#### **PUBLIC SCHOOL CHOICE 3.0**

# INSTITUTE OF ENVIRONMENTAL SCIENCE AT WALNUT PARK MIDDLE SCHOOL SRMS#3



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**Teacher-Leadership for Social Responsibility** 2012-2013



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### A. EXECUTIVE SUMMARY ANALYSIS Unwavering Focus on Academic Achievement

#### A. Summary Analysis ( 7 pages + attachment P)

The mission statement describes the purpose and aim of the school. It should be clear, focus on improving educational outcomes, and establish a set of priorities that are meaningful, manageable, and measureable.

The vision statement describes aspirations of the school. This includes what student will know and be able to do as well as the rigorous intellectual habits of mind, essential skills, knowledge and attributes they will posses upon matriculation that will prepare them to be successful adults in the 21st Century.

#### 1. Mission and Vision

Our mission and vision for the Institute of Environmental Science (IES) at Walnut Park Middle School is founded on the belief that every student should develop a passion for science and math through problem-based learning experiences that teach students how to engage in the scientific process of inquiry, research, experimentation, and communication. We fully believe that in order for our students to abundantly participate as 21st century global citizens and to compete in a global economy, they must acquire the skills to access and pursue college/career program in science, math, technology, or engineering, as outlined in The Partnership for 21st Century Skills framework: critical thinking and problem solving; communication and technology; collaboration; creativity and innovation; and core knowledge. In safe, personal relationships among students and teachers, students and students, and students and parents/community, learning is constructed through the scientific process and logical thinking. At the Institute of Environmental Science (IES) at Walnut Park MS students learn how to critically examine environmental issues or problems affecting the quality of life within the community.

**Our mission** at the Institute of Environmental Science (IES) at Walnut Park MS is to ensure students have the skills, knowledge, and behaviors to complete a college course of study successfully and without remediation. Our **purpose** is to create a student-centered learning environment which ensures young people are ready for college-career programs. Our **educational agenda aims** to provide **meaningful**, **manageable**, **and measureable** education for our students by guaranteeing:

(1) Each student will be college-career ready by receiving a rigorous CA/Common Core State Standards-based instructional program with a highly qualified teacher, as measured by meeting proficiency on district periodic assessments, state exams, and school marks.

- (2) Each student will demonstrate effective oral and written communication skills in order to close the achievement gap between English learners and their English-proficient peers, as measured by the California English Language Development Test (CELDT).
- (3) Each student will participate in a safe, personalized Environmental Science Community (ESC), that engages inquiry and problem-based learning in environmental science, as measured by successful completion of sustainability projects.
- (4) Each student will participate in a sustainability project in which students question, research, investigate, and conduct experimentation addressing the question of how humans can achieve a mode of life that meets our needs to survive in a way that can be continued indefinitely without destroying ecosystems and their bio-diversity.
- (5) Each student will develop 21st Century learning skills: critical thinking and problem solving; communication and technology; collaboration; creativity and innovation; and core knowledge, as measured by successful completion of the ESC sustainable project.

Our vision for the Institute of Environmental Science (IES) at Walnut Park MS is "In a personalized, safe learning environment, students will demonstrate proficiency in a rigorous, college-career readiness, CA/Common Core standards-based instructional program aligned with community-based environmental sustainable projects. Through an integrated study of the sciences, math, technology, and engineering, students will collaborate across grade levels to critically solve real-world community-based environmental problems. Our students will be capable, articulate, responsible citizens who take ownership for their learning as measured by state and federal-mandated assessments, LAUSD periodic assessments, project-based learning, and common formative assessments."

#### 2. School Data Analysis

Describe the student population that your proposed school will serve, including the interests and critical educational needs of the students. Explain your teams' experience serving a similar population of students, and how your proposed school will meet the identified needs of these students.

Institute of Environmental Science (IES) at Walnut Park MS will receive students from Walnut Park ES and alleviate overcrowding at Gage MS, Southeast MS, and South Gate MS. Of these schools, Gage MS and South Gate MS are identified as Program Improvement 5+ and have not met their API Growth Targets for over five years. Gage MS had growth in API from 645 (2009-2010) to 652 (2010-2011). None of these schools have met their AYP for 2010-2011 school year. The **student population and community that will be served at IES Walnut Park MS** will be largely comprised of Hispanic/Latino origin, 25%+ are English learners (EL) and almost 90% will be eligible for free or reduced meals. In addition to the unique needs of EL's, about 10% of the

student population is either a student with a disability (SWD) or gifted and/or talented (GATE); both subgroups requiring specific instructional strategies to meet their needs.

#### Student Demographics of Institute of Environmental Science (IES) at Walnut Park MS

LAUSD Report Card	Gage MS	Southeast MS	South Gate MS	Walnut Park ES
Met AYP 2010-11	No	No	No	No
Met API 2010-11	No	No	No	No
Latino	99%	99%	99%	100%
White	0.0%	0.0%	0.0%	0.0%
African-Amrican	0.0%	1%	0.0%	0.0%
English Learners (EL's)	27%	26%	23%	36%
Re-designated (RFEP's)	48%	45%	42%	16%
Students with Disabilities (SWD's)	9%	10%	11%	7%
Econ. Disadvantaged	89%	93%	88%	100%
Gifted and Talented (GATE)	11%	8%	11%	2%

#### The major strengths and opportunities for improvement offered at (IES) at Walnut Park MS are:

- ❖ All Students will use Algebra and/or Geometry to solve authentic, hands-on environmental community-based problems in Environmental Science.
- All Students will receive an accelerated program in Algebra, Geometry, and/or Trigonometry using the Singapore Math Model
- ❖ All Students will use effective oral and written communication skills by publicly presenting their research findings and solutions within community forums.
- All Students will participate in small Environmental Science Communities (ESC's) and maintain electronic portfolios in preparation for articulation to high school.

#### Gaps in achievement can be attributed to:

- 1. Limited access to higher order mathematics (Algebra and Geometry) for all students
- 2. Limited academic and language achievement by Long-Term English Learners (LTEL's)
- 3. Limited academic achievement in ELA and mathematics for SWD's

Baseline Data for Entering Students: Institute of Environmental Science (IES) at Walnut Park								
MS (LAUSD Performance Meter)								
	Gage MS - %		South Gate MS		Southeast MS		Walnut Park	
			-	%	-	%	ES - %	
Academic Year	09-10	10-11	09-10	10-	09-10	10-11	09-10	10-11
				11				
CST/ELA Trends	27.4	30.0	34.6	34.6	32.3	32.3	45.9	45.2
ELA/5th Prof./Adv.	N/A	N/A	N/A	N/A	N/A	N/A	55.7	38.9
ELA/6th Prof./Adv.	29.9	28.9	33.8	31.8	31.4	27.2	N/A	N/A
ELA/7th Prof./Adv.	23.5	34.6	35.4	38.5	32.3	35.7	N/A	N/A
ELA/8th Prof./Adv.	29.3	26.2	34.6	33.2	33.1	33.2	N/A	N/A
CST/Math Trends	30.0	28.6	37.0	30.5	23.1	23.8	50.7	54.3
Math/5th Pro/Adv	N/A	N/A	N/A	N/A	N/A	N/A	15.2	30.8
Math/6th Pro/Adv	30.9	26.7	35.5	32.0	28.6	25.8	N/A	N/A
Math/7th Pro/Adv	27.4	30.7	44.0	32.9	29.8	33.0	N/A	N/A
General Math	16.0	13.3	N/A	N/A	4.6	0.0	N/A	N/A
Algebra-I Pro/Adv	44.6	37.9	39.0	27.0	13.7	13.3	N/A	N/A
Geometry Pro/Adv	85.2	53.1	N/A	N/A	N/A	N/A	N/A	N/A
SWD's CST/ELA Basic +	10.3	9.2	26.7	18.4	13.0	21.8	35.0	47.7
SWD's CST/Math Basic +	16.2	16.0	22.8	21.3	16.7	21.2	45.0	46.5
EL's CST/ELA Basic +	16.3	16.4	23.9	24.1	26.9	17.1	58.0	55.6
EL's CELDT Prof.+	48.8	37.9	50.4	50.0	44.4	51.7	57.6	49.6
AMAO #2: LTEL's >5years	32.6	27.5	33.3	34.3	32.5	34.8	26.7	23.9
EL's Suspension >1x	11.9	9.3	8.0	6.5	4.8	9.1	0.0	0.2
Students Attendance	65.6	67.3	65.5	68.8	69.2	68.2	62.3	62.3
≥96%								
Student Transiency	23.6	20.0	14.8	14.4	16.1	14.2	13.4	13.7

