening Requirements

SLSA shall require its employees, and any volunteer, vendor, or independent contractor who may have frequent or prolonged contact with students, to be examined and determined to be free of active tuberculosis as described in Education Code section 49406. Charter School shall maintain TB clearance records on file.

SLSA shall provide for the immunization and health screening of its students, including but not limited to screening for vision, hearing, and scoliosis, to the same extent as would be required if the students were attending a non-charter public school. Charter School shall maintain immunization records on file.

Element 7: Means to Achieve Racial and Ethnic Balance

Court-ordered Integration

Charter School shall comply with all requirements of the Crawford v. Board of Education, City of Los Angeles court order and the SLUSD Integration Policy adopted and maintained, pursuant to the Crawford court order, by the District's Student Integration Services (collectively the "Court-ordered Integration Program"). The Court-ordered Integration Program applies to all schools within or chartered through SLUSD.

Charter School has set forth below its initial plan for achieving and maintaining the SLUSD's Racial and Ethnic Balance goal of a 70:30 or 60:40 ratios. (Ratio represents the percentage of Predominantly Hispanic Black Asian Other (PHBAO) compared to Other White (OW)). The written plan lists specific dates and locations of recruitment activities that Charter School will undertake in order to achieve the District's Racial and Ethnic Balance goal. Charter School shall monitor the implementation and outcomes of the initial plan, and modify it as necessary to achieve its goals. Upon request, SLSA shall provide the District with a copy of its current written plan.

The District receives neither average daily attendance allocations nor Court-ordered Integration Program cost reimbursements for charter school students. Instead, the District now receives the Targeted Instruction Improvement Grant (TIIG) for its Court-ordered Integration Program. The District retains sole discretion over the allocation of TIIG funding, where available, and cannot guarantee the availability of this funding.

No Child Left Behind-Public School Choice (NCLB-PSC) Traveling Students

The District and San Leandro STEM Academy are committed to providing all students with quality educational alternatives in compliance with all federal and state laws, including students who are enrolled in schools of the District identified by the California Department of Education as in need of Program Improvement. No Child Left Behind-Public School Choice ("NCLB-PSC") placement with charter schools is an alternative strongly encouraged by the No Child Left Behind Act of 2001 ("NCLB"). San Leandro STEM Academy agrees to discuss with the District the possibility of accepting for enrollment District students participating in the District's NCLB-PSC program. The parties agree to memorialize separately any agreed- to number of NCLB-PSC placements of District students at the charter school.

As required under NCLB, all NCLB-PSC students attending San Leandro STEM Academy shall have the right to continue attending San Leandro STEM Academy until the highest grade level of the charter. However, the obligation of the District to provide transportation for a NCLB-PSC student to San Leandro STEM Academy shall end in the event the NCLB-PSC student's resident District school exits Program Improvement status.

San Leandro STEM Academy shall ensure that all of its NCLB-PSC students are treated in the same manner as other students attending Charter School. NCLB-PSC students are and will be eligible for all applicable instructional and extra-curricular activities at Charter School. San Leandro STEM Academy shall make reasonable efforts to invite and encourage the participation of the parents of NCLB-PSC students in the activities and meetings at Charter School.

Determination of student eligibility for this NCLB-PSC option, including the grade level of eligibility, will be made solely by the District, based on the District's NCLB-PSC process, guidelines, policies and the requirements of NCLB. In the event demand for places at San Leandro STEM Academy under the NCLB-PSC program increases in subsequent years, San Leandro STEM Academy agrees to discuss with the District the possibility of increasing the number of NCLB-PSC places available at Charter School.

Federal Program Compliance

As a recipient of federal funds, including federal Title I, Part A funds, San Leandro STEM Academy has agreed to meet all of the programmatic, fiscal and other regulatory requirements of the No Child Left Behind Act of 2001 (NCLB) and other applicable federal grant programs. San Leandro STEM Academy understands that it is a local educational agency (LEA) for purposes of federal compliance and reporting purposes. San Leandro STEM Academy agrees that it will keep and make available to the District any documentation necessary to demonstrate compliance with the requirements of NCLB and other applicable federal programs, including, but not limited to, documentation related to funding, required parental notifications, appropriate credentialing of teaching and paraprofessional staff, the implementation of Public School Choice and Supplemental Educational Services, where applicable, or any other mandated federal program requirement. The mandated requirements of NCLB, Title I, Part A include, but are not limited to, the following:

- Notify parents at the beginning of each school year of their "right to know" the professional qualifications of their child's classroom teacher including a timely notice to each individual parent that the parent's child has been assigned, or taught for four or more consecutive weeks by, a teacher who is not highly qualified
- Develop jointly with, and distribute to, parents of participating children, a school-parent compact
- Hold an annual Title I meeting for parents of participating Title I students
- Develop jointly with, agree on with, and distribute to, parents of participating children a written parent involvement policy
- Submit biannual Consolidated Application to California Department of Education (CDE) requesting federal funds
- Complete and submit Local Education Agency (LEA) Plan to CDE
- Complete reform planning process with stakeholders and submit to CDE all appropriate documents for Title I Schoolwide Program eligibility and status, if applicable; otherwise, identify and maintain roster of eligible students for the Title I Targeted Assistance School Program
- Maintain inventory of equipment purchased with categorical funds, where applicable
- Maintain appropriate time-reporting documentation, including semi-annual certification and personnel activity report, for staff funded with categorical resources, where applicable

San Leandro STEM Academy also understands that as part of its oversight of Charter School, the District may conduct program review for federal and state compliance.

Outreach Efforts

SLSA is committed to the following recruitment efforts:

- SLSA makes diligent efforts to recruit students of various racial and ethnic groups so as to achieve a balance that is reflective of the general population residing within the territorial jurisdiction of the school district. Recruitment includes publicizing our instructional program, hosting Open House, providing tours of the school, and speaking to interested parents.
- SLSA will maintain an accurate accounting of ethnic and racial balance of students enrolled in the school. It will also keep on file documentation on the efforts the school made to achieve racial and ethnic balance.
- SLSA will provide outreach materials to prospective parents and students in English and Spanish.
- SLSA will maintain a web site that allows parents and students to learn about the school. SLSA will also maintain a presence on various lists of charter schools that prospective parents utilize, including those provided by the California Charter Schools Association and the San Leandro Unified School District.
- Pending authorization SLSA anticipates producing recruiting materials in the following languages: English, Spanish, Korean, Pilipino, Samoan and Tongan. These represent the major languages of the school's target area and the San Leandro community overall.

