



Dr. Theodore T. Alexander, Jr.
Science Center School
Charter Renewal Petition
2009



Dr. Theodore T. Alexander Jr., Science Center School
 Charter Renewal Petition
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LOS ANGELES UNIFIED SCHOOL DISTRICT
Charter Schools Division

Letter of Intent to Apply for a Charter School

Name of proposed charter school	<u>Dr. Theodore T. Alexander Jr. Science Center School</u>		
General location of proposed charter	<u>3737 S. Figueroa St. Los Angeles, CA 90007</u>		
Projected grade levels	<u>K-5th Grade</u>	Projected enrollment	<u>600</u>

Lead Petitioner Information:

Name	<u>Jeffrey N. Rudolph</u>		
Address	<u>California Science Center 700 Exposition Park Drive Los Angeles CA 90037</u>		
Phone number(s)	<u>213.744.7483</u>	Fax	<u>213-744-2034</u>
E-mail address	<u>jrudolph@cscmail.org</u>		

Other members of the Charter Development team

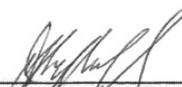
<u>Ron Rohovit</u>	<u>Paula Denen</u>
<u>Deputy Director of Education</u>	<u>Principal</u>
<u>California Science Center</u>	<u>Alexander Science Center School</u>
_____	_____

Certification:

I/we certify that we are interested in applying for a charter school within LAUSD boundaries.

I/we have participated in the Orientation Meeting given by the LAUSD Charter Schools Division.

Jeffrey N. Rudolph
PRINT NAME
President and CEO
California Science Center


SIGNATURE

1.28.09
DATE

Charter Briefing Page
Alexander Science School Charter Renewal Petition

Name of Organization Applying for Charter Renewal: Dr. Theodore T. Alexander, Jr.
Science Center School

Grade Served: Kindergarten – Grade 5

Number of Students: 606

Location Address: 3737 South Figueroa St., Los Angeles, CA 90007

Does the location meet Board Policy? (Low API, Overcrowded): Yes. Although LAUSD has made great progress in relieving the overcrowding at the schools surrounding the Alexander Science Center School that existed when this charter was first approved, one of the four resident schools serving students in the geographic area of the school is still multi-track, an indication of an overcrowded campus. Eight out of ten of the comparison schools are in year 3 or higher of Program Improvement. Three out of ten of the comparison schools are in year 5 of Program Improvement. None of the resident or comparison schools ranked higher than 3 on the 2007 statewide API ranking system, and 7 of the 10 comparison schools were ranked 1, the lowest possible ranking on the statewide system. The 2008 median growth API score for the comparison schools was 663.

Board of Directors: The Alexander Science Center School is an affiliated charter school with the Los Angeles Unified School District. A collaborative Governance and Operating Committee comprises the leadership of the school. The current membership of this committee are: Jeff Rudolph (President and CEO, California Science Center), Ron Rohovit (Deputy Director for Education, California Science Center), Carol M. Truscott (Superintendent, Local District 7, LAUSD), Donnalyn Jaque-Anton (Executive Officer, Educational Services, LAUSD), Paula Denen (Principal, Alexander Science Center School), Karen Gallagher (Dean, Rossier School of Education, University of Southern California), Jairo De La Torre (Teacher, UTLA Chapter Chair, Alexander Science Center School), Leticia Williams (Classified Representative, Alexander Science Center School), Eddie Cuevas (Parent Representative).

Description of Philosophy: Science Center-Style Learning moves fluidly between providing students with opportunities for informal, interest-based learning experiences and more formal activities that are teacher-directed and content specific. By combining best practices from both the informal and formal learning paradigms, students will engage in a rigorous, standards-based educational program emphasizing projects to encourage curiosity, inquiry, and anchor knowledge to real world contexts. Technology and social skills essential for collaboration and teamwork are integrated into student learning experiences, and students learn to communicate clearly, think creatively, and self manage as they prepare for the secondary stage of their educational career.

Source/Core of Money: The Alexander Science Center School is funded as a public school through the Los Angeles Unified School District.

3-5 Top Leaders: Jeff Rudolph, Ron Rohovit, Carol M. Truscott, and Paula Denen

Has your charter applied to any other jurisdiction for approval: No

Are there any sister charters?: No

What innovative elements of your charter could be considered “best practices” and replicated by other schools?:

- Science Center Style Learning, including the integration of informal and formal learning styles and the emphasis on science, math, and technology.
- Partnerships with community-based organizations to enhance instructional program

SELF STUDY NARRATIVE

In preparation for charter renewal, the Alexander Science Center School engaged in a yearlong self-study review of the school's educational programs, fiscal and operational systems, and leadership and governance. School leadership consisting of Local District 7, the Science Center, the school principal and UTLA representative met on a monthly basis to discuss issues related to the charter renewal process, organizational successes and challenges and how to begin the process of revising the existing charter to provide momentum in the fulfillment of the charter.

The Alexander Science Center School began as a partnership between the California Science Center and the Los Angeles Unified School District. It is the goal of both the California Science Center and the Los Angeles Unified School District to have the program become a national model of such a partnership. To our knowledge, there is no comparable school anywhere in the United States. At the establishment of the partnership, the California Science Center developed a Joint Use Agreement with the Los Angeles Unified School District that stipulated that the Alexander Science Center School was to be a neighborhood school. We enroll at least 70% of our students from the surrounding neighborhood schools within a 2 miles radius, which is one of the aspects that make our school unique. Other Science Center school partnerships in the United States have been magnet schools. Both the Science Center and the Los Angeles Unified School District have a strong commitment to keeping the school as one that serves its neighborhood. The students from the neighborhood are mostly socio-economically disadvantaged.

At the time of the school's founding, the schools in the surrounding neighborhood were multi-tracked and experiencing over-crowding. Since the surrounding schools were also sending students to other schools due to overcrowding, the Alexander Science Center School aimed to relieve some of the pressure of overcrowding in the Local District (G) at the time. The second goal of the school was to increase the learning opportunities for all students with an emphasis on enriched and expanded learning experiences for students who are identified as academically low achieving. This was to be achieved by offering a different educational experience for students, which would utilize the resources of the California Science Center and its Amgen Center for Science Learning as well as other institutions of the Exposition Park area to establish itself as a center for student and community science learning. The school was to offer a comprehensive array of interlinked academic enrichment and recreation support programs designed to equip, inspire and guide children and families of South Los Angeles to educational and career success.

At times, the partnership has been a challenge as the Science Center and the School District have unique cultures and different constraints. These challenges have manifested themselves in all aspects of the school, most clearly in the attempts of the leadership of the school to develop a unified vision for the educational direction of the school. The different organizational cultures often resulted in missed opportunities to set goals and define a shared set of values for its work together. As a result, the joint leadership had

difficulty in inspiring a shared commitment to improvement and the fulfillment of the charter in all stakeholders. The lack of implicit goals and values also meant that measurable outcomes and progress toward these goals were not clearly defined, not articulated with all stakeholders, and resulted in confusion for many people working in the school. Additionally, the school's mission required the development of an integrated science curriculum that needed consensus and goal setting systems in place to be established.

Changes in personnel and leadership have defined and greatly influenced the Alexander Science Center School since its opening. The school opened for students in the 2004-2005 school year. In its short, five-year history, the Alexander Science Center has had three different principals, with the second being an interim principal. The first principal was responsible for the organization of the school prior to opening, and then saw it through the first year of operations. An interim principal was assigned to the school after the start of the 2006-2007 school year. Due to many factors, including a lack of strong leadership and direction, the school lost half its teaching staff after the first year. In the second year, it lost a third of its staff. This constant change in staffing made collaboration and planning difficult for the school. It seemed that each year the school was "starting over".

The current principal has been assigned to the school since August 2007, and assistant principal since November 2007. A number of systems have been put in place in all areas of the school to provide stability so that the educational program and fulfillment of the charter can move forward. The joint leadership of the school has grown in understanding of how to develop a more effective partnership based on discussions of the salient issues related to the self-study. Leadership has made, and continues to make improvements to all areas of the school based on feedback from the Science Center, teaching staff, parents, and community stakeholders.

School governance is strength for the school. Our governing board, the Governance and Operations Committee, meets several times a year to discuss policy and makes decisions on direction for the school. We also make extensive use of LAUSD policies and procedures concerning school governance, and currently have all school councils operating effectively in shared decision-making at the school. Leadership has done better in the area of administration and compliance than it has in participation of stakeholders and providing leadership and management for the school.

During our self-study, it was noted that although parents feel there has been an improvement in communications between the school and families under the current leadership, there is still work to be done in how parents view their opportunities for involvement in the school. Some parents cited a lack of meaningful opportunity for involvement, that leadership did not always pursue opportunities for involvement, and that they were confused by LAUSD policies regarding volunteers in schools and the length of time it took for them to be processed as volunteers. Additionally, even though we are an affiliated charter school, the school did not provide a way for parents to be connected with middle school programs and opportunities for their children. However,

when asked to give the school a rating on a scale of one to five with five being the best, interviewed parents all gave ratings of four or five.

Based on feedback from parents, the school has taken steps to increase both communication and knowledge regarding policies that affect parents at the school, and develop ways to increase meaningful involvement. We have strengthened and added to our governance structure, and recently have more parents participating in the shared decision-making process. We participate in joint community events where families gather together several times a year to celebrate the successes of the school. We have instituted a room parent program this year, which seeks to improve communication for families regarding classroom events and opportunities for volunteerism. Educational opportunities have increased for parent education with monthly workshops and Open Houses sponsored by the Science Center's Parent and Community Liaison, and the sponsoring of parent attendance at conferences on Gifted Education. Communication from the school to parents has notably improved over the last year with the use of the Connect Ed telephone message system, quarterly newsletters, posting announcements in the Parent Center and carpool area, and the launching of the school web site. We have a scheduled middle school articulation meeting for parents, and have invited representatives of both charter and LAUSD schools.

Though the school has had a great deal of success as measured by our API and CST scores over the last five years, changes in leadership and a lack of a common vision regarding the direction of the instructional program have led to some challenges in the development of the instructional program. Both special education and our English language learners have lagged behind the school as a whole in their academic performance. Additionally, the school's API has stalled, and although we have made gains in some areas, we have lost ground in others.

When the school opened, the mandatory use of a state-approved English/Language Arts adoption was not the expectation. Open Court Reading, the LAUSD adopted program, was discouraged from being used. The LAUSD adopted math program, Scott Foresman, was used, with the addition of a supplementary math program TERC. This created a challenge for the school in many ways. Teachers were not able to have conversations around a common, cohesive curriculum. Data analysis was rare, because teachers were not using a program that had a data system to track student progress. Conflicts arose among teachers regarding the direction of the educational program, especially in the area of literacy development.

The school recently adopted the Open Court Reading program to address this issue but the teaching staff is not yet unified in their expectations as to how it should be implemented. Some teachers desire the administration to be more directive in this area, while others are resistant to any required use of the program. The school still needs to establish a common understanding as to how to manage this tension between the need to improve student English/Language Arts outcomes and the desire to have a program that is inquiry based. Providing training for teachers in OCR that emphasizes the inquiry-process, as well as solidifying the process to hold all staff members accountable to a coherent, common

curriculum and high levels of implementation of that curriculum in language arts is the current task for leadership.

Since there have been many changes to both leadership and the teaching staff, there is great variation between the quality of instruction from class to class at our school. While a number of classrooms are exemplary learning environments, there some in which there is little evidence of rigor and there can be higher expectations on the part of teachers to hold all students accountable to high levels of achievement. Just as unity and coherence needs to be brought to the curriculum, likewise instructional best practices need to be present in all classrooms. Best practices are now discussed in grade level meetings with the institution of a psychomotor program for students. Grade levels meet twice monthly, which enable teachers to have collaborative discussions and to implement their learning immediately into their classroom practice.

Through our debriefing in the self-study as well as meetings with LAUSD content experts and Literacy Coordinators, we are cognizant of the fact that as we revise the charter as part of the renewal process, it will be important that the instructional program is delineated with more specificity so that all members of the school community have a clear understanding of what every classroom at Alexander Science Center School should look like. Everyone should be held accountable to ensuring that all students have equitable access to the rich resources of the school, including educational experiences inside the classroom and outside the classroom like field trips.

Additionally, our school must develop a data-driven culture, to examine practice and the resulting effect on student learning. With collaborative structures and an accountability structure for assessments and the collection and analysis of data now in place, we can establish a professional learning community that is responsive to the needs of the students by having data inform our instructional practices, professional development programs, and parent and community outreach.

Student Achievement

The school's 2008 Growth API is 770, which represents no change over the 2007 Base API of 770. Prior to this last year, however, the school has shown growth as evidenced by a 2005 Base API of 734 and a 2006 Base API of 739. The school's 2007 API Statewide Rank is 6 and its Similar Schools Rank is seven. In general, students are performing considerably better on math CST exams than English Language Arts. Performance of English Language Learners lags significantly behind that of their peers. For the year 2007-2008 9.3% English Learners were redesignated as FEP versus the district rate of 14.6%, although the school had a higher redesignation rate than the district average for the previous three years. The school is not in Program Improvement but most recently made only 20 of 21 AYP criteria. English Language Learner proficiency on English/Language Arts CST was the criterion that we did not meet. However, we are still outperforming both the Resident Schools and Comparison Schools from the Renewing Charter in terms of API, the number of students scoring proficient and advanced on both

English Language Arts and Mathematics on CST, and the percentage of students identified a Gifted and Talented.

Although we have faced challenges to the instructional program in certain areas, we have had success with our core mission, which is the focus of science, math and technology. Our founding charter states that science, math, and technology will be integrated throughout the curriculum and that inquiry learning will comprise 40% of the instructional time. Classrooms have a clear focus on science and inquiry-based learning. This stands out in contrast to other schools where hands-on science activities are not as prevalent. In the area of science, our CST Science scores showed a 12% improvement, and reached 53% proficiency in 2008, which shows the significance of our work with students in our focus area.

Professional development and teacher training will continue to be a critical area for the school's development. The partnership with the Science Center provides the expertise necessary for the development of a comprehensive professional development plan in science, math and technology. Additionally, as an affiliated Charter, we can also have the benefits of maximizing LAUSD coaching, training and other supports as we utilize District adopted curriculum. We now have a more comprehensive plan for staff development, which targets both short and long-range goals.

Looking forward, the charter renewal process has given the school an opportunity to reflect on successes and challenges and make the changes necessary to the school and the charter to propel us forward in the fulfillment of the vision of the school. Despite the challenges of the first five years, there remains enthusiasm about the benefits of the partnership for students, and the desire to become a national model school in elementary science education. We are constantly striving for school improvement, have renewed our enthusiasm and commitment for the partnership and are eagerly awaiting the future successes of the school.

**Los Angeles Unified School District
Charter Schools Division**

CHARTER SCHOOLS GUIDELINES CHECKLIST – INITIAL SCREENING

Charter School Name: Dr. Theodore T. Alexander, Jr. Science Center School

Date: January 31, 2009 Contact Person: Ron Rohovit Phone No.: 213.744.2535

Fax No.: 213.744.2052

SUMMARY CONTENTS							
* PAGE	ITEM	ADDRESSED		ACCEPTABLE		COMMENTS	AB 544 REFERENCE
		YES	NO	YES	NO		
<u>N/A</u> <u>N/A</u> <u>N/A</u> <u>P22</u>	1. Approval Documentation Supporting signatures of: <ul style="list-style-type: none"> • conversion charter: 50% of permanent status teachers at the school site • start-up charter: one-half of parents who intend to enroll children or • one -half of teachers who intend to be employed at the school during first year of operation • petition includes prominent statement of meaningful interest to start a charter 						47605 (1) (2) 47605(3)
<u>P121</u> <u>P123</u> <u>P121</u> <u>P123</u> <u>P129</u> <u>P125</u>	2. Assurances that school will: <ul style="list-style-type: none"> • be non sectarian in programs, admission policies, employment practices and other operations • not charge tuition • not discriminate against any student on the basis of ethnicity, national origin, gender or physical or mental disability (religion, race color, medial condition, sexual condition, sexual orientation) • not enroll pupils over 19 years of age unless continuously enrolled in public school and making satisfactory progress toward high school diploma requirements • not require any child to attend a charter school nor any employee to work at a charter school • if pupil is expelled or leaves the charter school without graduating or completing the school year for any reason, the charter school shall 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 						47605 (d) (1) 47612 (a) (1) 47605 (e) (f)

	record of the pupil, including a transcript of grades or report card, and health information.						
<u>P23</u>	3. Description of which students will attend the school						47605 (d) (1) 47605 (d) (2) (A) (B)
<u>N/A</u>	4. Duration of initial charter petition: 5 years						47607 (a) (1)
<u>P23</u>	5. Renewal process/timeline						47607 (a) (1) (2)
<u>P105</u>	6. How the Board of Education and the charter school can monitor the progress in meeting student outcomes						47607 (a) (1) 47607 (b)
<u>P133</u>	7. Accepts and understands the grounds on which a charter may be revoked						47607 (b) (1-4) (c)
<u>P129</u> & <u>P123</u>	8. Accepts and understands obligations to comply with specific sections of the Education Code: Sections 47611 (STRS) and 41365 (Revolving Loan Fund), and all laws establishing minimum age for public school attendance						47610
<u>P120</u>	9. How district/county facilities will be maintained, insured and used by the charter school, if applicable						47605 (g) 47614
<u>P121</u>	10. How changes, additions or alterations to the facility will be accomplished and the district/county role in the process						47607 (a) (1)
<u>N/A</u> & <u>P120</u>	11. How school personnel, district/county will be insured against liability claims resulting from school operations <ul style="list-style-type: none"> • description of type/scope of legal services to be used • plans for insurance liability and legal issues to be dealt with collectively and individually 						47605 (g)
<u>P113</u>	12. Agreement between the charter school and the sponsoring agency detailing process and responsibility for operations, i.e., accounting, budgeting, payroll, liability insurance, etc. and contracted services and supervisorial oversight						47605 (g) 47613.7
<u>P86</u>	13. Agreement between the charter school and sponsoring agency detailing funding and services for special education students						47612 (a) (2)
<u>N/A</u>	14. Agreement between the charter school and sponsoring agency detailing operational funding levels						47613.5 (a)
<u>P113</u>	15. Agreement between the charter school and sponsoring agency detailing processes for responding to inquiries						47604.3

<u>P104</u> <u>P100</u> <u>P95</u> <u>N?A</u> <u>P103</u> <u>P95</u> <u>P95</u> <u>P97</u>	frames <ul style="list-style-type: none"> • reclassification of English learners • identification of who will be accountable for student progress • reference to NCLB • CAHS EE • CELDT • API • AYP • CST 						
<u>P106</u> <u>P106</u> <u>P106</u> <u>P109</u> <u>P108</u> <u>P106</u> <u>P105</u>	3. Method by which pupil progress in meeting pupil outcomes is measured (<i>Element 3</i>) <ul style="list-style-type: none"> • use of standardized test scores in measuring pupil progress • use of longitudinal, survey and other data in measuring pupil progress • methods to ensure that all statewide standards are met and pupil assessments conducted • process school will use to ensure that students meet the statewide performance standards and evidence of improved pupil learning • process for conducting pupil assessments pursuant to EC60602.5 • description of all assessment tools • identification of the grading policy 						47605 (b) (5) (C) 47605 (c)(1)
<u>P110</u> <u>P110</u> <u>P111</u> <u>P112</u> <u>P113</u>	4. Governance structure of the school including the process which is to be followed to ensure parent involvement (<i>Element 4</i>) <ul style="list-style-type: none"> • process which ensures staff, students and other stakeholder involvement • methods by which schools consult with parents and teachers regarding school's educational programs • decision-making process and organizational chart • assurances that school will comply with all laws relating to public agencies in general, all federal laws and regulations and state codes—i.e., Brown Act • what, if any relationships district/county will maintain 						47605 (b) (5) (D) 47605 (c)(2)

<p><u>P113</u> <u>N/A</u> <u>P109</u></p>	<p>with the charter school and how it will be accomplished</p> <ul style="list-style-type: none"> • process for amendments to charter • articles of incorporations and bylaws of nonprofit corporation • selection process of board members and relevant governance committees 						
<p><u>P115</u> <u>P115</u> <u>P119</u> <u>P114</u> <u>P117</u> <u>P118</u> <u>P115</u> <u>P70</u> <u>&</u> <u>114</u></p>	<p>5. Qualifications to be met by individuals to be employed by the school (<i>Element 5</i>)</p> <ul style="list-style-type: none"> • process for staff selection • job descriptions for positions • credentials, requirements and qualifications of staff • employee compensation-general description • identification of the roles and functions of staff members • measures of assessment of performance • procedure to be used for adequate background checks • process for recruiting teachers 						<p>47605 (b) (5) (E) 47605 (1)</p>
<p><u>P120</u> <u>P120</u> <u>P121</u> <u>P120</u> <u>P120</u> <u>P120</u> <u>P120</u></p>	<p>6. Procedures that the school will follow to ensure the health and safety of pupils and staff (<i>Element 6</i>)</p> <ul style="list-style-type: none"> • school will meet the requirement that each employee of the school furnish a criminal record summary as required in EC44237 • how the school will ensure that its facilities are safe • how the school will ensure that its auxiliary services are safe (food services, transportation, custodial services, hazardous materials) • role of staff as mandated or non-mandated child abuse reporters • TB requirements • employee fingerprints • student immunization requirement 						<p>47605 (b) (5) (F)</p>
<p><u>P121</u></p>	<p>7. Means by which school will achieve racial and ethnic balance among its pupils that reflects the general population residing within the district/county jurisdiction (<i>Element 7</i>)</p>						<p>47605 (b) (5) (G)</p>
<p><u>P123</u> <u>N/A</u></p>	<p>8. Admission requirements, if any (<i>Element 8</i>)</p> <ul style="list-style-type: none"> • admission assurances preferences 						<p>47605 (b) (5) (H)</p>

<u>P124</u>	<ul style="list-style-type: none"> lottery assurance and procedures 						
<u>P124</u>	<ul style="list-style-type: none"> waiting list preference (if applicable) 						
<u>P125</u>	9. Manner in which an annual independent financial audit will be conducted and exceptions/deficiencies resolved (<i>Element 9</i>)						47605 (b) (5) (I)
<u>P126</u>	10. Procedures by which students can be suspended or expelled (<i>Element 10</i>)						47605 (b) (5) (J)
<u>P126</u>	<ul style="list-style-type: none"> procedure for involving parents, students and staff in designing and implementing a discipline policy 						
<u>P126</u>	<ul style="list-style-type: none"> due process for students 						
<u>P126</u>	<ul style="list-style-type: none"> appeals of disciplinary action 						
<u>P126</u>	<ul style="list-style-type: none"> procedures for ensuring rights of students 						
<u>P126</u>	<ul style="list-style-type: none"> list of suspension and expulsion offenses 						
<u>P125</u>	<ul style="list-style-type: none"> suspension and expulsion procedure 						
<u>P126</u>	<ul style="list-style-type: none"> general discipline approach 						
<u>P129</u>	11. Procedures for dealing with staff issues (<i>Element 11</i>)						47605 (b) (5) (K) 47605 (1)
<u>P129</u>	<ul style="list-style-type: none"> relationship between the teachers and the district/county bargaining unit 						
<u>P129</u>	<ul style="list-style-type: none"> process by which salaries, benefits working conditions and items, i.e., calendars, holidays, vacations, work day and year will be determined 						
<u>P129</u>	<ul style="list-style-type: none"> labor procedures which will be applied to employees 						
<u>P129</u>	<ul style="list-style-type: none"> process for resolving complaints/grievances 						
<u>P129</u>	<ul style="list-style-type: none"> process for ensuring due process 						
<u>P129</u>	<ul style="list-style-type: none"> manner by which staff members will be covered by STRS, PERS, Social Security or Medicare 						
<u>P114, 118 & 129</u>	<ul style="list-style-type: none"> process for staff recruitment, selection, evaluation and termination 						
<u>P119</u>	<ul style="list-style-type: none"> Procedure for processing and monitoring credentials if required 						
<u>P129</u>	12. Public school attendance alternatives for pupils residing within the district/county who choose not to attend the charter school (<i>Element 12</i>)						47605 (b) (5) (L)
<u>P130</u>	13. Description of the rights of any						47605 (b) (5)

	employee of the district/county upon leaving the district/county to work in a charter and rights of return to the district/county after employment in a charter school <i>(Element 13)</i>						(M)
<u>P130</u>	14. Procedures to resolve disputes relating to provisions of the charter <i>(Element 14)</i> See LAUSD “Boiler Plate” Language						47605 (b)(5) (N)
<u>P132</u>	15. Declaration of Exclusive Public School Employer <i>(Element 15)</i>						47605 (b)(5) (O)
<u>P133</u>	16. Declaration whether or not 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 <i>(Element 16)</i>						47605(6) A (ii) O
<u>P132</u>	17. What the employment status relative to the district/county of charter school employees is and what it will be in the event the charter school ceases or in the event employees seek employment in the district/county						47605 (b)(5) (M)
<u>P118</u> <u>P115</u> <u>P115</u>	18. Description of the manner in which administrative services of the school are to be provided <ul style="list-style-type: none"> • responsibility for evaluating employees • criteria and procedures used in evaluation • how hiring decisions are made 						47605 (g)
<u>N/A</u>	19. Budget for the financial operation which is consistent with the requirements of any school district budget <ul style="list-style-type: none"> • proposed first year operational budget (including start-up costs) • financial projections for first three years • process for investment procedures and deposit of funds • procedure for ensuring adequate cash flow 						47605(g)
<u>P130</u>	20. Description of the facility to be used by the school						47605 (g)
<u>N/A</u>	21. Liability of district/county to handle payments if charter school defaults <ul style="list-style-type: none"> • for schools organized pursuant to Non-Profit Benefit Corporation Law • for schools not covered by Non-Profit Benefit 						47604

	<ul style="list-style-type: none"> • Corporation Law • AB 1994 • general assurances “Boiler Plate” language 						
<u>P123</u>	<ul style="list-style-type: none"> 22. Court-ordered Integration Language • action Plan for 70:30 or 30:70 						

DR. THEODORE T. ALEXANDER, JR. SCIENCE CENTER SCHOOL CHARTER RENEWAL PETITION

INTRODUCTION

The Dr. Theodore T. Alexander Jr. Science Center School (Alexander Science Center School) is a partnership School between the California Science Center and the Los Angeles Unified School District and is defined in the Alexander Science Center School and Center for Science Learning Lease (2000) (Appendix A) and the Joint Participation Agreement between the Los Angeles Unified School District and California Science Center (2002) (Appendix B). As stated in the Lease under section 26a, no modification of this Lease may be made except in writing and signed by both parties. The Alexander Science Center School is to become a national model school with an integrated curriculum focusing on science, mathematics and technology. The Alexander Science Center School will do this in a unique way. Alexander Science Center School has made progress toward the goal of blending the formal and informal educational approaches, and maintains a continuous reflection and improvement cycle to enable us to reach our ultimate goal of becoming a national model school in integrated curriculum, and professional practices that improve science education. It is also the intent of this educational partnership for the Alexander Science Center School to be a model school for replicable professional practices that improve science education in the District as well as regionally, statewide, and on a national level. The Alexander Science Center School is a neighborhood, affiliated charter school in the Los Angeles Unified School District (LAUSD) serving kindergarten through fifth grade students. Opened in 2004, the Alexander Science Center School operates as a single track, traditional calendar school that currently serves approximately 600 students.

Located in Exposition Park at the intersection of Exposition and Figueroa Boulevards, in South Los Angeles and Local District 7, the purpose of this neighborhood charter school is to establish and maintain an educational program of the highest quality for our students residing in our identified service area. The Alexander Science Center School also provides a school of choice to families residing in our service area. Our program integrates mathematics, science, and the use of technology in order to maximize learning opportunities for all students, especially those identified as at-risk for academic failure, and to create new professional opportunities for teachers through the use of diverse and innovative teaching methods toward the implementation of a rigorous, standards-based instructional program.

Successes and Challenges

The inaugural 5-year term has given the Alexander Science Center School the opportunity to build a solid foundation toward the development of our ultimate vision to become a national model school for high student achievement through science learning. In this term, we have experienced exciting success and some challenges that have allowed us to reflect deeply on our developing programs. This charter renewal petition reflects an ongoing process of deep analysis resulting in a stronger and more

comprehensive educational program toward achieving even greater levels of student engagement and learning.

The collaborative partnership between the California Science Center and LAUSD has worked to create an affiliated charter school, the Alexander Science Center School, which offers a clear focus on science and inquiry-based learning toward achieving the highest standards in core academic programs. The school's curriculum and programs are developed through collaboration between the California Science Center and the Alexander Science Center School teachers. This curriculum offers neighborhood families interested in engaging their children in a program with a science emphasis a local public school choice. Access to the staff and facilities at the California Science Center allows the Alexander Science Center School to continue to develop this integrated, science focused program in accordance with the latest research on science learning and utilizing state of the art resources to facilitate student learning. Through this partnership, key science-based activities have been developed for classroom implementation that can also be disseminated and shared with other educators throughout the district.

The Alexander Science Center School remains committed to continuing an enrollment priority for students residing in our identified service area. We are a neighborhood school of choice for local families looking for a science, mathematics, and technology focus for their child. Our student population consistently contains a majority of students from our local area and, as a Title I school, includes a significant percentage of students traditionally at-risk for failure because of economic circumstance.

Our most current area of focus for the Alexander Science Center School is in strengthening our common voice as a school community. We recognize that clarity around common goals and the consistent implementation of science center programs will allow our students to fully realize their potential within the Alexander Science Center School model. Conversations leading up to the construction of this charter renewal petition coupled with ongoing professional development for Alexander Science Center School staff are allowing us to grow as a community and to develop our common vision.

Benefits to LAUSD

The Alexander Science Center School is located in Exposition Park, one of the most densely populated areas in the state, and a community that has demonstrated perhaps the greatest need for this kind of educational institution. The communities served by the school are among the poorest in the city; median household income in the 32nd Congressional District (which includes Exposition Park) is \$41,400. Of the approximate 639,000 residents of the 32nd District, 42% are foreign-born and 68% of the residents speak a language other than English at home. There is 15% unemployment and 15% of the people in the 32nd District live below the poverty line. Nearly half of the District's residents receive some form of public assistance.