#### Top priorities and action steps for IES are:

- 1. Implement Professional Development (PD) to All Teachers on (1) California Common Core State Standards and inter-disciplinary literacy; (2) research-based methodologies and strategies that support academic achievement for All Students; and inquiry-based environmental studies.
- 2. Implement a school-wide seven-period day for Environmental Science Communities (ESC's).
- 3. Implement a practice of sharing knowledge and expertise within professional learning communities.

Based on Baseline Data, **realistic and reasonable goals projected** for Instructional Years 1-3 are:

Institute of Environment Science (IES) at Walnut Park MS Performance Plan							
	Y	'ear 1	Year 2		Ye	ear 3	
	(201	12-2013)	(2013-2014)		(2014-2015)		
TARGETS	IES	LAUSD	IES	LAUSD	IES	LAUSD	
CST/ELA Prof./Adv.	40%	50%	50%	54%	55%	N/A	
CST/Math Prof./Adv.	25%	41%	35%	47%	45%	N/A	
On Track for Meeting	40%	50%	50%	75%	65%	N/A	
A-G Requirements							
Algebra Prof.	30%	47%	40%	55%	50%	N/A	
Reclassification Rates	24%	24%	27%	27%	LAUSD	N/A	
Students w/96%+ Attendance	71%	71%	76%	76%	LAUSD	N/A	

#### 3. Applicant Team Analysis

The Local District and its collaborative team of the **Teacher-Leaders for Social Responsibility (T-LSR)**, along with United Teachers of Los Angeles (UTLA) have extensive experience (see Applicant History Data Sheet Appendix F) in serving the diverse instructional needs of the typical student demographics of Gage MS, South Gate MS, Southeast MS, and Walnut Park ES, the projected enrollment to be served at the Institute of Environmental Science (IES) at Walnut Park. Local District 6 provides a level of support and resources to manage this new middle school, to which other entities may not have the capacity:

- ❖ A proven track record of educating diverse learners: EL's; SWD's; GATE; and Title I.
- A data collection and analysis information systems, and support for ongoing progress monitoring.
- An effective communication structure that ensures articulation/communication among feeder schools - elementary, middle, and high schools.
- ❖ A zone of choice option in which middle school students will be eligible to select school that meet their interests or needs.

Key community partnerships are the Claremont Colleges; and University of Southern California Sea Grant.

As the collaborative team of **Teacher-Leaders for Social Responsibility (T-LSR,** we have many years of experience working with English Learners. Our team members' background experiences are as follows:

Denise Altamirano is a parent volunteer at Woodlawn Elementary, who has supported many school fund-raising events. She supports instructional practices within the classroom setting by providing assistance to teachers by way of preparing materials for student use. Although her community of residence is Walnut Park, she has been commuting to Woodlawn Avenue ES in the City of Bell because of her strong belief in a bilingual education for her daughter. Currently, she is pursuing advanced education in a nursing program at East Los Angeles City College, and interns at St. Francis Medical Center in Lynwood. In addition,, she and her daughter volunteer at SEEACA, an animal shelter in Downey.

Aida Coronado-DeLeon is a Title III Access to Core Expert at Local District 6 and possesses over 25 years experience in serving English learners as a teacher and Categorical Program Advisor. Ms. Coronado-DeLeon serves as an instructional leader, implementing professional development associated with English learners, such as SDAIE, Master Plan Program, ELD Practicum to fourteen Title III Instructional Coaches at LD6. Aida has a BCC (bilingual certificate of competency) and a multiple subject credential with a bilingual emphasis. She was instrumental in designing a research-based dual language program at Woodlawn Avenue ES which was modeled on the work of Mora Genesee on bilingual education. In addition, Ms. Coronado-DeLeon has extensive training on the Scottish Storyline, which was implemented in her multi-age classroom. As the categorical advisor ensured federal and state compliance for categorical programs. In addition, she oversaw the implementation of a model Parent Center at Woodlawn Ave ES.

Yolanda Delgado has 22 years of experience as a bilingual teacher, currently in the dual-language program at Woodlawn Ave ES. Through collaboration with the Pacific Theater Group, a Wonder of Reading state-of-the-art library at Woodlawn Ave ES was built. Trained by Alma Flor Ada, Yolanda has implemented family literacy programs. Ms. Delgado has successfully raised student achievement. Year after year, over 80% of her students score proficient or above as measured on the *California Standards Test* (*CST*) and LAUSD District Performance Assessments. In addition, Ms. Delgado continues to successfully reclassified over 90% of her students. Ms. Delgado received training on the Scottish Storyline and has implemented the practice in her classroom.

Carlos Garibaldi is the LD6 English Learner Coordinator and is responsible for Title III Access to Core Experts, Coaches, and school-site Categorical Program Coordinators. Carlos provides professional development in Project GLAD, Thinking Maps™, and

Adaptive Schools. With 15 years as an educator, Mr. Garibaldi provides support to the District EL Advisory (DELAC), a parent group that advises on behalf of the local district's English learners. With a credential in Counseling and Administration, Mr. Garibaldi supported special education students as an Assistant Principal Elementary Instructional Specialist (APEIS) at Ellen Ochoa Learning Center.

Liliana Herrera is currently a Title III Access to Core Expert at LD6 providing cognitive coaching and instructional support to fourteen Title III instructional coaches. Lilly has over seventeen years of secondary experience as a history teacher and AVID Coordinator. At Hollenbeck MS, Ms. Herrera was a Community Representative and a key liaison between parents and the school community, where she organized the first Parent Center. Ms. Herrera has extensive experience with State and Federal compliance guidelines.

Hilda Mehra-Montoya, a bilingual teacher in the dual-language program at Woodlawn Ave ES, has twenty-eight years of classroom experience and extensive expertise working with English learners in multi-age instructional settings. By incorporating project and performance-based learning experiences, interdisciplinary literacy, inquiry math and science, and Scottish Storyline, her effective instruction has resulted in closing the achievement gap with her students, with over 70% of her students scoring proficient or above on the *CST* and *CELDT* (*California English Language Development Test*). As a LEARN Lead Teacher through the U.C.L.A. Advanced School of Managements, Hilda helped empower teachers through school-based management.

Alda Bernice Merino-Caan is the Title III Access to Core Instructional Coach at Gage MS providing support to both the English and Math Departments by way of cognitive coaching, the lesson study cycle, and meta-cognitive strategies for diverse learners. With nearly 30 years experience in serving English learners as a general and special education teacher and as a GATE coordinator, she has led professional development workshops and conferences throughout LD6 and L.A. county in research-based methodologies and instructional strategies. Bernice was the lead architect in designing a Science and Social Studies content-based ELD curriculum at Woodlawn Ave ES and implemented a Family Science program there in collaboration with the U.S.C. Sea Grant program. Bernice is a NBC Teacher, Individuals with Exceptional Needs.