Competitive Advantage

SLSA's STEM instructional program is a tremendous competitive advantage. The curriculum is sound and proven and we are confident in our ability in delivering its content to our students in promoting and instilling educational achievement, confidence and progress. Those involved with the formation of this school are committed to the closing of these achievement gaps that are existent within our targeted communities and ensuring that indeed no child is left behind. SLSA students will develop the necessary core skill sets and attributes necessary to be successful in the subsequent phases of their respective educational experience including middle school, high school, college and life in general.

SLSA will establish an after-school program, hiring college students to work part-time as after-school tutors. We will focus our tutor hiring efforts on college students reflective of our target communities, as they could also serve as mentors to our students as well. Tutoring will be available to all students.

The advantage of the school is based on the target population and the support that has been previously mentioned through "town hall" meetings, roundtable discussions and genuine concern from the underserved Community. SLSA is targeting a significant but focused segment of the population.

Therefore, the advantage is less about school choice competition and more about closing an achievement gap in a small but significant group of students. The community is passionate about its people and has chosen through this school to help students achieve academically, socially and emotionally on the highest levels.

Outreach/Marketing Plan

SLSA acknowledges the role effective marketing/outreach plays in providing parents with the opportunity to actively participate in the enrollment process. Therefore, we have established a marketing plan designed to inform parents in the entire East Bay Area and surrounding areas of the school's program and provide these parents equal opportunity to participate in its offering. Inasmuch as many schools struggle to meet the needs of various disadvantaged groups, SLSA will specifically seek to inform parents of the enrollment opportunities at SLSA. Outreach literature/advertising will be provided in English, Spanish and Samoan. SLSA will provide this literature to Community leaders. The school will utilize its website, local newspapers, school-based marketing, flyers, brochures, mailings, radio, social media, and other advertising avenues to inform the public. SLSA will also implement "town hall" meetings to answer questions about the proposed school. To implement SLSA's outreach plan, committees will be created, application processes will be simplified within the laws of the State of California, and marketing materials will be strategically located in cultural dance studios.

It is critical that the school be open to all potential students even though the Hispanic and Pacific Islander population is the central subgroup SLSA hopes to serve. The after school tutoring, programs, and curriculum that will close the achievement gap will draw students of all ethnicities. We welcome all students and would never discriminate. However, the Pacific Islander community is a quiet, yet underserved population that, along with other groups, must not be overlooked any further.

Finally, SLSA will seek potential volunteers and students through public service announcements, informational seminars and networking opportunities in the community. Individuals expressing interest will be included on SLSA's mailing list and phone tree in order to keep them connected and informed of the progress and volunteer opportunities at the school. The marketing plan will be reevaluated on an annual basis.

Element 8: Admission Requirements

McKinney-Vento Homeless Assistance Act

Charter School shall adhere to the provisions of the McKinney-Vento Homeless Assistance Act and ensure that each child of a homeless individual and each homeless youth have equal access to the same free, appropriate public education as provided to other children and youths. Charter School shall provide specific information, in its outreach materials, websites, at community meetings, open forums, and regional center meetings, that notifies parents that the school is open to enroll and provide services for all students, and provides a District standard contact number for access to additional information regarding enrollment.

Non-Discrimination

SLSA shall not require a parent/legal guardian/student to provide information regarding a student's disability, gender, gender identity, gender expression, nationality, legal or economic status, primary language or English Learner status, race or ethnicity, religion, sexual orientation, or any other characteristic that is contained in the definition of hate crimes set forth in Section 422.55 of the Penal Code, or any other information that would violate federal or state law, prior to admission, participation in any admissions or attendance lottery, or pre-enrollment event or process, or as a condition of admission or enrollment. Charter School may request, at the time of, and as part of, conducting its lottery process, the provision of information necessary to apply specific admissions preferences set forth in this Charter.

SLSA shall not request or require submission of a student's IEP, 504 Plan, or any other record or related information prior to admission, participation in any admissions or attendance lottery, or pre- enrollment event or process, or as a condition of admission or enrollment.

Admissions

Students will be considered for admission without regard to race, religion, national origin, gender, or physical disability. Subject to space availability and the school's enrollment cap, SLSA will be open to any SLUSD student in kindergarten through sixth grade. The school will have an open admissions procedure, utilizing a lottery for qualified applicants if the number of applications exceeds the capacity of a grade level or the school. If no lottery is necessary as of March 15 in any given year, open spaces will be filled on a first-come, first served basis.

Lottery

As required by the Federal Charter School Program, SLSA will conduct a lottery if applications exceed the enrollment cap. Parents/legal guardians who submit their student's name, mailing address, requested grade level, date of birth, the names of siblings applying, the parent/guardian name, email address and telephone number through the SLSA website will thereby qualify their student(s) as an applicant for the lottery. If the remaining applicants will oversubscribe the school, another lottery will be conducted. As provided in the lottery requirements, students of founding board members, students of teachers, and siblings of students selected in the lottery will be given enrollment preference.

If necessary, the lottery for the first year will be conducted in March of 2015 at a place and time to be determined, and will be open to the public. The date, time, and location of the lottery will be publicized on the SLSA website. After the lottery, if needed, any remaining spaces for the 2015-16 school years will be filled on a first-come, first-served basis. The lottery will be conducted by a school administrator and will be attended by a founding board member and one outside observer, as is required by the lottery regulations. If a lottery is to be held, parents/legal guardians of applicants will be notified of the lottery date, time, and place by email no later than five business days in advance of the lottery.