The historic Exposition Park neighborhood of South Los Angeles, home of the California

Science Center, is a study in contrasts. Rich educational and cultural landmarks exist among some of the poorest performing schools in the city. Formerly an African-American enclave, the Exposition Park neighborhood is now a mixture of cultures that include a core African-American population and Hispanic immigrants from Central and South America. Exposition Park also features the Natural History Museum of Los Angeles County, the California African American Museum, the Expo Center and the Los Angeles Memorial Coliseum. The University of Southern California is across the street on the Park's northern border. This is the heart of urban Los Angeles and one of the oldest parts of the city.

The Need for the Alexander Science Center School

Of 10 other LAUSD elementary schools within a 2-mile radius of the Alexander Science Center School, 8 are in program improvement and 7 have a statewide ranking of "1" on a scale of 1 to 10 with 10 being the highest score. The School enrolls the majority of its students from local elementary schools giving families a choice in schools for their children.

The Charter School Act of 1992 states that:

It is the intent of the Legislature...to provide opportunities for teachers, parents, pupils, and community members to establish and maintain schools that operate independently from the existing school district structure, as a method to accomplish the following;

- (a) Improve pupil learning.
- (b) Increase learning opportunities for all pupils, with special emphasis on expanded learning experiences for pupils who are identified as academically low achieving.
- (c) Encourage the use of different and innovative teaching methods.
- (d) Create new professional opportunities for teachers, including the opportunity to be responsible for the learning program at the school site.
- (e) Provide parents and pupils with expanded choices in the types of educational opportunities that are available within the public school system.
- (f) Hold the schools established under this part accountable for meeting measurable pupil outcomes, and provide the schools with a method to change from rule-based to performance based accountability systems.
- (g) Provide vigorous competition within the public school system to stimulate continual improvements in all public schools.

-California Education Code Section 47601 (a)-(g)

In partnership with LAUSD, the Alexander Science Center School works to fulfill the intent of the Charter School Act of 1992, the LAUSD Charter School Division's Vision and Mission, and the LAUSD Guiding Principles and Expectations for Charter Schools by developing and implementing innovative, research-based instructional practices and assessments to improve and drive continuous improvement that draws on the rich resources surrounding our school. With this flexibility the Alexander Science Center School has the opportunity to design and implement a curriculum and instructional program toward achieving the LAUSD Charter School Division's Vision and Mission to:

- Examine practices and develop structures that can help solve the many challenges facing schools in the LAUSD and greater educational community
- serve as a model school and be an asset from which the District can learn
- provide possible solutions to urban school challenges
- provide data to help identify and evaluate issues that affect quality educational programs and student learning and achievement
- serve as laboratories to test, demonstrate and disseminate ideas that can promote best educational practices
- provide additional educational opportunities and engagement for parents and the community
- collaborate with the LAUSD and other districts throughout California to share best practices and opportunities for professional development and create the conditions for replication across LAUSD and other districts to accelerate improvement in all schools.

By using the resources of the California Science Center and its Amgen Center for Science Learning, as well as other institutions of the Exposition Park area, the Alexander Science Center School has established itself as a center for student and community science learning. The school offers a comprehensive array of interlinked academic enrichment and recreation support programs designed to equip, inspire and guide children and families of South Los Angeles to educational and career success.

The Dr. Theodore T. Alexander, Jr. Science Center School requests charter renewal for a full 5-year term in accordance with the legislative goals and LAUSD intentions outlined above. By granting this charter school petition, LAUSD helps fulfill the intent of the Charter Schools Act of 1992.

ELEMENT 1 - The Educational Program

“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.” Ed Code 47605 (b)(5)(A)

The Students

The Alexander Science Center School is located in Local District 7 in Exposition Park. The school enrolls LAUSD students with a first priority given to student residing in an area designated as the Alexander Science Center School’s “neighborhood.” Currently, the following schools fall within the designated “neighborhood” attendance area of the Alexander Science Center School: Vermont EL., Weemes EL., Norwood EL., Normandie EL., Menlo EL., John Mack EL and 52nd St. EL. Please see table below:

Demographic and Achievement Data of Surrounding Neighborhood Schools

SCHOOLS	# of Students	Multi-Track?	PI?	Met Schoolwide Growth targets?	API score	API State Ranking	Similar Schools Rank	% African-Am	% Hispanic	% White	% Other	% ELL	% Free & Reduced Lunch
Alexander SCS	599	Single	Not in PI	No	771	5	7	31	66	1	0	34	80
John Mack EL	518	Single	Y2	Yes	679	1	3	24	75	1	0	51	100
52 nd Street EL	806	Single	Y4	Yes	674	1	4	17	83	0	0	55	100
Menlo EL	964	4-Trk	Y3	Yes	642	1	3	16	83	0	1	57	93
Normandie EL	1,035	Single	Y5	Yes	642	1	2	27	73	0	0	48	91
Norwood EL	781	Single	Y4	Yes	693	2	3	2	97	1	0	51	92
Vermont EL	901	Single	Y3	Yes	706	2	5	8	91	1	0	51	100
Weemes EL	1,121	Single	Not in PI	No	697	2	5	29	69	0	2	39	90

In our elementary charter school, 78% of children are eligible for free or reduced-price lunch, and 30% of our students are classified as English Language Learners. The majority, 63%, of our students are Latino, and 33% are African-American. The Alexander Science Center School is committed to continually employing recruitment strategies that reach out to all families in this community, especially those who are not traditionally represented in progressive educational institutions, such as low-income and academically low-achieving students.

Four elementary schools have been identified as “resident” schools (i.e., schools charter school students would attend if they were not enrolled in the charter school) to the Alexander Science Center School. These four schools, Menlo E.S., Normandie E.S., Vermont E.S., and Weemes E.S. are also included in the CDE list of “comparison” schools for having similar demographics to the Alexander Science Center School. Six additional schools, Norwood E.S., King Jr. E.S., 52nd Street E.S., Budlong E.S., West

Vernon E.S., and Hyde Park E.S. are also included on the list of CDE “comparison” schools because of similar student demographics.

One of the four resident schools serving students in the geographic area of the Alexander Science Center School is multi-track, an indication of an overcrowded campus. Eight out of ten of the comparison schools are in year 3 or higher of Program Improvement. Three out of ten of the comparison schools are in year 5 of Program Improvement. None of the resident or comparison schools ranked higher than 3 on the 2007 statewide API ranking system, and 7 of the 10 comparison schools were ranked 1, the lowest possible ranking on the statewide system. The 2008 median growth API score for the comparison schools was 663.

The Alexander Science Center School is a single track elementary school serving a similar demographic composite of at-risk students. The Alexander Science Center School is not in Program Improvement and was ranked 6 on the 2007 API ranking system. The Alexander Science Center School’s 2008 growth API score was 770. (See Appendix C and Appendix D for demographic data matrices).

Mission and Vision Statements

Mission Statement

The mission of the school will be to educate students to be productively involved in a highly technical society by creating a neighborhood school where students learn through active participation in an integrated curriculum that focuses on science, mathematics and the use of technology. The partnership between the California Science Center and the Los Angeles Unified School District will create a model for excellence through the:

- Creation of a unique learning environment for a culturally diverse population that integrates both formal and informal learning and builds the interconnection between classroom experiences and students’ view of the world and life-long learning.
- Involvement of family, community business and industry, and professional organizations to create a comprehensive and integrated system of support for students that build a heightened sense of discovery and nurtures self-esteem. Parents will be equipped to provide mentorship, guidance and academic intervention.

Vision Statement

The original vision statement to become a National Model School by 2010, was the result of a year of work in 2002 by over 30 Science Center, District, university and local community education organization staff, teachers and parents.

The Alexander Science Center School will be a national model in elementary education through the innovative use of science, mathematics and technology as the foundation for

a rigorous and exciting multidisciplinary learning experience for kindergarten through 5th grade students.

This will be achieved through the following:

- Drawing on the dynamic partnership between the California Science Center, the Los Angeles Unified School District, the University of Southern California and other Exposition Park entities
- Maintaining strong and effective leadership, along with dedicated and highly-trained teachers and staff
- Establishing school operations and instructional practices that value diverse learning styles and provide rich experiences for all learners
- Modeling collaborative engagement of parents, teachers, and professional staff from the school's partner organizations
- Designing and implementing an innovative, learner-centered curriculum based on current research, State and National Education Standards
- Researching, developing and advancing best practices for engaging students and parents, training teachers and promoting educational excellence and innovation
- Effectively integrating a wide range of resources through the adjacent Amgen Center for Science Learning

Progress

The Alexander Science Center School has had notable success in working toward achieving its vision as outlined in the initial 5 year charter. We have developed a nine member Governance and Operating Committee made up of three Science Center personnel, three District personnel, a parent representative, a classified staff and a UTLA representative. This Committee provides oversight for the School's development, instructional program and overall direction. While we continue a rigorous process of data-based self-reflection in partnership with the LAUSD charter division office to continue our progress, we are proud of what we have achieved in our first 5 years.

A unique asset of the Alexander Science Center School is its access to some of the best resources for science education in the Nation. The partnership between the Alexander Science Center School and the California Science Center provides exceptional opportunities for both students and faculty. Alexander Science Center School teachers work with the California Science Center's curatorial staff, expert education staff, and District teachers-in-residence to develop standards and researched-based curriculum and programs for implementation in the classroom. On-going professional development opportunities work toward an understanding of best practice in science education and other ways to access Exposition Park resources to improve opportunities for student learning.

Students expand their classroom based instructional program in their use of the Science Center facilities (e.g., the Big Lab and the California Science Center Exhibit Halls). Students will have even greater access to science resources with the anticipated opening of the World of Ecology Exhibit at the California Science Center. The California Science

Center has also worked to facilitate science learning trips to Catalina Island and the Santa Monica Mountains for all Science Center Students at designated grade levels in order to broaden student exposure.

An original intent of the Alexander Science Center School is to become a model of collaborative engagement between families, teachers, and community-based organizations. Toward this goal, Science Center families have access to activities and resources provided by the California Science Center aimed at extending student learning opportunities beyond the school day. Families receive free membership to the California Science Center and are able to participate in a myriad of Science Center programs and activities in the Science Center Exhibit Halls and the Big Lab. As we continue to develop this aspect of our program, we look forward to continuing our family educational programs and providing even better opportunities for parent input and engagement in their child[ren]'s education.

The Alexander Science Center School will continue to nurture and develop its partnerships with the University of Southern California and other Exposition Park entities in its next charter term as these partnerships pertain to the accomplishment of the School's mission and vision statements.

Looking Forward

As part of the LAUSD Local District 7, the Alexander Science Center School operates under the Local District's mission to educate all students and demonstrate improved student achievement with standards-based instruction, focused learning opportunities, and appropriate use of all resources. In accordance with the federal No Child Left Behind Act's stated purpose to improve the academic achievement of the disadvantaged, the partnership between all stakeholders enables the Alexander Science Center School to continue its work toward becoming a learning community with high expectations and achievement for all students. The Alexander Science Center School will continue to emphasize:

- the study of science and mathematics as the school's curricular foundation
- the use of technology
- learner-centered and activity- and inquiry-based learning throughout all instruction
- the construction of exhibits, projects and experiments as an important tool for learning
- its role as an experimental school
- the professional development of teachers and teachers-in-training
- developing parent training programs to encourage participation in the school and to reinforce habits of life long learning in their children

A Typical Day at the Alexander Science Center School

8:08 AM – Edgar looked around his 2nd grade classroom to see what kinds of choices his teacher, Ms. Corona, had set up for the morning. He noticed upon looking at the agenda

on the board, that they would be checking in on the fish eggs they had discovered in the Big Lab last week. He wondered if they had hatched. After putting away his coat and backpack, turning in his second draft of his bar graph for his research project titled Jet Planes and Rocket Ships: Which is louder?, and signing in on the attendance sheet, Edgar sat down with Viviana and Jack to see if he could make a nail and other objects move with various magnets.

10:00 AM – Looking at the clock, Edgar, his group’s timekeeper, encourages his group mates to finish checking their work before they had to go to recess. Yesterday’s activity on the Ecology Platform in the Big Lab had been really exciting. One of the fish had laid eggs, and Dr. Erikson, a California Science Center content expert, had asked the students to make predictions about what characteristics the baby fish might have based on what they observed about the adult fish in the pond. Edgar and his team had been working on their analysis of the question all morning and were almost ready to report their ideas to the class.

10:45 AM – Ms. Johnson, the paraprofessional in Edgar’s class, called him over to read with her individually. Edgar still struggled with reading in English, but Ms. Johnson had really been helping him to learn how to figure out what the words said. Edgar knew it was important to be able to read well if he wanted to be a scientist, so he got to work.

11:11 AM – Ms. Corona came over to Edgar’s group to check in on an animated conversation that was going on over the predictions the fish babies in the pond. Basing his perspective on a lesson they had had earlier, Edgar was arguing that, because one fish in the pond was all black, all the babies would also be black because that was a dominant trait. Ms. Corona asked the group if they thought that dominant characteristics in humans were also dominant characteristics in other species. She asked the group to write their predictions in their science journals, so they could compare them to the fish babies when they hatched.

1:25 PM – Edgar worked on his own on revising the fact based statements he was writing about jet planes and rocket ships. He knew they had to be really clear because visitors, including his parents were going to come and look at his work on exhibition day. He wanted them all to understand all he had learned about sound waves. He even had information about the sonic boom his class had heard a few weeks ago.

2:20 – Edgar shows Ms. Corona his assignment notebook with the night’s assignments written in it. He leaves the closing circle and begins packing his things to go to the after school program. He couldn’t wait to play handball with Pedro and Julie. Julie had won yesterday, and he was looking forward to a rematch.

4:43 PM – Edgar and his 2 sisters, also Alexander Science Center School students, hop into his Dad’s car. In Spanish, Edgar immediately begins telling his little sister about how he was going to get a magnet strong enough to push their car all the way home without using any gas, which makes her laugh like crazy. Edgar’s older sister reminds

her Dad about an upcoming parent night at the Science Center Exhibit Hall as they drive home from their busy day.

At the Alexander Science Center School, we seek to promote activities that stimulate a heightened sense of discovery and inspire science learning. We seek to promote the power of informal learning experiences to spark curiosity and engage interest in the sciences during school years and throughout a lifetime. Kindergarten sets the stage for an interdisciplinary approach, building curriculum around major concepts and ideas that will be echoed in subsequent grades. Teachers plan activities that are student-centered, self-directed, and intrinsically motivated and also promote collaboration, discussion and social interaction among students.

A typical day at the Alexander Science Center School should include evidence of both standards-based and informal learning opportunities for all students. A typical day should be a well coordinated effort by collaborative grade level teams for which all team members can articulate the goals and objectives of the day's agenda. A typical day should embrace each elementary school student's natural passion and curiosity and use that enthusiasm as a jumping off point for specific instruction. A typical day should include exploration, skills development, collaboration, questioning, and fun.

The Instructional Program and Curriculum

Proposed Teaching Methodologies: Science Center Style Learning

At the core of the Alexander Science Center School's understanding of what constitutes effective instructional practice is the belief that science inquiry, the process by which scientists come to understand the natural world, is at the heart of how students learn. The National Science Teachers Association and the California Science Teachers Association supports the notion that inquiry science must be a basic in the daily curriculum of every elementary school student at every grade level, so students may develop problem-solving skills that empower them to participate in an increasingly scientific and technological world (National Science Teachers Association, 2002).

Science Center-Style Learning is founded on the principles of inquiry-based instructional methods and combines the formal educational methods commonly practiced in schools with informal learning experiences stimulated by the enriched environment in which our school is located. A growing body of research documents the power of informal learning experiences to spark curiosity and engage interest in the sciences during school years and throughout a lifetime. This type of multi-faceted learning is voluntary, self-directed, and often mediated within a social context (Falk, Dierking, & Foutz, 2007). Informal learning provides an experiential base and motivation for further activity and subsequent learning. Informal science education accommodates different learning styles and effectively serves the complete spectrum of learners: gifted, challenged, non-traditional, and second language learners (Informal Science Education Position Statement, National Science Teachers Association, 1999). Additionally, a recently released report from the National Research Council, *Learning Science in Informal Environments: People, Places, and*

Pursuits, (National Research Council, 2009) notes that experience in informal settings, such as science centers, zoos and museums, can kick-start and sustain long-term interests that involve sophisticated learning and can significantly improve science learning outcomes for individuals from groups which are historically underrepresented in science, such as women and minorities.

Science Center-Style Learning moves fluidly between providing students with opportunities for informal, interest-based learning experiences and more formal activities that are teacher-directed and content specific. By combining best practices from both the informal and formal learning paradigms, students will engage in a rigorous, standards-based educational program emphasizing projects to encourage curiosity, inquiry, and anchor knowledge to real world contexts. Technology and social skills essential for collaboration and teamwork are integrated into student learning experiences, and students learn to communicate clearly, think creatively, and self manage as they prepare for the secondary stage of their educational career.

The Science Center-style instructional approach, then, is reflected in the following ways in classroom practice:

- I. Students participate in a process of **inquiry** within an **integrated, project-based** curriculum;
- II. Students **utilize resources** (i.e., adults and peers), classroom-based materials, and the unique, state of the art resources which comprise the Alexander Science Center School's environment to enhance their learning;
- III. Students engage in a curriculum that is **learner-centered**;
- IV. Students use **technology** as a tool to articulate their ideas and access deeper degrees of comprehension.

Inquiry: Inquiry-based learning refers to a process by which students use evidence to make sense of information. At the Alexander Science Center School, teachers utilize the processes of inquiry (observing, communicating, classifying, estimating and measuring, inferring, predicting, defining operationally, making models, and investigating) to work with students toward content area objectives.

Integrating Curriculum: An integrated curriculum is a series of content area objectives building toward a common goal or outcome. Alexander Science Center School teachers integrate a standards-based curriculum toward both an overarching grade level goal and a final graduate outcome goal framed by the processes of inquiry.

Project-Based Learning: Project-Based Learning is an instructional approach designed to engage natural curiosity through an inquiry-based process of resolving authentically generated questions. At the Alexander Science Center School, content area objectives are taught during the course of projects stimulated by student interest.

Utilizing Resources: Teachers create opportunities for student engagement and increased learning utilizing the rich resources of the school environment as well as by teaching

students to draw on the strengths of their peers in the classroom. Collaborative learning in the classroom also leads to the development of critical social skills.

Learner-Centered: A learner-centered curriculum recognizes that people learn more efficiently when ideas and information are relevant to prior knowledge and student interest. Furthermore, a learner-centered curriculum respects the need to differentiate instruction based on individual learning styles and in order to expose all students to creative ways to solve problems. Alexander Science Center School students engage in self-designed projects guided by teacher-designed classroom activities.

Technology: Technology is an increasingly powerful tool for accessing information, processing data, and manipulating the environment. Alexander Science Center School teachers use technology to examine their own practice and as a means for communicating ideas to students and teachers. Students are routinely exposed to and taught to utilize technology as a support for learning and communicating.

Dual Language Immersion

The Alexander Science Center School offers an instructional program based on the science-center style learning approach described above. Alexander Science Center School families have the additional option of enrolling their child[ren] in our dual language immersion program. LAUSD has stated that dual language Programs have been proven effective in educating English learners and English proficient/Fluent English proficient students in the same classroom environment. The goals of the dual language program are academic and social language proficiency in one's primary language, academic and social language proficiency in a second language, academic achievement in all subject areas, and cultural validation and competence. The dual language immersion program also seeks to develop student academic science and math vocabulary in Spanish and English.

Parents choose to enroll their children in the Alexander Science Center School dual language program because they desire to prepare their child for the future. While science, math and technology are undeniably skills for the 21st century, in order to provide our students the ability to navigate within their future professional communities, multilingualism and cultural competence provide an undeniable advantage.

Dual language is a tool to bring communities together and build a bridge across the cultural and linguistic divide that can separate the African American and Latin American populations that coexist within our local community. Learning another language is another way of being able to see something from another perspective and point of view. Learning the importance of language is also the first step to becoming an effective communicator, a goal for all 21st century citizens.

In organizing our dual language classrooms, we strive to maintain the LAUSD recommended composition for dual language classrooms that produces optimal results when the percentage of both English learners and English only/fluent English proficient students approach 50%. This is to ensure that there are sufficient language models in both

languages and to facilitate flexible grouping for differentiated instruction and cooperative learning.

The Alexander Science Center School implements a 50/50 dual language model, one of three dual language models approved by LAUSD. This means that each student receives 50% of his or her instruction in English and 50% in Spanish in all content areas from kindergarten through fifth grade. All subjects are taught in both languages at all grade levels beginning in Kindergarten, and English and Spanish Language literacy skills are taught simultaneously beginning in kindergarten.

Our dual language program has 2 classes at grade levels K-3, with teachers working within a teaming structure. At grade 4, we have one dual language classroom that is self-contained. In the 2009-2010 school year, the Alexander Science Center School will have dual language classrooms K-5. The dual language classrooms receive equitable allocation of school resources.

Parent training is an integral part of the dual language program implementation. Our school provides on-going training for parents of students in the dual language program. Teacher-Family Workshops are provided throughout the year, with an emphasis on building the skills of parents to understand and participate meaningfully in the dual language experience. Workshops on bi-literacy, vocabulary building, understanding the dual language program and homework assistance are all essential to engage parents in the program.

By participating in the dual language program students will not only have access to all the resources and participate fully in the Alexander Science Center School curriculum, but they will do this in two languages. For English speaking students this means that they will enhance their linguistic capacities, acquire meta-linguistic and meta-cognitive skills, and have many doors opened to them as a person who is fluent in both Spanish and English. University admissions, the job marketplace as well as diversity in social relationships are all enhanced for bilingual individuals.

For Spanish speaking students, in addition to all of the previously mentioned benefits, they will build upon prior knowledge and therefore have more access to content. Students will have a greater repertoire of linguistic skills to use to further their acquisition of English, and they will develop better self-esteem through the inclusion of their culture and language in formal education.

Scope and Sequence

The Alexander Science Center School's curriculum works backwards first from our vision of our 5th grade graduates and then from our understanding of what students need to master by the end of each grade level in order to build toward that ultimate vision. The overarching goals for each grade level are based on the "Investigation and Experimentation" strand of the California Content Standards for Science.

How the curriculum addresses the California Content Standards

The California Content Standards are embedded in our project-based, inquiry focused curriculum. They act as a context for the interactive educational environment in which students explore their own ideas and as a reference for teachers and parents looking for opportunities to gauge student progress. Including the California Content Standards in this manner allows our students the opportunity to be prepared for any middle school in which they choose to enroll.

Our curricular program, framed by science inquiry, includes rigorous, standards-based core programs. All of the state mandated content standards in Mathematics, English-Language Arts and Social Studies are addressed as we build student capacity toward the overarching goal. Additionally, technology standards based on the National Educational Technology Standards (NETS) and language learning standards based on the Language Learning Continuum (LLC) of the California Foreign Language Framework for our dual language immersion program have been included. Both NETS and LLC standards are applied at each grade level in a manner consistent with grade level appropriate content and expectations. Students enrolled in our dual language immersion program are expected to make progress on the LLC in both Spanish and English as outlined in the matrix below. Because we simultaneously believe that the integration of content area knowledge should not be forced and understand that it is our responsibility to ensure that all our students are achieving the high standards set by LAUSD and the State of California, discreet content area lessons not directly related to the overarching unit objective will be taught, if necessary, to ensure all students are receiving standards-based in addition to instruction based on objectives set by the Alexander Science Center School.

The Alexander Science Center School will comply with all applicable provisions of the No Child Left Behind Act and other state and federal mandates.

Scope and Sequence

<u>KINDERGARTEN</u>	
At the end of the Kindergarten Year, each student will present an individual exhibition or science focused project demonstrating his or her ability to <i>classify</i> items and <i>describe</i> the rationale for his or hers system of classification.	
Science	
Physical Science	<ol style="list-style-type: none"> 1. Properties of materials can be observed, measured, and predicted. As a basis for understanding this concept: <ol style="list-style-type: none"> a. Students know objects can be described in terms of the materials they are made of (e.g., clay, cloth, paper) and their physical properties (e.g., color, size, shape, weight, texture, flexibility, attraction to magnets, floating, sinking). b. Students know water can be a liquid or a solid and can be made to change back and forth from one form to the other. c. Students know water left in an open container evaporates (goes into the air) but water in a closed container does not.

Life Science	<p>2. Different types of plants and animals inhabit the earth. As a basis for understanding this concept:</p> <ul style="list-style-type: none"> a. Students know how to observe and describe similarities and differences in the appearance and behavior of plants and animals (e.g., seed-bearing plants, birds, fish, insects). b. Students know stories sometimes give plants and animals attributes they do not really have. c. Students know how to identify major structures of common plants and animals (e.g., stems, leaves, roots, arms, wings, legs).
Earth Science	<p>3. Earth is composed of land, air, and water. As a basis for understanding this concept:</p> <ul style="list-style-type: none"> a. Students know characteristics of mountains, rivers, oceans, valleys, deserts, and local landforms. b. Students know changes in weather occur from day to day and across seasons, affecting Earth and its inhabitants. c. Students know how to identify resources from Earth that are used in everyday life and understand that many resources can be conserved.
Investigation and Experimentation	<p>4. Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will:</p> <ul style="list-style-type: none"> a. Observe common objects by using the five senses. b. Describe the properties of common objects. c. Describe the relative position of objects by using one reference (e.g., above or below). d. Compare and sort common objects by one physical attribute (e.g., color, shape, texture, size, weight). e. Communicate observations orally and through drawings.
Mathematics	
Number Sense	<p>1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement)</p> <p>2.0 Students understand and describe simple additions and subtractions</p> <p>3.0 Students use estimation strategies in computation and problem solving that involve numbers that use the ones and tens places:</p>
Algebra and Functions	1.0 Students sort and classify objects
Measurement and	1.0 Students understand the concept of time and units to measure it;

Geometry	<p>they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties</p> <p>2.0 Students identify common objects in their environment and describe the geometric features</p>
Statistics, Data Analysis, and Probability	1.0 Students collect information about objects and events in their environment
Mathematical Reasoning	<p>1.0 Students make decisions about how to set up a problem:</p> <p>2.0 Students solve problems in reasonable ways and justify their reasoning</p>
Technology	
Creativity and Innovation	- Students apply existing knowledge to generate new ideas, products, or processes.
Communication and Collaboration	- Students interact, collaborate, and publish with peers, experts, or others employing a variety of digital environment and media.
Digital Citizenship	- Students exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
Technology Operations and Concepts	- Students transfer current knowledge to learning of new technologies.
English Language Arts	
Reading	<p>1.0 Students know about letters, words, and sounds. They apply this knowledge to read simple sentences.</p> <p>2.0 Students identify the basic facts and ideas in what they have read, heard, or viewed. They use comprehension strategies (e.g., generating and responding to questions, comparing new information to what is already known.</p> <p>3.0 Students will listen to and respond to stories based on well-known characters, themes, plots, and settings.</p>
Writing	1.0 Students will write words and brief sentences that are legible.
Written and Oral English Language Conventions:	1.0 Students will write and speak with a command of Standard English conventions.
Listening and Speaking:	<p>1.0 Students will listen and respond to oral communication. They will speak in clear and coherent sentences.</p> <p>2.0 Students will deliver brief recitations and oral presentations about familiar experiences or interests, demonstrating command of organization and delivery strategies.</p>
Social Science	

	<p>K.1 Students understand that being a good citizen involves acting in certain ways.</p> <p>K.2 Students recognize national and state symbols and icons such as the national and state flags, the bald eagle, and the Statue of Liberty.</p> <p>K.3 Students match simple descriptions of work that people do and the names of related jobs at the school, in the local community, and from historical accounts.</p> <p>K.4 Students compare and contrast the locations of people, places, and environments and describe their characteristics.</p> <p>K.5 Students put events in temporal order using a calendar, placing days, weeks, and months in proper order.</p> <p>K.6 Students understand that history relates to events, people, and places of other times.</p>
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Dual Immersion

Function	<p>Students develop the ability to:</p> <ul style="list-style-type: none"> • greet and respond to greetings • introduce and respond to introductions • engage in conversations • express likes and dislikes • make requests • obtain information • understand some ideas and familiar details • begin to provide information
Context	<p>Students can perform these functions:</p> <ul style="list-style-type: none"> • when speaking, in face-to-face social interaction • when listening, in social interaction and using audio or video texts • when reading, using authentic materials • when writing notes, lists, poems, postcards, and short letters
Text Type	<p>Students can:</p> <ul style="list-style-type: none"> • use short sentences, learned words and phrases, and simple question and commands when speaking • understand some ideas and familiar details presented in clear, uncomplicated speech when listening • understand short texts enhanced by visual clues when reading

FIRST GRADE

At the end of the First Grade, each student will present an individual exhibition or science focused project demonstrating his or her ability to *make comparisons* and

represent data as a means of communicating an idea.