Natividad Rozsa is a Local District 6 Principal-Leader and Director of School Services. She has over 35 years experience in serving English learners and has instituted systems and practices to increase student academic achievement and English language proficiency. As the principal and instructional leader at Woodlawn, she raised student achievement in English language arts, mathematics, and science for both students in the general education and special education programs. In addition, while overseeing and monitoring the bilingual program, she implemented a Dual-Language Program which is now in its third year. As a Principal-Leader and Director of School Services, Mrs. Rozsa supervised the re-structuring of Huntington Park High School. Her experiences as a leader will be an asset to our learning environment.

### B. INSTRUCTIONAL PLAN: Uwavering Focus on Academic Achievement

#### B-1 Curriculum and Instruction ( <u>18 pages + attachments: LIS Waiver #2, TA page 2; LIS Waiver #6, TA page 3; LIS Waiver #3, TA page 2</u>)

Clearly explain how your plan is designed specifically with the student population in mind. Address how the program is differentiated to maximize learning and engagement for students of all needs and performance levels.

a. Instructional Program and Instructional Philosophy: Provide a thorough description of the proposed Instructional Program and the underlying theory that drives it. How does the proposed Instructional Program align with the critical educational needs of the population of students you propose to serve? Include an explanation of what students should know and be able to do as well as the rigorous intellectual habits of mind, essential skills, knowledge and attributes they will possess upon matriculation that will prepare them to be successful adults in the 21st Century.

Our vision for the Institute of Environmental Science (IES) at Walnut Park is "In a personalized, safe learning environment, students will demonstrate proficiency in a rigorous, college-career readiness, CA/Common Core standards-based instructional program aligned with community-based environmental sustainable projects. Through an integrated study of the sciences, math, technology, and engineering, students will collaborate across grade levels to critically solve real-world community-based environmental problems. Our students will be capable, articulate, responsible citizens who take ownership for their learning as measured by state and federal-mandated assessments, LAUSD periodic assessments, project-based learning, and common formative assessments."

Our visionary approach to learning is the result a comprehensive needs analysis of several factors: (1) an adherence to research-based best practices; (2) a review of available programs in the service area of this new middle school; (3) consideration for preferences and needs expressed by parents, students and community members through surveys and public meeting; and (4) student demographics and performance data from our surrounding middle and elementary schools.

#### The Underlying Theory of our Instructional Program:

There is a growing body of research on cognitive processing that emphasizes the student's role in the learning process (*Constructivism and Learning – Two Perspectives*. Excerpt *Phi Delta Kappan:*697-702, May). Constructivist theory is based on the work of Jean Piaget and Lev Vygotsky, among others, and the following premises:

 Culturally Relevant and Responsive – In order for learning to occur, the learner must actively construct new learning based on his/her own schemata; that is, an existing framework of prior knowledge, beliefs, and personal experiences.

- 2. Social Engagement Through questioning, investigation, and problem-solving, learners are actively engaged with others in the learning process.
- 3. Authentic Real-World Problem Solving –Real-world problem solving anchors what is learned in project-based experiences.
- 4. Constructivist Curriculum As learners pursue their questions, they begin to develop new and more complex questions. A constructivist curriculum has both depth and complexity.
- 5. Technology Informational and communication technology is embedded within the constructivist curriculum.
- 6. Teacher Empowerment In a constructivist classroom, the teacher is facilitatormentor, providing learning experiences organized around big ideas.

Our rationale for the Constructivist model is the emphasis on a student-centered learning environment. Working collaboratively teachers plan explicit and purposeful instruction that invites students to participate in their own educational program by engaging and motivating learners to question, investigate, and reason. Out of this negotiation comes a powerful sense of ownership and commitment on the part of the learner.

We at the Institute of Environmental Science (IES) at Walnut Park Middle School assert that all students not only have a right to access a rigorous academic curriculum, but also have a right to engage in a rigorous learning environment. Rigor is defined as teachers having high expectations that all students, including those identified with disabilities, English learners, Title I, and gifted and talented will achieve proficiency in a standards-based core-content. We embrace an adaptive pedagogy in which multiple instructional strategies are utilized to support active learning (Redesigning Schools. What Matters and What Works. Linda Darling-Hammond.2002). Using what Howard Gardner refers to multiple intelligences, students will engage in guided inquiry and experimentation, small group work, discussion, project-based collaboration, independent work, book and technology research, model construction, and project/performance-based expression of ideas, all 21st century skills for college-career readiness.

IES has determined the following research-based methodologies (Problem-Based Learning, SDAIE, AVID, Scottish Story Line, and Singapore Math) to be implemented across all core content areas and to be aligned with research-based strategies (Marzano's high-yield strategies) that will support student learning. Classroom instruction will be scaffold to support students as they engage in Bloom's higher-level critical thinking (Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation) and solve real-world environmental problems. Based on Hammond's research (2002) Students will develop the 16 Habits of mind – persistence; clear communication; perseverance; data collection; empathy; creativity; flexibility; inquisitiveness; reflection; responsibility; precision; humor; inquiry; independence; resiliency; and openness – requiring students to: (1) weigh and use evidence; (2) speculate on alternatives; (3) address multiple perspectives; (4) assess the value of the

ideas they have studies; (5) make connections among ideas; and (6) present their ideas clearly and with appropriate use of conventions.

**Evidence-based (Problem-Based Learning)** Rigor stretches the mind, engages the body, and refreshes the soul. In project-based learning, students are engaged in challenging work solving real-world environmental problems through research, inquiry, collaboration, and negotiation. As an assessment model, it provides clear evidence of student learning as students take ownership by providing models, demonstrations, and exhibitions of what has been learned. At the IES we will use the inquiry-based model in environmental science for our Project-Based Learning (PBL). **Specific methodologies and programs that will be use and IES rationale are:** 

#### **School-Determined Rationale for Environmental Science:**

- Environmental science examines the impact humans are having on the environment, and the economic and socio-political ramifications. Therefore, the study of environmental science includes student understanding of how we use and interact with our environment, as well as how, to communicate effectively.
- ➤ Environmental science offers students the opportunity to study controversial topics, while promoting problem-solving skills. Solving environmental problems requires both teams skills and leadership abilities, necessary for all professions.
- Environmental science utilizes higher order mathematics, such as Algebra, Geometry, and Trigonometry, to engineer and design solutions to problem-based questions.
- ➤ Environmental science prepares students for careers in STEM (science, technology, engineering, and mathematics) industry, research, and academics.
- ➤ Only Gage Middle School offers a Math, Science, Technology Magnet program.

#### School-Determined Rationale for Problem-Based Learning (PBL):

- ➤ Students learn math and science when they experience challenging problems that promote dissonance and engages them in authentic, inquiry-based learning. Through thought, habits of mind, and behaviors associated with problem solving, problem-based learning (PBL) becomes a powerful vehicle for student investigations. PBL is a robust, constructivist process, in which teachers are meta-cognitive coaches guiding students through the inquiry, while students engage in the science of inquiry, investigations and experimentation, research, and publication.
- Unlike other science programs, PBL focuses on three key features: (1) initiating learning with a problem; (2) exclusive use of ill-defined problems; and (3) teacher as meta-cognitive coach (Shelagh A. Gallagher; Sher, B.T., Stepien, W.J.; and Workman, David; School of Science and Mathematics. Vol.95; Issue 3; March 1995.

- In typical classroom problem-solving occurs after students have been given all the information needed to solve the problem. As a result, students come to believe that solutions to problems are available and just waiting to be disclosed. In real life, problem-solving occurs when confronted by a problem, and individuals are compelled to change their way of thinking or preconceived notions. Students become stakeholders in and take ownership for ill-defined problems.
- ➤ PBL promotes science learning by going well beyond knowing to evidence gathering and information analysis. Students come to understand science through exploration, discovery, questioning, investigation, and persistence. Students create meaning through inquiry and application.
- ➤ In PBL learning students are self-directed; they negotiate and collaborate with others to find solutions to problems.