SLSA fills its student enrollment based on the following priority:

1. **Open Enrollment**. Once a student has been admitted to the school through an appropriate process, he or she may remain in attendance through subsequent grades. A new applicant for admission to the charter school, however, would be subject to the lottery if, as of the open enrollment closing date, the total number of applicants exceeds the number of spaces available at the school. Open enrollment dates will be publicly announced and will adhere to state statute.

2. **Lottery Selection**. A lottery is a random selection process by which SLSA admits applicants. SLSA will use a lottery if, during the open enrollment period, more students apply for admission to the charter school (in any grade) than can be admitted. During a public meeting, an accepted lottery process will be used to select students.

    - The random drawing will begin with sixth grade, proceeding down through kindergarten, and each student is assigned a number identifying the order in which they are drawn.
    - Following the lottery, preferential enrollment is addressed and classes are filled to capacity using the sequence obtained from the lottery drawing. When a student is admitted to the school through the process, all siblings of that student are admitted immediately, if space is available.
    - If space is not available for a particular grade, that sibling will be placed on the waiting list. Students not selected will remain on a waiting list, preserving the order as determined by the lottery, giving preference to siblings of attending students.
    - SLSA will notify applicants of the lottery results within two weeks. Students placed on the waiting list will be given the opportunity to attend the school if openings become available during the school year. Families will be notified and students have three school days to accept the opening.
    - Students who apply after the enrollment period will be admitted as space allows or will be added to the waiting list.

Transfer and Withdrawal Policy

If the student has accepted enrollment to SLSA for the 2015-16 school year and the parent wishes to withdraw the student from SLSA for enrollment in another California charter school or school district, the parent of a student enrolled at SLSA must obtain approval from both the SLSA administration and

SLUSD or charter school in which enrollment is sought. The following is an overview of the school's policy:

- If a student wishes to enroll at SLSA but has accepted enrollment to another charter school for the 2015-2016 school year, the student's parent must obtain approval from both the SLSA administration and the charter school in which the student is already enrolled. Student records will be released as soon as all appropriate paperwork is completed.
- If a student accepts enrollment for the 2015-16 school year and the parent wishes to withdraw the student from SLSA for enrollment in his or her school district of residence for the 2015-16 school year, the student's parent must submit a notice of intent to enroll to SLSA administration no later than June 30, 2015.
- If a student has accepted enrollment to SLSA for the 2015-16 school year and the parent wishes to withdraw the student from SLSA for enrollment in another California charter school for the 2015-16 school year, student's parent must submit a notice of intent to enroll to the school along with their letter of acceptance from that charter school to the SLSA administration no later than June 30, 2015.
- If a student's application for registration at SLSA has been approved and the student wishes to enroll but has already accepted enrollment at another California charter school for the 2015-16 school year, the student's parent must inform the other charter school of their intent to enroll at SLSA and must also submit the letter of acceptance from SLSA to the other charter school no later than June 30, 2015.

SLSA is a public charter school that does not discriminate on the basis of disability, race, creed, color, gender, national origin, or religion. SLSA admissions and transfer policies comply with the state and federal law.

Element 9: Annual Financial Audits

The annual audit shall be conducted in compliance with the California Education Code 47605(b)(5)(I) as it is amended from time to time.

The following reports will be submitted to SLUSD, in the required format and within timelines to be specified by SLUSD, each year:

- Provisional Budget – Spring prior to operating fiscal year
- Final Budget – July of the budget fiscal year.
- First Interim Projections – November of operating fiscal year.
- Second Interim Projections – February of operating fiscal year.
- Unaudited Actuals – July following the end of the fiscal year.
- Audited Actuals – December 15 following the end of the fiscal year.
- Classification Report – monthly according to school's Calendar.
- Statistical Report – monthly according to school's Calendar of Reports

In addition:

- P1, first week of January
- P2, first week of April
- Instructional Calendar – annually five weeks prior to first day of instruction
- Other reports as requested by the District

Fiscal Procedures

The SLSA governing board is ultimately responsible for the financial health of the school. The Board exercises its responsibility by:

1. Business Manager to manage school's financial operations and to comply with the school's board-adopted financial policies and procedures guidelines.
2. Designating a board treasurer (see job description excerpt at the end of this section) to work closely with the Principal and business management personnel, acting as a bridge between the Board and management, to ensure that the Board fully understands the organization's financial status.
3. Developing and approving the school's annual budget, including regular review and adjustments as required.
4. Reviewing regular financial status reports, including profit and loss, budget vs. actual, cash flow, balance sheet and accounts payable.

5. Reviewing and approving the annual financial audit report.
6. Participating in board professional development training with emphasis on financial management and oversight.

As per SLSA's organizational plan, the Principal is expected to hire additional personnel to execute the business plan and oversee the business operation. The SLSA business manager will be person hired by the Board on a contracted to provide the business and fiscal management services required of the School by the Board. The business manager must be experienced and have a track record of successful charter school financial management.

The business manager will work closely with the Principal. Together, they are charged with executing and managing the financial operation of the school. The business manager, in concert with the Principal, will work closely with the Board of Trustees, particularly the board treasurer, in the development of the annual budget, reporting and oversight of the school's finances and business operation.

The Board of Trustees will adopt a comprehensive policy for its fiscal operation, *The SLSA Financial Policy and Procedures Guide*, to which guidelines the Principal and school's business management personnel will comply. Key policies of interest to reviewers follow.

1. **Standards** – The school will utilize uniform budgeting, accounting, and auditing procedures and forms approved by the State Board of Education, which must be in accordance with generally accepted accounting principles and governmental auditing standards.
2. **Budget** – SLSA's Principal and business manager have primary responsibility for preparing an annual operating budget of revenues and expenses and a cash flow projection. Budgets are reviewed by the board treasurer and presented to the Board of Trustees at an open and public meeting. They are reviewed regularly and modified, as necessary. SLSA will comply with the budgeting rules for local school boards.
3. **Budget Reports** – On a regular basis, at least monthly through the end of the first operational year, the Principal and business manager are responsible for preparing financial status reports for the board treasurer and the full Board of Trustees, including profit and loss, budget vs. actual, cash flow, balance sheet, and accounts payable. Business management staff will maintain complete and open records for any person who requests the information.
4. **Segregation of Duties & Signature Authority** –At least one of the board president and treasurer, and the principal shall have signatory authority and are responsible for authorizing cash transactions. Signature authority may be granted to others as directed by the Board. All checks must have two signatures. The person who has prepared the check may not sign the check. Appropriate documentation must accompany expenditures.
5. **Independent Auditor** – SLSA will engage a qualified independent auditing firm to conduct an annual audit of its financial operation and prepare financial statements and annual financial reports required by SLUSD. Purchasing Policies & Procedures (PP&P).