Science

Physical Science	<ol style="list-style-type: none">1. Materials come in different forms (states), including solids, liquids, and gases. As a basis for understanding this concept:<ol style="list-style-type: none">a. Students know solids, liquids, and gases have different properties.b. Students know the properties of substances can change when the substances are mixed, cooled, or heated.
Life Science	<ol style="list-style-type: none">2. Plants and animals meet their needs in different ways. As a basis for understanding this concept:<ol style="list-style-type: none">a. Students know different plants and animals inhabit different kinds of environments and have external features that help them thrive in different kinds of places.b. Students know both plants and animals need water, animals need food, and plants need light.c. Students know animals eat plants or other animals for food and may also use plants or even other animals for shelter and nesting.d. Students know how to infer what animals eat from the shapes of their teeth (e.g., sharp teeth: eats meat; flat teeth: eats plants).e. Students know roots are associated with the intake of water and soil nutrients and green leaves are associated with making food from sunlight.
Earth Science	<ol style="list-style-type: none">3. Weather can be observed, measured, and described. As a basis for understanding this concept:<ol style="list-style-type: none">a. Students know how to use simple tools (e.g., thermometer, wind vane) to measure weather conditions and record changes from day to day and across the seasons.b. Students know that the weather changes from day to day but that trends in temperature or of rain (or snow) tend to be predictable during a season.c. Students know the sun warms the land, air, and water.
Investigation and Experimentation	<ol style="list-style-type: none">4. Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own

	<p>questions and perform investigations. Students will:</p> <ol style="list-style-type: none"> Draw pictures that portray some features of the thing being described. Record observations and data with pictures, numbers, or written statements. Record observations on a bar graph. Describe the relative position of objects by using two references (e.g., above and next to, below and left of). Make new observations when discrepancies exist between two descriptions of the same object or phenomenon
Mathematics	
Number Sense	<p>1.0 Students understand and use numbers up to 100.</p> <p>2.0 Students demonstrate the meaning of addition and subtraction and use these operations to solve problems.</p> <p>3.0 Students use estimation strategies in computation and problem solving that involve numbers that use the ones, tens, and hundreds places.</p>
Algebra and Functions	<p>1.0 Students use number sentences with operational symbols and expressions to solve problems:</p>
Measurement and Geometry	<p>1.0 Students use direct comparison and nonstandard units to describe the measurements of objects:</p> <p>2.0 Students identify common geometric figures, classify them by common attributes, and describe their relative position or their location in space:</p>
Statistics, Data Analysis, and Probability	<p>1.0 Students organize, represent, and compare data by category on simple graphs and charts:</p> <p>2.0 Students sort objects and create and describe patterns by numbers, shapes, sizes, rhythms, or colors:</p>
Mathematical Reasoning	<p>1.0 Students make decisions about how to set up a problem:</p> <p>2.0 Students solve problems and justify their reasoning:</p> <p>3.0 Students note connections between one problem and another.</p>
Technology	
Creativity and Innovation	<p>- Students apply existing knowledge to generate new ideas, products, or processes.</p>
Communication and Collaboration	<p>- Students interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.</p>

	- Students contribute to project teams to produce original works or solve problems.
Research and Information Fluency	- Students process data and report results.
Critical Thinking, Problem Solving, and Decision Making	- Students identify and define authentic problems and significant questions for investigation.
Digital Citizenship	- Students exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
Technology Operations and Concepts	- Student transfer current knowledge to learning of new technologies.
English Language Arts	
Reading	<p>1.0 Students understand the basic features of reading. They select letter patterns and know how to translate them into spoken language by using phonics, syllabication, and word parts. They apply this knowledge to achieve fluent oral and silent reading.</p> <p>2.0 Students read and understand grade-level-appropriate material. They draw upon a variety of comprehension strategies as needed.</p> <p>3.0 Students read and respond to a wide variety of significant works of children's literature. They distinguish between the structural features of the text and the literary terms or elements.</p>
Writing	<p>1.0 Students write clear and coherent sentences and paragraphs that develop a central idea. Their writing shows they consider the audience and purpose. Students progress through the stages of the writing.</p> <p>2.0 Students write compositions that describe and explain familiar objects, events, and experiences. Student writing demonstrates a command of standard American English and the drafting, research, and organizational strategies.</p>
Written and Oral English Language Conventions:	1.0 Students write and speak with a command of standard English conventions appropriate to this grade level.
Listening and Speaking:	<p>1.0 Students listen critically and respond appropriately to oral communication. They speak in a manner that guides the listener to understand important ideas by using proper phrasing, pitch, and modulation.</p> <p>2.0 Students deliver brief recitations and oral presentations about familiar experiences or interests that are organized around a</p>

	coherent thesis statement. Student speaking demonstrates a command of standard American English and the organizational and delivery strategies.
Social Science	
	<p>1.1 Students describe the rights and individual responsibilities of citizenship.</p> <p>1.2 Students compare and contrast the absolute and relative locations of places and people and describe the physical and/ or human characteristics of places.</p> <p>1.3 Students know and understand the symbols, icons, and traditions of the United States that provide continuity and a sense of community across time.</p> <p>1.4 Students compare and contrast everyday life in different times and places around the world and recognize that some aspects of people, places, and things change over time while others stay the same.</p> <p>1.5 Students describe the human characteristics of familiar places and the varied backgrounds of American citizens and residents in those places.</p> <p>1. 6 Students understand basic economic concepts and the role of individual choice in a free-market economy</p>
Dual Immersion	
Function	<p>Students expand their ability to perform all the functions developed in Stage I. They also develop the ability to:</p> <ul style="list-style-type: none"> • make requests • express their needs • understand and express important ideas and some detail • describe and compare • use and understand expressions indicating emotion
Context	<p>Students can perform these functions</p> <ul style="list-style-type: none"> • when speaking, in face-to-face social interaction • when listening, in social interaction and using audio or video texts • when reading, using grade level appropriate authentic materials
Text Type (Continuation of Stage I objectives)	<p>Students can:</p> <ul style="list-style-type: none"> • use short sentences, learned words and phrases, and simple question and commands when speaking • understand some ideas and familiar details presented in clear, uncomplicated speech when listening • understand short texts enhanced by visual clues when reading

SECOND GRADE

At the end of the Second Grade, each student will present an individual exhibition or science focused project demonstrating his or her ability to *make predictions* using *tools to measure and observe*.

Science

Physical Science	<ol style="list-style-type: none">1. The motion of objects can be observed and measured. As a basis for understanding this concept:<ol style="list-style-type: none">a. Students know the position of an object can be described by locating it in relation to another object or to the background.b. Students know an object's motion can be described by recording the change in position of the object over time.c. Students know the way to change how something is moving is by giving it a push or a pull. The size of the change is related to the strength, or the amount of force, of the push or pull.d. Students know tools and machines are used to apply pushes and pulls (forces) to make things move.e. Students know objects fall to the ground unless something holds them up.f. Students know magnets can be used to make some objects move without being touched.g. Students know sound is made by vibrating objects and can be described by its pitch and volume.
Life Science	<ol style="list-style-type: none">2. Plants and animals have predictable life cycles. As a basis for understanding this concept:<ol style="list-style-type: none">a. Students know that organisms reproduce offspring of their own kind and that the offspring resemble their parents and one another.b. Students know the sequential stages of life cycles are different for different animals, such as butterflies, frogs, and mice.c. Students know many characteristics of an organism are inherited from the parents. Some characteristics are caused or influenced by the environment.d. Students know there is variation among individuals of one kind within a population.e. Students know light, gravity, touch, or environmental stress can affect the germination,

	<p>growth, and development of plants.</p> <p>f. Students know flowers and fruits are associated with reproduction in plants.</p>
Earth Science	<p>3. Earth is made of materials that have distinct properties and provide resources for human activities. As a basis for understanding this concept:</p> <p>a. Students know how to compare the physical properties of different kinds of rocks and know that rock is composed of different combinations of minerals.</p> <p>b. Students know smaller rocks come from the breakage and weathering of larger rocks.</p> <p>c. Students know that soil is made partly from weathered rock and partly from organic materials and that soils differ in their color, texture, capacity to retain water, and ability to support the growth of many kinds of plants.</p> <p>d. Students know that fossils provide evidence about the plants and animals that lived long ago and that scientists learn about the past history of Earth by studying fossils.</p> <p>e. Students know rock, water, plants, and soil provide many resources, including food, fuel, and building materials, that humans use.</p>
Investigation and Experimentation	<p>4. Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will:</p> <p>a. Make predictions based on observed patterns and not random guessing.</p> <p>b. Measure length, weight, temperature, and liquid volume with appropriate tools and express those measurements in standard metric system units.</p> <p>c. Compare and sort common objects according to two or more physical attributes (e. g., color, shape, texture, size, weight).</p> <p>d. Write or draw descriptions of a sequence of steps, events, and observations.</p> <p>e. Construct bar graphs to record data, using appropriately labeled axes.</p> <p>f. Use magnifiers or microscopes to observe and draw descriptions of small objects or small features of</p>

	<p>objects.</p> <p>g. Follow oral instructions for a scientific investigation.</p>
Mathematics	
Number Sense	<p>1.0 Students understand the relationship between numbers, quantities, and place value in whole numbers up to 1,000.</p> <p>2.0 Students estimate, calculate, and solve problems involving addition and subtraction of two- and three-digit numbers.</p> <p>3.0 Students model and solve simple problems involving multiplication and division.</p> <p>4.0 Students understand that fractions and decimals may refer to parts of a set and parts of a whole.</p> <p>5.0 Students model and solve problems by representing, adding, and subtracting amounts of money.</p> <p>6.0 Students use estimation strategies in computation and problem solving that involve numbers that use the ones, tens, hundreds, and thousands places.</p>
Algebra and Functions	1.0 Students model, represent, and interpret number relationships to create and solve problems involving addition and subtraction.
Measurement and Geometry	<p>1.0 Students understand that measurement is accomplished by identifying a unit of measure, iterating (repeating) that unit, and comparing it to the item to be measured.</p> <p>2.0 Students identify and describe the attributes of common figures in the plane and of common objects in space.</p>
Statistics, Data Analysis, and Probability	<p>1.0 Students collect numerical data and record, organize, display, and interpret the data on bar graphs and other representations.</p> <p>2.0 Students demonstrate an understanding of patterns and how patterns grow and describe them in general ways.</p>
Mathematical Reasoning	<p>1.0 Students make decisions about how to set up a problem.</p> <p>2.0 Students solve problems and justify their reasoning.</p> <p>3.0 Students note connections between one problem and another.</p>
Technology	
Creativity and Innovation	<p>- Students apply existing knowledge to generate new ideas, products, or processes.</p> <p>- Students create original works as a means of personal or group</p>

	<p>expression</p> <ul style="list-style-type: none"> - Students identify trends and forecast possibilities.
Communication and Collaboration	<ul style="list-style-type: none"> - Students interact, collaborate, and publish with peers, experts, or others employing a variety of media and formats. - Students communicate information and ideas effectively to multiple audiences using a variety of media and formats.
Research and Information Fluency	<ul style="list-style-type: none"> - Students process data and report results.
Critical Thinking, Problem Solving, and Decision Making	<ul style="list-style-type: none"> - Students identify and define authentic problems and significant questions for investigation. - Students plan and manage activities to develop a solution or complete a project.
Digital Citizenship	<ul style="list-style-type: none"> - Students exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
Technology Operations and Concepts	<ul style="list-style-type: none"> - Students transfer current knowledge to learning of new technologies. - Students understand and use technology systems.
English Language Arts	
Reading	<p>1.0 Students understand the basic features of reading. They select letter patterns and know how to translate them into spoken language by using phonics, syllabication, and word parts. They apply this knowledge to achieve fluent oral and silent reading.</p> <p>2.0 Students read and understand grade-level-appropriate material. They draw upon a variety of comprehension strategies as needed.</p> <p>3.0. Students read and respond to a wide variety of significant works of children's literature. They distinguish between the structural features of the text and the literary terms or elements.</p>
Writing	<p>1.0 Students write clear and coherent sentences and paragraphs that develop a central idea. Their writing shows they consider the audience and purpose. Students progress through the stages of the writing process.</p> <p>2.0 Students write compositions that describe and explain familiar objects, events, and experiences. Student writing demonstrates a command of standard American English and the drafting, research, and organizational strategies.</p>
Written and Oral English Language Conventions:	<p>1.0 Students write and speak with a command of standard English conventions appropriate to this grade level.</p>

Listening and Speaking:	<p>1.0 Students listen critically and respond appropriately to oral communication. They speak in a manner that guides the listener to understand important ideas by using proper phrasing, pitch, and modulation.</p> <p>2.0 Students deliver brief recitations and oral presentations about familiar experiences or interests that are organized around a coherent thesis statement. Student speaking demonstrates a command of standard American English and the organizational and delivery strategies.</p>
Social Science	
	<p>2.1 Students differentiate between things that happened long ago and things that happened yesterday.</p> <p>2.2 Students demonstrate map skills by describing the absolute and relative locations of people, places, and environments.</p> <p>2.3 Students explain governmental institutions and practices in the United States and other countries.</p> <p>2.4 Students understand basic economic concepts and their individual roles in the economy and demonstrate basic economic reasoning skills.</p> <p>2.5 Students understand the importance of individual action and character and explain how heroes from long ago and the recent past have made a difference in others' lives (e.g., from biographies of Abraham Lincoln, Louis Pasteur, Sitting Bull, George Washington Carver, Marie Curie, Albert Einstein, Golda Meir, Jackie Robinson, Sally Ride).</p>
Dual Immersion	
Function	<p>Students expand their ability to perform all the functions developed in Stage I. They also develop the ability to</p> <ul style="list-style-type: none"> • make requests • express their needs • understand and express important ideas and some detail • describe and compare • use and understand expressions indicating emotion
Context	<p>Students can perform these functions:</p> <ul style="list-style-type: none"> • when speaking, in face-to face social interaction • when listening in social interaction and using audio or video texts • when reading, using grade level appropriate authentic materials • when writing letters
Text Type	<p>Students can:</p> <ul style="list-style-type: none"> • use and understand learned expressions, sentences, and strings of

	<p>sentences, questions, and polite commands when speaking and listening</p> <ul style="list-style-type: none"> • create simple sentences when writing • understand important ideas and some details in highly contextualized, grade level appropriate, authentic texts when reading
<p><u>THIRD GRADE</u></p>	
<p>At the end of the Third Grade, each student will present an individual exhibition or science focused project demonstrating his or her ability to <i>analyze data</i> and <i>make evidence based statements</i>.</p>	
<p>Science</p>	
<p>Physical Science</p>	<ol style="list-style-type: none"> 1. Energy and matter have multiple forms and can be changed from one form to another. As a basis for understanding this concept: <ol style="list-style-type: none"> a. Students know energy comes from the Sun to Earth in the form of light. b. Students know sources of stored energy take many forms, such as food, fuel, and batteries. c. Students know machines and living things convert stored energy to motion and heat. d. Students know energy can be carried from one place to another by waves, such as water waves and sound waves, by electric current, and by moving objects. e. Students know matter has three forms: solid, liquid, and gas. f. Students know evaporation and melting are changes that occur when the objects are heated. g. Students know that when two or more substances are combined, a new substance may be formed with properties that are different from those of the original materials. h. Students know all matter is made of small particles called atoms, too small to see with the naked eye. i. Students know people once thought that earth, wind, fire, and water were the basic elements that made up all matter. Science experiments show that there are more than 100 different types of atoms, which are presented on the periodic table of the elements. 2. Light has a source and travels in a direction. As a basis for understanding this concept: <ol style="list-style-type: none"> a. Students know sunlight can be blocked to create

	<p>shadows.</p> <ul style="list-style-type: none"> b. Students know light is reflected from mirrors and other surfaces. c. Students know the color of light striking an object affects the way the object is seen. d. Students know an object is seen when light traveling from the object enters the eye.
Life Science	<p>3. Adaptations in physical structure or behavior may improve an organism's chance for survival. As a basis for understanding this concept:</p> <ul style="list-style-type: none"> a. Students know plants and animals have structures that serve different functions in growth, survival, and reproduction. b. Students know examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands. c. Students know living things cause changes in the environment in which they live: some of these changes are detrimental to the organism or other organisms, and some are beneficial. d. Students know when the environment changes, some plants and animals survive and reproduce; others die or move to new locations. e. Students know that some kinds of organisms that once lived on Earth have completely disappeared and that some of those resembled others that are alive today.
Earth Science	<p>4. Objects in the sky move in regular and predictable patterns. As a basis for understanding this concept:</p> <ul style="list-style-type: none"> a. Students know the patterns of stars stay the same, although they appear to move across the sky nightly, and different stars can be seen in different seasons. b. Students know the way in which the Moon's appearance changes during the four-week lunar cycle. c. Students know telescopes magnify the appearance of some distant objects in the sky, including the Moon and the planets. The number of stars that can be seen through telescopes is dramatically greater than the number that can be seen by the unaided eye. d. Students know that Earth is one of several planets that orbit the Sun and that the Moon orbits Earth.

	<p>e. Students know the position of the Sun in the sky changes during the course of the day and from season to season.</p>
Investigation and Experimentation	<p>5. Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will:</p> <ul style="list-style-type: none"> a. Repeat observations to improve accuracy and know that the results of similar scientific investigations seldom turn out exactly the same because of differences in the things being investigated, methods being used, or uncertainty in the observation. b. Differentiate evidence from opinion and know that scientists do not rely on claims or conclusions unless they are backed by observations that can be confirmed. c. Use numerical data in describing and comparing objects, events, and measurements. d. Predict the outcome of a simple investigation and compare the result with the prediction. e. Collect data in an investigation and analyze those data to develop a logical conclusion.
Mathematics	
Number Sense	<p>1.0 Students understand the place value of whole numbers.</p> <p>2.0 Students calculate and solve problems involving addition, subtraction, multiplication, and division.</p> <p>3.0 Students understand the relationship between whole numbers, simple fractions, and decimals.</p>
Algebra and Functions	<p>1.0 Students select appropriate symbols, operations, and properties to represent, describe, simplify, and solve simple number relationships.</p> <p>2.0 Students represent simple functional relationships.</p>
Measurement and Geometry	<p>1.0 Students choose and use appropriate units and measurement tools to quantify the properties of objects.</p> <p>2.0 Students describe and compare the attributes of plane and solid geometric figures and use their understanding to show relationships and solve problems.</p>
Statistics, Data Analysis, and	<p>1.0 Students conduct simple probability experiments by determining the number of possible outcomes and make simple</p>

Probability	predictions.
Mathematical Reasoning	<p>1.0 Students make decisions about how to approach problems.</p> <p>2.0 Students use strategies, skills, and concepts in finding solutions.</p> <p>3.0 Students move beyond a particular problem by generalizing to other situations.</p>
Technology	
Creativity and Innovation	<ul style="list-style-type: none"> - Students apply existing knowledge to generate new ideas, products, or processes. - Students create original works as a means of personal or group expression
Communication and Collaboration	<ul style="list-style-type: none"> - Students interact, collaborate, and publish with peers, experts, or others employing a variety of media and formats. - Students communicate information and ideas effectively to multiple audiences using a variety of media and formats.
Research and Information Fluency	<ul style="list-style-type: none"> - Students plan strategies to guide inquiry. - Students process data and report results.
Critical Thinking, Problem Solving, and Decision Making	<ul style="list-style-type: none"> - Students identify and define authentic problems and significant questions for investigation. -Students plan and manage activities to develop a solution or complete a project. - Students collect and analyze data to identify solutions and/or make informed decisions.
Digital Citizenship	<ul style="list-style-type: none"> - Students exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
Technology Operations and Concepts	<ul style="list-style-type: none"> - Students transfer current knowledge to learning of new technologies. - Students select and use applications effectively and productively. - Students understand and use technology systems.
English Language Arts	
Reading	<p>1.0 Students understand the basic features of reading. They select letter patterns and know how to translate them into spoken language by using phonics, syllabication, and word parts. They apply this knowledge to achieve fluent oral and silent reading.</p> <p>2.0 Students read and understand grade-level-appropriate material. They draw upon a variety of comprehension strategies as needed.</p>

	3.0 Students read and respond to a wide variety of significant works of children's literature. They distinguish between the structural features of the text and literary terms or elements.
Writing	1.0 Students write clear and coherent sentences and paragraphs that develop a central idea. Their writing shows they consider the audience and purpose. Students progress through the stages of the writing process. 2.0 Students write compositions that describe and explain familiar objects, events, and experiences. Student writing demonstrates a command of standard American English and the drafting, research, and organizational strategies.
Written and Oral English Language Conventions:	1.0 Students write and speak with a command of standard English conventions appropriate to this grade level.
Listening and Speaking:	1.0 Students listen critically and respond appropriately to oral communication. They speak in a manner that guides the listener to understand important ideas by using proper phrasing, pitch, and modulation. 2.0 Students deliver brief recitations and oral presentations about familiar experiences or interests that are organized around a coherent thesis statement. Student speaking demonstrates a command of standard American English and the organizational and delivery strategies.
Social Science	
	3.1 Students describe the physical and human geography and use maps, tables, graphs, photographs, and charts to organize information about people, places, and environments in a spatial context. 3.2 Students describe the American Indian nations in their local region long ago and in the recent past. 3.3 Students draw from historical and community resources to organize the sequence of local historical events and describe how each period of settlement left its mark on the land. 3.4 Students understand the role of rules and laws in our daily lives and the basic structure of the U.S. government. 3.5 Students demonstrate basic economic reasoning skills and an understanding of the economy of the local region.
Dual Immersion	
Function	Students expand their ability to perform all the functions developed

	<p>in Stages I and II. They also develop the ability to</p> <ul style="list-style-type: none"> clarify and ask for and comprehend clarification express and understand opinions narrate and understand narration in the present, past, and future identify, state and understand feelings and emotions
Context	<p>Students can perform these functions</p> <ul style="list-style-type: none"> when speaking, in face-to-face social interaction and in simple transactions on the phone when listening, in social interaction and using audio or video texts when reading grade level appropriate short stories, poems, and articles when writing journals and letters
Text Type	<p>Students can</p> <ul style="list-style-type: none"> use strings of related sentences when speaking understand most spoken language when the message is deliberately and carefully conveyed by a speaker accustomed to dealing with learners when listening create simple paragraphs when writing acquire knowledge and new information from grade level appropriate, comprehensive, authentic texts when reading

FOURTH GRADE

At the end of the Fourth Grade, each student will present an individual exhibition or science focused project demonstrating his or her ability to *use inference* and *experimentation* to come to a conclusion about a self-generated question.

Science

Physical Science	<ol style="list-style-type: none"> Electricity and magnetism are related effects that have many useful applications in everyday life. As a basis for understanding this concept: <ol style="list-style-type: none"> Students know how to design and build simple series and parallel circuits by using components such as wires, batteries, and bulbs. Students know how to build a simple compass and use it to detect magnetic effects, including Earth's magnetic field. Students know electric currents produce magnetic fields and know how to build a simple electromagnet. Students know the role of electromagnets in the construction of electric motors, electric generators, and simple devices, such as doorbells and earphones. Students know electrically charged objects attract or
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	<p>repel each other.</p> <p>f. Students know that magnets have two poles (north and south) and that like poles repel each other while unlike poles attract each other.</p> <p>g. Students know electrical energy can be converted to heat, light, and motion.</p>
Life Science	<p>2. All organisms need energy and matter to live and grow. As a basis for understanding this concept:</p> <p>a. Students know plants are the primary source of matter and energy entering most food chains.</p> <p>b. Students know producers and consumers (herbivores, carnivores, omnivores, and decomposers) are related in food chains and food webs and may compete with each other for resources in an ecosystem.</p> <p>c. Students know decomposers, including many fungi, insects, and microorganisms, recycle matter from dead plants and animals.</p> <p>3. Living organisms depend on one another and on their environment for survival. As a basis for understanding this concept:</p> <p>a. Students know ecosystems can be characterized by their living and nonliving components.</p> <p>b. Students know that in any particular environment, some kinds of plants and animals survive well, some survive less well, and some cannot survive at all.</p> <p>c. Students know many plants depend on animals for pollination and seed dispersal, and animals depend on plants for food and shelter.</p> <p>d. Students know that most microorganisms do not cause disease and that many are beneficial.</p>
Earth Science	<p>4. The properties of rocks and minerals reflect the processes that formed them. As a basis for understanding this concept:</p> <p>a. Students know how to differentiate among igneous, sedimentary, and metamorphic rocks by referring to their properties and methods of formation (the rock cycle).</p> <p>b. Students know how to identify common rock-forming minerals (including quartz, calcite, feldspar, mica, and hornblende) and ore minerals by using a table of diagnostic properties.</p>

	<p>5. Waves, wind, water, and ice shape and reshape Earth's land surface. As a basis for understanding this concept:</p> <ul style="list-style-type: none"> a. Students know some changes in the earth are due to slow processes, such as erosion, and some changes are due to rapid processes, such as landslides, volcanic eruptions, and earthquakes. b. Students know natural processes, including freezing and thawing and the growth of roots, cause rocks to break down into smaller pieces. c. Students know moving water erodes landforms, reshaping the land by taking it away from some places and depositing it as pebbles, sand, silt, and mud in other places (weathering, transport, and deposition).
Investigation and Experimentation	<p>6. Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will:</p> <ul style="list-style-type: none"> a. Differentiate observation from inference (interpretation) and know scientists' explanations come partly from what they observe and partly from how they interpret their observations. b. Measure and estimate the weight, length, or volume of objects. c. Formulate and justify predictions based on cause-and-effect relationships. d. Conduct multiple trials to test a prediction and draw conclusions about the relationships between predictions and results. e. Construct and interpret graphs from measurements. f. Follow a set of written instructions for a scientific investigation.
Mathematics	
Number Sense	<p>1.0 Students understand the place value of whole numbers and decimals to two decimal places and how whole numbers and decimals relate to simple fractions. Students use the concepts of negative numbers.</p> <p>2.0 Students extend their use and understanding of whole numbers to the addition and subtraction of simple decimals.</p> <p>3.0 Students solve problems involving addition, subtraction,</p>

	<p>multiplication, and division of whole numbers and understand the relationships among the operations.</p> <p>4.0 Students know how to factor small whole numbers.</p>
Algebra and Functions	<p>1.0 Students use and interpret variables, mathematical symbols, and properties to write and simplify expressions and sentences.</p> <p>2.0 Students know how to manipulate equations.</p>
Measurement and Geometry	<p>1.0 Students understand perimeter and area.</p> <p>2.0 Students use two-dimensional coordinate grids to represent points and graph lines and simple figures.</p> <p>3.0 Students demonstrate an understanding of plane and solid geometric objects and use this knowledge to show relationships and solve problems.</p>
Statistics, Data Analysis, and Probability	<p>1.0 Students organize, represent, and interpret numerical and categorical data and clearly communicate their findings.</p> <p>2.0 Students make predictions for simple probability situations.</p>
Mathematical Reasoning	<p>1.0 Students make decisions about how to approach problems.</p> <p>2.0 Students use strategies, skills, and concepts in finding solutions.</p> <p>3.0 Students move beyond a particular problem by generalizing to other situations.</p>
Technology	
Creativity and Innovation	<ul style="list-style-type: none"> - Students apply existing knowledge to generate new ideas, products, or processes. - Students create original works as a means of personal or group expression
Communication and Collaboration	<ul style="list-style-type: none"> - Students interact, collaborate, and publish with peers, experts, or others employing a variety of media and formats. - Students communicate information and ideas effectively to multiple audiences using a variety of media and formats.
Research and Information Fluency	<ul style="list-style-type: none"> - Students plan strategies to guide inquiry. -Students evaluate and select information sources and digital tools based on the appropriateness to specific tasks.

	- Students process data and report results.
Critical Thinking, Problem Solving, and Decision Making	- Students identify and define authentic problems and significant questions for investigation. -Students plan and manage activities to develop a solution or complete a project. - Students collect and analyze data to identify solutions and/or make informed decisions.
Digital Citizenship	- Students advocate and practice safe, legal, and responsible use of information and technology. - Students exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
Technology Operations and Concepts	- Students transfer current knowledge to learning of new technologies. - Students select and use applications effectively and productively. - Students understand and use technology systems.
English Language Arts	
Reading	1.0 Students understand the basic features of reading. They select letter patterns and know how to translate them into spoken language by using phonics, syllabication, and word parts. They apply this knowledge to achieve fluent oral and silent reading. 2.0 Students read and understand grade-level-appropriate material. They draw upon a variety of comprehension strategies as needed. 3.0 Students read and respond to a wide variety of significant works of children's literature. They distinguish between the structural features of the text and the literary terms or elements.
Writing	1.0 Students write clear, coherent sentences and paragraphs that develop a central idea. Their writing shows they consider the audience and purpose. Students progress through the stages of the writing process. 2.0 Students write compositions that describe and explain familiar objects, events, and experiences. Student writing demonstrates a command of standard American English and the drafting, research, and organizational strategies.
Written and Oral English Language Conventions:	1.0 Students write and speak with a command of standard English conventions appropriate to this grade level.