#### **School-Determined Rationale for Technology**

Students should have a clear understanding of the practical application of technology for information gathering, and be able to apply the underlying principles of how things behave. However, when students use technology to design and engineer solutions to authentic problem-solving, they utilize design strategies, measurement, data collection, sample treatment, computation, and logic. The nature of science is dependent on students ability to use technology for scientific inquiry and mathematical modeling.

Engineering technology allows students to design solutions to ill-defined problems by devising creative and logical approaches and, then, working out the technical details of the construction. Through technological constructions, students think as scientists, engineers, and mathematicians. As scientists students come to understand their world; as engineers they learn to create solutions to real-world problems; and as mathematicians, students seek to show logical proof that their designs work. Technological engineering is the ethical litmus test of the immediate implications of social success or failure in decision-making and personal benefit or harm.

#### **Specially Designed Academic Instruction in English (SDAIE) Rationale**

Over 99% of the students who choose to attend Institute of Environmental Science at Walnut Park Middle School are Hispanic and of these nearly one-third will be English learners. Almost half of those students who choose to attend IES are reclassified fluent English proficient (RFEP). The SDAIE methodology uses the English language to support English Learners (EL's) in accessing and comprehending the core content (social English, Math, Social Studies, and Science). As a result, EL's gain both subject material and English proficiency.

#### Achievement Via Individual Determination (AVID) Rationale

AVID is a methodology that aligns with our **mission and vision** by transforming teacher behavior and expectations for student achievement. To that end, AVID provides a student-focused learning environment designed to close the achievement gap by improving the performance of all students, especially those (1) who have not traditionally completed the requirements for college entrance; (2) who are underrepresented at four-year colleges and universities; and/or (3) who are the first in their family to go to college. AVID is a college-career readiness methodology that provides academic rigor, academic skills, content knowledge, and social adaptability, all 21st Century Learning Skills.

#### **School-Determined Rationale for Scottish Story Line**

Storyline is a effective methodology to learning and teaching that builds on a key principle of learning: in order for learning to be memorable it must be meaningful. The structure of Storyline provides an opportunity for active learning and engagement by connecting with the learner's prior experiences and enthusiasm to create new learning through storyline. Learners develop a powerful sense of ownership in their learning.

#### **School-Determined Singapore Math Rationale**

Singapore Math methodology places a consistent and strong emphasis on problem solving and model drawing (pre-Algebra) focusing on in-depth understanding of essential math skills, recommended by the National Council of Teachers of Mathematics (NCTM). Results from TIMSS (Trends in International Mathematics and Science Study) reveal significant student gains in math concept development. Singapore Math allow students to accelerate their learning of mathematics and engage in advanced mathematics: Algebra, Geometry, and Trigonometry.

#### Marzano's High Probability Instructional Strategies Rationale

In <u>Classroom Instruction that Works: Research-based Strategies for Increasing Student Achievement</u>, (Marzano, Pickering, & Pollock, 2011), nine high-yield instructional strategies were identify through a meta-analysis of over 100 independent studies. Based on the research nine strategies were identified as having the greatest positive effect for all students, in all subject areas, at all grade levels.

#### **B-1.** Curriculum and Instruction

**b. Core Academic Curriculum:** Describe the core academic curriculum, such as the scope and sequence of skills to be taught across the grade levels as well as the different subjects. If you are proposing a school with a particular focus (e.g. arts, technology, dual-language, etc.), or if you are applying for a pilot or small school, be sure to include a clear explanation of how you will still ensure all students will receive access to the core curriculum.

	IES at Walnut Park MS: Meeting the Needs of Our Students through Research-Based Methodologies and Instructional Strategies					
Methodology	Beneficiaries	Marzano's High Probability Instructional Strategies (% of gain)	Essential Skills/Habits of Mind: How to			
Problem-Based Learning (PBL)	Engages all learners in solving real-world problems through inquiry.	Generating &Testing Hypothesis = 23 Cooperative Learning= 27 Summarizing and Note-taking=34 Cues, Questions, & Advanced Organizers = 22 Reinforcing effort and providing recognition = 29 Setting Objectives and Providing Feedback = 23	<ul> <li>Make connections among ideas</li> <li>Present ideas clearly and with appropriate use of conventions</li> <li>Assess the value of the ideas that have been studied</li> <li>Weigh and use evidence</li> </ul>			
SDAIE-Specially Designed Academic Instruction in English	Addresses the needs of English Learners	Cooperative Learning= 27 Nonlinguistic Representation = 27 Cues, Questions, & Advanced Organizers = 22	<ul> <li>Make connections among ideas</li> <li>Present ideas clearly and with appropriate use of conventions</li> </ul>			
AVID – Achievement Via Individual Determination	Supports learners by changing teacher expectations	Generating & Testing Hypothesis = 23 Cooperative Learning= 27 Summarizing and Note-taking=34 Cues, Questions, & Advanced Organizers = 22 Setting Objectives & Providing Feedback = 23	<ul> <li>Make connections among ideas</li> <li>Assess the value of the ideas that have been studied</li> <li>Weigh and use evidence</li> </ul>			
Scottish Story- Line	Connects prior experience and knowledge; by engaging students in imaginative practical problem solving.	Similarities and Differences = 45 Nonlinguistic Representation=27 Generating & Testing Hypothesis = 23 Cooperative Learning= 27 Summarizing and Note-taking=34 Cues, Questions, & Advanced Organizers = 22 Reinforcing effort and providing recognition = 29 Setting Objectives and Providing Feedback = 23	<ul> <li>Make connections among ideas</li> <li>Present ideas clearly and with appropriate use of conventions</li> <li>Assess the value of the ideas that have been studied</li> <li>Weigh and use evidence</li> </ul>			
Singapore Math (Real-World Problem Solving)	Supports learners by using bar models (a form of pre-algebra).	Cooperative Learning= 27 Nonlinguistic Representation = 27 Cues, Questions, & Advanced Organizers = 22 Generating & Testing Hypothesis = 23	<ul> <li>Make connections among ideas</li> <li>Assess the value of the ideas that have been studied</li> <li>Weigh and use evidence</li> </ul>			

<u>Rigorous Curriculum</u> Rigor is one of those words that has defined a *Transformative* model of education, but yet, very few in education can say what exactly it means. Some have defined *rigor* as a classroom where students are completing endless quantities of worksheets involving drill and practice or increasing graduation requirements as preparation for college-career programs. At the Institute of Environmental Science (IES) at Walnut Park Middle School we believe that to truly understand *rigor* one has to experience it; i.e., see it, feel it, hear it. Rigor should involve a lot of reading, hands-onwork, problem solving, and math. It should also include a relevant content, in which students are engaged in "sinking their teeth" into in-depth learning. At the end of the day, students should feel "stretched", but satisfied, similar to a great physical work-out.

The IES Walnut Park MS, will be comprised of three interdisciplinary Environmental Science Communities (ESC's), in which teachers are facilitator-mentors for sustainability projects. These sustainability projects are based on a real-world problem-solving model that integrates meaningful problem-solving with instruction and reflection. Students will collaborate in across grade-level multi-disciplinary teams to investigate, research, and solve open-ended environmental science problems utilizing technological engineering and mathematics. **Students are empowered to select** a year-long environmental science focus in one of three areas of interest: In addition, **teachers are empowered to select** the focus area they want to facilitate-mentor. Within the ESC's teachers will **collaboratively design** learning experiences around the ill-defined question for problem-based learning. Each ESC will participate in two sustainability projects per year as follows:

*i.* **Autonomy** The Institute of Environmental Science at Walnut Park MS will seek Autonomy to develop a rigorous environmental science curriculum and implement the Scottish Story-Line and Singapore Math methodologies (see *Autonomy* page).

**Autonomy for Environmental Science:** IES at Walnut Park MS will use the GEMS (Great Explorations in Math and Science) curriculum developed at the Lawrence Hall of Science, the public science education center at the University of California at Berkeley. These materials are highly engaging providing students hands-on experience with experimentation in the introduction of essential, standards-based principals and concepts in science.