SLSA's purchasing guidelines exist to ensure that goods and services are acquired at fair and reasonable prices and that the highest personal standards of conduct are maintained in all relationships with vendors, suppliers, and subcontractors. SLSA adheres to the following procurement objectives:

- Procurements will be completely impartial based strictly on the merits of supplier and contractor proposals and applicable related considerations such as delivery, quantity, etc.
- Make all purchases in the best interests of the school and its funding sources.
- Obtain quality supplies/services needed for delivery at the time and place required.
- Buy from responsible and dependable sources of supply.
- Obtain maximum value for all expenditures.
- Deal fairly and impartially with all vendors.
- Be above suspicion of unethical behavior at all times; avoid any conflict of interest, related parties or even the appearance of a conflict of interest in SLSA's supplier relationships.
- In short, the school utilizes the following procurement guidelines:
- Contracts under $1,000 – The school uses the purchasing objectives noted above when procuring goods and services for amounts less than $1,000.
- Contracts from $1,001 to $49,999.99 – The school seeks price quotes from at least two vendors (three quotes are preferred) and awards the contract to the responsible vendor offering the supply or service needed for the best price, appropriate quality and in the necessary timeframe.
- Contracts greater than $50,000 – The school conducts a formal advertised competition using sealed bids or proposals. An award is offered to the qualified bidder who meets the School's specifications and offers the best price.
- Construction contracts – The school follows all state and federal guidelines inclusive of state public bidding laws.
- Expendable Revenue and Undistributed Reserved – SLSA's management and Board of Trustees will work to set standards on its annual operating safety margins. During the annual budget review, any plans to use expendable revenue and/or undistributed reserves must be in fulfillment of the school's mission, values and spending priorities, and receive Board approval in an open meeting. SLSA will comply with the rules associated with school budget undistributed reserves.
- Investments and Banking – The school will invest its funds in a fiscally prudent manner. The following priorities shall be followed: safety of principal, cash flow, liquidity, and yield. The school shall allocate interest earnings or losses, as they are realized, not less than annually. Reports, no less than quarterly, shall be provided to the Board of Trustees by the business management staff indicating fund balances, interest earnings to date and a forecast for the remainder of the fiscal year. SLSA bank accounts will be placed in reputable and stable financial institutions and be FDIC insured.
- Fundraising and Donations – All revenue producing activities at SLSA, including fundraising projects, must be board approved and support the school vision and educational philosophy. Proposals for fundraising projects should answer the following questions:

- For what purpose do we need additional funds?
- How much revenue do we intend to generate?
- How does this fundraiser align with our school's mission statement and educational beliefs?
- What are the responsibilities attached to receiving additional funds?

- SLSA welcomes donations from private sources. Accepted funds must be consistent with the mission and philosophy of the school and promote the education, health, or safety of students.
- School Fees – The school will follow all state rules related to charging school fees. Students in grades K-6 will not be charged fees. Charges related to the National School Lunch Program are not considered fees. Fees will be set, approved, and published each school year by the Board of Trustees. The fee schedule will be posted and distributed to all parents or guardians annually. Students may apply for a waiver of any school fees as per board policy and state rules.

SLSA Business Manager Position Description

Business manager reports to the chair of the Board of Trustees and supports the CEO. Specific responsibilities:

- Provides direction for the financial management of the school and facilitates board financial oversight.
- Provides direction for the oversight of the school's record keeping and accounting.
- Ensures the presentation of timely and meaningful financial reports to the Board.
- Leads the monitoring of budget implementation.
- Ensures the development of the annual budget and its submission to the Board for its approval in cooperation with the board treasurer.
- Oversees development and board review of financial policies and procedures.
- Ensures the presentation of the recommendations of the auditor to the Board for their approval.
- Leads in reviewing the results of the audit including the management letter, develops a plan for remediation, if necessary, and presents the results to the Board.
- Takes responsibility for designing an annual board education program so that all board members can effectively conduct oversight of the financial health of the organization.

Element 10: Suspension/Expulsion Procedures

General Provisions

San Leandro STEM Academy shall follow these provisions:

- Provide due process for all students, including adequate and timely notice to parents/guardians and students of the grounds for all suspension and expulsion recommendations and decisions and their due process rights regarding suspension and expulsion, including rights of appeal.
- Ensure that its policies and procedures regarding suspension and expulsion will be periodically reviewed, and modified as necessary, in order to conform to changes in state law.
- Ensure that its staff is knowledgeable about and complies with the District's Discipline Foundation Policy and/or current equivalent policy, as required by the Modified Consent Decree.
- Be responsible for the appropriate interim placement of students during and pending the completion of the Charter School's student expulsion process and shall facilitate the post-expulsion placement of expelled students.
- Document and implement the alternatives to suspension and expulsion that Charter School utilizes in response to attendance-related concerns, e.g. truancy or excessive tardiness.

Students with Disabilities

Charter School shall implement operational and procedural guidelines ensuring compliance with federal and state laws and regulations regarding the discipline of students with disabilities. If a student is recommended for expulsion and the student receives or is eligible for special education, Charter School shall identify and provide special education programs and services at an appropriate interim educational placement, pending the completion of the expulsion process, to be coordinated with the SLUSD Special Education Service Center.

In the case of a student who has an Individualized Education Program ("IEP"), or a student who has a 504 Plan, Charter School shall ensure that it follows correct disciplinary procedures to comply with the mandates of state and federal laws, including IDEA and Section 504 of the Rehabilitation Plan of 1973. As set forth in the MOU regarding special education between the District and Charter School, an IEP team, including a District representative, will meet to conduct a manifestation determination and to discuss alternative placement utilizing the District's Special Education Policies and Procedures Manual. Prior to recommending expulsion for a student with a 504 Plan, Charter School's administrator will convene a Link Determination meeting to ask the following two questions:

- Was the misconduct caused by, or directly and substantially related to the student's disability?
- Was the misconduct a direct result of the Charter School's failure to implement 504?