Listening and Speaking:	<p>1.0 Students listen critically and respond appropriately to oral communication. They speak in a manner that guides the listener to understand important ideas by using proper phrasing, pitch, and modulation.</p> <p>2.0 Students deliver brief recitations and oral presentations about familiar experiences or interests that are organized around a coherent thesis statement. Student speaking demonstrates a command of standard American English and the organizational and delivery strategies.</p>
Social Science	
	<p>4.1 Students demonstrate an understanding of the physical and human geographic features that define places and regions in California.</p> <p>4.2 Students describe the social, political, cultural, and economic life and interactions among people of California from the pre-Columbian societies to the Spanish mission and Mexican rancho periods.</p> <p>4.3 Students explain the economic, social, and political life in California from the establishment of the Bear Flag Republic through the Mexican-American War, the Gold Rush, and the granting of statehood.</p> <p>4.4 Students explain how California became an agricultural and industrial power, tracing the transformation of the California economy and its political and cultural development since the 1850s.</p> <p>4.5 Students understand the structures, functions, and powers of the local, state, and federal governments as described in the U.S. Constitution.</p>
Dual Immersion	
Function	<p>Students expand their ability to perform all the functions developed in Stages I, II, and III. They also develop the ability to</p> <ul style="list-style-type: none"> • give and understand advice and suggestions • initiate, engage in, and close a conversation • compare and contrast • explain and support and opinion
Context	<p>Students can perform these functions</p> <ul style="list-style-type: none"> • when speaking, in face-to-face social interaction, in simple transactions on the phone, and in group discussions and presentations • when listening, in social interaction and using audio or video texts, including TV interviews and news-casts

	<ul style="list-style-type: none"> when reading grade level appropriate short literary texts, poems, and articles when writing journals and letters
Text Type	<p>Students can</p> <ul style="list-style-type: none"> use simple discourse in a series of coherent paragraphs when speaking understand most authentic spoken language when listening acquire knowledge and new information from grade level appropriate, comprehensive, authentic texts when reading
<u>FIFTH GRADE</u>	
<p>At the end of the Fifth Grade, each student will present an individual exhibition or science focused project demonstrating his or her ability to <i>develop a testable question</i> and <i>present an evidence-based conclusion</i> about that question.</p>	
Science	
Physical Science	<ol style="list-style-type: none"> Elements and their combinations account for all the varied types of matter in the world. As a basis for understanding this concept: <ol style="list-style-type: none"> Students know that during chemical reactions the atoms in the reactants rearrange to form products with different properties. Students know all matter is made of atoms, which may combine to form molecules. Students know metals have properties in common, such as high electrical and thermal conductivity. Some metals, such as aluminum (Al), iron (Fe), nickel (Ni), copper (Cu), silver (Ag), and gold (Au), are pure elements; others, such as steel and brass, are composed of a combination of elemental metals. Students know that each element is made of one kind of atom and that the elements are organized in the periodic table by their chemical properties. Students know scientists have developed instruments that can create discrete images of atoms and molecules that show that the atoms and molecules often occur in well-ordered arrays. Students know differences in chemical and physical properties of substances are used to separate mixtures and identify compounds. Students know properties of solid, liquid, and gaseous substances, such as sugar (C₆H₁₂O₆), water (H₂O), helium (He), oxygen (O₂), nitrogen (N₂),

	<p>and carbon dioxide (CO₂).</p> <ul style="list-style-type: none"> h. Students know living organisms and most materials are composed of just a few elements. i. Students know the common properties of salts, such as sodium chloride (NaCl).
Life Science	<p>2. Plants and animals have structures for respiration, digestion, waste disposal, and transport of materials. As a basis for understanding this concept:</p> <ul style="list-style-type: none"> a. Students know many multicellular organisms have specialized structures to support the transport of materials. b. Students know how blood circulates through the heart chambers, lungs, and body and how carbon dioxide (CO₂) and oxygen (O₂) are exchanged in the lungs and tissues. c. Students know the sequential steps of digestion and the roles of teeth and the mouth, esophagus, stomach, small intestine, large intestine, and colon in the function of the digestive system. d. Students know the role of the kidney in removing cellular waste from blood and converting it into urine, which is stored in the bladder. e. Students know how sugar, water, and minerals are transported in a vascular plant. f. Students know plants use carbon dioxide (CO₂) and energy from sunlight to build molecules of sugar and release oxygen. g. Students know plant and animal cells break down sugar to obtain energy, a process resulting in carbon dioxide (CO₂) and water (respiration).
Earth Science	<p>3. Water on Earth moves between the oceans and land through the processes of evaporation and condensation. As a basis for understanding this concept:</p> <ul style="list-style-type: none"> a. Students know most of Earth's water is present as salt water in the oceans, which cover most of Earth's surface. b. Students know when liquid water evaporates, it turns into water vapor in the air and can reappear as a liquid when cooled or as a solid if cooled below the freezing point of water. c. Students know water vapor in the air moves from one place to another and can form fog or clouds, which are tiny droplets of water or ice, and can fall

	<p>to Earth as rain, hail, sleet, or snow.</p> <ul style="list-style-type: none"> d. Students know that the amount of fresh water located in rivers, lakes, under-ground sources, and glaciers is limited and that its availability can be extended by recycling and decreasing the use of water. e. Students know the origin of the water used by their local communities. <p>4. Energy from the Sun heats Earth unevenly, causing air movements that result in changing weather patterns. As a basis for understanding this concept:</p> <ul style="list-style-type: none"> a. Students know uneven heating of Earth causes air movements (convection currents). b. Students know the influence that the ocean has on the weather and the role that the water cycle plays in weather patterns. c. Students know the causes and effects of different types of severe weather. d. Students know how to use weather maps and data to predict local weather and know that weather forecasts depend on many variables. e. Students know that the Earth's atmosphere exerts a pressure that decreases with distance above Earth's surface and that at any point it exerts this pressure equally in all directions. <p>5. The solar system consists of planets and other bodies that orbit the Sun in predictable paths. As a basis for understanding this concept:</p> <ul style="list-style-type: none"> a. Students know the Sun, an average star, is the central and largest body in the solar system and is composed primarily of hydrogen and helium. b. Students know the solar system includes the planet Earth, the Moon, the Sun, eight other planets and their satellites, and smaller objects, such as asteroids and comets. c. Students know the path of a planet around the Sun is due to the gravitational attraction between the Sun and the planet.
Investigation and Experimentation	<p>6. Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in</p>

	<p>the other three strands, students should develop their own questions and perform investigations. Students will:</p> <ol style="list-style-type: none"> a. Classify objects (e.g., rocks, plants, leaves) in accordance with appropriate criteria. b. Develop a testable question. c. Plan and conduct a simple investigation based on a student-developed question and write instructions others can follow to carry out the procedure. d. Identify the dependent and controlled variables in an investigation. e. Identify a single independent variable in a scientific investigation and explain how this variable can be used to collect information to answer a question about the results of the experiment. f. Select appropriate tools (e.g., thermometers, meter sticks, balances, and graduated cylinders) and make quantitative observations. g. Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data. h. Draw conclusions from scientific evidence and indicate whether further information is needed to support a specific conclusion. i. Write a report of an investigation that includes conducting tests, collecting data or examining evidence, and drawing conclusions.
Mathematics	
Number Sense	<p>1.0 Students compute with very large and very small numbers, positive integers, decimals, and fractions and understand the relationship between decimals, fractions, and percents. They understand the relative magnitudes of numbers.</p> <p>2.0 Students perform calculations and solve problems involving addition, subtraction, and simple multiplication and division of fractions and decimals.</p>
Algebra and Functions	1.0 Students use variables in simple expressions, compute the value of the expression for specific values of the variable, and plot and interpret the results.
Measurement and Geometry	1.0 Students understand and compute the volumes and areas of simple objects.

	2.0 Students identify, describe, and classify the properties of, and the relationships between, plane and solid geometric figures.
Statistics, Data Analysis, and Probability	1.0 Students display, analyze, compare, and interpret different data sets, including data sets of different sizes.
Mathematical Reasoning	1.0 Students make decisions about how to approach problems. 2.0 Students use strategies, skills, and concepts in finding solutions. 3.0 Students move beyond a particular problem by generalizing to other situations.
Technology	
Creativity and Innovation	- Students apply existing knowledge to generate new ideas, products, or processes. - Students create original works as a means of personal or group expression - Students use models and simulations to explore complex systems and issues.
Communication and Collaboration	- Students interact, collaborate, and publish with peers, experts, or others employing a variety of media and formats. - Students communicate information and ideas effectively to multiple audiences using a variety of media and formats. - Students develop cultural understanding and global awareness by engaging with learners of other cultures.
Research and Information Fluency	- Students plan strategies to guide inquiry. - Students locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media. -Students evaluate and select information sources and digital tools based on the appropriateness to specific tasks. - Students process data and report results.
Critical Thinking, Problem Solving, and Decision Making	- Students identify and define authentic problems and significant questions for investigation. -Students plan and manage activities to develop a solution or complete a project.

	<ul style="list-style-type: none"> - Students collect and analyze data to identify solutions and/or make informed decisions. - Students use multiple processes and diverse perspectives to explore alternative solutions.
Digital Citizenship	<ul style="list-style-type: none"> - Students advocate and practice safe, legal, and responsible use of information and technology. - Students exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity. - Students demonstrate personal responsibility for lifelong learning. - Students exhibit leadership for digital citizenship.
Technology Operations and Concepts	<ul style="list-style-type: none"> - Students transfer current knowledge to learning of new technologies. - Students select and use applications effectively and productively. - Students understand and use technology systems. - Students troubleshoot systems and applications.
English Language Arts	
Reading	<p>1.0 Students use their knowledge of word origins and word relationships, as well as historical and literary context clues, to determine the meaning of specialized vocabulary and to understand the precise meaning of grade-level-appropriate words.</p> <p>2.0 Students read and understand grade-level-appropriate material. They describe and connect the essential ideas, arguments, and perspectives of the text by using their knowledge of text structure, organization, and purpose.</p> <p>3.0 Students read and respond to historically or culturally significant works of literature. They begin to find ways to clarify the ideas and make connections between literary works.</p>
Writing	<p>1.0 Students write clear, coherent, and focused essays. The writing exhibits the students' awareness of the audience and purpose. Essays contain formal introductions, supporting evidence, and conclusions. Students progress through the stages of the writing process as needed.</p> <p>2.0 Students write narrative, expository, persuasive, and descriptive texts of at least 500 to 700 words in each genre. Student writing demonstrates a command of standard American</p>

	English and the research, organizational, and drafting strategies.
Written and Oral English Language Conventions:	1.0 Students write and speak with a command of standard English conventions appropriate to this grade level.
Listening and Speaking:	<p>1.0 Students deliver focused, coherent presentations that convey ideas clearly and relate to the background and interests of the audience. They evaluate the content of oral communication.</p> <p>2.0 Students deliver well-organized formal presentations employing traditional rhetorical strategies (e.g., narration, exposition, persuasion, description). Student speaking demonstrates a command of standard American English and the organizational and delivery strategies.</p>
Social Science	
	<p>5.1 Students describe the major pre-Columbian settlements, including the cliff dwellers and pueblo people of the desert Southwest, the American Indians of the Pacific Northwest, the nomadic nations of the Great Plains, and the woodland peoples east of the Mississippi River.</p> <p>5.2 Students trace the routes of early explorers and describe the early explorations of the Americas.</p> <p>5.3 Students describe the cooperation and conflict that existed among the American Indians and between the Indian nations and the new settlers.</p> <p>5.4 Students understand the political, religious, social, and economic institutions that evolved in the colonial era.</p> <p>5.5 Students explain the causes of the American Revolution.</p> <p>5.6 Students understand the course and consequences of the American Revolution.</p> <p>5.7 Students describe the people and events associated with the development of the U.S. Constitution and analyze the Constitution's significance as the foundation of the American republic.</p> <p>5.8 Students trace the colonization, immigration, and settlement patterns of the American people from 1789 to the mid-1800s, with emphasis on the role of economic incentives, effects of the physical and political geography, and transportation systems.</p> <p>5.9 Students know the location of the current 50 states and the</p>

	names of their capitals.
Dual Immersion	
Function	Students expand their ability to perform all the functions developed in Stages I, II, III, and IV. They also develop the ability to <ul style="list-style-type: none"> • conduct grade level appropriate transactions and negotiations • substantiate and elaborate opinions • convince and persuade • analyze and critique
Context	Students can perform these functions in almost any context, including many complex situations.
Text Type	Students can perform these functions in extended discourse when appropriate.

The Research

Our Students

The Alexander Science Center School’s teaching methodologies and instructional program have been developed in accordance with our understanding of what constitutes effective educational practice for all students. Recognizing that a significant portion of our student population is identified with markers (e.g., socioeconomically disadvantaged) traditionally associated with being “at-risk” for academic failure, we continue to develop our program by examining the academic growth rate of our student body, paying special attention to any subgroups demonstrating academic need. The majority of our student body (78%) has been identified as socioeconomically disadvantaged. One third (33%) of our students are classified as English Language Learners. Our largest ethnic subgroups are our Hispanic students (63%) followed by our African-American students (33%).

Three major findings from the report *How People Learn* (National Research Council, 2000) have informed the development of our instructional methodologies. This report suggests that curriculum developers and professional development providers should reference the following principles in order to ensure best practice in their instructional program:

- 1) Learners preconceptions about how the world works will be **engaged** so that they may grasp new concepts and information in a **meaningful** manner
- 2) Learners will develop a **deep foundation** of factual knowledge that is **understood in the context of a conceptual framework** and they will know how to organize that information in ways that facilitate retrieval and application
- 3) Learners will be **in control** of their own learning by defining goals and monitoring their progress in achieving them.

From this research, we understand that our educational program must be **engaging**, **relevant**, and **rigorous** for all our students. Toward achieving these principles, our program implements an *integrated, inquiry-based* program drawing on the rich *resources* that comprise the Science School environment. Through the development of *learner-centered projects* and the inclusion of *technology* as a meaningful tool, we expect all of our students to realize their potential.

Engagement

Research has shown that high levels of student engagement are linked to increased levels of student success ([Blank, 1997](#); [Dev, 1997](#); [Kushman, 2000](#); [Woods, 1995](#)). Learning that is connected to local context and utilizes local resources can lead to more engaging schooling. Furthermore, research has shown that inquiry-based classroom and school programs leads to increased levels of student engagement (National Research Council, 2006). Additional research has shown that introducing project-based curriculum improves the motivation and participation levels of elementary aged students (Bartscher, 1995). To these ends, the Alexander Science Center School's program implements an **inquiry**-based program using the rich **resources** of our local community.

Relevance

We understand that students are most open to the introduction of new concepts and ideas when they see how these ideas can be applied (National Research Council, 2000). Learning is most effective when it occurs in the context of what students already know (Tharp, Estrada, Dalton, & Yamauchi, 2000). Educational programs that draw on student's prior knowledge and work toward a meaningful outcome result in greater student engagement which leads to higher levels of student learning (Bybee, 2006). Furthermore, studies have shown that curriculum that is integrated produces a greater sense of relevance across the disciplines as students work toward the achievement of a common goal or toward the completion of a common product (Jacobs, 1989; Lipson, Valencia, Wixson, & Peters, 1993; Maclver, 1990; Vars, 1987; and White, 2008). Our **project-based** curriculum purposefully **integrates** the content areas and orients academic instruction toward a common goal. Project topics are drawn from student interest and allow room for student exploration and inquiry based on prior understanding of topics.

Rigorous

Educational researchers concur that when all students are held to high expectations for academic success and are consistently supported in exploring topics that are cognitively challenging, all students, including those traditionally at-risk for academic failure, will make academic gains (Lee, Smith, and Croninger, 1995; Waxman, Padron, and Knight, 1991). The **project-based** instructional model allows teachers and students to develop appropriate goals that may challenge individual students or groups of students (Northwest Regional Education Laboratory, 2002). The inclusion of technology as a tool for learning and communicating introduces another multi-leveled aspect to the instructional program

in that tools of **technology** can be used to encourage academic enrichment and support academic remediation (Olenchak & Renzulli, 1989).

Science Inquiry

According to research, students engaged in inquiry based learning develop deep content knowledge (Darling-Hammond, Baron, Pearson, & Schoenfeld, 2008). The National Science Teachers Association supports the notion that inquiry science must be a basic in the daily curriculum of every elementary school student at every grade level. In the last decade, numerous reports have been published calling for reform in education. Each report highlighted the importance of early experiences in science so that students develop problem-solving skills that empower them to participate in an increasingly scientific and technological world (National Science Teachers Association, 2002). The incremental manner in which an inquiry-based program introduces new vocabulary and literacy skills also supports the manner in which English should be taught to English Language Learners according to the California ELD standards (Dobb, 2004).

Integrated Curriculum

The most fundamental reason for introducing an integrated approach in school curricula is that it provides students some opportunities to learn science in contexts close to what they will experience in life beyond school (Bybee, 2006). Maclever (1990) found that with an integrated program students developed team spirit and improved their attitudes and work habits. Research suggests that students engaged in programs employing an integrated curriculum perform at levels equivalent to, and often better than, their peers in more departmentalized programs (Vars, 1997). Following the original work of Bransford, Brown, and Cocking, the National Research Council published *America's Lab Report: Investigations in High School Sciences* (2006). The authors of America's Lab Report support the concept of "integrated instructional units."

Project-Based Education

The use of projects as a teaching tool leads to the development of inquiry skills (Grey, 2004). Beyond the broader skills of inquiry, project-based learning facilitates factual learning that is equivalent or greater than that occurring in more traditional, teacher-centered environments (Mergendoller & Thomas, 2000). Furthermore, some studies have shown that students at-risk for academic failure have greater potential for academic success when participating in a project-based learning program (see, e.g., Boaler, 1997; Meyer, Turner, & Spencer, 1997; Rosenfeld & Rosenfeld, 1998).

Utilizing Resources

Informal science education accommodates different learning styles and effectively serves the complete spectrum of learners: gifted, challenged, non-traditional, and second language learners (National Science Teachers Association, 1999). Drawing on the rich

and varied resources surrounding the Alexander Science Center School helps facilitate the inclusion of informal learning opportunities for our students.

Learner-Centered

Student learning is most effective when it is contextualized and builds on prior knowledge (Tharp, Estrada, Dalton, & Yamauchi, 2000), perhaps even more so for some groups of students who traditionally struggle in formalized schooling (Lee, 1999). Through the development of student generated and teacher guided projects, student have the opportunity to work on the acquisition of standards based skills and concepts within a framework that makes these concepts applicable to their experience (Railsback, 2002).

Technology

In the report, *Learning for the 21st Century* (2002), the Partnership for 21st Century Skills recommends the integration of technology into the classroom for several reasons. Today's students are increasingly fluid in their use of technology, most significantly as a tool for networking and connecting. Today's students also live in a world where technology is, literally, the writing on the walls. They encounter some form of technology everywhere they turn. To create a learning environment that does not utilize technology as a tool results in a chasm between the "real" world in which students reside and their school experience. Further, this report suggests that to be competitive in the 21st Century, citizens need to understand how to access as use the tools of technology. Multi-media presentations of information in a classroom setting have been shown to result in greater acquisition of knowledge (Mayer, 2009). National Research Council (2000) found that technology can not only help to create a bridge for students between the real world and classroom based learning but also expand learning beyond the walls of the classroom. This idea works well the Science-Center Learning Style in that students are able to engage in a relevant learning activities.

The Resources

Description of the Materials and Curricula at the School

As an affiliated LAUSD Charter, the Alexander Science Center School implements both local school design and District plans to achieve high quality teaching and learning for all students. Our school makes use of the District's core programs while integrating additional programs to further promote inquiry and conceptual understanding for students. Core programs are integrated within an inquiry-based program with an emphasis on science and mathematics that utilizes many resources and strategies to drive innovation in the curriculum and achieve results for students. Curricula at the school are selected to provide an instructional framework that supports a variety of student needs and learning styles, such as English Learners, Standard English Learners, gifted and special education students. Attention is paid to the implementation of these materials within a coherent curriculum plan, and a related and comprehensive professional development plan to ensure their successful use.

The Alexander Science Center School also recognizes the critical importance of supporting the healthy development of every child, so they have the knowledge, skills, and resiliency to be successful in social relationships and collaboration. We work to engage the entire school community in activities that promote problem solving, reasoning, decision-making, visioning, responsibility and self-management. Our social development curriculum and activities engage students as stakeholders in the school as a learning community, themselves as self-directed learners, and in the shared mission and vision of the school.

Content Area	Materials	Publisher
English Language Arts	Open Court	SRA/McGraw Hill
	Selected grade level appropriate, state approved texts	Varies
Spanish Language Arts	Foro Abierto	SRA/ McGraw Hill
	Nuevo Bravo, Bravo!	Santillana USA
English Language Development	Into English	National Geographic School Publishing
Writing	Writing Workshop – Units of Study	Heinemann
Mathematics	enVision Math	Scott Foresman/Addison-Wesley
	Investigations in Number Data and Space	TERC
Mathematics (Spanish)	enVision Math en español	Scott Foresman/Addison-Wesley
Science	Full Option Science System (FOSS)	Lawrence Hall of Science
	Great Explorations in Mathematics and Science (GEMS)	Lawrence Hall of Science
	Marine Activities, Resources & Education (MARE)	Lawrence Hall of Science
	Activities Integrating Math and Science (AIMS)	AIMS Educational Foundation
Social Science	History/Social Science Texts for California K: Learn and Work 1: Time and Place 2: Then and Now 3: Our Communities 4: Our California 5: Our Nation	Scott Foresman
Social Development	Tribes	Center Source Systems

California Science Center Resources

Location. The location of the Alexander Science Center School in Exposition Park as well as its partnership with the California Science Center and the Amgen Center for Science Learning has provided the school with unparalleled access to community resources. In that we understand the environment in which a student resides exposes that student to a myriad of informal learning opportunities, it is our intention to allow our students to explore to the greatest extent possible the remarkable place in which their educational program is located. Documents linking the Big Lab at the Amgen Center for Science Learning (Appendix E) and at the California Science Center Exhibit Halls (Appendix F) guide Alexander Science Center School teachers in their use of the rich resources steps away from their formal classroom setting to meet California State Content Standards. We strongly encourage teachers to modify the use of the available resources as it fits their instructional needs.

National Advisory Board. A nine-member, National Advisory Board has been formed to advise the Amgen Center for Science Learning, review the progress of the school, make relevant commentary and suggestions, advise on the development of the curriculum and promote the national recognition of the school.

The current membership of the National Advisory Board

1. Janet Carlson, Ph.D.
Executive Director
Biological Sciences Curriculum Study
2. Jonathan Williams
Co-Director
The Accelerated School
3. Dean Gilbert
Secondary Science Consultant
Los Angeles County Office of Education
4. Dennis M. Bartels, Ph.D.
Executive Director
Exploratorium
5. Maria Alicia Lopez-Freeman, Ph.D.
Executive Director, California Science Project
University of California, Los Angeles
6. Shirley Malcolm, Ph.D.
Director, Education and Human Resources Program
American Association for the Advancement of Science

7. Maria Ott, Ph.D.
Superintendent
Rowland Unified School District
8. Karen Gallagher, Ph.D.
Dean, Rossier School of Education
University of Southern California
9. David Heil
President
Heil and Associates

The California Science Center also brings other external resources, organizations and expertise as needed to the school to enhance the curriculum and professional development offerings, such as the Los Angeles County Office of Education, Santa Monica Mountains National Recreation Area, National Park Service, and American Association for the Advancement of Science to name a few.

Teachers in residence. As stated in the Lease and Joint Participation Agreements, the District agrees to assign two full-time teachers to the Amgen Center for Science Learning each year and four teachers each summer. The teachers-in-residence are paid for by the District. The terms and conditions of the Lease and Joint Participation Agreement may be subject to change upon a fully executed agreement between the parties as stated in the Joint Lease and Participation Agreements.

In addition to the work the Amgen Center for Science Learning does, the California Science Center contributes significant staff and resources to assist the Center for Science Learning, teachers-in-residence, the School, and District to accomplish our professional development partnership goals. This comes in the form of administrative, curatorial, scientific, programmatic and monetary support.

The teachers-in-residence work with staff from the Amgen Center for Science Learning, LAUSD, and the School's principal and teachers to provide exemplary learning experiences and professional development for parents and teachers throughout the District and beyond. They help develop the instructional program in the School and provide support and tailored professional development workshops to the Alexander Science Center School's teachers. It is the purpose of this program to develop a linkage for other schools and districts on a state and national level.

With input from the School's principal, teachers-in-residence and the Center for Science Learning staff develop a series of monthly professional development training topics that are scheduled and delivered each school year to the School's teachers. These trainings are replicated for professional development opportunities for other teachers throughout LAUSD and other school districts.

The teachers-in-residence also work with the principal, the School's parent leadership, and the Science Center's Community and Parent Program Manager to develop the Science Center's Parent Resource Center. The parent center offers computers and other technology for parent to use. A series of parent focused trainings are scheduled and delivered by staff from the California Science Center staff, the School, and the District.

During the 2007 – 2008 school year, the Amgen Center for Science Learning with the teachers-in-residence designed and delivered professional development workshops to over 4,500 teachers, parents, preschool providers, administrators and afterschool providers. Over 2,300 of the teachers and 700 of the parents were from LAUSD. Many of the preschool providers and afterschool providers are preparing students for or are providing programs at LAUSD schools.

In addition to the parent and teacher programs, the teachers-in-residence worked with LAUSD staff to host 300 students attending the LAUSD Science Fair. They also worked with Science Center staff to host 953 students from 31 counties attending the California State Science Fair that the California Science Center hosts each year.

Examples of the work the teachers-in-residence perform include:

- Providing science and math professional development training for 250 participants in the LAUSD District Intern Program. The interns spent 5-weeks in training in the Science Center's facilities
- Teachers-in-residence helped developed curriculum for the LAUSD Adult Division 2-semester physics course. They developed the lab manual and delivered the lab activities in the California Science Centers' Big Lab facilities
- Teachers-in-residence participated in the development and delivery of science inquiry workshops for parent leaders from LAUSD Local Districts 4, 7 and 8
- Teachers-in-residence designed and delivered a series of 6 workshops for the Alexander Science Center School teachers on how students can build science fair projects

The teacher-in-residences will work with Center for Science Learning staff and the Alexander Science Center School teachers to develop and implement the unique science, math and technology focused instructional program defined in the charter. They can also serve as cognitive coaches to assist teachers with the development of their skills necessary to successful deliver the instructional program and grow as a professional educator. The majority of their time is spent delivering professional development programs and providing support to other schools, teachers and parents within the LAUSD (See Appendix G for the teachers-in-residence job description).

Teachers

Recruitment

The Alexander Science Center recruits from a variety of sources to find highly qualified teachers for our school. LAUSD Human Resources Division works with our school to

provide information and advice regarding candidate backgrounds as they relate to school needs. We also work directly with the UCLA Graduate School of Education by hosting mentoring events at our school for pre-service teachers in the UCLA Teacher Education Program, which gives us an opportunity to meet prospective candidates. USC Rossier School of Education student teachers do field work at the Alexander Science Center, and we have the opportunity to seek and observe qualified candidates during their field experiences.

Characteristics of Alexander Science Center School Teacher Candidates

The ideal teacher candidate will demonstrate the following characteristics in their application, interview, formal presentation, and demonstration lesson prior to being hired at the school:

- A commitment to fulfilling the mission and vision of the Charter
- The desire to improve the urban schooling experience for racially, culturally, and linguistically diverse children
- A background and interest in science, math and technology
- Attributes that facilitate working within a caring, socially responsible learning community
- Characteristics of innovation and the improvement of professional practice
- Experience with integrated, learner-centered, inquiry and project-based curriculum
- Knowledge and use of data and research driven instructional methods and curriculum

At current enrollment and class configurations, we employ 28 certificated teachers and 1 teacher currently enrolled in a University Internship Program. In terms of staff experience, 50% of our current teachers have less than 2 years of teaching experience, 25% has 4-5 years of experience, and 25% has 7 years of more of teaching experience. We are a racially mixed staff that mirrors the demographics of the City of Los Angeles and the Los Angeles Unified School District. The ethnic composite of our teaching staff is almost equally divided between teachers who are Latino(a), African-American, Asian, and White. In addition to always looking for the strongest match for our teaching program, we make a strong effort during recruitment to look for highly qualified minority candidates to work with our student population so that the school can offer students a culturally relevant experience.

In staffing our school, all teachers must possess the appropriate credential or certificate that authorizes the teacher to teach EL learners. The LAUSD Master Plan for English Learners establishes staffing priorities based on the instructional needs of students. The teaching authorization required is directly linked to the type of program the English learner receives in our school, such as the structured English immersion (SEI), and Dual language immersion (DL). To staff our dual language classrooms and provide specially designed academic instruction in English and English language development for our EL students, we actively recruit teachers who have a Bilingual Certificate of Competence

(BCC) and teachers with BCLAD emphasis authorizations and assign them to identified priorities of classes requiring primary language instruction or support.

In addition to the requirements to meet LAUSD Master Plan objectives, we also recruit staff members that are teacher-leaders in science, math and technology. We have recruited teachers who lead professional development and training for parents and teachers, participate in teacher curriculum networks, and actively promote science-based instructional reforms.

Professional Development

The research informs us that in order to successfully implement an inquiry-based program, teachers must receive support and professional development about these alternative ways of teaching and learning (Brophy & Good, 1986). Professional support for designing inquiry-based lessons, managing multiple group projects, understanding when to use direct instruction, and the use of standardized and alternative forms of assessment to inform an inquiry-based program is critical for teachers who may not have opportunities to explore this type of teaching practice in depth in either their professional programs or prior teaching assignments (Marx et al., 1994, 1997). As a school designed to encourage innovation in LAUSD in the area of science education, we recognize our responsibility for modeling, not only excellent educational practice in our classrooms, but also, and in order to achieve that end, excellent professional development opportunities for our teachers.

The Alexander Science Center School incorporates the National Standards of Professional Development as articulated in the National Science Education Standards and draws on key characteristics of professional development as presented by the late Susan Loucks-Horsley (1996). These characteristics of professional development include the following:

- They are driven by a clear, well-defined image of effective classroom learning and teaching
- They provide teachers with opportunities to develop knowledge and skills and broaden their instructional approaches
- They use instructional methods that mirror the methods used with students
- They prepare and support teachers to serve in leadership roles beyond the classroom
- They provide effective links to other aspects of the educational system
- They provide opportunities for continuous assessment of their own professional growth

Loucks-Horsley, Stiles, Hewson, 1996

Implementing the philosophy of establishing communities of professional learners to bring about reform-based changes that result in better student learning, the California Science Center forms leadership teams annually with the School's teachers to design and implement curriculum and professional development plans and trainings. These teams of Science Center staff and teachers build on the curriculum work of the previous year to

enhance and update the work. These teams also work to analyze the professional development needs of the teachers and work with Science Center staff to deliver these programs. These teams support and sustain the intellectual work of change and the successful implementation of an inquiry-based science program that spans the disciplines and includes structured time for reflection and planning as well as coherent instructional guides for taking action.

The Alexander Science School Principal works within the allowable professional development time frame determined through collective bargaining with LAUSD. Teachers participate in 1 hour a week of professional development managed by the principal in collaboration with LAUSD and the California Science Center staff. Grade level teams meet twice a month during student psychomotor activities. Grade level meetings are organized to analyze student data and provide timely interventions for students and inform instructional plans. The benefits of staff working collaboratively on an on-going basis is to ensure a common curriculum, seek out and refine practices that will have the most positive effect on student achievement, reflect on student work so that students will be judged according to essential criteria across a grade level, and so that teachers can provide students with examples of quality work to help them learn and self-evaluate.

The leadership team consisting of representatives from each grade level, the Science Center, and Special Education meets regularly. Team members strategize on interventions for at-risk students, standards, and curriculum needs. The leadership team then works with the principal to develop strategies for addressing identified needs. Identifying and planning for necessary staff development are also discussed. Opportunities for learning at the Science Center as well as at other community institutions are presented.

The Alexander Science Center School is committed to providing time for teachers and administrators to plan for academic success and reflect on their pedagogy, curriculum and methodology. A variety of scheduling strategies are employed to allow teachers to examine successful teaching methods and discuss how to fine-tune and enhance them. These strategies include, but are not limited to: shortened days, pupil-free days and summer retreats before the academic year begins.