**Autonomy for FOSS:** Core Science classes will use the FOSS (Full Option Science System) a research-based curriculum also developed at Lawrence Hall. The FOSS program materials are designed to challenge students from diverse backgrounds to prepare them for college/career programs in science, technology, engineering, and mathematics. Students acquire the ability to think like scientists through observation, logical thinking, testing and experimentation, and generating hypothesis and explanations. Students construct their own inquiries, investigations, and analyses as they explore the natural world.

Earth Science	Life Science	Physical Science
The Solid Earth	Human Health	Flow of Energy
The Atmosphere	Biological	Renewable/Non-renewable
Air, Water, Soil	Carrying Capacity	Energy
Cycling of Matter	Cultural and Economic	1st Order Effects
Minerals	Influences	Higher-Order Effects
Land		
Earth Science	Life Science	Physical Science
FOSS: Planetary Science;	FOSS: Human Brain and	FOSS: Electronics;
Earth History;	Senses; Populations and	Chemical Interactions;
Weather and Water	Ecosystems; Diversity of	Force and Motion
	Life	

**Autonomy for Scottish Storyline Method:** The foundation of Scottish Storyline Method is based on six guiding principles:

- 1) The Principle of Story Central to the human experience is the Story, in which by telling we seek to make sense of our world. Stories provide a meaningful context for what we are trying to teach and a predictable structure for what students are expected to learn.
- 2) The Principle of Anticipation Anticipation ensures that the process of learning is not bounded by classroom walls or school boundaries but is on-going and limitless.
- 3) The Principle of the Teacher's Rope There is a critical partnership between teacher in student known as collaborative story-making. The relationship is balanced between teacher instructional goals and student ownership of the story.
- 4) The Principle of Ownership There is no stronger motivation than ownership, the sense of responsibility, pride, enthusiasm for projects in which participants have clearly had a substantial role. Storyline begins by accessing and building on students' conceptual models and collective knowledge and bringing this to life in the classroom setting.
- 5) The Principle of Context- The Storyline Method meets the needs of diverse learners, but especially English language learners, by connecting new learning to previous acquired knowledge. Students construct their understanding by linking what they know with the unknown. Students come to realize that the Storyline topic mirrors real life and see the relationship to their own lives. For economically disadvantaged students, this linear, predictable structure provides context For economically disadvantaged students, this linear, predictable structure provides context in which they come to understand patterns of behavior and thinking.

6) The Principle of the Structure before Activity – When students have an opportunity to express all that they know about a topic, then they can frame their own questions and seek to find the answers. Students need to learn to articulate what they don't know and identify the gaps in their knowledge. When this has been accomplished, students can begin to build their conceptual model by creating a frieze, researching and writing, presenting their learning, or thinking as one of individuals in the storyline. Storyline is accessible for students with limited oral or expressive skills due to disabilities or second language acquisition, as well as for students who are gifted and talented and capable of divergent thinking.

**Autonomy for Singapore Math:** The Singapore Math program focuses on developing the following student behaviors in mathematics: investigative work; communications skills in mathematics; appropriate use of computation and estimation skills; mental math; and model drawing for problem solving. The curriculum excludes any concepts or skills that are not fundamental to the essential understanding of the concept studied. Singapore math builds conceptual understanding and real-world practice. As a result, the focus for students is accelerated learning as opposed to intervention.

#### Autonomy for implementation of a curriculum other than the District-Mandated ELA Intervention:

*ii* Curriculum Development: Among researchers there is clear consensus that all students, but particularly at-risk students, require cognitively challenging instruction that requires thinking and analysis. Students who are expected to meet high academic standards and devote serious effort to academic learning by engaging in sustained and disciplined critical thought demonstrate academic achievement gains (Tharp, Estrada, Dalton, & Yamauchi, 2000). Student demographic and academic performance data (*LAUSD*) provide clear evidence of need for STEM, which will capitalize on students' prior knowledge and experiences to construct new knowledge and learning through high-interest authentic project-based 21st Century learning experiences and home language and culture

A top priority for the Teacher-Leaders for Social Responsibility Writing-Design Team was to identify the most successful **school structure and curriculum**, as well as, the best teaching practices given our proposed student population (see Sec. A Summary Analysis). Through a review of educational research, we have identified **five research-based differentiated instructional methodologies** that align with the Constructivist model of learning and address the unique and diverse needs of our student population. The Institute of Environmental Science (IES) at Walnut Park Middle School will provide rigorous, individualized instruction and intervention to advance all students, but particularly the large number of English learners, gifted and talented students, those from socioeconomically disadvantaged homes, and special education students who might choose to attend our new middle school.

These research-based instructional methodologies (see page 20) – Problem-Based Learning (PBL); SDAIE (Specially Designed Academic Instruction in English); AVID (Achievement Via Individual Determination); Scottish Story Line; and Singapore Mathwill be supported by nine broad categories of Marzano's research-based High-Probability Instructional Strategies— identifying similarities and differences; summarizing and note taking; reinforcing effort and providing recognition; homework and practice; nonlinguistic representations; cooperative learning; setting objectives and providing feedback; generating and testing hypothesis; and questions, cues, and advance graphic organizers (Marzano, Pickering, & Pollock, 2011).

The Teacher-Leaders for Social Responsibility Writing-Design Team have created a culturally relevant and responsive CA/Common Core State Standards-based environmental science curriculum where all students can achieve their potential to become 21st Century Global Citizens. All members of the Teacher-Leaders for Social Responsibility Writing-Design team have agreed on setting high expectations for what the students will know and be able to do. Students at the IES at Walnut Park MS will achieve proficiency or advanced on formative and summative State, District, and School assessments. In order to achieve this vision, students, staff, and parents and community have been included in building a common philosophy and core values:

- All students, staff, parents and community members who join our school will commit to the belief that all students will acquire the knowledge and skills needed for a college-career program.
- All students are guaranteed a rigorous academic curriculum that affords entry into a college-career program.
- All students will receive an instructional focus that develops students into inquisitive, critical thinkers, problems solvers, capable oral communicators and expressive writers.
- All students will develop a cooperatively-designed, research-based, environmental sustainability project aligned with their grade-level CA/Common Core State Standards.
- All students will receive research-based instructional methodologies, strategies, and curriculum to support their diverse learning needs as determined by: CA/Common Core State Standards, District-periodic assessments, and the LAUSD Superintendent's Goals: 100% Graduation; English Proficiency; 100% Attendance; Parent and Community Engagement; and Decrease in Violent/Nonviolent Suspension.

→ All students will acquire the skills to compete in a global economy: critical thinking and problem solving; communication and technology; collaboration; creativity and innovation; and core knowledge.