Notification of the District

Upon expelling any student, SLSA shall notify the SLUSD by submitting an expulsion packet to the District immediately or as soon as practicable, which shall contain:

- Completed "Notification of Charter School Expulsion" [form available from the SLUSD website or office], including attachments as required on the form
- Documentation of the expulsion proceeding, including statement of specific facts supporting the expulsion and documentation that SLSA's policies and procedures were followed
- Copy of parental notice of expulsion hearing
- Copy of expulsion notice provided to parent stating reason for expulsion, term of expulsion, rehabilitation plan, reinstatement notice with eligibility date and instructions for providing proof of student's compliance for reinstatement, appeal process, and options for enrollment
- If the student is eligible for Special Education, documentation related to expulsion in compliance with IDEA and the MCD, including the Expulsion Analysis page of the pre-expulsion IEP
    - If the student is eligible for Section 504 accommodations, documentation that Charter School conducted a Link Determination meeting to address two questions: Was the misconduct caused by, or directly and substantially related to the student's disability?
    - Was the misconduct a direct result of Charter School's failure to implement 504 Plan?

Notwithstanding the documentation sent to the SLUSD as indicated above, if the student is a resident of a school district other than SLUSD; SLSA must notify the Superintendent of the student's district of residence within 30 days of the expulsion. Additionally, upon request of the receiving school district, SLSA shall forward student records no later than 10 school days from the date of the request as stated in Education Code sections 49068 (a) and (b).

Outcome Data

Charter School shall gather and maintain all data related to placement, tracking, and monitoring of student suspensions, expulsions, and reinstatements, and make such outcome data readily available to the District upon request.

Rehabilitation Plans

Pupils who are expelled from SLSA shall be given a rehabilitation plan upon expulsion as developed by SLSA's governing board at the time of the expulsion order, which may include, but is not limited to, periodic review as well as assessment at the time of review for readmission. Terms of expulsion should be reasonable and fair with the weight of the expelling offense taken into consideration when determining the length of expulsion. Therefore, the rehabilitation plan should include a date not later than one (1) year from the date of expulsion when the pupil may apply to SLSA for readmission. SLSA shall inform parents in writing of its processes for reinstatement and applying for expungement of the expulsion record.

Readmission

SLSA's governing board shall adopt rules establishing a procedure for the filing and processing of requests for readmission and the process for the required review of all expelled pupils for readmission. Upon completion of the readmission process, Charter School's governing board shall readmit the pupil, unless Charter School's governing board makes a finding that the pupil has not met the conditions of the rehabilitation plan or continues to pose a danger to campus safety. A description of the procedure shall be made available to the pupil and the pupil's parent or guardian at the time the expulsion order is entered and the decision of the governing board, including any related findings, must be provided to the pupil and the pupil's parent/guardian within a reasonable time.

Reinstatement

SLSA's governing board shall adopt rules establishing a procedure for processing reinstatements, including the review of documents regarding the rehabilitation plan. Charter School is responsible for reinstating the student upon the conclusion of the expulsion period in a timely manner.

Gun Free Schools Act

SLSA shall comply with the federal Gun Free Schools Act.

Dismissal

Any of the following student behaviors are grounds for disciplinary action, which may lead to dismissal of the student by the governing board.

- The illegal use, possession, or sale of controlled substances by any student while the student is on school property or in attendance at a school function.
- Possession of a firearm, a knife, a weapon, or an item that may be used as a weapon by any student while the student is on school property or in attendance at a school function.
- Violence against any school personnel or another student.
- Sexual harassment.
- Vandalism (theft, defacing, misuse of school property)

Suspension of Students

An administrator may suspend a student for up to three days for the following reasons:

- The student's behavior disrupts normal school proceedings sufficiently that it hampers the right of other students to learn.
- The student willfully and knowingly destroys school property or threatens to do so.
- The student physically injures or threatens to injure him/her or others.

Due Process

Public schools are bound by both procedural and substantive due process when a suspension becomes necessary. Any suspension should also be reasonably expected to help correct the problem for which it was necessary. Suspended students must remain on the school's membership rolls, and they must be counted as absent during the period of their suspension.

Procedural Due Process:

- **Notice**: The student must have had reasonable opportunity to know the expectations for acceptable conduct in the school.
- **Hearing**: Parents/guardians must be notified immediately of the suspension. The student and parent/guardian have a right to explain what occurred, as they perceived it.

Substantive Due Process:

Disciplinary actions imposed by school officials will not be arbitrary, capricious, or unfair.

Suspension for More than Three Days

The SLSA Disciplinary committee must authorize suspension of a student for longer than a three- day period. If a student is to be suspended he/she is entitled to the following rights of due process:

- The student must have had reasonable opportunity to be informed of the rules and policies of the school.
- The student must be advised of the violations against him/her that may be the basis for suspension and be given an opportunity to explain his/her version of the incident and respond to the allegations.
- The parent/guardian of the suspended student must be given prompt written or verbal notice of the suspension and the reason for the action.

During the period of suspension the school shall maintain the student on its membership rolls and count him/her as absent. The school shall also make provisions for homework to be provided during the period of suspension. If a student is suspended on a Safe School Referral, the services offered to the student are different than when they are suspended for other reasons. The student suspended on a Safe School Violation is suspended from all services and activities, including receiving homework, until the Safe School Screening Committee processes the referral.

Expulsion from the school may result when a student has engaged in very serious or extreme behaviors. An expulsion for a minimum period of one calendar year may be imposed for any student who brings a firearm to school or is in possession of a firearm at the school or any school activity.

Note: SLSA will adopt and adhere to procedural safeguards to protect the rights of students with special needs, specifically those who have or would qualify for IEPs.