Integral to the development of the communities of learners is the Science Center's Amgen Center for Science Learning. It provides a point of entry for students to actually experience the various fields of science and technology in a more in-depth and realistic dimension. The Amgen Center for Science Learning also provides a significant learning experience for parents, teachers, scientists, administrators and professional educators.

To begin the process of professional development, the Alexander Science Center School worked with the Amgen Center for Science Learning to form a Curriculum and Professional Development Team comprised of Amgen Center for Science Learning staff and Alexander Science Center School. Subcommittees of the Curriculum Committee are

formed to plan professional development activities to meet the needs of the teachers and inform school plans.

Professional Development Schedule

The following table shows proposed topic for professional development for the 2009-2010 school year. At the discretion of the principal, and through coordination with the California Science Center staff and LAUSD, these topics may be altered based on the needs of the staff. When appropriate, educational consultants and other experts in relevant fields may be hired to or asked to participate in professional development workshops.

Timeline	Proposed Topics	Professional Development Administrator
Summer Institute – 1-2 weeks prior to the start of the school year	See Appendix H for a week long sample schedule	Amgen Center for Science Learning staff
Quarter 1 – September – December (estimated 10 meetings using banked time)	<ul style="list-style-type: none"> • Instructional Strategies – English Language Learners • Instructional Strategies – Implementing the Writing Process • Arts Cadre • Assessment strategies for inquiry and project based curriculum 	Coordinated by school principal
	<ul style="list-style-type: none"> • Science For All Students: Differentiation, and inclusion part 1 • Technology in the Classroom, part 1 • Inquiry and Cross Curricular Integration part 1 • Problem based Learning • Project based Learning • FOSS refresher 	Amgen Center for Science Learning staff

<p>Quarter 2- January – March (estimated 11 meetings using banked time)</p>	<ul style="list-style-type: none"> • Instructional Strategies - ELD Writing • Art in the Village • Instructional strategy – social science • Instructional Strategies – Writing Workshop • Instructional strategy - math 	<p>Coordinated by school principal</p>
	<ul style="list-style-type: none"> • Schoolwide Science Fair Launch • Grade level science content training • Hands-on, minds on Science strategies • Technology in the Classroom, part 2 • Science For All Students: Differentiation, and inclusion, part 2 • Inquiry and Cross Curricular Integration, part 2 	<p>Amgen Center for Science Learning staff</p>
<p>Quarter 3 – April – June (estimated 6 meetings using banked time)</p>	<ul style="list-style-type: none"> • Instructional Strategy – Listening and Speaking • Technology • Data based needs assessment 	<p>Coordinated by school principal</p>
	<ul style="list-style-type: none"> • Checking for Understanding: Alternative Assessment Measures • Schoolwide Science Fair • Forward Planning: Looking back and Looking ahead 	<p>Amgen Center for Science Learning staff</p>

Dual language immersion program teachers participate in all professional development opportunities as the teachers in our non-dual language classrooms. They also participate in specialized professional development to increase their expertise and ability to provide quality instructional experiences to students, such as the Bilingual Symposium at the University of California, Los Angeles and the annual California Association of Bilingual Educators Conference. In addition to professional development conferences and workshops, the Dual Language Team teachers are allocated time for planning, reflection and program development.

In addition to whole group professional development opportunities, the school recognizes the need for differentiated staff development opportunities, and provides for them as needed. We recognize that our paraprofessionals and teaching assistants need on-going training. We provide training for them in our curricular materials to enable them to work with students at an optimal level. Paraprofessionals have been trained in our core language arts program and math programs, English language development strategies, and positive behavior support strategies.

We provide new teacher support to our newly credentialed teachers as stipulated by the California Department of Education. We currently have Beginning Teacher Support Providers on site, who work with six of our beginning teachers. The Support Providers are National Board Certified teachers and provide weekly meetings to help beginning teachers complete components of their teaching portfolios required by the State to clear credentials. Topics are aligned to the California Standards for the Teaching Profession.

The Alexander Science Center School recognizes its responsibility to the surrounding educational community and will seek to develop young, gifted teachers each year. Over time, it is hoped that these teachers will share their experiences and talents with other elementary schools with high percentages of inexperienced teachers. This will support Local District 7's mission to emphasize professional development for teachers. Also, with the Amgen Center for Science Learning, the Alexander Science Center School will disseminate its best practices to teachers in other elementary schools in Local District 7 in particular and the larger Los Angeles Unified School District, region and state in general. As part of the California Department of Education's Public Charter School initiative, The Alexander Science Center School will disseminate information about its charter school start-up and implementation experience at local, statewide and national conferences.

Academic Calendar

The State of California requires that public schools deliver 50,000 instructional minutes for grades K-3 and 55,100 instructional minutes for grades 4-5 over at least 180 instructional days. The Alexander Science Center School will follow the LAUSD calendar for single track schools as adopted by the LAUSD board of education. The 2009-10 school year calendar, adopted on 01-13-09 is included. Calendars for subsequent years during this charter terms will be implemented as they are adopted by the BOE. Teachers may have an additional mandatory, paid 1-2 week professional development workshop prior to the first day of school.

LAUSD Instructional Calendar 2009-2010	
Teacher Professional Development Days	TBD
Labor Day	Monday, September 7, 2009
Pupil Free Day	Tuesday, September 8, 2009
First Day of Instruction	Wednesday, September 10, 2009
Unassigned Day	Monday, September 29, 2009
Veteran's Day	Wednesday, November 11, 2009
Thanksgiving Holiday	Thursday, November 26 – Friday, November 27, 2009
Winter Recess	Monday, December 21, 2009 – Friday, January 8, 2010
Dr. Martin L. King, Jr.'s Birthday Observed	Monday, January 18, 2010
President's Day	Monday, February 15, 2010
Spring Recess	Monday, March 29 – Friday, April 2, 2010
Memorial Day Observed	Monday, May 31, 2010
Last Day of Instruction	Thursday, June 24, 2010
Pupil Free Day	Friday, June 25, 2010
Total Instructional Days	180

Bell Schedules

The Science Center has 3 different bell schedules described below. The significant majority of our days operate on a regular school day schedule. These schedules allow us to meet the state requirements for instructional minutes in all grades. The following description is based on the number of regular, shortened, and minimum school days from the 2008-2009 school year. We anticipate a similar schedule for subsequent years.

Regular School Days

The Alexander Science Center School uses the following bell schedule on regular school days.

Bell Schedule – Regular Days	
8:05 AM	First Bell
8:10 AM	Second Bell / Instruction Begins
9:45 – 10:05 AM	Recess – Kindergarten
10:10 – 10:30 AM	Recess – Grades 1, 2, and 3
10:35 – 10:55 AM	Recess – Grades 4 and 5
11:30 AM – 12:11 PM	Lunch – Kindergarten
11:50 AM – 12:31 PM	Lunch – Grades 1 and 2
12:10 – 12:51 PM	Lunch – Grades 3 and 4
12:30 - 1:11 PM	Lunch – Grade 5
2:30 PM	Dismissal

The total number of regular school days for the 2008-2009 school year is 150. On all regular school days, students in Grades K-5 receive 5 hours and 19 minutes (319 minutes) of instructional time. The total number of instructional minutes from regular school days during the course of the 2008-2009 school year is 47,850.

Shortened School Days

The Alexander Science Center School uses a shortened day schedule for parent-teacher conferences and other parent outreach events. The following bell schedule is used on shortened school days.

Bell Schedule – Shortened Days	
8:05 AM	First Bell
8:10 AM	Second Bell / Instruction Begins
9:45 – 10:05 AM	Recess – Kindergarten
10:10 – 10:30 AM	Recess – Grades 1, 2, and 3
10:35 – 10:55 AM	Recess – Grades 4 and 5
11:30 AM – 12:11 PM	Lunch – Kindergarten
11:50 AM – 12:31 PM	Lunch – Grades 1 and 2
12:10 – 12:51 PM	Lunch – Grades 3 and 4
12:30 - 1:11 PM	Lunch – Grade 5
1:55 PM	Dismissal

The total number of shortened school days for the 2008-2009 school year is 20. On all shortened school days, students in Grades K-5 receive 4 hours and 44 minutes (284 minutes) of instructional time. The total number of instructional minutes from shortened school days during the course of the 2008-2009 school year is 5,680.

Minimum School Days

The Alexander Science Center School uses a minimum day schedule for professional development. The following bell schedule is used on minimum school days.

Bell Schedule – Minimum School Days	
8:05 AM	First Bell
8:10 AM	Second Bell / Instruction Begins
10:30 – 10:51 AM	Brunch – Grades K and 1
10:50 – 11:11 AM	Brunch – Grades 2 and 3
11:10 – 11:31 AM	Brunch – Grades 4 and 5
12:40 PM	Dismissal

The total number of minimum school days for the 2008-2009 school year is 10. On all minimum school days, students in Grades K-5 receive 4 hours and 9 minutes (249 minutes) of instructional time. The total number of instructional minutes from minimum school days during the course of the 2008-2009 school year is 2,490.

Total Instructional Minutes

The total number of instructional minutes from regular days, shortened days, and minimum school days is 56,020. This surpasses the minimum requirements for instructional minutes in all grades served by the Alexander Science Center School.

Special Populations:

English Language Learners

Approximately one third of the students enrolled at the Alexander Science Center School are identified somewhere on the spectrum of English Language Learners (ELL). As an affiliated charter, the Alexander Science Center School uses English Language Development (ELD) benchmarks to measure student progress. At the beginning of a school year, the learning needs of continuing ELL are determined by reviewing the benchmark assessments and scores of the previous year's ELD Portfolio. Teachers also refer to the English Learners Monitoring Roster for their class, and use other forms of data provided to assess student needs, such as CELDT and CST data.

Grade-level teams teach the ELD Standards over the course of the school year using ELD curriculum, (e.g. Into English, and district-approved supplemental materials such as the ELD Practicum Guides). Grade-level team members collaborate on determining ELD assessments to measure their students' progress and by problem solving together how best to accelerate and improve instruction based on their ongoing assessment results for ELL. Teachers collaborate to determine how best to improve student success on the CELDT test, and provide classroom activities prior to students taking the annual CELDT.

Teachers continually identify and demonstrate the use of the most effective strategies and practices for addressing the needs of culturally and linguistically diverse students. The instructional activities that teachers use for our ELL are taught explicitly within the ELD instructional block and infused throughout our integrated curriculum. These strategies are building fluency, increasing academic vocabulary and reading comprehension, scaffolding specific strategies to build fluency vocabulary and comprehension strategies for making instruction meaningful, and providing students with multiple opportunities to demonstrate what they know.

Wherever possible, classrooms are organized with no more than two consecutive ELD levels. However, when teachers have multiple ELD levels in the same class, we establish teams of teaching partners by ELD level. Teachers may also differentiate instruction within the classroom by grouping students by ELD level for direct instruction or small group instruction. Differentiated instruction and classroom accommodations also provide for the varied ELD levels within a class.

Teachers collect assessments and work samples of ELD standards taught throughout each reporting period. Work samples are reviewed at the end of each reporting period, and

representative samples of a student’s current performance are placed in the student’s ELD portfolio. Portfolio items include:

- End-Of-Unit Assessments from *Into English!*
- ELD Story Telling Criterion Chart ELD Composition Criterion Charts
- District ELD Benchmark Assessments
- ELD Writing Assessments
- District ELD Practicum Guide Assessments and
- Teacher/Grade-Level Created Performance Tasks.

Teachers or grade-level teams select student assessments and work samples to be scored and identify the ELD standards assessed by the assignment. Teachers analyze assessments/work samples and use the four-point rubric found on the ELD portfolio to decide upon a score for each ELD standard identified to have been assessed. Teachers record the score for each ELD standard on the assignment. At each reporting period, teachers review a set of scores for each individual ELD standard assessed during that reporting period to determine a single score to record on the portfolio for each ELD standard.

Because English learners often master the standards of one domain, for example listening-speaking, more rapidly than another, teachers meet the individual student’s learning needs by accelerating instruction in that domain by teaching the listening-speaking standards from the next ELD level. This occurs while the teacher continues to teach the remaining standards until the student masters those reading and writing standards. Instruction must always match identified student needs.

The Alexander Science Center School will administer a home language survey to identify incoming students who may be English Learners and it will use the California English Language Development Test (CELDT) in accordance with SB 638 to identify English Learners, to monitor their progress in learning English, and to reclassify them when they become proficient in English. New enrollees will be tested within thirty (30) days of enrollment unless they were already recently tested in a different California public school. The coordinator or administrator for English Learner Programs will monitor portfolios on a periodic basis to ensure that portfolio scores align to progress report card scores, progress report cards align to District progress benchmarks for English learners prior to each reporting period, and that portfolios demonstrate mastery of all standards at that ELD level prior to updating to the next ELD level. Reclassification criteria for English learners follows LAUSD guidelines and is designated as follows:

Reclassification Criteria

<u>Grades 1 & 2</u>	<u>Grades 3 – 5/6</u>
Annual CELDT Scores Overall performance of 4 or 5 with skill area scores of 3 or higher in listening and speaking	Annual CELDT Scores Overall performance of 4 or 5 with skill area scores of 3 or higher in listening, speaking, reading and writing
Elementary Progress Report	Elementary Progress Report

Marks of 3 or 4 in ELA	Marks of 3 or 4 in ELA
Performance in ELA Periodic Assessments, Met benchmark on 3 consecutive ELA assessments	CST Scores Score Basic or above on ELA
Teacher Evaluation Language Appraisal Team Recommendation (LAT Candidates)	Teacher Evaluation Language Appraisal Team Recommendation (LAT Candidates)
Parent Consultation and Notification	Parent Consultation and Notification

Once a student is identified as having met all reclassification criteria as verified by the Reclassification Eligibility Roster, the EL Coordinator sends letter to parents for consultation and signature.

Socioeconomically disadvantaged students

Seventy-eight percent of the Alexander Science Center School’s student population is identified as being socioeconomically disadvantaged. Students from such backgrounds often come to school with less academic and social preparedness. Furthermore, students from socioeconomically disadvantaged families may have less access to enrichment activities outside of school hours that can support academic achievement.

One of the greatest assets of the Alexander Science Center School is its location among some of the great cultural and academic institutions in Los Angeles. By integrating the instructional program with the school’s environment, students from all backgrounds, including those identified as being socioeconomically disadvantaged, participate in the enriching activities of these institutions. Our instructional program strategies concentrate on a student’s opportunity to learn, restructuring classroom organization and human relations to support culturally relevant education, and the use of authentic and varied assessment and data to inform instruction.

Student Opportunity to Learn

Our classroom environments set clear expectations by defining what students are expected to learn and display criteria and models of work that help them meet and exceed standards. Students regularly engage in activities that facilitate the mastery of standard and academic English, which increases the amount of student-to-student interactions in classrooms. Classrooms are student-centered so that the students have opportunities to use problem solving, questioning, collaborative and exploration skills to enable them to make decisions in both academic and social situations. Academic standards for student achievement are structured within a rigorous curriculum. Students actively engage in reasoning about important concepts, and are engaged regularly in inquiry-based activities that support high-order thinking and reasoning ability.

Teachers provide differentiated instruction for students during all content lessons using standards-based teaching and learning, emphasizing an alignment between core reading programs and state language arts standards within our integrated curriculum to ensure

that specific students' needs in relation to the standards are appropriately addressed through instructional materials. Standards-based teaching and learning is embedded within our inquiry-based model to create rich and contextual culminating tasks in science and mathematics that lead to scaffolding activities that address linguistic and cultural needs of Standard English Learners (SEL) and English Language Learners (ELL).

Restructuring Classroom Organization and Human Relations

Teachers integrate culturally relevant literature and instructional materials into the curriculum. Our teachers create an accepting, affirmative, and risk-free classroom environment in which the culture and the language of each student is validated, valued, and respected. Authentic accomplishments are recognized, therefore students are eager to learn and become risk-takers, able to sustain high-levels of achievement. Teachers demonstrate their knowledge of different learning styles of culturally diverse learners and build on student strengths to promote academic growth. We increase student ability to use effective learning skills by practicing collaborative strategies in classrooms, and actively promote a school-wide positive behavior support plan for students to enable them to work cooperatively with each other. School leadership supports the efforts of teacher leaders who can assist with improving the environment for students consistent with research including high expectations, knowledge of cultural context learning styles and pedagogy through modeling, classroom demonstrations, mentoring, and providing staff development to staff. We design instructional experiences and provide instructional strategies that connect new tasks or concepts to student prior knowledge and incorporate what and how students are taught to meet their social and emotional needs and experiences.

Teachers provide opportunities for students to engage in cooperative learning during all content area subjects knowing that cooperative learning produces positive results such as: promote student learning and academic achievement, increase student retention, enhance student satisfaction with their learning experience, help students develop skills in oral communication, develop students' social skills, promote student self-esteem, help to promote positive race relations

Use of Data to Inform Instruction

Teachers maintain an on-going collaborative process by which they analyze student work, standardized test data, and periodic assessments to improve specific students' academic achievement during grade-level team meetings, banked time meetings and staff development trainings. Teachers continually assess and monitor student progress. Teachers select content materials for culminating performance tasks, analyzing student products and performances to increase the effectiveness of project-based learning for students. During collaborative discussion on issues of data and assessment, we strive to eliminate expectations of students based on race and social class when analyzing data.

Types of data include the analysis of annual and periodic assessments to determine areas

of student needs in order to provide differentiated instruction during the Language Arts and English Language Development instructional blocks, and analyzing data on CST and other standardized tests to identify differentiated needs among all school populations: EL, SEL, special education and GATE students. The use of Use of OCR and Into English benchmarks are monitored on a continual basis to assess and monitor student progress towards meeting instructional goals and objectives in language arts. Additionally, we use assessments corresponding to instructional materials to drive instructional goals and planning. Using the results of data reflection, teachers regularly engage in identifying intervention plans for students that are not meeting benchmarks.

In our efforts to help students become self-directed learners, teachers help students become self-evaluators, to promote student learning and autonomy. Students learn to recognize his/her own progress by taking the time to reflect. Students explain the reasons for choosing the processes they used and identify the next step, develop insight and self-involvement. Students also participate in peer evaluation through structured conferences, dialogue and informal conversations. Students analyze and assess their peers' proficiency using either established or self-generated criteria. Teachers make certain that the activities are carefully structured so that students receive valid feedback from their peers.

Teachers are encouraged to use a variety of student products as assessment. Student products consist of but are not limited to writings, videotapes, audiotapes, computer demonstration, dramatic performances, bulletin boards, debates, investigations, experiments, etc. Teachers use the investigation model (which may be related to a specific subject area or integrated into several content areas). The most typical form of investigation is a collection of student writing, diagrams, graphs, tables, charts, posters, experiments and other products. When students become involved in science or mathematics investigations, assessment activities and/or questions are presented to students embedded within instructional activities. Students demonstrate understanding, application, originality, organizational skills, growth in social and academic skills and attitudes within these products.

Gifted Students

In order to remedy inequities in identification and monitor outcomes of underrepresented students in our Gifted and Talented Program (GATE), the Alexander Science Center structures a program for gifted students to increase identification of underrepresented students in GATE and provide instructional programs to promote student achievement. Our curriculum reflects cultural relevance for our student population and promotes the active engagement of learners and recognition of different learning styles in students. We carefully select instructional experiences for students with the goal of differentiation for student needs, and determine classroom materials that can be compacted within the content areas for gifted students. The school annually assesses our program goals in the following areas: parent involvement, governance and administration, standards and assessment of students, staffing and professional growth, teaching and learning, and opportunity. We generate action plans for our GATE program based on the outcomes of

our yearly survey. We survey parents, educators and students to create goals and objectives for our school's plan for GATE education.

Our GATE plan for parent involvement requires us to develop a cadre of parents who will be trained to facilitate and plan meetings and workshops for other parents. Through parent meetings, parents are informed regarding program requirements, the identification process, discuss topics of interest and provide a forum for parent networking.

Professional development opportunities for staff ensure that we are able to provide a differentiated program for students. Teachers of identified GATE students are encouraged to go to specialized conferences on gifted and talented education and share materials and learning with colleagues. Teachers also meet to plan program goals, and support each other and share quality strategies that help student learning and achievement. Teachers use data to inform instructional needs and drive the programs.

Gifted students are clustered together in self-contained classrooms and participate in a curriculum that is differentiated through acceleration and depth and complexity. Teachers also facilitate meetings with students to promote goal setting and self-reflection. Students have differentiated standards-based instruction with the following embedded strategies:

- identifying similarities and differences
- Identifying, Summarizing and note taking
- Homework and practice
- Flexible grouping
- Cooperative learning
- Setting objective and providing feedback
- Generating and listing hypotheses and
- Generating questions, cues, and use of advance organizers.

Our instructional plan for gifted students supports the overall goals of the instructional program of the school. Critical thinking is one of the school wide goals and objectives for our GATE students. Students investigate problems, issues, facts and concepts, determine how well facts support generalizations, and evaluate the reliability of sources.

In science and math, students use the skills that they acquire in learning about statistics and data collection and apply it to real life problems. Students interpret, analyze, and evaluate the validity of data in mathematical problems and scientific experimentation to make sound conclusions. In Language Arts and Social Science, student use primary resources of information to help them compare and contrast real life situations. They analyze the validity of their informational sources; therefore, being better able to draw conclusions.

The principles and processes of science is another school wide goal and objective for GATE students. Students know methods and procedures, and investigate, research, and experiment with concepts and information. Students use the scientific process and method to create questions and formulate hypotheses that will guide their scientific investigations. Students are able to develop and plan their own investigations, enriching their experiences after doing scientific experiments through FOSS. Students analyze data

collected and draw conclusions to prove or disprove their hypothesis. They develop generalizations and form conclusions supported with evidence. Students evaluate their data and make judgments based on criteria.

Students achieving below grade level

Academic intervention is a systematic, focused and individualized approach for providing additional instruction and practice enabling students at risk to attain greater literacy skills. This approach provides additional help that a student might need before, rather than after, they have failed. The intent of this approach is to provide targeted interventions that supplement and support the school's core literacy program, Open Court Reading (OCR). This prevention/intervention framework has as its foundation a three-tier model of instructional intervention.

The first stage of the intervention process is to identify students whose overall academic performance is below the expected levels of achievement. We first identify at-risk students by reviewing and evaluating reading assessment data available through OCR and identifying all students who fall within the **intensive** score band level. For students who fall within the **intensive** score band, there are two levels of response that are to be considered:

Level I: Prevention

“Good first teaching” is provided for all students in the form of highly effective teaching that introduces and reinforces concepts and skills from the district's core literacy program. Periodic reading assessments indicate which students are successful in meeting the grade level content standards and which students require intermediate or intensive interventions. Effective first teaching strategies may include but are not limited to the following:

- Daily/weekly phonics routines
- Read alouds
- Shared reading
- Teacher-directed interactive reading
- Structured independent reading
- Higher level questioning
- Conversations/discussion

Level II: Intermediate Intervention

Immediate intervention is provided to students who have not responded to the good first teaching strategies. For these students the Open Court intervention curriculum is utilized. Independent Work Time (IWT) is utilized for the introduction of the OCR intervention materials. The skills areas in need of intervention are identified through the use of six weeks assessment data. Each student's progress is monitored through the use of assessment tools provided in each of the intervention programs noted above.

Intensive Intervention is provided for students who continue to score with the intensive instructional band based on OCR assessments. The intensive intervention curriculum focuses on the specific processing skills required for literacy. Any intensive intervention approach, strategy, curriculum or program when selected is based on the following criteria

- It is researched-based
- Pre/post screenings or academic probes can be administered with ease
- It includes the ability to screen whole classrooms, small groups or individual students
- The primary focus is on reading and writing interventions
- Systemic instruction in phoneme awareness, phonics, and sight vocabulary is embedded
- Alignment of interventions to content standards and district curriculum is evident
- Instructional interventions are targeted to the student/s identified processing skills gaps
- Interventions are provided within a realistic time period
- It includes a process for monitoring effectiveness of intervention and student progress.

Level II intervention curriculum materials include Explode the Code, Read Naturally, and Touch Math.

Students in grades 2-5 who do not respond to first interventions are recommended to our after-school intervention class, taught by our teachers. Students receive 30 hours of additional instruction during the intervention class. Additionally, the school has organized college tutors from the USC Joint Educational Program to work with our After-School Programs to provide tutoring and homework assistance.

Level III students consist of those students who not have not successfully responded to Level I and II interventions and continue in the intensive OCR band. The Student Success Team (SST) is a problem-solving team that reviews and evaluates the effectiveness of the previous interventions, taking into account the level of student participation the integrity level of implementation and other factors that may be impeding achievement. Based on diagnostic testing results and data from progress monitoring, the SST may need to consider additional modification of the interventions.

Some students may display the characteristics of a student with a specific learning disability. These students are referred for a comprehensive evaluation to determine if the student has a disability that requires special education services. The comprehensive evaluation uses all progress monitoring data and diagnostic testing previously collected as well as supplementary assessment materials as a basis for establishing the disability, eligibility, and the need for special education services.

Special Education and Students With Disabilities

The Alexander Science Center School will adhere to the requirements of the LAUSD Special Education Local Plan Area (“SELPA”) Local Plan for Special Education regarding the provision of special education services including use of the District’s Special Education Policies and Procedures Manual and Welligent, the District-wide web-based software system used for on-line IEPs and tracking of related services provided to students during the course of their education. Charter School is also bound by all terms, conditions and requirements of the *Chanda Smith* Modified Consent Decree (“MCD”) and all other court orders imposed upon the District pertaining to special education.

The Alexander Science Center School will comply with Section 504 of the Federal Rehabilitation Act, the Americans with Disabilities Act, and all Office of Civil Rights mandates for students enrolled in the Charter School.

Program Implementation

The Alexander Science Center School is committed to an ongoing process of evidence supported reflection. While we celebrate our successes to date, we are focused on strengthening and growing our program based on lessons learned from innovation in the field and our own experience in working with students, families, and partners.

As is evidenced by the proposed professional development schedule discussed above, we are committed in the coming school year to strengthening the development of our common commitment to providing an integrated curriculum founded on the best practice in science education and emphasizing instruction in mathematics and through the use of technology. Furthermore, we are committed to ensuring that all our students, especially our English-Language Learners make progress indicative of their fullest potential.

An Educated Person of the 21st Century

“For today’s children – the first generation to come of age in the new millenium –the future could not be more exciting, complex, and challenging. How can we prepare them for a world that we can hardly imagine? It will be a world with a stabilizing population of 10 to 20 billion people, characterized by global everything – from economics and the environment to health care and communications. Our grandchildren will live to see the next century, perhaps travel to the moon, or even choose to live in space. Almost all of them will have multiple jobs that haven’t even been invented yet. Never in history has the time between major changes (of almost everything) been shorter than a generation. Science, mathematics, and technology will be at the center of this radical change – causing it, shaping it, and responding to it. Literacy in science, mathematics, and technology is more important than ever for citizens of the 21st century.”

George Nelson

Director, Project 2061

Update 2001-2002

An educated person shows an understanding of science that makes it possible to share in the richness and excitement of comprehending the natural world. Scientific literacy enables a person to use scientific principles and processes in making personal decisions and to participate in discussions of scientific issues that affect society. A sound grounding in science strengthens many of the skills that people use every day, like solving problems creatively, thinking critically, working cooperatively in teams, using technology effectively, and valuing life-long learning. In addition, the educated person demonstrates knowledge of the arts, cultures, literature, history, social sciences, mathematics, and technology. This person has developed a broad knowledge base and has acquired skills, which will allow him or her to enter the economic mainstream. (S)he works cooperatively to achieve constructive answers to difficult questions for the benefit of society and has acquired an acute awareness of global diversity and his/her responsibility to the global community. This person sees himself/herself as an integral member of this diverse community. Skills in reading, writing, speaking, and listening have been acquired. Quantitative reasoning, logic, problem solving, research, and independent study have been integral parts of this person's educational background. (S)he values friendship, responsibility, cultural diversity, respect for self and others, and a satisfying quality of life.

How learning best occurs

The research literature that was synthesized by the National Research Council report *How People Learn: Brain, Mind, Experience and School* (2000) defined three established principles how learning best occurs that are key for teachers to understand and incorporate in their teaching. Learning best occurs when:

- 1) Students initial understandings or preconceptions about how the world works are engaged and addressed with new concepts and information.
- 2) Students are given the opportunity to
 - a) develop a deep foundation of factual knowledge,
 - b) understand facts and ideas in the context of a conceptual framework, and
 - c) organize knowledge in ways that facilitate retrieval and application.
- 3) Students learn to take control of their own learning by defining learning goals and monitoring their progress in achieving them.

The implication drawn from this research is that learning best occurs when instruction is:

- 1) Learner-centered by beginning instruction with close attention to the students' preconceptions, skills, ideas, knowledge, and attitudes because these provide the foundation on which new learning builds.
- 2) Knowledge-centered where there is a clear focus on what is taught, why it is taught, how the knowledge is organized to support expertise, and what competence or mastery looks like.
- 3) Assessment-centered with frequent opportunities to make students' thinking and learning visible as a guide for both the teacher and the student in learning and instruction.
- 4) Community-centered with an environment that promotes a core culture of inquiry, respect and risk taking.

Self-Motivated, Competent, and Lifelong Learners

Goals of the Alexander Science Center School

- Students will use science inquiry, combined with “a science center-style approach,” as the core of an instructional program featuring an enriched curriculum integrating math, science, and the use of technology throughout
- Students will interact with the world in a scientific way: observing, questioning, hypothesizing, predicting, investigating, interpreting, and communicating
- Students will master basic skills, critical thinking, and become problem solvers
- Students will demonstrate mastery demonstrated through measurable outcomes in the areas of language arts and will demonstrate grade-level proficiency in reading, writing, listening, and speaking which meet or exceed California State Content Standards
- Student performance will increase as demonstrated by standardized, criterion-referenced and performance-based tests
- Students will demonstrate cooperative social behavior with a sense of responsibility toward their school, home, and community
- Students will value and respect their heritage and the contributions of other cultures through arts, literature, social studies, science and math curricula

The goals of the Alexander Science Center School promote the development of comprehensive, life skills rather than the rote acquisition of factual information. Our program emphasizes the development of process and critical thinking skills which can be transferred into any life situation regardless of age and environment. It is our intention to participate in student growth as self-motivated, competent, and lifelong learners.