ı	Meeting the Needs of All Learners at the Institute of Environmental Science at Walnut Park MS							
Student Needs	Research-based Methodology	Research-based Instructional Strategies	Highly Qualified Teacher	Support for Instruction	Program Participatio n			
EL's	<ul> <li>Culturally Relevant and Responsive Education (CRRE)</li> <li>SDAIE (Specially Designed Academic Instruction in</li> </ul>	<ul> <li>Transition to MS</li> <li>Program</li> <li>Cooperative and</li> <li>Learning Environments</li> <li>Instructional</li> <li>Conversations</li> <li>Academic Language</li> <li>Dev.</li> </ul>	Core or Multiple Subject Cred. BCLAD, BCC or CLAD	Rtl <sup>2</sup> based on LAUSD criteria	LAUSD Master Plan			
	<ul><li>English)</li><li>LAUSD Access to Core Strategies BUL-4827 (2009)</li></ul>	•Advanced Graphic Organizers – Thinking Maps™ •PBL	And/or biliterate Para-prof.					
SWD's	•Full-Inclusion Model unless otherwise stated on IEP •Modifications/ Accommodations aligned with IEP	<ul> <li>Transition to MS</li> <li>Program</li> <li>Learning Center</li> <li>Project-Based</li> <li>Learning (Habits of Mind)</li> </ul>	Special Ed. Credential Sp. Ed. Para-prof.	•MCD Outcome #2 Elective: •Learning Center •ESY	IEP			
Title I	Core Curriculum     PSA Counselor     Psychiatric-Social Worker	<ul><li>Transition to MS</li><li>Program</li><li>Project-Based</li><li>Learning (Habits of Mind)</li></ul>	Core or Multiple Subject Credential	Elective: Music, Art, Creative Writing, Study Skills, etc.	CPM Title I			
GATE	•Depth & Complexity Icons	Transition to MS Program •Project-Based & Service-Learning (Habits of Mind)	GATE certified	<u>Elective:</u> Leadership	District Assess- ment			
All	•AVID and WICR Strategies	•Transition to MS •PBL (Habits of Mind)	AVID Trained Teacher(s)	Elective: Leadership	Parent- Student- Survey			

The structures that support our **Curriculum Design** are:

1) <u>Personalized Interdisciplinary Service Learning Community Structure</u>: Current research findings (David, 2008) reveal that personalized learning community structures create more positive relations among students and among teachers, suggesting a connection between personalization and student academic achievement. In addition, a strong relationship with the teacher instills a perception that the course is relevant resulting in higher student attendance, which along with course grades, is a powerful predictor of high school graduation. The Institute of Environmental Science at Walnut Park Middle School will be composed of highly personalized, interdisciplinary, across grade-level Environmental Science Communities (ESC's). These ESC's will engage in a course of environmental study that will evolve into a collaborative sustainability project.

For example, the **teacher-facilitators** might pose a school-wide question, "What would be the impact to Huntington Park of a world without fish?" The Earth ESC might investigate the impact of Huntington Park's water contamination, a current community problem, while the Life Science ESC investigates and collects data on the impact of water contamination on people living in Huntington Park. The Physical ESC would be examining the first and higher order effects on the community of Huntington Park's. Each of these ESC's would present their findings before peers to identify environmental sustainability projects that would demonstrate their understanding of the focused learning.

Each Environmental Science Communities (ESC's) will be mentored and facilitated by the teachers in the SLC and will provide a structure for close interdisciplinary interaction:

- among students and teachers
- among students and counselors who provide academic and emotional support
- among students and parents/community
- 2) <u>Complex Performance-Based Assessment and Evaluation Structure</u>: Assessment informs instruction; in order for teachers to make informed instructional decisions monitoring data as to student progress and achievement must be on-going, standards-based, and authentic. At the Institute of Environmental Science at Walnut Park MS, multiple assessment measures will be used to assess student learning, differentiate student learning, target intervention, and design standards-based lessons based on the development of Expected School-Wide Learning Results (ESLR's). Students will be assessed using the following instruments:
  - Common Formative Assessments (CFAs) created by Professional Learning Communities or PLCs (Departments, grade levels and Service Learning Communities) with criteria/rubrics for benchmark, approaching and intensive. Metacognitive feedback forms will be developed along with the CFAs so students, teachers, and parents may reflect on results and develop a plan for improvement.

CFAs will be given at least every three weeks so PLCs may inform their instruction, differentiate, and group students as necessary.

- Portfolios developed by students for Service Learning Projects, which will also be accompanied by rubrics, and feedback forms.
- > LAUSD District Periodic Assessments
- Assessments selected by PLCs and individual teachers from the various textbooks or series used for instruction: Singapore Math, Full Option Science System (FOSS), English Language Arts, Social Studies, etc.
- Common Formative Writing Assessments created by PLCs for content areas (rubrics, feedback forms included).
- > CST, CELDT

#### Interdisciplinary Curriculum and Instruction According to Robert Marzano, PhD.,

"Knowledge is stored in two forms: linguistic and non-linguistically. Research proves that the more we use both systems of representation the better we are able to think and recall knowledge." (<a href="http://www.thinkingfoundation.org">http://www.thinkingfoundation.org</a>).

At the Institute of Environmental Science (IES) at Walnut Park MS a comprehensive program has been designed to ensure a quality learning experience for all students. In alignment with the CA/Common Core State Standards our interdisciplinary curriculum requires all students to demonstrate both linguistic and non-linguistic competency. All students will be: (1) thinking and writing across the disciplines; (2) engaged in inquiry and investigations; (3) collaboratively working with peers to solve real-world problems that impact their community, nation, and world; and (4) effectively communicating their research findings and product-based learning by presenting before peers, families, and community.

<u>Curriculum Sequence</u> We have developed a curriculum aligned with our **vision**, **mission**, **and instructional philosophy** that builds both horizontally and vertically:

"In a personalized, safe learning environment, students will demonstrate proficiency in a rigorous, college-career readiness, CA/Common Core standards-based instructional program aligned with community-based environmental sustainable projects. Through an integrated study of the sciences, math, technology, and engineering, students will collaborate across grade levels to critically solve real-world community-based environmental problems. Our students will be capable, articulate, responsible citizens who take ownership for their learning as measured by state and federal-mandated assessments, LAUSD periodic assessments, project-based learning, and common formative assessments."

The unique and creative aspects of our instructional program at the Institute of Environmental Science (IES) at Walnut Park MS not only provides rigor, but is rich in student-centered learning experiences. The curriculum builds both horizontally through the grade level year, as well as, vertically, from year-to-year. The Environmental Sustainability learning experiences are designed to capitalize on the Science "big ideas" across grade levels while providing an environment to explore critical community-based issues or concerns. In addition, our program is grounded in evidence-based educational practice as outlined in the reform document titled Taking Center Stage: A Commitment to Standards-based Education for California's Middle Grades Students (California Department of Education 2001): California Content and/or Common Core Standards alignment; Content and Performance-Based Proficiency: Differentiated Instruction based achievement data; Disciplinary and Academic Literacy - Habits of Mind; Reciprocal Accountability; and Cura Personalis, the Health, Safety, and Emotional Well-being of the entire student.

Our three-year instructional sequence demonstrates academic rigor and interdisciplinary literacy across all content areas to meet the unique needs of our student population. Our students will synthesize and showcase their learning from all subject areas into a twice-yearly culminating problem-based learning (PBL) environmental science project that will prepare our students with 21st Century skills.

The horizontal strand of each ESC is based on one of three focus areas: Earth Science, Life Science, or Physical Science. Each environmental science sustainability project originates from school-wide and/or focus-are ill-defined problem that develops the *Habits of Mind* (Costa, Kallick, 2011). Each ESC is composed of an interdisciplinary team of team of teachers that "coach" students to not only consider what they know about the problem, but to explore beyond what they know as possible solutions to the problem. Throughout the learning students are thinking as scientists, technicians, design engineers, and mathematicians. In addition, they are assuming roles and perspectives not traditionally covered in the core science classes. For example, posing the question, "What would be the impact to Huntington Park of a world without fish?" might have the students assuming the perspective of a parent in the community, a Huntington Park council representative, a business person, or commercial fisherman through the Scottish Storyline method.

The horizontal strand of the learning engages students in interdisciplinary environmental sustainability learning projects (6-8 grade) across the three focus areas: Earth Science, Life Science, and Physical Science. The vertical strand of the learning requires students to design and maintain e-portfolios of expected school-wide learning environmental projects, which are currently required for high school graduation. The curriculum has been designed with clear expectations of the content to be learned, how student needs are met, how learning is monitored, and how students will be empowered as capable and responsible learners. The curriculum design meets the LAUSD Quality Indicators for a Culturally Relevant and Responsive Education:

- •A safe, personalized learning environment accepts and affirms the culture, language, learning style, and unique needs of each student, encouraging students to put forth high-levels of effort.
- •A student-centered classroom promotes problem solving behavior, develops habits of mind, and empowers students to explore the decision-making process.
- •Culturally-relevant literature and instructional materials are woven throughout a rigorous curriculum organized around the Science "Big Ideas".
- •Culturally diverse learning styles support higher-order thinking and meta-cognitive skills that promote student strengths and academic growth.
- •Research-based Instructional strategies support student mastery of Academic English, disciplinary literacy, and content-knowledge
- •Students' prior knowledge and linguistic needs of all students are considered when developing engaging academic activities.
- •There are individual displays of project- and performance-based learning.