Element 11: Retirement Programs

State Teachers Retirement Systems (STRS)

All full-time certificated employees participate in STRS. The Human Resource/Business Services manager is responsible for ensuring that appropriate arrangements for STRS, and Social Security coverage has been made.

Social Security

All non-certificated employees contribute to Social Security according to Federal and State laws with SLSA matching at the rates prescribed by law, unless provisions are made for other retirement options such as Public Employees Retirement System (PERS) or other retirement systems.

Salary Schedule

SLSA determines each employee's salary based on years of experience, post baccalaureate degree units, areas of specialty, and other factors as determined by CBA.

Work Calendar

Each staff member works the number of days agreed upon in his/her individual contract or work agreement, which will address the following:

- Details related to holidays, illness, personal days, vacation, and bereavement per Employee Personnel Handbook and CBA
- Determination of full-time or part-time status
- Employee discipline procedures and the employee's due process rights for appealing disciplinary action per CBA.
- Performance Evaluation

Performance evaluations will be conducted annually and will be conducted in a fair and judicious manner by their immediate supervisor per the CBA.

Other

SLSA shall adhere to applicable federal and state mandates, including:

- Family Medical Leave Act (FMLA)
- California Family Rights Act (CFRA)
- Disability Insurance Workers Compensation Medicare

Element 12: Public School Attendance Alternatives

Pupils who choose not to attend SLSA may choose to attend other public schools in their district of residence or pursue an inter-district transfer in accordance with existing enrollment and transfer policies of the District.

> *"The public school attendance alternatives for pupils residing within the school district who choose not to attend charter schools."* Cal. Ed. Code § 47605(b)(5)(L).

Element 13: Rights of District Employees

Employees of the District who choose to leave the employment of the District to work at Charter School shall have no automatic rights of return to the District after employment at Charter School unless specifically granted by the District through a leave of absence or other agreement or policy of the District as aligned with the CBAs of the District. Leave and return rights for District union-represented employees and former employees who accept employment with Charter School will be administered in accordance with applicable CBAs and any applicable judicial rulings.

"A description of the rights of any employee of the school district upon leaving the employment of the school district to work in a charter school, and of any rights of return to the school district after employment at a charter school." Cal. Ed. Code § 47605(b)(5)(M).

Element 14: Mandatory Dispute Resolution

The staff and governing board members of SLSA agree to resolve any claim, controversy or dispute arising out of or relating to the Charter agreement between the District and [Charter School], except any controversy or claim that is in any way related to revocation of this Charter ("Dispute"), pursuant to the terms of this Element 14.

"The procedures to be followed by the charter school and the entity granting the charter to resolve disputes relating to provisions of the charter." Cal. Ed. Code § 47605(b)(5)(N).

Any Dispute between the District and SLSA shall be resolved in accordance with the procedures set forth below:

1. Any Dispute shall be communicated in writing ("Written Notification"). The Written Notification must identify the nature of the Dispute and any supporting facts. The Written Notification shall be tendered to the other party by personal delivery, by facsimile, or by certified mail. The Written Notification shall be deemed received (a) if personally delivered, upon date of delivery to the address of the person to receive such notice if delivered by 5:00 p.m., or otherwise on the business day following personal delivery; (b) if by facsimile, upon electronic confirmation of receipt; or (c) if by mail, two (2) business days after deposit in the U.S. Mail. All Written Notifications shall be addressed as follows:

To Charter School:	SLSA c/o School Principal
To Director of Charter Schools:	San Leandro Unified School District

2. A written response ("Written Response") shall be tendered to the other party within twenty (20) business days from the date of receipt of the Written Notification. The parties agree to schedule a conference to discuss the Dispute identified in the Written Notice ("Issue Conference"). The Issue Conference shall take place within fifteen (15) business days from the date the Written Response is received by the other party. The Written Response may be tendered by personal delivery, by facsimile, or by certified mail. The Written Response shall be deemed received (a) if personally delivered, upon date of delivery to the address of the person to receive such notice if delivered by 5:00p.m., or otherwise on the business day following personal delivery; (b) if by facsimile, upon electronic confirmation of receipt; or (c) if by mail, two (2) business days after deposit in the U.S. Mail.

3. If the Dispute cannot be resolved by mutual agreement at the Issue Conference, either party may then request that the Dispute be resolved by mediation. Each party shall bear its own attorneys' fees, costs and expenses associated with the mediation. The mediator's fees and the administrative fees of the mediation shall be shared equally among the parties. Mediation proceedings shall commence within 120 days from the date of either party's request for mediation following the Issue Conference. The parties shall mutually agree upon the selection of a mediator to resolve the Dispute. The mediator may be selected from the approved list of mediators prepared by the American Arbitration Association. Unless the parties mutually agree

otherwise, mediation proceedings shall be administered in accordance with the commercial mediation procedures of the American Arbitration Association.

4. If the mediation is not successful, then the parties agree to resolve the Dispute by binding arbitration conducted by a single arbitrator. Unless the parties mutually agree otherwise, arbitration proceedings shall be administered in accordance with the commercial arbitration rules of the American Arbitration Association. The arbitrator must be an active member of the State Bar of California or a retired judge of the state or federal judiciary of California. Each party shall bear its own attorney's fees, costs and expenses associated with the arbitration. The arbitrator's fees and the administrative fees of the arbitration shall be shared equally among the parties. However, any party who fails or refuses to submit to arbitration as set forth herein shall bear all attorney's fees, costs and expenses incurred by such other party in compelling arbitration of any controversy or claim.

Element 15: Exclusive Public School Employer

SLSA is deemed the exclusive public school employer of all employees of the charter school for collective bargaining purposes. As such, Charter School shall comply with all provisions of the Educational Employment Relations Act ("EERA"), and shall act independently from SLUSD for collective bargaining purposes. In accordance with the EERA, employees may join and be represented by an organization of their choice for collective bargaining purposes.

"A declaration whether or not the charter school shall be deemed the exclusive public school employer of the employees of the charter school for purposes of Chapter 10.7 (commencing with Section 3540) of Division 4 of Title 1 of the Government Code." Cal. Ed. Code § 47605(b)(5)(O).