ELEMENT 2 – MEASUREABLE STUDENT OUTCOMES

“The measureable 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.” Ed. Code 47605 (b)(5)(B)

Student achievement:

Academic Performance Index

The Academic Performance Index (API) is a single number between 200-1000 assigned to a school in order to provide a comprehensive picture of student achievement as measured by state mandated standardized tests (e.g., CST, Cat/6). Schools are each given annual API targets designed to move all students toward proficiency in Math and English Language Arts as required by state and federal mandates (NCLB). API target for 2007-2008, the most current year for which we have data on our students, was 620 or at least 1 point higher than the previous year’s score. The Alexander Science Center School API scores from 2005-2008, compared to those designated by the California Department of Education as necessary to show adequate growth, are shown in the table below.

Table 1
Comparison of API growth to CDE target

Year	2005	2006	2007	2008
Alexander Science Center School API Score (Growth)	734	741	770	770
CDE Target API Score	590	590	590	620

The Alexander Science Center School has consistently had an API score well above that designated by the State of California. In 3 out of 4 years, the Alexander Science Center School has shown growth through our API scores. Our 2008 base API is 771. Our 2008-2009 growth target is 5 with a 2009 API target of 776. The Alexander Science Center School is committed to continuing to show progress as evidenced by our API scores at minimum toward the CDE’s target of 800 in 2014.

Adequate Yearly Progress

Schools are determined to have made Adequate Yearly Progress (AYP) by the state of California if they have met the criteria for 1) participation rate in standardized tests, 2) achieving the target “percent proficient” as designated by the annual measureable objectives (AMOs), 3) API growth, and 4) graduation rates. The fourth criterion is only applicable to schools administering a high school diploma. Schools that do not meet their AYP can be put into “Program Improvement” (PI) and face consequences from the state.

The Alexander Science Center School's AYP data from 2006-2008, compared to the AMOs designated by the California Department of Education, are shown in the table below.

**Table 2
Participation Rates and Percent Proficient by Subgroup**

English Language Arts						
	2006		2007		2008	
	Participation Rate (CDE Goal = 95%)	Proficiency Rate (CDE Goal = 24.4%)	Participation Rate (CDE Goal = 95%)	Proficiency Rate (CDE Goal = 24.4%)	Participation Rate (CDE Goal = 95%)	Proficiency Rate (CDE Goal = 35.2%)
Schoolwide	100%	40.3%	100%	42.9%	99%	44.1%
African-American	100%	44.0%	99%	41.6%	99%	44.1%
Hispanic or Latino	100%	35.5%	100%	42.1%	99%	42.5%
SES disadvantaged	100%	37.2%	100%	39.7%	99%	40.0%
ELL	100%	31.5%	100%	35.9%	99%	30.4%
Students with Disabilities	100%	9.5%	100%	29.0%	99%	17.4%
Mathematics						
	2006		2007		2008	
	Participation Rate (CDE Goal = 95%)	Proficiency Rate (CDE Goal = 26.5%)	Participation Rate (CDE Goal = 95%)	Proficiency Rate (CDE Goal = 26.5%)	Participation Rate (CDE Goal = 95%)	Proficiency Rate (CDE Goal = 37.0%)
Schoolwide	100%	48.7%	100%	58.4%	100%	57.5%
African-American	100%	47.9%	99%	50.9%	99%	54.5%
Hispanic or Latino	100%	47.4%	100%	61.7%	100%	57.0%
SES disadvantaged	100%	46.2%	100%	56.9%	100%	55.0%
ELL	100%	44.8%	100%	55.5%	99%	52.3%
Students with Disabilities	100%	19.0%	100%	29.0%	100%	28.0%

The data shows that our students, with one exception, consistently score above the CDE designated levels for proficiency in both English Language Arts and Mathematics. Analysis of our data from the 2008 testing year demonstrated an area of need within our ELL population in English Language Arts (see Table 2). In the 2008 testing cycle, 30.4% of ELLs scored at or above proficiency in ELA compared to the CDE target of 35.2% at or above proficiency. Through a careful self-analysis, we identified 3 areas that needed strengthening specifically related to the instruction of EL learners.

First, we needed a comprehensive, coordinated Language Arts Program that would provide consistent and meaningful data on our EL learners. In the 2008-2009 school year, we implemented Open Court as our core language arts program. Second, EL learners had been often grouped homogeneously away from higher performing and English Only

students who provide a useful language model to those learning English. ELD students are now grouped within their ELD levels within mixed ability level classrooms. Additionally, teachers have received and will continue to receive training in ELD instructional strategies. Third, a school wide ELD block had not been consistently implemented. In the 2008-2009 school year, ELD curriculum materials including the *Practicum Guide* and *Into English* were used and a school wide ELD block was implemented. Additionally, we have implemented the following steps to ensure that our ELL population reaches the high level of achievement we expect from all our students

- Supervision of instruction and monitoring of classrooms
- Collaboration by grade level and cross-grade level teams to analyze data
- Use of ELD portfolios by teachers to guide instruction
- Monitoring of ELD portfolios by EL Coordinator

The Alexander Science Center School has met its AYP in 3 of the past 4 years. In 2008 it missed meeting its AYP in 1 category, EL Learners. Our school's targets for Adequate Yearly Progress are a 95% participation rate of all groups school-wide, and to meet targets for percent proficient for annual measurable objectives in both English language arts and mathematics for all numerically significant sub-groups. The Alexander Science Center School has never been in PI. The Alexander Science Center School is committed to continuing to meet or exceed AYP under the guidelines of NCLB and to make progress toward state and federal mandates for 100% student proficiency in English Language Arts and Mathematics in 2014.

California Standards Test

The California Standards Test (CST) is a series of standardized tests designed to measure student achievement of the California State Standards. Students at the California Science Center take the CST in English Language Arts and Mathematics in grades 2-5 and in Science in grade 5. The state has set as a goal for all students to score at or above proficiency on the CST. Currently, that means a minimum scaled score of 350 on a range of 150-600.

The Standardized Testing and Reporting (STAR) report shows grade level achievement in ELA, Math, and, in 5th grade, Science. This report gives the Mean Scaled Score (Mean SS) and the percent of students scoring in each of the 5 levels of proficiency. The Alexander Science Center School's CST data on the percentage of students scoring at or above proficiency from 2005-2008 in English Language Arts and Mathematics are shown in the table below.

Table 3
Percent Proficient 2005-2008

	2005		2006		2007		2008	
	ELA	Math	ELA	Math	ELA	Math	ELA	Math
2	32%	45%	39%	48%	40%	68%	36%	59%
3	33%	48%	30%	45%	37%	60%	33%	62%
4	43%	43%	55%	56%	53%	58%	61%	72%
5	44%	43%	38%	44%	44%	48%	44%	38%

Of particular interest to the Alexander Science Center School are the CST scores for 5th graders scoring at or above proficiency in Science shown in the table below.

Table 4
Percent Proficient on Science CST

2005	2006	2007	2008
43%	39%	41%	53%

This data is also useful when looked at in context. The Alexander Science Center School's 2007 and 2008 CST data is compared to schools LAUSD has identified as being comparable (Comparison Schools) in terms of student demographics and schools our students would attend if the Alexander Science Center School was not an option (Resident Schools) in the table below.

Table 5
CST Comparison Scores

	2007			2008		
	ELA	Math	Science	ELA	Math	Science
Alexander Science Center School	43%	58%	41%	44%	58%	53%
Median Resident Schools	21%	32%	17%	27%	39%	26%
Median Comparison Schools in Charter	20%	31%	16.1%	26%	38%	25%

The data show that the Alexander Science Center School is scoring significantly higher than comparable schools in ELA, Math, and Science. The Alexander Science Center School has high standards for student achievement as measured by the CST and is committed to working toward the CDE goal of 100% student proficiency as measured in ELA, Math, and Science on the CST by 2014. The Alexander Science Center School will work to meet or exceed the targets for student proficiency as set by the State of California toward 100% proficiency. Targets for student proficiency in ELA and Math are included in the table below.

Table 6
CST targets 2010-2014

2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
ELA	Math	ELA	Math	ELA	Math	ELA	Math	ELA	Math
56.8%	58%	67.6%	68.5%	78.4%	79%	89.2%	89.5%	100%	100%

Disaggregated data comparing the achievement of Alexander Science Center students enrolled in our dual language (DL) immersion program with the achievement of Alexander Science Center students enrolled in our English Only (EO) program shows that our DL students are performing at levels comparable to our EO students as measured by the CST. Table 7, using data prepared by local district 7 staff, shows the mean CST scores of DL students and EO students on a scale of 1-5. On this scale, 1 is “far below basic” and 5 is “advanced.”

Table 7
4th Grade Dual Language and English Only CST averages

2007				2008			
Dual Language		English Only		Dual Language		English Only	
Math	ELA	Math	ELA	Math	ELA	Math	ELA
3.9	3.68	3.87	3.0	3.29	2.84	3.99	2.95

As we continue our efforts to bring 100% of our students to proficiency in ELA and Math by 2014, we will continue to look at the progress of students in both our DL and EO programs to ensure students in both programs are making comparable progress.

Other Student Outcomes

The Alexander Science Center School recognizes that student academic achievement and growth are significantly influenced by student conduct, attendance, and parental involvement. We have a well-disciplined school with extensive parental involvement, and our expectation is to continue to maximize our attendance at 95% or better. The Science Center employs a Parent and Community Liaison to facilitate this effort and achieve the expected outcomes in parental involvement listed below.

The Science Center aims to continue reporting the following:

Student conduct

- Average daily attendance rate of at least 95%
- Tardiness rate of less than 5%

Parental Involvement

- Attendance at parent/teacher conferences at 90%
- Participation in IEPs at 100%

- Parents will be better prepared to mentor, guide and provide academic intervention with their children
- Parents will feel comfortable being actively engaged with the School personnel, policy and activities

Next Level of Evaluation

Over the next few years we will take the School's evaluation to the next level. As funding allows, both the District and the Science Center will collect data and evidence to indicate the students' yearly progress, the effectiveness of the instructional program and materials, and the teachers' skills in implementing the instructional program. Specific evaluation criteria, outcomes, rubrics, and tools will be designed and implemented with input from the University of Southern California, the School's National Advisory Board and/or other appropriate external consultants. The results of this multi-year evaluation will not only provide information on how the School's students are achieving the unique goals of the School, but will also inform the teachers on the strengths and weaknesses of the instructional program and the needs for professional development.

LAUSD Responsibilities

The Los Angeles Unified School District will track the progress of each student that attends the Alexander Science Center School from K through 12th grade and document:

- a) Each student's academic achievement as measured by District tests and the students grade point average
- b) The graduation rate of Alexander Science Center School students
- c) Days expelled or out sick (or other behavioral indicators)
- d) Number of science and math courses taken

These numbers will be compared to students from three other elementary schools in our local community and District averages.

Science Center Responsibilities

The California Science Center will hire an external research and evaluation company to design and conduct a longitudinal evaluation study that measures factors such as the student's:

- a) Science process skills
- b) Critical thinking and problem solving skills
- c) Depth of understanding science and science concepts
- d) Motivation to learn and to pursue science classes and perhaps a science degree
- e) Cooperative social behaviors
- f) Sense of discovery and curiosity
- g) Positive attitude toward learning science

These are some of the unique objectives of the Alexander Science Center School has for its students.

Ideally, students in other schools in our local community would also participate in the study for comparison of results.

The results from this evaluation will allow us to document the School's progress, make the necessary changes in the School's instructional program to ensure the success for the students, parents and teachers, and to become a national model school.

The Alexander Science Center School will comply with all federal and State Education Codes laws, policies and practices. As an affiliated charter school, Alexander Science Center School's Governance and Operating Committee may pursue alternative policies and procedures with the written approval of the local District Superintendent or his/her designee. The Alexander Science Center School will adhere to all collective bargaining agreements and will not violate any of the agreements without consulting and receiving prior approval from the District, Union, and the California Science Center.

Benchmarks to be Met

The achievement of the Alexander Science Center School will be measured in both growth and absolute measures and will be compared to the achievement of selected District schools that are similar in demographic and other characteristics. The criteria for selecting the comparison schools are:

Comparison Schools

The achievement of Alexander Science Center School will be measured in both growth and absolute measures and will be compared to the achievement of selected District schools that are similar in demographic and other characteristics. The criteria for selecting the comparison schools are:

I. Comparison Schools

In gauging the success of Alexander Science Center School during the renewal term, a group of comparison district schools will be selected that meet the following criteria:

1. The total student population is within 10% of the Alexander Science Center School enrollment;
2. Students eligible for free/reduced lunch are within 10% of the Alexander Science Center School enrollment;
3. The English Language Learner population is within 10% of the Alexander Science Center School enrollment; and
4. The student ethnic populations are within 10% of the Alexander Science Center School enrollment.

II. Primary Growth Measures

Growth in student achievement is the primary measure that will be used to determine whether the Alexander Science Center School has been an academic success in its renewal period. The growth of the Alexander Science Center School will be measured annually against the growth of the comparison schools. At the time of renewal, if the Alexander Science Center School has met all of the following benchmarks either in the previous year or in two of the previous three years, the Alexander Science Center School will be considered an academic success:

1. The Alexander Science Center School's "value added" for English Language Arts is greater than the median value added for the comparison schools (prepared annually by PERB.)
2. The Alexander Science Center School's "value added" for Math is greater than the median value added for the comparison schools. (Prepared annually by PERB)
3. The Alexander Science Center School's API growth is 1.25 times the median growth of the comparison schools.
4. The Alexander Science Center School's API growth for all subgroups is 1.25 times the median growth of the comparison schools.
5. The decrease in percentage points of students scoring Below Basic & Far Below Basic on the CST for ELA is 1.25 times the median decrease for the comparison schools.
6. The decrease in percentage points of students scoring Below Basic & Far Below Basic on the CST for Math is 1.25 times the median decrease for the comparison schools.
7. The increase in percentage points of students scoring Advanced & Proficient on the CST for ELA is 1.25 times the median increase for the comparison schools.
8. The increase in percentage points of students scoring Advanced & Proficient on the CST for Math is 1.25 times the median increase for the comparison schools.
9. The increase in percentage points of students scoring Early Advanced & Advanced on the CELDT is 1.25 times the median increase for the comparison schools.

III. Other Measures

If the Alexander Science Center School fails to meet the primary growth measures, the following measures will be considered to determine whether the school should, nevertheless, be considered an academic success:

1. The Alexander Science Center School's API score at the time of renewal is greater than the median API score for the comparison schools.
2. The percentage of Alexander Science Center School students scoring Advanced & Proficient in ELA on the CST is greater than the median percentage for comparison schools.
3. The percentage of Alexander Science Center School students scoring Advanced & Proficient in Math on the CST is greater than the median percentage for comparison schools.

4. The percentage of Alexander Science Center School students scoring Below Basic & Far Below Basic in ELA on the CST is below the median percentage for comparison schools.
5. The percentage of Alexander Science Center School students scoring Below Basic & Far Below Basic in Math on the CST is below the median percentage for comparison schools.
6. The percentage of Alexander Science Center School ELL students redesignated to English proficiency is greater than the median for comparison schools.
7. The Alexander Science Center School has met its AYP goals and is not in Program Improvement

IV. Annual Self-Study

Applying the measures in II and III above, the Alexander Science Center School will submit to the LAUSD Charter Schools Division an annual progress report. The district will identify the comparison schools, provide the names and specific data by which they were selected. LAUSD PERB will prepare annual report on “value added” benchmark. The Charter Schools Division will review the progress report and provide comments to the Alexander Science Center School within 60 days.

V. Board Discretion

At the time of renewal, the Charter Schools Division will present an analysis of its findings with respect to II and III above, with a recommendation for action. The determination of whether Alexander Science Center School will be renewed will be based upon the requirements of the Education Code and is within the purview of the Board determination.

ELEMENT 3 – Method by Which Student Outcomes will be Measured

“The method by which pupil progress in meeting those pupil outcomes is to be measured.” Ed. Code 47605 (b)(5)(C)

Variability in assessment is best controlled through socialization of teachers within academic programs and across the entire school and through the application of multiple assessment instruments and methods. At the Alexander Science Center School, student content mastery will be assessed using multiple measures that are based on an assessment program that improves learning and provides ample assurances of accountability and objectivity. Mastery will be measured using an assessment model that is formative and summative, holistic and standardized, narrative and norm-referenced. The approach to assessment will be conducive to benchmarking students against themselves, evaluating groups of students, and assessing the whole school from year to year, using state and national standards.

Using data to create, support, and sustain a high-quality school is essential to Alexander Science Center School’s mission of eliminating the achievement gap among educationally disadvantaged students. Alexander Science Center School not only evaluates its own school’s data but it also uses resident neighborhood schools’ data in order to evaluate its performance.

The Alexander Science Center School will use a variety of assessment tools to measure student outcomes. These include standardized tests, program assessments from textbook publishers, LAUSD District Assessments, Project-Based and Performance Assessments, teacher observations, teacher designed assessments, homework, and class work. The staff will use a four-point scale that corresponds to the LAUSD grading system (1 = not proficient, 2 = partially proficient, 3 = proficient, 4 = advanced) and develop rubrics for performance and project-based assessments. The Alexander Science Center School will adhere to Education Code §48070 and LAUSD Board policy in regards to promotion to the next grade level as well as in regards to the retention of students who do not make adequate progress. Also, assessments will be used to provide intervention, such as after school tutoring, to ensure that measures are taken for students who do not meet the criteria for standards-based promotion. All school stakeholders (i.e., administrators, teachers, parents, and students) will work together and be accountable for student progress.

Methods for Assessing Student Outcomes

The following table shows how each measureable student outcome as outlined in Element 2 will be assessed.

Table 8
Methods for Assessing Student Outcomes

Student Outcome			Method for Assessment
API of 800 or higher by 2014			Annual CDE API reports
Meet AYP targets			Annual CDE AYP reports
CST proficiency targets:	09-10	ELA: 56.8% Math: 58%	Annual STAR reports
	10-11	ELA: 67.6% Math: 68%	Annual STAR reports
	11-12	ELA: 78.4% Math: 79%	Annual STAR reports
	12-13	ELA: 89.2% Math: 89.5%	Annual STAR reports
	13-14	ELA: 100% Math: 100%	Annual STAR reports
95% attendance rate or higher			Students records
Less than 5% tardiness rate			
Less than 2% referral rate			

“In House” Benchmark Assessments

Classroom and school based assessments will also be used to monitor student achievement and inform instructional practice as outlined in the table below.

Table 9
“In House” Methods for Assessing Student Outcomes

Outcome	Method of Assessment	Frequency
<u>English Language Arts</u> <ul style="list-style-type: none"> By the end of fifth grade, students will demonstrate the ability to read fluently and comprehend a variety of grade-level texts in both literature and other academic disciplines Students will be able to read and respond to grade-level text both orally and in written format. Students will be able to write papers using grade level strategies and skills. Students will be active 	<ul style="list-style-type: none"> LAUSD Quarterly Assessments Teacher Designed and/or Publisher Designed Tests Teacher Observation Teacher Designed Performance Activities and 	<ul style="list-style-type: none"> Quarterly per content area Weekly, at the end of a teaching unit, or as necessary for formative data On-going throughout the year At the end of teaching units

<p>speakers and listeners.</p> <ul style="list-style-type: none"> • Students will be able to communicate clearly and effectively using appropriate vocabulary, both verbally and in writing. 	<p>Projects</p>	<p>and activities</p>
<p><u>Mathematics:</u></p> <ul style="list-style-type: none"> • By the end of fifth grade, students will be fluent in computational skills, will be algebraic thinkers, and will be problem solvers. • Students will understand and solve problems related to number sense; algebra and functions; measurement and geometry; statistics, data analysis, and probability; and mathematical reasoning. • Students will demonstrate the ability to reason logically and to implement a variety of problem-solving strategies. 	<ul style="list-style-type: none"> • LAUSD Quarterly Assessments • Teacher Designed and/or Publisher Designed Tests • Teacher Observation • Teacher Designed Performance Activities and Projects 	<ul style="list-style-type: none"> • Quarterly per content area • Weekly, at the end of a teaching unit, or as necessary for formative data • On-going throughout the year • At the end of teaching units and activities
<p><u>Science and Technology:</u></p> <ul style="list-style-type: none"> • By the end of fifth grade, students will have the essential skills and knowledge necessary to become scientifically literate citizens. • Students will work collaboratively and use scientific inquiry skills and the scientific method to analyze scientific problems and reach conclusions. • Students will demonstrate an understanding of fundamental concepts in earth science, life science, and physical science. • Students will use multiple 	<ul style="list-style-type: none"> • LAUSD Quarterly Assessments • Teacher Designed and/or Publisher Designed Tests • Teacher Observation • Teacher Designed Performance Activities and Projects 	<ul style="list-style-type: none"> • Quarterly per content area • Weekly, at the end of a teaching unit, or as necessary for formative data • On-going throughout the year • At the end of teaching units and activities

<p>technological tools such as word-processing software, spreadsheet software, presentation software, and multimedia tools in multiple disciplines.</p> <ul style="list-style-type: none"> • Students will utilize online information and the Internet safely and responsibly. 		
<p><u>History/Social Science:</u></p> <ul style="list-style-type: none"> • By the end of fifth grade students will have core knowledge in history and social science and have the critical thinking skills necessary to study the past and its relationship to the present. • Students will understand the history of California, (grade 4), early U.S. History (grade 5), and the development of new ideas, institutions, and systems of thoughts. • Students will interpret and summarize information from maps, charts, and graphs. • Students will be able to use historical research to ask and answer questions about the past and the present, and to make predictions about the future. 	<ul style="list-style-type: none"> • Teacher Designed and/or Publisher Designed Tests • Teacher Observation • Teacher Designed Performance Activities and Projects 	<ul style="list-style-type: none"> • Weekly, at the end of a teaching unit, or as necessary for formative data • On-going throughout the year • At the end of teaching units and activities
<p><u>Visual and Performing Arts:</u></p> <ul style="list-style-type: none"> • Students will understand, appreciate, and be able to interpret the arts. • Students will possess skills, knowledge, and abilities in dance, music, theatre, and visual arts. • Students will participate in artistic activities and 	<ul style="list-style-type: none"> • Teacher Observation • Student Performances • Teacher Designed Performance 	<ul style="list-style-type: none"> • On-going throughout the year • At the end of teaching units and activities • At the end of teaching units

<p>events.</p> <ul style="list-style-type: none"> • Students will understand the role that the arts has played in history as well as its relationship to other academic disciplines. 	<p>Activities and Projects</p>	<p>and activities as necessary for formative data</p>
<p><u>Physical Education:</u></p> <ul style="list-style-type: none"> • By the end of fifth grade, students will possess the skills, knowledge, and abilities necessary to maintain healthy physical lifestyles. • Students will regularly participate in many different forms of physical activity. • Students will use team athletics to maintaining positive relationships, develop leadership, teamwork, and good sportsmanship skills. 	<ul style="list-style-type: none"> • Teacher Assessments • Teacher Observation • CA State Fifth Grade Physical Fitness Exam 	<ul style="list-style-type: none"> • At the end of teaching units and activities as necessary for formative data • On-going throughout the year • Annually
Development of Science Processing Skills	Science Center External Evaluation Study (To be Developed)	
Development of Critical Thinking and Problem Solving Skills		
Development of depth of understanding in Science and Science Concepts		
Development of a motivation to learn and to pursue science classes and perhaps a science degree		
Development of cooperative social behaviors		
Development of a sense of discovery and curiosity		
Development of a positive attitude toward learning science		

State Mandated Assessments

The Alexander Science Center School will participate in all District-sponsored testing and will distribute a School Accountability Report Card in English and Spanish to all parents and involved community members annually. All students will continue to be

tested yearly using the testing systems sponsored by the District, including periodic assessments, standardized and performance-based tests. The Alexander Science Center School's grading policy will be consistent with established District guidelines.

The use of District assessments for dual language classrooms ensures that students are held accountable to the same standardization of reporting for accountability purposes. All students in dual language programs will be assessed annually in English and the target language according to District and State mandates.

If the Alexander Science Center School does not test (i.e., STAR, CELDT, CAHSEE) with the District, the Alexander Science Center 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.

Evidence Based Program Development

Subcommittees of the Curriculum Committee are formed to plan professional development activities to meet the needs of the teachers and inform school plans. Guided by a yearly professional development assessment plan based on the prior-years needs-assessment, the school utilizes LAUSD mandated Banked-time professional development time, faculty meetings, minimum and shortened days, and grade level collaboration to provide staff development. We currently have the following teams to plan professional development and provide assistance and guidance to teaching and paraprofessional staff in key school areas: a writing team, a technology team, professional development planning team, a Student Success Team, and a Language Appraisal Team. Both the Language Appraisal and the Student Success Team strategize on at-risk students and interventions, standards and curriculum needs. These teams work with student data and observe students and teachers to provide an appropriate program of interventions. The professional development planning team coordinates local school determined needs, LAUSD mandated professional development, and Science Center initiatives to provide input to professional development structure and schedule professional development on the school calendar.

ELEMENT 4 – Governance

“The governance structure of the school, including, but not limited to, the process to be followed by the school to ensure parental involvement.” Ed. Code 47605 (b)(5)(D)

An Affiliated Charter School

The Alexander Science Center School is K-5 grade charter school affiliated with the Los Angeles Unified School District. The Alexander Science Center School wishes to continue operating as an affiliated charter with LAUSD.

The Alexander Science Center School is operated in partnership by the Los Angeles Unified School District and the California Science Center, a Department of the California State government.

Governance Structure

The Alexander Science Center School’s Governance and Operating Committee (G & O) is the leadership of the Alexander Science Center School. The School is operated as an affiliated charter school within the District. The G & O, as defined in the Joint Participation Agreement, currently consists of nine members: Three representatives from the California Science Center, two representatives from LAUSD, plus the Principal, a parent of a current Alexander Science Center School student, the current UTLA chapter chair and an elected representative of the classified staff. The parent representative and classified staff representative are elected annually at the end of May.

Councils

As an affiliated charter, the Alexander Science Center School Site Council is the decision-making council for various school-based coordinated categorical programs (e.g. Title I, English Learners, Gifted and Talented) at the school to improve student achievement. School advisory committees, including the Compensatory Education Advisory Committee (CEAC), and the English Learner Advisory Committee (ELAC), will be comprised of the principal, the faculty, the parents and community, and other employees. Composition and functions of the councils are established in accordance with State guidelines (Education Code 62002.5 and 52852). The School Site Council will adopt by-laws to guide its actions. The School Site Council shall develop a Single School Plan which includes, curricula, instructional services, staff development programs, and provide ongoing evaluation of the educational program of the school. The School Site Council shall annually review the Single School Plan, establish a new budget, and if necessary, make other modifications in the plan to reflect changing needs and priorities.

The school shall also establish shared decision making through a Local School Leadership Council established according to the LAUSD-UTLA collective bargaining agreement (Article XXVII). The School Leadership Council will participate in certain local policy decisions made at the school site, and take into consideration the respective

interests of all stakeholders. The Local School Leadership Council shall have the responsibility for the collaborative development of the staff development, student discipline guidelines, the schedule of school activities and events, guidelines for the use of school equipment, and local budgetary matters as defined by the Collective Bargaining Agreement.

Parent Involvement

Parents play an active role in governing the school. An elected parent representative(s) serves on the school's G & O Committee and on various councils set up to find solutions to challenging areas as prioritized by the G & O Committee, including budget, charter, curriculum, English Learner Advisory Council, Compensatory Education Advisory Council, multicultural, school safety, staff selection, technology, discipline and professional development. The Science Center has a Community and Professional Development Manager that oversees and coordinates the Parent Resource Center and its free programs and resources for parents. This Manager attends School parent committee meetings and the PTA meetings.

Meetings

The Governance and Operating Committee meets at least six times each year or more often depending on the needs of the School. The meetings are generally held on Wednesdays from 5:30 p.m. to 7:30 p.m. at the California Science Center.