<u>Curriculum Development: Math</u> The Institute of Environmental Science (IES) at Walnut Park MS will implement the following curriculum for mathematics, grades 6-8: **New Elementary Mathematics Syllabus D** (Meng, & Yoong, 2003) . *In Singapore, the term "elementary" refers to "the basics" of higher math, i.e., algebra, geometry, trigonometry, etc.*) Throughout the series, emphasis is placed on the development of better understanding of mathematical concepts and their applications, as well as on proficiency in problem solving, mathematical reasoning and higher order thinking.

<u>Curriculum Development: Environmental Science</u> The Institute of Environmental Science (IES) at Walnut Park MS will implement the following curriculum for environmental science, grades 6-8: GEMS (Great Explorations in Math and Science), activity-based science and mathematics education, developed at the University of California's Lawrence Hall of Science.

Institute of Environmental Science (IES) at Walnut Park MS 21st Century College-Career Readiness Skills Curriculum Pacing Plan For High School A-G Course Work (Scope and Sequence, AP Access, and/or Concurrent College Enrollment)						
Subject Methodology	Grade 6:	Grade 7:	Grade 8:	Habits of Mind		
Mathematics – Singapore Math  Methodology: Singapore Math (Problem-Solving and Non-Linguistic Models)	General Math 6 (Pre-Algebra) grades 6-8: New Elementary Mathematics Syllabus D Publisher: Marshall Cavendish Int (S) Pte Ltd, Singapore ISBN: 9789812714114	Algebra I;  New Elementary Mathematics Syllabus D Publisher: Marshall Cavendish Int (S) Pte Ltd, Singapore ISBN: 9789812714114	Geometry or Algebra I  New Elementary Mathematics Syllabus D Publisher: Marshall Cavendish Int (S) Pte Ltd, Singapore ISBN: 9789812714114	•Weighing and using evidence     •Making connections among ideas     •Speculating on alternatives		
English – District literature series and locally determined reading (novels) Methodology: SDAIE AVID-WICR	English 6; English 6 Honors	English 7; English 7 Honors	English 8; English 8 Honors	Presenting ideas clearly and with appropriate use of conventions		
Science – District curriculum and FOSS (Full Option Science System) (embedded: Science Reasoning & Technology)	Earth Science FOSS: Planetary Science; Earth History; Weather and Water	Life Science FOSS: Human Brain and Senses; Populations and Ecosystems; Diversity of Life	Physical Science FOSS: Electronics; Chemical Interactions; Force and Motion	Weighing and using evidence     Speculating on alternatives		
History/ Social Science – District Curriculum Methodology: Scottish Story Line	World History and Geography: Ancient Civilizations	World History and Geography: Medieval and Early Modern Times	United States History and Geography: Growth and Conflict	Assessing the value of the ideas that have been studied     Making connections among ideas     Addressing multiple perspectives		
Physical Education	PE 6	PE 7	PE 8	•Making connections among ideas		

Electives	Health Transition to Middle School – Study Skills	Music-Band Art Dance AVID/Leadershi p Technology	Music-Band Art Dance AVID/Leadershi p Technology	•Assessing the value of the ideas that have been studied
*Intervention -	Locally designed	intervention for		
7th Period Locally determined				•Making connections among ideas
curr. •PBL:Environmental	Life Science:			•Addressing multiple perspectives
Science Sustainability Proj. •Scottish Story Line	Physical Science	e:		

#### (c) WASC Accreditation (High schools only) Not applicable

(d) Addressing the Needs of All Students Explain how individual students' performance levels and needs will be determined at the beginning of the school year. Describe the practices, programs, people, structures,, services to ensure the learning needs of all students are met. Based on the data analysis in Section A, what specific needs have you already identified?

The Institute of Environmental Science at Walnut Park MS's curriculum design is based on a Culturally Relevant and Responsive Pedagogy using the Problem-Based Learning Model. Students' prior knowledge is used to construct learning allowing them to make connections with new knowledge. The selected **research-based methodologies and instructional strategies have demonstrated significant student achievement gains** for English learners, students with disabilities, socio-economically disadvantaged, and students identified as gifted and talented.

- 1. Students receiving inquiry-based instruction in science (FOSS) had a strong understanding of the scientific content and an enhanced level of linguistic proficiency in English that translated across reading, writing, and mathematics. In addition, the achievement of these learners increased in relation to the number of years they participated in an inquiry-based science program (Amaral, Garrison & Klentschy, 2002).
- 2. Adherence to student selection criteria average standardized test scores, average classroom ability, school personnel recommendations, student attitude, and the potential to be successful is critical for the AVID program success. However, when the initial selection of these students are more in-line with the criteria there is measured student achievement for high-achieving students (Vitory, 1998).

- 3.The Scottish Storyline method yielded a learner-centered approach in which students: (1) made connections between what they knew and what they were learning; (2) increased motivation for learning; (3) interacted more frequently with peers, including those with unique educational needs, such as, second language learners and students with disabilities; (4) gained authentic literacy listening, speaking, reading, writing, and thinking experiences; and (5) engaged in more interdisciplinary conceptual problem-solving and critical thinking (Eiriksdottir, 1995).
- 4. An independent evaluation by Educational Research Institute of America (ERIA) reviewed math scores from the New Jersey Assessment of Skills and Knowledge (ASK). After one year of implementing the Houghton Mifflin Harcourt *Math in Focus* (U.S. version of Singapore Math) data analysis revealed a 12.4 point increase in average test performance compared to peers not using the Singapore Math method (*Math in Focus*), who gained only 3.5 points (Cavendish, 2011).
- 5. Through a meta-analysis of 100 independent studies of high-yield instructional strategies, researcher, Robert Marzano et. al identified nine strategies that have the greatest positive effect on student achievement, across all subject areas, and at all grade levels (Marzano, Pickering, & Pollock, 2011).

Research shows that use of teacher common planning time to: (1) analyze research-based classroom practices, (2) develop and implement engaging instructional lessons that meet the needs of all students, and (3) design common progress monitoring instruments increases student achievement. The Institute of Environmental Science (IES) at Walnut Park MS interdisciplinary teams of teachers will meet three times weekly in their ESC (environmental science community) to collaboratively:

- 1. Design a rigorous instructional curriculum based on the CA/Common Core State Standards
- 2. Implement the school-wide methodologies (Problem-Based Learning, SDAIE, AVID, Scottish Story Line, and Singapore Math) to meet the unique needs of diverse learners;
- 2. Develop common assessments and rubrics to measure student achievement in linguistic and non-linguistic representations;
- 3. Examine student achievement data to individualize instruction;
- 4. Identify a forum for student expression of learning; and
- 5. Provide feedback to parents and students regarding academic and social-emotional progress.
- 6. Ensure a safe, personalize learning environment.
- (e) Vertical Articulation is an integrated part of IES Walnut Park Middle School instructional plan and is accomplished through the following activities:
- (1) Environmental science communities (ESC's) at the Institute of Environmental Science (IES) at Walnut Park MS will share their learning with the neighboring Walnut Park ES.