Element 16: Charter School Closure Procedures

"A description of the procedures to be used if the charter school closes. The procedures shall ensure a final audit of the school to determine the disposition of all assets and liabilities of the charter school, including plans for disposing of any net assets and for the maintenance and transfer of pupil records." Cal. Ed. Code § 47605(b)(5)(P).

Revocation of the Charter

The District may revoke the Charter if SLSA commits a breach of any provision set forth in a policy related to charter schools adopted by the District Board of Education and/or any provisions set forth in the Charter School Act of 1992. The District may revoke the charter of SLSA if the District finds, through a showing of substantial evidence, that Charter School did any of the following:

- SLSA committed a material violation of any of the conditions, standards, or procedures set forth in the Charter.
- SLSA failed to meet or pursue any of the pupil outcomes identified in the Charter.
- SLSA failed to meet generally accepted accounting principles, or engaged in fiscal mismanagement.
- SLSA violated any provision of law.

Prior to revocation, and in accordance with Cal. Educ. Code section 47607(d) and state regulations, the SLUSD Board of Education will notify San Leandro STEM Academy in writing of the specific violation, and give SLSA a reasonable opportunity to cure the violation, unless the SLUSD Board of Education determines, in writing, that the violation constitutes a severe and imminent threat to the health or safety of the pupils. Revocation proceedings are not subject to the dispute resolution clause set forth in this Charter.

Pursuant to AB 97, charter schools may be identified for assistance based on state evaluation rubrics and be subject to revocation pursuant to Education Code section 47607.3.

Closure Action

The decision to close SLSA either by the governing board of SLSA or by the SLUSD Board of Education must be documented in a "Closure Action." A Closure Action shall be deemed to have been automatically taken when any of the following occur: the Charter is revoked or non-renewed by the SLUSD Board of Education; the governing board of SLSA votes to close Charter School; or the Charter lapses.

Closure Procedures

The procedures for charter school closure set forth below are guided by California Education Code sections 47604.32, 47605, and 47607 as well as California Code of Regulations, Title 5 (5 CCR), sections 11962 and 11962.1, and are based on "Charter School Closure Requirements and Recommendations (Revised 08/2009)" posted on the California Department of Education website. All references to

"Charter School" apply to San Leandro STEM Academy including its nonprofit corporation and governing board.

Designation of Responsible Person(s) and Funding of Closure

Upon the taking of a Closure Action by either the governing board of SLSA or the SLUSD Board of Education, the governing board of SLSA shall immediately designate a person or persons responsible for conducting all closure procedures and activities, and determine how SLSA will fund these activities.

Notification of Closure Action

Upon the taking of a Closure Action, SLSA shall send written notice of its closure to:

1. The SLUSD, if the Closing Action is an act of SLSA Note: If the Closure Action is a revocation or nonrenewal by the SLUSD Board of Education, the charter school may omit this step.
2. Parents, guardians, and/or caretakers of all students currently enrolled in San Leandro STEM Academy within 72 hours of the Closure Action. SLSA shall simultaneously provide a copy of the written parent notification to the SLUSD.
3. Alameda County Office of Education (ACOE). San Leandro STEM Academy shall send written notification of the Closure Action to OCOE by registered mail within 72 hours of the Closure Action. Charter School shall simultaneously provide a copy of this notification to the SLUSD.
4. The Special Education Local Plan Area (SELPA) in which the school participates. SLSA shall send written notification of the Closure Action to the SELPA in which Charter School participates by registered mail within 72 hours of the Closure Action. Charter School shall simultaneously provide a copy of this notification to the SLUSD.
5. The retirement systems in which the school's employees participate. Within fourteen (14) calendar days of the Closure Action, San Leandro STEM Academy shall notify the State Teachers Retirement System (STRS), Public Employees Retirement System (PERS), and the Alameda County Office of Education of the Closure Action, and follow their respective procedures for dissolving contracts and reporting. Charter School shall provide a copy of this notification and correspondence to the SLUSD.
6. The California Department of Education (CDE). SLSA shall send written notification of the Closure Action to the CDE by registered mail within 72 hours of the Closure Action. SLSA shall provide a copy of this notification to the SLUSD.
7. Any school district that may be responsible for providing education services to the former students of SLSA. SLSA shall send written notification of the Closure Action within 72 hours of the Closure Action. This notice must include a list of potentially returning students and their home schools based on student residence. SLSA shall provide a copy of these notifications, if any, to the SLUSD.
8. All school employees and vendors within 72 hours of the Closure Action. SLSA shall simultaneously provide a copy of the written employee and vendor notification to the SLUSD.

Notification of all the parties above, with the exception of employees and vendors, must include but is not limited to the following information:

1. The effective date of the school closure
2. The name(s) and contact information for the person(s) handling inquiries regarding the closure
3. The students' school districts of residence
4. How parents and, legal guardians may obtain copies of student records and transcripts, including specific information on completed courses and credits that meet graduation requirements

In addition to the four required items above, notification of the CDE shall also include:

1. A description of the circumstances of the closure
2. The location of student and personnel records

In addition to the four required items above, notification of parents, guardians, and students shall also include:

1. Information on how to enroll or transfer the student to an appropriate school
2. A certified packet of student information that includes closure notice, a copy of the student's cumulative record, which will include grade reports, discipline records, immunization records, completed coursework, credits that meet graduation requirements, a transcript, and state testing results
3. Information on student completion of college entrance requirements, for all high school students affected by the closure

Notification of employees and vendors shall include:

1. The effective date of the school closure
2. The name(s) and contact information for the person(s) handling inquiries regarding the closure
3. The date and manner, which shall be no later than 30 days from the effective date of school closure, by which Charter School shall provide employees with written verification of employment.

Within 30 days of the effective date of closure, Charter School shall provide all employees with written verification of employment. Charter School shall send copies of such letters to the SLUSD.

School and Student Records Retention and Transfer

SLSA shall adhere to the following requirements regarding the transfer and maintenance of school and student records:

1. SLSA shall provide the District with original student cumulative files and behavior records pursuant to District policy and applicable handbook(s) regarding cumulative records for

secondary and elementary schools for all students both active and inactive, of Charter School. Transfer of the complete and organized original student records to the District shall occur within seven (7) calendar days of the effective date of closure.