Current Membership of Governance and Operating Committee

Jeff Rudolph – President and CEO, California Science Center
Ron Rohovit, Ed.D. - Deputy Director for Education, California Science Center
Carol M. Truscott – Superintendent, Local District 7, LAUSD
Donnalyn Jaque-Anton - Executive Officer, Educational Services, LAUSD
Paula Denen – Principal, Alexander Science Center School
Dr. Karen Gallagher – Dean, Rossier School of Education, University of Southern California
Jairo De La Torre – Teacher, UTLA Chapter Chair, Alexander Science Center School
Leticia Williams - Classified Representative, Alexander Science Center School
Eddie Cuevas – Parent Representative

The Brown Act

The Alexander Science Center School will comply with the Brown Act. To provide access to the Governance and Operating Committee, meeting dates, time, location and the contact information will be published on all Governance and Operating Committee agendas and meeting minutes. Governance and Operating Committee information, agendas, and meeting minutes can also be acquired by contacting:

Ron Rohovit, Ed.D.
Deputy Director, Education

California Science Center
Amgen Center for Science Learning
700 Exposition Park Drive
Los Angeles, CA 90037
Phone: 213.744.2535
Email: rrohovit@cscmail.org

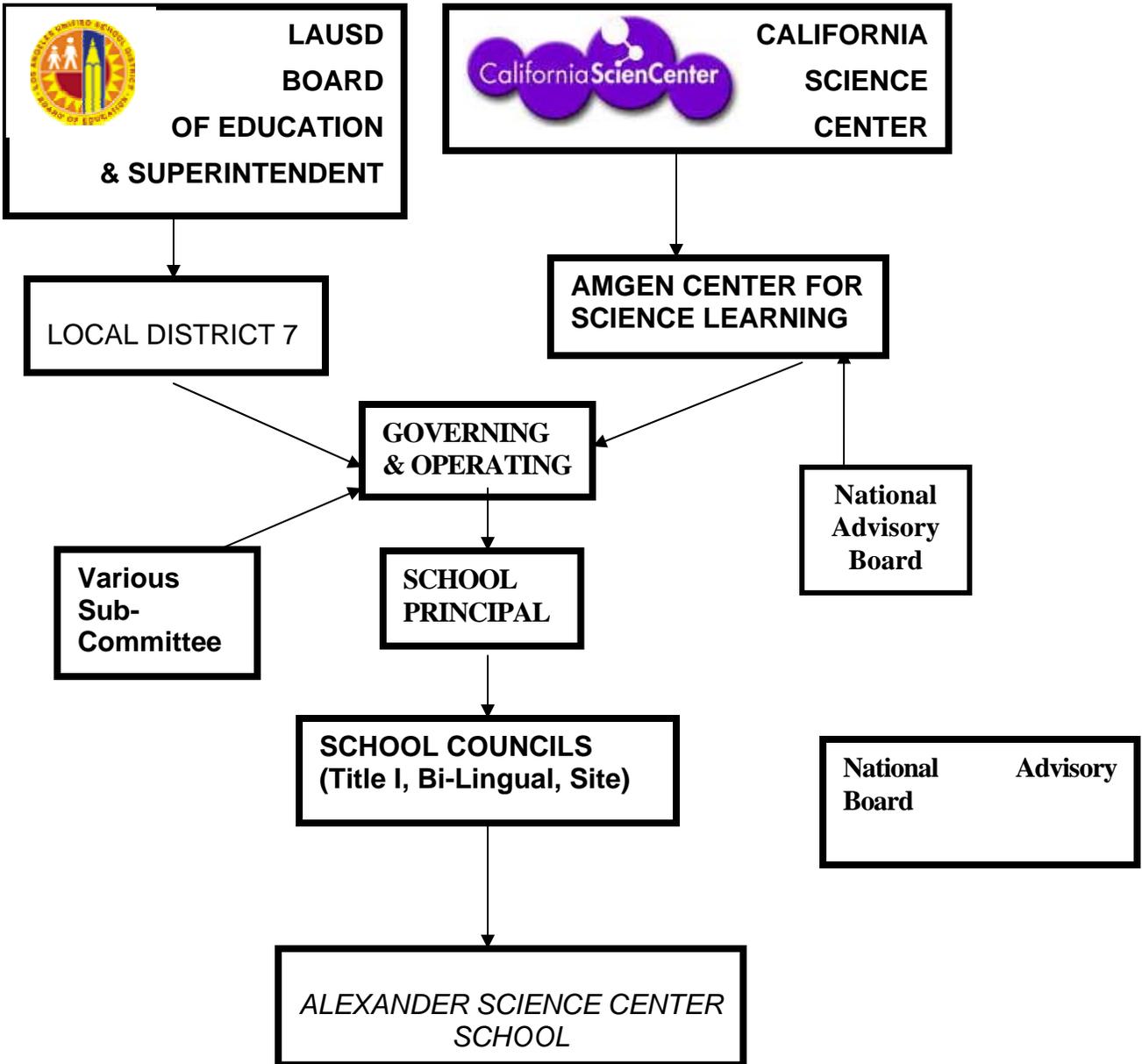
Paula Denen
Principal
Alexander Science Center School
3737 South Figueroa St.
Los Angeles, CA 90007
Phone: 213.746.1995

Meeting minutes will be published and made available at the next scheduled Governance and Operating Committee meeting. Meeting minutes and agendas will also be mailed or emailed to anyone upon request.

Agendas are posted at least 72 hours in advance of the Governance and Operating meeting at the door of the California Science Center Administration Building East and at the information kiosk at the Alexander Science Center School. The agenda is also emailed to School staff, members of the Governance and Operating Committee, and anyone who requests to be on the email list.

Any parent or staff member may submit items for the agenda by submitting a written request. Items must be submitted at least 72 hours in advance of the meeting in order to be included on the agenda.

Organizational Chart



Grievance Procedure for Parents and Students

Alexander Science Center School will 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 Alexander Science Center School alleging its noncompliance with these laws or alleging any actions which would be prohibited by these laws. The Alexander Science Center School will notify all its students and employees of the name, office address, and telephone number of the designated employee or employees.

The Alexander Science Center School will adopt and publish grievance 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.

The Alexander Science Center School will implement specific and continuing steps to notify 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 the recipient, that it does not discriminate on the basis of sex or mental or physical disability in the educational program or activity which it operates, and that it is required by Title IX and Section 504 not to discriminate in such a manner.

Assurance of Ethics

Members of the Alexander Science Center School's Governance & Operating Committee, any administrators, managers or employees, and any other committees of the School shall comply with federal and state laws, nonprofit integrity standards and LAUSD's Charter School policies and regulations regarding ethics and conflicts of interest.

Fiscal Responsibilities

The fiscal responsibilities between the California Science Center and the Los Angeles Unified School District are defined in the Alexander Science Center School and Center for Science Learning Lease (2000) and the Joint Participation Agreement between the Los Angeles Unified School District and California Science Center (2002). Terms and conditions of the Lease Agreement and the Joint Participation Agreement may be subject to change pursuant to a fully executed agreement between the parties as stated in the Joint Lease and Participation Agreements.

LAUSD Charter Policy

The Alexander Science Center School will comply with the District policy related to charter schools, as it may be change from time to time.

Responding to Inquiries

The Alexander Science Center School shall promptly respond to all inquiries, including but not limited to, inquiries regarding financial records, from the District and shall consult with the District regarding any inquiries. The Alexander Science Center School acknowledges that it is subject to audit by LAUSD including, without limitation, audit by the District Office of the Inspector General.

Notifications

Notification is to be made to the Charter Schools Division of any notices of workplace hazards, investigations by outside regulatory agencies, lawsuits, or other formal complaints, within one week of receipt of such notices by the Alexander Science Center School.

Audit and Inspection of Records

The Alexander Science Center School agrees to observe and abide by the following terms and conditions as a requirement for receiving and maintaining their charter authorization

- The Alexander Science Center School is subject to District oversight
- The District's statutory oversight responsibility continues throughout the life of the Charter and requires that it, among other things, monitor the fiscal condition of the Alexander Science Center School
- The District is authorized to revoke this charter for, among other reasons, the failure of the Alexander Science Center School to meet generally accepted accounting principles or if it engages in fiscal mismanagement

Accordingly, the District hereby reserves the right, pursuant to its oversight responsibility, to audit the Alexander Science Center School books, records, data, processes and procedures through the District Office of the Inspector General or other means. The audit may include, but is not limited to, the following areas:

- Compliance with terms and conditions prescribed in the Charter agreement,
- Internal controls, both financial and operational in nature,
- The accuracy, recording and/or reporting of school financial information,
- The school's debt structure,
- Governance policies, procedures and history,
- The recording and reporting of attendance data,
- The school's enrollment process,
- Compliance with safety plans and procedures, and
- Compliance with applicable grant requirements.

The Alexander Science Center School shall cooperate fully with such audits and to make available any and all records necessary for the performance of the audit upon 30 days

notice to Alexander Science Center School. When 30 days notice may defeat the purpose of the audit, the District may conduct the audit upon 24 hours notice.

In addition, if an allegation of waste, fraud or abuse related to the Alexander Science Center School operations is received by the District, the Alexander Science Center School shall be expected to cooperate with any investigation undertaken by the Office of the Inspector General, Investigations Unit.

ELEMENT 5 – Employee Qualifications

“The qualifications to be met by individuals to be employed by the school.” Ed Code 47605 (b)(5)(E)

As an affiliated charter school of the Los Angeles Unified School District, The Alexander Science Center School will comply with all No Child Left Behind Act (NCLB) requirements of teachers and paraprofessionals. The Alexander Science Center School will follow all District personnel policies and practices. Roles and functions of employees are subject to established District policies and procedures. The Alexander Science Center School retains the right to select and evaluate teaching and administrative staff, including the coordinator, the special education teachers, the resource teacher and the full inclusion specialist, subject to the policies and procedures of the District. We will adhere to all court mandates and state and federal laws including policies established from the Rodriguez Consent Decree and OCR guidelines. All Alexander Science Center School staff are LAUSD employees and will be compensated (salary and benefits) according to District contracts and collective bargaining agreements.

Staff Member Selection

The Alexander Science Center School shall select its own staff. The selection procedures shall not discriminate 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.** In addition, the selection procedures shall not discriminate on the basis of any characteristic that is contained in the definition of hate crimes set forth in Section 422.55 of the Penal Code, including disability, gender, nationality, race or ethnicity, religion, or sexual orientation. The Alexander Science Center School staff shall consist of persons who are committed to the Alexander Science Center School's philosophy. The Alexander Science Center School will continue to recruit qualified bilingual personnel (teachers, paraprofessionals, office staff, etc.) and will staff programs which will attract and serve ELL students.

Selection of Certificated and Classified Personnel (via LAUSD HR office)

As an affiliated charter school, selection of staff is subject to the policies and procedures of the District.

The selection process will include the following steps:

- Research and establish job qualifications, including a list of position-specific criteria to be given to qualified applicants
- Announce opening(s)
- Recruit applicant(s) from a broad pool of applicants, including those outside of LAUSD

- Request an application, resume, references, records of experiences, credentials, licenses, etc.
- Verify that prospective employees are highly qualified as per NCLB requirements (as applicable).
- Verify previous employment -interview candidate(s)
- Final teacher candidates will be interviewed by the Selection Committee using questions specifically directed to the applicant's understanding of the Alexander Science Center School philosophy and present a demonstration lesson from the curriculum of the Alexander Science Center School and using the methods outlined in this charter
- Select top candidate
- Medical clearance -proof of medical exam and TB testing
- Fingerprinting -applicant will submit prints (LiveScan) that will be forwarded to appropriate agencies for criminal record check prior to employment in a manner consistent with applicable state law
- Check for employment eligibility, including Master Plan regulations, authorization to work in the United States and require child-abuse sign-off

Selection of Teacher(s)

With regard to hiring, the Alexander Science Center School will adhere to all court mandates and state and federal laws including policies established by the District from the Rodriguez Consent Decree and Office of Civil Rights guidelines. Credentialed teachers interested in filling a position will be asked to submit a resume plus three letters of recommendation from former employers or other references. An applicant, who is being considered for selection, will be interviewed by the Staff Selection Sub-committee of the G & O Committee. Members of the Sub-committee will prepare questions specifically directed to the applicant's understanding of the practices indicated in the teacher criteria. Final candidates will be asked to present a demonstration lesson at a particular grade level while being observed by members of the Sub-committee. The Sub-committee will be authorized to determine, by consensus, in an advisory capacity, which applicants will be hired. When an applicant is selected, s/he must be processed through the District.

Teachers and specialists will be required to read the Alexander Science Center School Charter. They will also be required to sign an agreement that states they have read and understand the charter and the Schools goals, vision and mission and that they are responsible for delivering the School's instructional program as defined in the charter.

The G & O Committee shall appoint the Staff Selection Sub-committee made up of members of the Committee to recommend selection of the School staff. The Sub-committee shall consist of one Committee member from the Science Center, the principal, a teacher representative and a parent representative. Teaching staff is to be selected and should be made available by the District, subject to available funding, for the purpose of developing curriculum in collaboration with the Science Center. The District agrees to use every possible funding availability and its best efforts to meet funding

requirements, recognizing that this effort represents an important element for both parties.

Selection of Administrator(s)

The principal is responsible for the direction of the instructional program and the supervision of the school plant and related facilities, and serves as the chief fiscal officer and administrator.

In addition to the above procedures, prospective administrators will be interviewed by faculty and parent representatives, and will be recommended for approval based upon a two-thirds majority vote at a G & O Committee meeting. In conjunction with the designated representatives from Local District 7, the California Science Center will select the administrator(s) from the list of candidates recommended by the Governance and Operating Committee. The principal is directly supervised by the Local District 7 School Services Director and will be responsible to the LAUSD Local District 7 Superintendent and the Alexander Science Center School G & O Committee.

Selection of Paraprofessionals

Paraprofessionals will be required to meet NCLB requirements associated with their job and functions. An interview committee consisting of faculty and administrators will conduct interviews. Paraprofessionals will be required to meet a rigorous standard of quality and can demonstrate knowledge of, and the ability to assist in instruction, reading, writing and mathematics. The selection and assignment of paraprofessionals are made based on school and individual classroom needs.

Selection of Day-to-Day Substitutes

The Alexander Science Center School will establish and maintain a list of qualified substitutes, who meet the LAUSD qualifications, who will be contacted as needed. All substitute teachers will be credentialed teachers and will meet the qualifications of the NCLB Act.

Staff Duties

Teachers

- Provide a quality, enriched, and integrated curriculum based on the school charter
- Provide continual assessment of student progress and maintain records.
- Evaluate professional and classroom performance to meet the changing needs of students.
- Adjust teaching strategies and materials to meet the diagnosed needs of students.
- Provide an effective room environment that reflects and facilitates the academic program.
- Provide peer assistance to fellow teachers.

- Continue to work on professional growth.
- Provide ongoing and open communication with parents.
- Be an active participant in at least one aspect of school governance.
- Participate in coaching conversations with peers about teaching and learning.
- Regular, punctual attendance.
- Maintain professional appearance and attitude.
- Demonstrate attitudes for working in a professional learning community

Administrator(s)

- Ensure effective collaboration with the Science Center.
- Oversee the business practices of the school.
- Attract new resources to the school.
- Oversee the instructional program.
- Provide opportunities for professional growth.
- Facilitate communication among staff, parents and community.
- Assist with student discipline.
- Assist with scheduling when necessary.
- Spend at least 8 hours per month actively involved in the classroom.
- Regular, punctual attendance.
- Professionally attired

Principal Essential Functions:

1. Provides assistance, guidance, and supervision in instructional practices and curriculum development specific to the language, social, and academic needs of the student population, including bilingual, Special Education, and Gifted and Talented students.
2. Provides leadership for and facilitates collaboration with all stakeholders on the writing of the School Plans, Self-Study, and Program Quality Reviews and on identifying goals for student achievement and standards for assessing the outcome of these goals.
3. Prepares school budgets and is responsible for and monitors the expenditures of all school funds in accordance with federal, state and District guidelines.
4. Develops the partnership among students, parents, community members, teachers and support staff that will enable the Alexander Science Center School to become a learning community with high expectations and achievement for all students.
5. Works enthusiastically with the California Science Center to develop and operate the school and maintains collaborative relationships with other formal or informal educational institutions.
6. Establishes an interdisciplinary instructional approach that emphasizes science and mathematics and integrates these with technology, language arts, social studies, fine arts and physical education.
7. Educates all students and demonstrates improved student achievement with standards-based instruction, focused learning opportunities, and appropriate use of all resources.

8. Evaluates the performance of certificated and classified personnel assigned to the school site.
9. Maintains a school climate that ensures the safety, health and welfare of students and personnel; organizes and implements a "School Safe Plan"; and complies with mandated child abuse reporting procedures.
10. Provides staff development and training for all stakeholders to improve student achievement.

Classified and Other Personnel

As an affiliated charter school, job descriptions, qualifications and duties for classified employees are established by the Personnel Commission.

- Teacher Assistants will assist with instruction and will assist the teacher with other classroom duties.
- Office personnel will perform daily school business.
- Other personnel will perform duties as described by the administrative team.

Plant Manager and Custodians

- The Plant Manager and all Custodians will be employees of the California Science Center and will perform maintenance and operations. The plant manager and custodians will work with the principal and Deputy Director of Operations to establish work schedules, procedures and protocol to ensure that the School is maintained and operated appropriately.

As an affiliated charter school, the LAUSD is responsible for the debts and obligations of the Alexander Science Center School as defined in the Alexander Science Center School and Center for Science Learning Lease (2000) and the Joint Participation Agreement between the Los Angeles Unified School District and California Science Center (2002). These agreements are subject to review by the District as needed. Terms and conditions of the Joint Participation Agreement and Joint Lease Agreement are subject to any new executed agreement between all parties as stated in the Joint Lease and Participation Agreements.

Evaluation

In addition to the next level school wide evaluation defined in Element 2 and as stated in the Joint Participation Agreement, at the close of each school year, the Governance and Operating Committee shall evaluate the Principal consistent with District policy. The Governance and Operating Committee will develop an assessment tool to evaluate the principal on such items as engagement of the partnership, school leadership, implementation of the instructional program, and community involvement to mention a few. The evaluation will inform the Governance and Operating Committee so the Committee can identify the principal's strengths and weaknesses, clarify job

responsibilities, set standards of performance, specify work plan goals and objectives, and recommend appropriate action to be taken and plans for career development.

The principal will evaluate the faculty in a manner consistent with District policy. Such evaluation shall include the areas of professional development, teaching performance, the integration of science and technology, and the delivery of the instructional program as defined by the charter. Such evaluation will adhere to all collective bargaining agreements. Performance assessment of Teacher Assistants and other classified employees are established by the current Collective Bargaining Agreements.

The Amgen Center for Science Learning will work closely with the Principal, University of Southern California, the National Advisory Board, and/or other external consultants to design and implement evaluation tools, criteria, outcomes and rubrics for evaluating the instructional program as defined by the charter and professional development program. Participating in this evaluation will help the Center for Science Learning to better understand the instructional program strengths and weaknesses and teachers needs and then can better provide assistance in improving the instructional program and professional development offerings.

Through coordination with the Principal, Science Center staff or their designates will observe in classrooms and make needed recommendations to the instructional program. Appropriate curriculum and professional development workshops will be designed to meet the needs of the teachers in the school based on the observations, feedback and recommendations to the Principal.

Teacher Credentials

Each self-contained classroom teacher will have appropriate credentials issued by the State Commission on Teacher Credentialing for his/her teaching assignment. Non-self-contained classroom teachers will have appropriate credentials consistent with state legislation and Title I, No Child Left Behind legislation. The District will monitor all credentials.

Use of Teachers with Intern Credentials

When a fully credentialed teacher is not available for hire, the Alexander Science Center School ensures that the teacher hired will be in an approved Teacher Credential Program. The Alexander Science Center School ensures that the teacher also has an Intern Credential allowing them to work as a classroom teacher. The Alexander Science Center School shall take all steps necessary to comply with the requirements of NCLB with respect to teachers serving under provisional authorization.

Reduction in Force (RIF)

As an affiliated charter school, all certificated and classified employees are subject to Reductions In Force in accordance with law.

ELEMENT 6 - Health and Safety

“The procedures that the school will follow to ensure the health and safety of pupils and staff. These procedures shall include the requirement that each employee of the school furnish the school with a criminal record summary as described in 44237.” Ed. Code (b)(5)(F)

As an affiliated charter school, Alexander Science Center School will continue to follow all LAUSD policies and practices to guarantee the health and safety of pupils and staff.

Address

The Alexander Science Center School is located at 3737 South Figueroa St., Los Angeles, CA 90007.

Immunization, Vision, Hearing

As per LAUSD policy, Alexander Science Center School requires immunization of pupils as a condition of school attendance to the same extent as would apply if the pupils attended a non-charter public school. Students’ hearing and vision are screened by the LAUSD Nursing staff, and scoliosis screenings are done per LAUSD policy.

Facilities Compliance

The Alexander Science Center School facilities comply with state building codes, federal Americans with Disabilities Act (ADA) access requirements, and other applicable fire, health and structural safety requirements. Records documenting such compliance are on file and readily accessible for review.

The Alexander Science Center School will comply with the existing regulations that apply to charter schools including CAL/OSHA, the California Environmental Protection Agency and Federal EPA regulations.

The Science Center shall maintain the School as defined in the lease and joint participation agreements, in an orderly manner to keep the facilities clean and healthy at all times, providing water, power and all other utility services necessary for the normal operation of the school.

As an affiliated charter school, the LAUSD is responsible for the debts and obligations of the Alexander Science Center School as defined in the Alexander Science Center School and Center for Science Learning Lease (2000) and the Joint Participation Agreement between the Los Angeles Unified School District and California Science Center (2002). These agreements are subject to review by the District as needed. Terms and conditions may be amended upon a fully executed agreement between the parties as stated in the Joint Lease and Participation Agreements.

Instructional Program: The Science Center staff and teachers can develop and implement a unique science and math focused instructional program and teacher professional development program that emphasizes the use of technology as defined in the Charter

- The principal and teachers will be evaluated on their ability to develop the necessary skills and to implement the instructional program as defined in the Charter
- To accomplish the mission and vision of the Dr. Theodore T. Alexander Jr. Science Center School, we may require teachers to participate in professional development activities prior to the start of each school year. The number of days of professional development will be set prior to the end of each school year and will not exceed ten (10) days. These professional development days are in addition to any District Buy-Back or Pupil Free Days. Teachers will be compensated at their regular pay rate. The professional development will be a collaborative effort by both LAUSD and the California Science Center to provide teachers with the skills, materials, knowledge and confidence to accomplish the school's dynamic vision and deliver the unique science, math and technology instructional program as defined by the School's Charter. Professional development activities will be differentiated for grade appropriate instruction and content. Teachers will participate in the development and design of the program and where appropriate, will facilitate components of the professional development activities.

T.B. Testing

Staff will honor County requirements for periodic Mantoux tuberculosis (TB) tests.

Criminal Record Summary

Each employee is required to provide the Alexander Science Center School with a full disclosure statement regarding prior criminal record as required by the California Education Code Section 44237.

Certificate of Occupancy

The Alexander Science Center School has a valid Certificate of Occupancy issued by the applicable permitting agency, available for review.

Safety Plan

The Alexander Science Center School has a current safety plan on file and available for review. School staff is annually trained on or before December 1st on the safety procedures outlined in the plan. Amendments will be made to the school safety plan to remain compliant with District safety policies or upon recommendation by the District's insurance carriers.

Child Abuse Reporting

School staff is annually trained on or before December 1st on the safety procedures outlined in the Safety Plan including staff responsibility for reporting incidence of suspected child abuse.

Insurance and Liability

As an affiliated charter school, coverage is provided to the charter school by the Los Angeles Unified School District under any of the District's self-insured programs or commercial insurance policies.

It is Alexander Science Center School's responsibility to monitor its vendors, contractors, partners or sponsors for compliance with the LAUSD Risk Management Division's requirements.

Evidence of Insurance

Alexander Science Center School shall follow all policies of the LAUSD Risk Management Division of the Los Angeles Unified School District.

Healthy Schools Act

Alexander Science Center School will follow the Healthy Schools Act – California Education Code section 17608, which details pest management requirements for schools.

ELEMENT 7 – Racial and Ethnic Balance

“The means by which the school will achieve a racial and ethnic balance among its pupils that is reflective of the general populations residing within the territorial jurisdiction of the school district to which the charter petition is submitted.” Ed. Code 47605 (b)(5)(G)

Annual Outreach Efforts

The Alexander Science Center School operates as a neighborhood school with open enrollment heavily weighted toward neighborhood students and their siblings. The attending students represent a broad ethnic background. We offer 70 percent of our enrollment to students who reside within the attendance boundaries of the school. If the number of students residing within the attendance boundaries wishing to attend the Alexander Science Center School exceeds the number of available seats, a wait list will be created. If the number of students residing within the attendance boundaries who wish to attend the Alexander Science Center School is less than the number of available seats, enrollment opens up to any LAUSD students.

Non-Discriminatory Statement

The Alexander Science Center School will not unlawfully discriminate, harass or allow harassment against any student on the basis of disability, gender, 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. The Alexander Science Center School will be nonsectarian in its programs, admission policies, employment practices, and all other operations; shall not charge for tuition.

Student Recruitment

The Alexander Science Center School makes every effort 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 Los Angeles Unified School District. Recruitment efforts within the District designated attendance area include publicizing our instructional program, visiting the impacted neighborhood schools, hosting annual Open House events, providing tours of the school, and speaking to interested parents.

Planned dates, locations and recruitment activities to achieve the District’s ethnic balance goal:

- Dates: November through January of each school year
- Locations: California Science Center, Alexander Science Center School, Local District 7 Office, Local Area Schools and External Organizations

- Activities: Publishing application announcement in local area newspapers, such as L’Opinion, The Sentinel, Korean Journals
- Visit local area pre-schools, such as USC Early Childhood Centers, Hoover Intergeneration Center
- Visiting local park and recreation facilities such as EPICC, Boys and Girls Club
- School Tours 1x per month during the enrollment period
- Announcements and applications from the School to all currently enrolled parents
- Distribution of announcements and applications to prospective parents through USC, Local District 7, the Alexander Science Center School, and the California Science Center
- Display announcements in display case in the front of the school

Target Geographic Areas

Outreach targets families who reside within the designated attendance boundaries for the school. Currently, the following schools fall within the designated “neighborhood” attendance area of the Alexander Science Center School: Vermont EL., Weemes EL., Norwood EL., Normandie EL., Menlo EL., 52nd EL and John Mack EL. This list of area schools may be amended to accommodate the development of new schools in the area.

Outreach Languages

Appropriate school information is delivered to parents in English, Spanish and Korean. The School’s application is in all three languages. The vision statement is in English and Spanish.

Racial and Ethnic Balance

The Alexander Science Center School’s outreach efforts have been successful in enrolling a racial and ethnic demographic representative of our surrounding neighborhood. Our largest subgroups are our Hispanic students (63%), our African-American students (33%), our Socioeconomically disadvantage students (78%), and our English Language Learners (30%).

Public School Choice Traveling Students

The District and Alexander Science Center School 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. Public School

Choice (“PSC”) placement with charter schools is an alternative strongly encouraged by the No Child Left Behind Act of 2001 (“NCLB”). Alexander Science Center School agrees to discuss with the District the possibility of accepting for enrollment District students participating in the District’s PSC program. The parties agree to separately memorialize any agreed-to number of PSC placements of District students at the school.

As required under NCLB, all PSC students attending Alexander Science Center School shall have the right to continue attending Alexander Science Center School until the highest grade level of the charter. However, the obligation of the District to provide transportation for a PSC student to Alexander Science Center School shall end in the event the PSC student’s resident District school exits Program Improvement status.

Alexander Science Center School will ensure that all of its PSC students are treated in the same manner as other students attending the school. PSC students are and will be eligible for all applicable instructional and extra-curricular activities at the school. Alexander Science Center School will make reasonable efforts to invite and encourage the participation of the parents of PSC students in the activities and meetings at the school. Determination of student eligibility for this PSC option, including the grade level of eligibility, will be made solely by the District, based on the District’s PSC process, guidelines, policies and the requirements of NCLB. In the event demand for places at Alexander Science Center School under the PSC program increases in subsequent years, Alexander Science Center School agrees to discuss with the District the possibility of increasing the number of PSC places available at the school.

Federal Compliance

To the extent that the Alexander Science Center School is a recipient of federal funds, including federal Title I, Part A funds, the Alexander Science Center School has agreed to meet all of the programmatic, fiscal and other regulatory requirements of the No Child Left Behind Act and other applicable federal grant programs. The Alexander Science Center School agrees that it will keep and make available to the District any documentation necessary to demonstrate compliance with the requirements of the No Child Left Behind Act and other applicable federal programs, including, but not limited to, documentation related to 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 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.

The Alexander Science Center School also understands that as part of its oversight of the school, the Charter School Office may conduct program review of federal and state compliance issues.

Court-ordered Integration

The Alexander Science Center School is subject to the requirements of the Crawford Court Order. The school will provide a written plan to achieve and maintain the District's ethnic balance goal which is within a 70:30 or 30:70 ratio.

ELEMENT 8 – Admission Requirements

Education Code 47605 (d)(2)(A)

The Alexander Science Center School will admit all pupils who wish to attend as outlined in Education Code 47605 (d)(2)(A). Admission to the Alexander Science Center School will be non-discriminatory and will be open to any resident of the State of California. The school does not charge tuition, nor does it discriminate against any pupil on the basis of disability, gender, 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. It is non-sectarian and nondiscriminatory in all areas of its operation. The Alexander Science Center School will adhere to all applicable laws governing the minimum age for public school attendance.

Student Records

The “Family Educational Rights and Privacy Act (FERPA)” policy is followed any time there is a request for access to or the possibility of the disclosure of the contents of a student’s educational records by any means, including oral, written, or electronic. All student records are kept in a secure location. Secure disposal methods, such as the shredding of paper records, are used to maintain student confidentiality.

Admission Requirements

The school shall be located and operate within the boundaries of Local District 7 of Los Angeles Unified School District. It shall be open to all students who wish to apply. The school shall have a maximum capacity that is determined by the District's policy for a single-track traditional school. At least 70% of the students enrolled in the Alexander Science Center School shall reside within the designated “neighborhood” attendance area (see Element 7). When space exists other students residing in the LAUSD service area, and then within the state of California, may be admitted to the Alexander Science Center School. Transportation will not be provided.

Recruiting Academically Low-Achieving and Economically Disadvantaged Students

Past recruitment efforts at the Alexander Science Center School have produced a student population 78% of which is identified as being economically disadvantaged, as measured by eligibility for free or reduced-price lunches. Historically this population has been academically low achieving. We continue to draw our student population largely from our “neighborhood.” The comparison schools in our neighborhood have identified 94% of their populations as qualifying for free or reduced price lunch. The Alexander Science Center School remains committed to recruiting students from a variety of backgrounds representative of the community in which we operate.

Application Process

Students enroll in the Alexander Science Center School through an application process. Each year, the school, in cooperation with the Science Center and Local District 7, produce an announcement and application that is disseminated widely throughout the surrounding community. Announcements are placed in local community newspapers, printed announcements are delivered to community organizations and pre-schools, and applications are distributed at the school, the Science Center, and the Local District office. Additionally, the announcement and application can be downloaded from the school, the Local District 7 and the Science Center web site. Applications are available in English, Spanish and Korean.

The application process begins in mid November and lasts through mid January. To ensure that applications are fairly executed, the school does not handle applications during the initial application period when the ranked priority list is created. Applications are submitted to the Local District 7 office. Late applications may be accepted, but are noted as late and ranked as such on the priority enrollment list. Applications are handled by LAUSD which creates a ranked priority enrollment list based on a preference system developed out of the Joint Use Agreement Lease between LAUSD and the Science Center. Parents are notified of acceptance to the school in May, and begin the enrollment process in June for the following school year. Parents are notified of acceptance and non-acceptance by letter from the Local District 7 office, and when to pick up enrollment packets at the school. If a parent does not enroll their child within a specified period of time as determined by the school prior to the end of the school year (typically two weeks after notification), we make multiple attempts to contact the parent. If there is no response, or the parent declines enrollment, the parent is officially notified that the seat is no longer available and the next student on the priority list is notified of the available space.

In the event that the number of applicants exceeds the number of available seats at the Alexander Science Center School, the remaining students are wait-listed from the priority enrollment list to determine admission. Students are wait-listed for the current school year only, and must re-apply for the following year if they wish to be considered for enrollment at the school. No points are given for applying during different school years.

If enrollment at a certain grade fall below expected needs, the school may accept from the wait list first, and then from new applications at a later time to meet LAUSD enrollment numbers. The process for communication to the public about available seats after the initial enrollment period has passed is the same as during the regular enrollment period. The school maintains all records pertaining to enrollment, contacts and responses of applicants during the enrollment process.

LAUSD applies the following “weights” to qualifying applications to the Alexander Science Center School:

- USC Employee - 1 point
- Science Center Employee - 2 points

- Other Local District 7 school - 2 points
- Siblings at the school - 3 points
- One of the “7 schools” - 4 points

The “7 schools” are the resident schools from which the Alexander Science Center School aims to draw 70% of its enrollment. Those schools are Normandie EL, Vermont EL, Weemes EL, Mack EL, King Jr. EL, Norwood EL, and Menlo El. An applicant may be assigned points in more than one category if the applicant meets multiple criteria from the list above.

ELEMENT 9 – Financial Audits

“ The manner in which annual, independent, financial audits shall be conducted, which shall employ generally accepted accounting principles, and the manner in which audit exceptions and deficiencies shall be resolved to the satisfaction of the chartering authority.” Ed. Code 47605 (b)(5)(I)

Annual Audits

As an affiliated charter school that is fully financially administered by the Los Angeles Unified School District, Alexander Science Center School will follow all usual District financial planning, budgeting, and management procedures.

As an affiliated charter school operating within the District, the Alexander Science Center School will be audited by the District. The audit will verify the accuracy of the school's financial statements, attendance and enrollment accounting practices and review the school's internal controls. The audit will be conducted in accordance with generally accepted accounting principles applicable to the school.

Resolution of Exceptions and Deficiencies

As an affiliated charter school, the Alexander Science Center School would follow District policy around resolving any exceptions or deficiencies found during the course of an audit.

District Oversight Costs

Since Alexander Science Center School is an affiliated charter school, fully financially administered by the Los Angeles Unified School District, the school does not accrue revenue, nor does it owe the District the additional supervisorial oversight costs described below.

However, if the school changed its status and became unaffiliated and financially independent, the following would apply:

The District may charge for the actual costs of supervisorial oversight of the Alexander Science Center School not to exceed 1% of the charter school's revenue, or the District may charge for the actual costs of supervisorial oversight of the Alexander Science Center School not to exceed 3% if the Alexander Science Center School is able to obtain substantially rent free facilities from the District. Notwithstanding the foregoing, the District may charge the maximum supervisorial oversight fee allow under the law as it may change from time to time.

ELEMENT 10 – Student Expulsions

“The procedures by which pupils can be suspended or expelled.” Ed. Code 47605 (b)(5)(J)

General Discipline Policies

The Alexander Science Center School has developed a matrix of Guiding Principles. Distributed to all students and families, this matrix provides the foundation for all disciplinary matters at the school.

Rules and Procedures

SUSPENSIONS and EXPULSIONS will be administered in accordance with the Los Angeles Unified School District discipline policies. The policies will include specific grounds for suspension and expulsion (see below); maximum number of consecutive days of suspension; notification process to parents of suspended student, including the appeal process, reason for suspension, length of suspension; and provision for the student's education during suspension.

Discipline policies will not be discriminatory, arbitrary, or capricious. It will follow the principles of due process. An impartial process will be implemented to investigate and confirm the appropriateness of suspension/expulsion of any student. All provisions of the IDEA will be complied with in regards to the disciplining of students determined eligible for special education services. Based on the LAUSD discipline policies, Alexander Science Center School administrators, faculty, staff and parents advised the G & O Committee and developed a matrix of guiding principles that is distributed to all parents and families (See Appendix I).

Affiliated Charter School

As an affiliated charter school within the Los Angeles Unified School District, we follow all discipline proceedings established by the district. In LAUSD, the Student Discipline Proceedings Unit is charged with ensuring that students recommended for expulsion are afforded a fair and impartial hearing and all due process rights.

At the school level, only the principal is allowed to recommend a student's expulsion. Whenever a student is accused of an act for which an expulsion may be recommended, the principal will conduct an incident investigation by 1) discussing the matter with district officials, 2) identifying and interviewing witnesses, 3) securing oral and written statements, and 4) reviewing appropriate student records.

The principal will also notify law enforcement if certain acts have been committed by the student, including assault with a deadly weapon, possession of narcotics or controlled substances, possession of a weapon at school. The principal will then consult with the

student Discipline Proceedings Unit of LAUSD regarding the appropriateness of an expulsion, and additionally consult with his/her LD7 School Services Director.

When an expulsion recommendation is being considered, the principal shall conduct a formal expulsion conference as soon as possible. At this conference, the principal shall:

1. Inform the student and the parent/guardian of the charge(s) and evidence, including any witnesses.
2. Provide the student and parent with the opportunity to fully review and discuss the allegations and to note for the record any unusual circumstances relevant to the allegations.
3. Document any pertinent or relevant comments made by the student or parent which may be construed as admission or denial of the allegations.

A decision by the principal to recommend a student's expulsion shall occur following the expulsion conference, unless the student and parent fail to attend.

1. When principals recommend expulsion, they shall provide the student and parent with copies of, and explain expulsion procedures, and the Ed Code Section 48900.
2. If the parent fails to attend the scheduled conference, attempts must be made to reschedule the conference. Efforts to contact parents will be recorded in the student's file.
3. If the principal decides to recommend expulsion, the school will immediately notify the parent/guardian by mail. If the parent did not attend the expulsion conference, the mailing shall also include copies of the summary of procedures and E.C. Section 4899. The parent shall be informed of an alternative placement arranged through the Local District or that the student's suspension may be extended, pending disposition of the case by the Board of Education.

The principal will forward all required documentation to the Expulsion Review Committee of LAUSD, and after review they will make a recommendation to the Board of Education. The decision of the Board must be made at a public hearing and the parent may request an opportunity to address the Board.

A student may be expelled without suspended enforcement ("straight" expelled) and, therefore, not be allowed to attend any LAUSD school or program during the term of expulsion. Or, the enforcement of the expulsion may be suspended, pursuant to Education Code Section 48917, in which case, the expelled student could be assigned to an LAUSD Educational Options school for the term of the expulsion. The length of an expulsion may be for the balance of the semester in which the Board expels; for the balance of the semester, plus the following school semester; or for one-calendar year, depending on the violation and/or the student's social adjustment background. Parents may appeal an expulsion to the Los Angeles County Board of Education.

Students are subject to suspension or expulsion for offenses occurring

- While on school grounds.
- While going to or coming from school.
- During the lunch period, whether on or off the campus.
- During, or while going to, or coming from, a school sponsored event.

California law allows classroom teachers to suspend students from the classroom for any of the behaviors described in Education Code Sections 48900 et seq. (see Grounds for Suspension/Expulsion below). If a student is suspended from the classroom, the teacher must immediately report the suspension to the principal for appropriate action. The principal shall then determine whether to suspend the student from school or to allow the student to remain on campus during the term of the classroom suspension. Only the school principal or his or her designee may suspend a student from school. The term of a classroom suspension shall be no longer than the balance of the day (or class period) plus the following day (or next class period for that same class). A student serving a classroom suspension must remain on campus under appropriate supervision. Subsequent to a teacher's classroom suspension, the teacher shall, as soon as possible, ask the parent to attend a conference with the teacher, at which the school administrator, school counselor, or school psychologist may also be present. If the student has committed an obscene act, engaged in habitual profanity or vulgarity, or has disrupted school activities or otherwise defied the valid authority of school officials, the teacher may require that the parent/guardian attend a portion of the school day in his or her child's classroom.

Length of Suspension

The length of suspension for students may not exceed a period of five (5) consecutive school days unless an administrative recommendation has been made and agreed to by the student's parent/guardian. If a student is recommended for a period of suspension exceeding five (5) consecutive school days, a second conference will be scheduled between the parent/guardian to discuss the progress of the suspension upon the completion of the fifth (5th) day of suspension. All reasonable arrangements will be made to provide the student with classroom material and current assignments to be completed at home during the length of the suspension. A student may not be suspended more than 20 days in a single school year.

Grounds for Suspension and Expulsion

A student may be recommended for suspension or expulsion for any of the following reasons, as specified in Education Code Sections 48900 et seq.:

- Caused, attempted to cause, or threatened to cause physical injury to another person
- Willfully used force or violence upon the person of another, except in self-defense
- Possessed, sold, or otherwise furnished any firearm, knife, explosive, or other dangerous object, unless, in the case of possession of any object of this type, the pupil had obtained written permission to possess the item from a certificated school employee, which is concurred in by the Principal or the designee of the Principal
- Unlawfully possessed, used, sold, or otherwise furnished, or been under the influence of, any controlled substance listed in Chapter 2 (commencing with Section 11053) of Division 10 of the Health and Safety Code, an alcoholic beverage, or an intoxicant of any kind

- Unlawfully offered, arranged, or negotiated to sell any controlled substance listed in Chapter 2 (commencing with Section 11053) of Division 10 of the Health and Safety Code, an alcoholic beverage, or an intoxicant of any kind, and either sold, delivered, or otherwise furnished to any person another liquid, substance, or material and represented the liquid, substance, or material as a controlled substance, alcoholic beverage, or intoxicant
- Committed or attempted to commit robbery or extortion
- Caused or attempted to cause damage to school property or private property (includes, but is not limited to, electronic files and databases)
- Stole or attempted to steal school property or private property (includes, but is not limited to, electronic files and databases)
- Possessed or used tobacco, or any products containing tobacco or nicotine products, including, but not limited to, cigarettes, cigars, miniature cigars, clove cigarettes, smokeless tobacco, snuff, chew packets, and betel (exception made for use or possession by a pupil of his or her own prescription products)
- Committed an obscene act or engaged in habitual profanity or vulgarity
- Unlawfully possessed or unlawfully offered, arranged, or negotiated to sell any drug paraphernalia, as defined in Section 11014.5 of the Health and Safety Code
- Disrupted school activities or otherwise willfully defied the valid authority of supervisors, teachers, administrators, school officials, or other school personnel engaged in the performance of their duties
- Knowingly received stolen school property or private property (includes, but is not limited to, electronic files and databases)
- Possessed an imitation firearm
- Committed or attempted to commit a sexual assault as defined in Section 261, 266c, 286, 288, 288a, or 289 of the Penal Code or committed a sexual battery as defined in Section 243.4 of the Penal Code
- Harassed, threatened, or intimidated a pupil who is a complaining witness or a witness in a school disciplinary proceeding for the purpose of either preventing that pupil from being a witness or retaliating against that pupil for being a witness, or both
- Unlawfully offered, arranged to sell, negotiated to sell, or sold the prescription drug, Soma
- Engaged in, or attempted to engage in, hazing as defined in Section 32050
- Aided or abetted, as defined in Section 31 of the Penal Code, the infliction or attempted infliction of physical injury to another person (suspension only)
- Committed sexual harassment (grades 4-5). Section 48900.2 (E.C. 48900et seq.)
- Caused, attempted to cause, threatened to cause, or participated in the act of hate violence (grades 4-5). Section 48900.3
- Engaged in harassment, threats, or intimidation directed against school district personnel or pupils (grades 4-5), that is sufficiently severe or pervasive to have the actual and reasonably expected effect of materially disrupting class work, creating substantial disorder, and invading the rights of either school personnel or pupils by creating an intimidating or hostile educational environment. Section 48900.4

- Made terroristic threats against school officials, school property or both. Section 48900.7
- Engaged in an act of bullying, including, but not limited to, bullying committed by means of an electronic act, as defined in subdivisions (f) and (g) of Section 32261, directed specifically toward a pupil or school personnel.

It is the intent of the Legislature that alternatives to suspension or expulsion be imposed against any pupil who is truant, tardy, or otherwise absent from school activities. The Principal may use discretion to provide alternatives to suspension or expulsion including, but not limited to, counseling and an anger management program.

Mandatory Expulsion

Under California law, a school principal is *required* to recommend a student's expulsion when he or she determines that the student committed one of the following while on campus or at a school-sponsored activity off campus:

- Possession of a firearm
- Brandishing a knife at another person
- Unlawfully selling a controlled substance
- Committing or attempting to commit a sexual assault or committing a sexual battery
- Possession of an explosive. The Federal Gun-Free Schools Act of 1994 also mandates the expulsion of any student who takes a firearm onto a school campus.

Special Education Discipline

In the case of a student who has an IEP, or a student who has a 504 Plan, Alexander Science Center School will ensure that it follows the correct disciplinary procedures to comply with the mandates of state and federal laws, including the IDEA and Section 504 of the Rehabilitation Plan of 1973. An IEP team, including a district representative, will meet to conduct a manifestation determination and to discuss alternative placement utilizing the District's Policies and Procedures Manual . Prior to recommending expulsion for a student with a 504 Plan, the Alexander Science Center School administrator will convene a Link Determination meeting to ask the following two questions: A) Was the misconduct caused by, or directly and substantially related to the student's disability? B) Was the misconduct a direct result of Alexander Science Centers School's failure to implement the 504 Plan?

Procedures for Rehabilitation, Readmission and Interim placement

As an affiliated charter school within the Los Angeles Unified School District, we follow all discipline proceedings established by the District.

Pupils who are expelled from the charter school shall be given a rehabilitation plan upon expulsion as developed by the LAUSD Discipline Unit 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. The rehabilitation plan should include a date not later than one year from the date of expulsion when the pupil may reapply to the charter school for readmission.

The decision to readmit a pupil or to admit a previously expelled pupil from another school district or charter school shall be in the sole discretion of the LAUSD Discipline Unit and LAUSD Board , to determine whether the pupil has successfully completed the rehabilitation plan and to determine whether the pupil poses a threat to others or will be disruptive to the school environment. The pupil's readmission is also contingent upon the capacity of the charter school at the time the pupil seeks readmission.

Disciplinary Records

The Alexander Science Center School shall maintain the confidentiality of pupil records of all student suspensions and expulsions in locked files at the school. These files will only be accessible to the school administration and designated staff members providing services to the students. Such records shall be made available to the District upon request.

Outcome Data

Outcome data will be maintained including:

- Suspensions
- Expulsions & Expulsion Placements
- Reinstatements
- Out of District Expellees

ELEMENT 11 – Retirement Programs

“The manner by which staff members of the charter schools will be covered by the State Teachers’ Retirement System, the Public Employees Retirement System, or federal social security.” Ed. Code 47605 (b)(5)(K)

As an affiliated charter school, the following issues are dealt with per established District policies and procedures:

- relationship between the teachers and the district/county bargaining unit
- process by which salaries, benefits working conditions and items, i.e., calendars, holidays, vacations, work day and year will be determined
- labor procedures which will be applied to employees (EERA)
- process for resolving complaints/grievances
- process for ensuring due process
- manner by which staff members will be covered by STRS, PERS, Social Security or Medicare
- process for staff recruitment, selections, evaluation, and termination
- procedure for processing and monitoring credentials if required

As employees of an affiliated charter school within the Los Angeles Unified School District, all Alexander Science Center School staff members (certificated, classified, and administrative) will continue to be covered by all federal, state, and LAUSD employee benefits and will be represented by employee unions: UTLA, AALA, Local 99, Teamsters. Employees will continue to be covered by STRS , PERS, and PARS.

Retirement Systems

STRS

All full-time certificated employees will participate in retirement organizations of the Los Angeles Unified School District.

PERS

Classified employees currently contributing to PERS shall continue to contribute to PERS in a manner consistent with applicable state and federal law. Employees contributing to PERS must also contribute to Social Security because PERS coordinates retirement benefits with Social Security.

Social Security

All employees who must contribute to Social Security according to Federal and State laws will continue in the same manner with employee withholding and LAUSD matching at the rates prescribed by law.

Other Benefits

As LAUSD employees, administrators, faculty and staff will receive all appropriate benefits in compliance with state and federal laws regarding employee benefits and pursuant to applicable collective bargaining agreements.

Employee Complaints and Grievances

Alexander Science Center School adheres to the principles of progressive discipline in resolving issues with employees. In accordance with union contracts, all employees are offered support and guidance regarding job performance. All evaluations and documentation will be completed in a timely manner according to contract provisions.

Before filing a formal grievance, employees are encouraged to make a reasonable attempt to resolve a dispute or complaint by means of an informal conference with the immediate administrator. However, the grievance must be filed within the time limits required under the union contract.

In the case where a grievance is filed, Alexander Science Center School follows procedures outlined in the LAUSD/UTLA Collective Bargaining Agreement, Article V, Section 7.0. Matters regarding employees from other bargaining units (Local 99, Teamsters) will follow the procedures outlined in their contracts.

To ensure due process for all employees, all procedures will be in alignment with the respective contracts of LAUSD with UTLA, Local 99, and Teamsters.

ELEMENT 12 – Attendance Alternatives

“The public school attendance alternatives for pupils residing within the school district who choose not to attend charter schools.” Ed. Code 47605 (b)(5)(L)

The Alexander Science Center School is a school of choice. No student is required to attend, and no employee is required to work at the school. LAUSD students living within the attendance area who do not wish to attend the Alexander Science Center School may attend another school in LAUSD. Alternatives to the Alexander Science Center School for these students living within LAUSD attendance boundaries who opt not to attend the Alexander Science Center School are the same as those offered to all other students currently residing in the district.

Parent(s) or guardian(s) of each pupil enrolled in the charter school shall be informed that the pupil has no right to admission in a non-charter district school (or program within a district school) as a consequence of enrollment in the charter school, except to the extent that such a right is extended by the district.

The governing board of a school district shall not require any pupil enrolled in the school district to attend a charter school.

The address of the Alexander Science Center School is 3737 South Figueroa St., Los Angeles, CA 90007.

The phone number of the Alexander Science Center School is 213-746-1995.

The contact person for the Alexander Science Center School is Paula Denen.

The number of rooms at the Alexander Science Center School is 28.

The grade configuration is K-5.

The current number of students enrolled in the Alexander Science Center School is 606.

The operational capacity of the Alexander Science Center School is 840.

The instructional calendar follows that for all single track LAUSD elementary schools. Please see Element I.

The bell schedule for the Alexander Science Center School: please see Element 1.

If space is available, traveling students will have the option to attend.

Pupils who choose not to attend the Alexander Science Center School may choose to attend other public schools in their district of residence or pursue an interdistrict-transfer in accordance with existing enrollment and transfer policies of the district.

ELEMENT 13 – Employee Rights

“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.” Ed. Code 47605 (b)(5)(M)

As an affiliated charter school, all administrators, faculty and staff of the Alexander Science Center School will be LAUSD employees. All employees will be hired by LAUSD and maintain the same relationships to all bargaining units.

If, for any reason, Alexander Science Center School closes or LAUSD closes Alexander Science Center School, all staff members at the time of such closing will retain their status (and all concomitant rights and benefits) as LAUSD employees.

As LAUSD employees, Alexander Science Center School employees are subject to District decisions regarding Reductions in Force (RIF).

To Director of Charter Schools: Director of Charter Schools Division
Los Angeles Unified School District
333 South Beaudry Avenue, 20th Floor
Los Angeles, California 90017

- (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 claim or controversy (“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 controversy, claim, or dispute cannot be resolved by mutual agreement at the Issue Conference, then either party may request that the matter be resolved by mediation. Each party shall bear its own 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 the Issue Conference. The parties shall mutually agree upon the selection of a mediator to resolve the controversy or claim at dispute. The mediator may be selected from the approved list of mediators prepared by the American Arbitration Association. Mediation proceedings must be administered in accordance with the mediation rules or guidelines of the American Arbitration Association.
- (4) If the mediation is not successful, then the parties agree to settle the controversy, claim or dispute by arbitration conducted by a single arbitrator in accordance with the guidelines of the American Arbitration Association. The arbitrator must be an active member of the California State Bar or a retired judge of the state or federal judiciary of California. Each party shall bear its own 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. Each party shall bear their own costs and expenses.
- (5) However, any party who fails or refuses to submit to arbitration shall bear all costs and expenses incurred by such other party in compelling arbitration of any controversy, claim, or dispute.

ELEMENT 15 – Employer Status and Collective Bargaining

“A declaration whether or not the charter school shall be deemed the exclusive public school employer of the employees of the charter school for the purposes of the Educational Employment Relations Act (Chapter 10.7, commencing with Section 3540, of division 4 of Title 1 of the Government Code).” Ed. Code 47605 (b)(5)(O)

As an affiliated charter school, the Alexander Science Center School will adhere to Los Angeles Unified School District policies and procedures that are in-line with the Alexander Science Center School Charter provisions and with respect to all existing collective bargaining agreements Alexander Science Center School staff are employees of LAUSD.

- **Instructional Program:** The Science Center staff and teachers can develop and implement a unique Science and Math focused instructional program and teacher professional development program that emphasizes the use of technology as defined in the Charter
- The principal and teachers will be evaluated on their ability to develop the necessary skills and to implement the instructional program as defined in the Charter
- To accomplish the mission and vision of the Dr. Theodore T. Alexander Jr. Science Center School, we may require teachers to participate in professional development activities prior to the start of each school year. The number of days of professional development will be set prior to the end of each school year and will not exceed ten (10) days. These professional development days are in addition to any District Buy-Back or Pupil Free Days. Teachers will be compensated at their regular pay rate. The professional development will be a collaborative effort by both LAUSD and the California Science Center to provide teachers with the skills, materials, knowledge and confidence to accomplish the school’s dynamic vision and deliver the unique science, math and technology instructional program as defined by the School’s Charter. Professional development activities will be differentiated for grade appropriate instruction and content. Teachers will participate in the development and design of the program and where appropriate, will facilitate components of the professional development activities.

As LAUSD employees, Alexander Science Center School employees are subject to District decisions regarding Reductions in Force (RIF).

ELEMENT 16 – Procedures to be Used if the Alexander Science Center School Closes

“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.” Ed. Code 47605 (b)(5)(P)

Procedures to be used if the Alexander Science Center School closes (Element 16) is defined in the Alexander Science Center School and Center for Science Learning Lease Agreement (2000) and the Joint Participation Agreement between the Los Angeles Unified School District and California Science Center (2002). The terms and conditions of the Lease Agreement and the Joint Participation Agreement may be amended pursuant to a fully executed agreement between all parties as stated in the Joint Lease and Participation Agreements.

Revocation

The District may revoke the charter of the Science Center if the Science Center commits a breach of any terms of its charter. Further, the District may revoke the charter if the Science Center 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.

Furthermore, the District may revoke the charter of the Alexander Science Center School on any of the following grounds

- the Alexander Science Center School committed a material violation of any of the conditions, standards, or procedures set forth in the charter
- the Alexander Science Center School failed to meet or pursue any of the pupil outcomes identified in the charter
- the Alexander Science Center School failed to meet generally accepted accounting principles, or engaged in fiscal mismanagement
- the Alexander Science Center School violated any provisions of law.

Prior to revocation, and in accordance with Cal. Educ. Code section 47607(d), the District will notify the Alexander Science Center School in writing of the specific violation, and give the Alexander Science Center School a reasonable opportunity to cure the violation, unless the District determines, in writing, that the violation constitutes a severe and imminent threat to the health or safety of the pupils.

Notwithstanding the immediately preceding language, revocation proceedings are not subject to the dispute resolution clause set forth in this charter.

Charter Renewal

The Alexander Science Center School must submit its renewal petition to the District’s Charter Schools Division no earlier than September of the year before the charter expires.

Affiliated Charter Closure Procedures

If, for any reason, LAUSD closes Alexander Science Center School, all staff members at Alexander Science Center School at the time of such closing will retain their status (and all concomitant rights and benefits) as LAUSD employees. The procedures for closing shall ensure the disposition of assets and liabilities of the charter school, including plans for disposing of any net assets and for the maintenance and transfer of pupil records.

The following are closing procedures that abide by Cal. Educ. Code §47605(b)(5)(P), should the school close for any reason. The decision to close Alexander Science Center School either by the Alexander Science Center School governing body or by the LAUSD Board, will be documented in a Closure Action. The Closure Action shall be deemed to have been automatically made when any of the following occur: the charter is revoked or not renewed by the LAUSD Board of Education; the charter school governing body votes to close the school; or the charter lapses. In the event of such a Closure Action, the following steps are to be implemented:

1. Written notification to parents/guardians/caregivers of the enrolled students of the Alexander Science Center School will be issued by Alexander Science Center School within 72 hours after the determination of a Closure Action. A sample copy of the language used in the written notification is also to be made to LAUSD within the same time frame.
 - a. The written notification will also include information on assistance in transferring each student to another appropriate school, and a process for the transfer of all student records.
 - b. The process for transferring student records to the receiving schools shall be in accordance with LAUSD procedures for students moving from one school to another.
 - c. Parents will also be provided with student information that includes closure notice, grade reports, discipline records, immunization records, completed coursework and credits that meet graduation requirements.
2. The terms of the Alexander Science Center School and Center for Science Learning Lease (2000) and the Joint Participation Agreement between the Los Angeles Unified School District and California Science Center (2002) shall govern the future use of the School.
3. Written notification to LAUSD of the list of returning students and their home schools, to be made within 72 hours of the determination of the Closure Action.
4. A timely transfer of student records to the receiving schools will be made by the charter school for those students not eligible to remain at the location of the school, due to LAUSD boundaries and attendance policies. Any decision to transfer students from Alexander Science Center School will be conducted in conjunction with consultation with LAUSD, who may decide to allow students to complete the school year at the charter school location which has reverted to an LAUSD district school, unless the transfers at the request of the students' parents/guardians/caregivers.

5. Written notification to the California Department of Education and the Los Angeles County Office of Education of the Closure Action shall be made by the LAUSD CSD and Alexander Science Center School by registered mail within 72 hours of the decision to Closure Action.
6. Transfer of student records to the receiving schools, within seven calendar days from the determination of an Action to Close.
7. Alexander Science Center School shall allow LAUSD access, inspection and copying of all school records, including financial and attendance records, upon written request by LAUSD.

Facilities

If the Alexander Science Center School fails to submit a certificate of occupancy, issued by the applicable permitting agency, to the District not less than 45 days before the school is scheduled to open, it may not open unless an exception is made by the Charter Schools Division. If the Alexander Science Center School moves or expands to another facility during the term of this charter, the Alexander Science Center School shall provide a certificate of occupancy, issued by the applicable permitting agency, to the District for each facility at least 45 days before school is scheduled to open in the facility or facilities. The Alexander Science Center School shall not open in any location for which it has failed to timely provide a certificate of occupancy, issued by the applicable permitting agency, to the District, unless an exception is made by the Charter Schools Division. Notwithstanding any language to the contrary in this charter, the interpretation, application, and enforcement of this provision are not subject to the Dispute Resolution Process (Element 14).

JEFFREY N. RUDOLPH
PRESIDENT AND CEO
CALIFORNIA SCIENCE CENTER

Jeffrey Rudolph is the President and CEO of the California Science Center and the President of the California Science Center Foundation. He provided the leadership for the planning, design, fundraising and implementation of the California Science Center Master Plan which transformed the California Museum of Science and Industry into the new California Science Center and created an award winning Exposition Park Master Plan to guide the redevelopment of Exposition Park in central Los Angeles.

The California Science Center's first phase opened to the public in February 1998 and immediately received international recognition and public support. Implementation of the Master Plan for the California Science Center and Exposition Park reached a milestone with the construction of the Alexander Science Center School and Center for Science Learning, an innovative facility combining a kindergarten - 5th grade school developed in partnership with the Los Angeles Unified School District and a professional development center modeling best practices in science, math and technology education and providing resources to teachers, community youth group leaders and parents. Improvements to Exposition Park also are continuing, including new green space, community recreational facilities and underground parking facilities. Over \$250 million of the estimated \$400 million total cost of this multi-phased project has already been committed.

Rudolph received an M.B.A. from Yale University and a B.A. from the University of California at Berkeley.

Prior to becoming President and CEO of the California Science Center, he served as its Executive Director and Deputy Director, as the Executive Director of the State of California's Intergovernmental Personnel Act Advisory Board, and as a Program Analyst for the Legislative Budget Committee of the California Legislature.

Rudolph is Immediate Past Chair of the American Association of Museums. He served as Chair from 2004-2006, is currently Chair of the AAM CEO Search Committee. He previously served as a member of the Board of the American Association of Museums and as Vice Chair. Rudolph is also a Past President of the Association of Science-Technology Centers. He also serves on the Boards of the National Health Science Consortium, Science Museum Exhibits Collaborative, and Museum Trustees Association Advisory Council of Directors. He has previously served as Chair of the Western Museums Association Annual Meeting, and as a member of the Board of the California Association of Museums, the Organizing Committee for the World Congress of Science Centers and the National Academy of Science's Defense Reinvestment Advisory Board.

He serves as a member of the California Council on Science and Technology, and on the Board for EXPO Center. Rudolph is often a featured speaker at Science Center and Museum Conferences worldwide and frequently conducts accreditation reviews and assessments for the American Association of Museums and the Association of Science-Technology Centers. He enjoys outdoor sports and is a Deputy Patrol Leader for the Squaw Valley Ski Patrol. He also enjoys adventure travel and has journeyed to rain forests in remote regions of New Guinea, Borneo, Sumatra, and Bolivia.

California Science Center

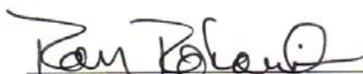
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Stacey Williams
Jeffrey N. Rudolph
President
As of January 2006

Governing and Operating Committee
of
The Dr. Theodore T. Alexander, Jr. Science Center School
Resolution for Charter Renewal
January 21, 2009

The Governing and Operating Committee of the Dr. Theodore T. Alexander, Jr. Science Center School hereby designates:

Jeffrey Rudolph, President and CEO of the California Science Center, as the lead petitioner, Paula Denen as the principal of the school, and Letice Williams as the on-site financial manager for this charter renewal petition. This Committee hereby officially submits this renewal petition for the Dr. Theodore T. Alexander, Jr. Science Center School to the Los Angeles Unified School District.



Ron Rohovit, Secretary
Deputy Director, Education
California Science Center

JANUARY 21, 2009

Date: January 21, 2009