2. SLSA's process for transferring student records to the receiving schools shall be in accordance with SLUSD procedures for students moving from one school to another.

3. SLSA shall prepare and provide an electronic master list of all students to the SLUSD. This list shall include the student's identification number, Statewide Student Identifier (SSID), birthdate, grade, full name, address, home school/school district, enrollment date, exit code, exit date, parent/guardian name(s), and phone number(s). If the SLSA closure occurs before the end of the school year, the list should also indicate the name of the school to which each student is transferring, if known. This electronic master list shall be delivered to the SLUSD in the form of a CD.

4. SLSA must organize the original cumulative files for delivery to the District in two categories: active students and inactive students. Charter School will coordinate with the SLUSD for the delivery and/or pickup of the student records.

5. SLSA must update all student records in the California Longitudinal Pupil Achievement Data System (CALPADS) prior to closing.

6. SLSA must provide to the SLUSD a copy of student attendance records, teacher gradebooks, school payroll and personnel records, and Title I records (if applicable). Personnel records must include any and all employee records including, but not limited to, records related to performance and grievance.

7. SLSA shall ensure that all records are boxed and clearly labeled by classification of documents and the required duration of storage.

Financial Close-Out

After receiving notification of closure, the CDE will notify the charter school and the authorizing entity of any liabilities the charter school owes the state, which may include overpayment of apportionments, unpaid revolving fund loans or grants, and/or similar liabilities. The CDE may ask the county office of education to conduct an audit of the charter school if it has reason to believe that the school received state funding for which it was not eligible.

SLSA shall ensure completion of an independent final audit within six months after the closure of the school that includes: An accounting of all financial assets. These may include cash and accounts receivable and an inventory of property, equipment, and other items of material value.

1. An accounting of all liabilities. These may include accounts payable or reduction in apportionments due to loans, unpaid staff compensation, audit findings, or other investigations.

2. An assessment of the disposition of any restricted funds received by or due to the charter school. This audit may serve as the school's annual audit.

SLSA shall pay for the financial closeout audit of SLSA. This audit will be conducted by a neutral, independent licensed CPA who will employ generally accepted accounting principles. Any liability or debt incurred by San Leandro STEM Academy will be the responsibility of SLSA and not SLUSD. SLSA understands and acknowledges that SLSA will cover the outstanding debts or liabilities of SLSA. Any unused monies at the time of the audit will be returned to the appropriate funding source. SLSA understands and acknowledges that only unrestricted funds will be used to pay creditors. Any unused AB 602 funds will be returned to the District SELPA or the SELPA in which San Leandro STEM Academy participates, and other categorical funds will be returned to the source of funds.

SLSA shall ensure the completion and filing of any annual reports required. These reports include but are not necessarily limited to:

1. Preliminary budgets
2. Interim financial reports
3. Second interim financial reports
4. Final unaudited reports

These reports must be submitted to the CDE and the authorizing entity in the form required. If Charter School chooses to submit this information before the forms and software are available for the fiscal year, alternative forms can be used if they are approved in advance by the CDE. These reports should be submitted as soon as possible after the Closure Action, but no later than the required deadline for reporting for the fiscal year.

For apportionment of categorical programs, the CDE will count the prior year average daily attendance (ADA) or enrollment data of the closed charter school with the data of the authorizing entity. This practice will occur in the first year after the closure and will continue until CDE data collection processes reflect ADA or enrollment adjustments for all affected LEAs due to the charter closure.

Disposition of Liabilities and Assets

The closeout audit must identify the disposition of all liabilities of the charter school. Charter school closure procedures must also ensure appropriate disposal, in accordance with Charter School's bylaws, fiscal procedures, and any other applicable laws and regulations, of any net assets remaining after all liabilities of the charter school have been paid or otherwise addressed. Such disposal includes, but is not limited to:

1. The return of any donated materials and property according to any conditions set when the donations were accepted.
2. The return of any grant and restricted categorical funds to their source according to the terms of the grant or state and federal law.
3. The submission of final expenditure reports for any entitlement grants and the filing of Final Expenditure Reports and Final Performance Reports, as appropriate.

Net assets of the charter school may be transferred to the authorizing entity. If SLSA is operated by a nonprofit corporation, and if the corporation does not have any functions other than operation of Charter School, the corporation shall be dissolved according to its bylaws.

- SLSA shall retain sufficient staff, as deemed appropriate by the San Leandro STEM Academy governing board to complete all necessary tasks and procedures required to close the school and transfer records in accordance with these closure procedures.
- SLSA governing board shall adopt a plan for wind-up of the school and, if necessary, the corporation, in accordance with the requirements of the Corporations Code.
- SLSA shall provide SLUSD within fourteen (14) calendar days of the Closure Action with written notice of any outstanding payments due to staff and the method by which the school will make the payments.

Prior to final close-out, SLSA shall complete all actions required by applicable law, including but not limited to the following:

1. File all final federal, state, and local employer payroll tax returns and issue final W-2s and Form 1099s by the statutory deadlines.
2. File a Federal Notice of Discontinuance with the Department of Treasury (Treasury Form 63).
3. Make final federal tax payments (employee taxes, etc.)
4. File its final withholding tax return (Treasury Form 165).
5. File its final return with the IRS (Form 990 and Schedule).

This Element 16 shall survive the revocation, expiration, termination, cancellation of this Charter, or any other act or event that would end SLSA's right to operate as a charter school or cause San Leandro STEM Academy to cease operation SLSA and the District agree that, due to the nature of the property and activities that are the subject of this Charter, the District and public shall suffer irreparable harm should Charter School breach any obligation under this Element 16. The District therefore shall have the right to seek equitable relief to enforce any right arising under this Element 16 or any provision of this Element 16 or to prevent or cure any breach of any obligation undertaken, without in any way prejudicing any other legal remedy available to the District. Such legal relief shall include, without limitation, the seeking of a temporary or permanent injunction, restraining order, or order for specific performance, and may be sought in any appropriate court.