- (2) Teachers from IES will meet with teachers from Walnut Park ES, Huntington Park HS, and Linda Marquez High School/(SRHS#7) to engage in vertical planning for incoming sixth grade and out-going eighth grade students to ensure students unique learning needs students with disabilities; English learners; gifted and talented are addressed upon transition to middle school or to high school.
- (3) Department-specific teachers will design curriculum maps, pacing schedules, and research-based lessons to ensure that instruction is vertically-aligned, CA/Common Core State Standards-based, and timely with respect to assessments.
- (4) Environmental science communities (ESC's) will design interdisciplinary sustainability projects based on community problems.
- (5) Enrollment data and on-going progress monitoring will be used to plan and address the unique **performance levels and needs of individual students**.
- (f) Early Education Not applicable
- **(g) Service Plan for Special Education –** Separate Document Students with disabilities (SWD) will receive a rigorous curriculum at par with the general education students. 10% of student population may be students with disabilities. We are prepared to serve all, from mild to most severe SWD. See Appendix E.

### B. INSTRUCTIONAL PLAN: Unwavering Focus on Academic Achievement

#### B-2 Professional Development (<u>5 pages + attachments</u>: LIS Waiver #7, TA page 3)

(a) Professional Culture: In order to stay true to our stated vision and be able to develop "...students who are capable, articulate, responsible citizens who take ownership for their learning," behaviors amongst our staff must model such qualities. Furthermore, the way that we work with each other will be indicative of our professional relationship with our students. As a result, our Teacher-Leader Social Responsibility Writing-Design Team is determined to create a culture of learning, collaboration and trust where data will be reviewed continuously and strengths and weaknesses will be addressed banking on the safety of mutual support and shared responsibility for effective instruction.

At the Institute of Environmental Science (IES) at Walnut Park MS our Professional Development learning model will reflect a culture of collaboration that promotes the ideals of ethical social responsibility and stewardship for our environment. The professional teaching and learning cycle (PTLC) is a job-embedded, systematic approach to the professional development process in which teachers collaboratively plan and implement standards-based lessons aligned to the CA/Common Core State Standards. There is an abundance of research that supports this approach to teacher-collaboration and sharing impacts classroom instruction and improves student learning (DuFour, DuFour, Eaker, & Karhenek 2004).

Small safe, personalized learning environments through the service-learning communities (SLCs) are the foundation of a culture of collaboration and trust, in which teachers engage in a cycle of teaching and learning in order to provide a guaranteed viable curriculum for all students. Through collaborative planning teams (grade-level, department, or vertical) teachers critically examine and discuss the learning expectations of what students will be expected to know and do; how the students will be assessed; and the response when students achieve, exceed, or fall below benchmarks.

Our PD strategies are tied to the goals identified in section A and the specific needs of our student population: Through collaboration in professional learning communities (department/grade and vertical groups), teachers will design standards-aligned common lessons and common assessments to meet our diverse student population of English learners, students with disabilities, economically disadvantaged, and gifted and talented. Just as we expect our students to take ownership for their learning, teachers are expected to take ownership for their professional growth and development. In order to prepare our students with 21st Century skills, teachers also need to develop the critical Habits of Mind: (1) weigh and use evidence; (2) speculate

on alternatives; (3) address multiple perspectives; (4) assess the value of the ideas they have studies; (5) make connections among ideas; and (6) present their ideas clearly and with appropriate use of conventions.

At the Institute of Environmental Science (IES) at Walnut Park MS, we believe that the way that we work with each other as professionals, will be indicative of our professional relationship with our students. **Professional trust** will be built using the following proven strategies: **Lesson Study**, **Cognitive Coaching**, and **Socratic Seminars**.

#### **Lesson Study Model Rationale**

The PTLC is a Lesson Study process that serves as an on-going approach to professional development as it effectively aligns curriculum, instruction, and assessments to the CA/Common Core State Standards, ultimately increasing student achievement (Southwest Educational Development Laboratory (SEDL), 2008).

The PTLC Lesson Study model is comprised of six steps for teaching and learning:

Step 1 Study: Teachers work in collaborative teams to critically examine and discuss learning expectation based on the CA/Common Core State Standards. Teachers identify the concepts and skills students will need to know to accomplish the standards. In addition, teachers will determine how the standards will be assessed on state and district tests.

Step 2 Select: The collaborative planning teams identify the effective and appropriate instructional strategies and resources needed to support diverse students in learning the standards. Teachers agree on the appropriate assessment technique to be used to provide evidence of student learning.

Step 3 Plan: The Planning Team designs a common lesson incorporating the selected instructional strategies and agree on the student work that will provide evidence of student learning. Teachers design a pacing plan outlining the lessons objectives, materials, procedures, time frame, and learning activities.

Step 4 Implement: Teachers implement the planned lesson, noting successes and challenges, and gathering agreed-upon evidence of student learning. Teachers record data as to where students struggled, and where instruction did not achieve expected outcomes.

Step 5 Analyze: Teachers in collaborative teams examine a sampling of student work and discuss student understanding of the standards. Teachers discuss whether students have met the standards and reflect on the strengths, weaknesses, and implications of instruction for future lesson development.

Step 6 Adjust: In order to promote student learning of the standards, collaborative teams reflect on the implications of student work analysis and discuss alternative instructional strategies or modifications to the original instruction strategy. Teachers freely discuss their common and different teaching experiences; and how to improve the lesson.

#### **Cognitive Coaching Rationale**

The Cognitive Coaching model provides the tools Teachers-Leaders need to facilitate the learning of All learners. Research shows that nothing within a school has greater impact on student achievement than professional growth of teachers. As teachers collectively examine, questions, and reflect on their instructional practice, they develop new practices that support the goals and objectives of the school community. An essential feature of cognitive coaching is the building of conversational relationships among teachers, school leaders, students, and parents/families,

Through the Cognitive Coaching model teachers will professionally grow in a safe, risk-taking environment which allows the purposeful sharing of professional practice by: (1) observing one another; (2) videotaping lesson for critical peer analysis; (3) analyzing student achievement data individually and as a group; and (4) identifying growth targets to improve instructional practice. The Socratic seminar format will be used to support professional reading and discourse. During common planning time, our Service-Learning Communities (SLC) will explore, analyze, compare, and evaluate student achievement data (periodic assessments, CA Standards tests, common formative assessments), that provide the catalyst for discussions around effective instruction and assessment practices (Deasy 2011).

#### **Socratic Seminars Rationale**

A key element to professional growth is engagement with professional text. The purpose of the Socratic Seminar is to achieve a deeper understanding of text by systematically posing questions, examining issues, and articulating different perspectives on text. Through group discourse participants construct meaning through analysis, interpretation, listening, and participation. The strength of this learning structure is the learner-responsibility for the quality of the discussion. Learners have the responsibility to study the text closely in advance of the discussion; to listen actively; to share ideas and questions in response to ideas and questions posed; and to provide textual evidence to support their ideas. It is through the Socratic Seminar that students will be challenged to identify solutions to community-based environmental issues.

The week prior to the opening of the school year, teachers will meet to engage in team-building, professional reading, and curriculum planning. After receiving professional development on the IES's Mission and Vision and Problem-Based Learning (PBL) model, teachers will select their Environmental Science Community (ESC). These ESCs will provide students with an open-ended environmental question that will provoke

inquiry, research, experimentation, and collaboration to create an environmental sustainable project based on student learning. In order to provide rich learning experiences for our students, teachers will receive professional development on Project-Based learning (PBL), as well as, our identified research-based instructional methodologies (SDAIE, AVID, Scottish Story-Line, and Singapore Math) and research-based instructional strategies (Marzano 2009).

#### **B-2 Professional Development**

(b) Professional Development (PD) The specific PD activities and structures that will support our professional culture are consistent with IES at Walnut Park MS

**Vision – "...**students will demonstrate proficiency in a rigorous dual-language, college-career readiness, CA/Common Core standards-based instructional program aligned with community-based service-learning projects...Through interdisciplinary study of the sciences, math, humanities, arts and technology..." and **Mission – "...**students are college-ready when they have the skills, knowledge, and behaviors to complete a college course of study successfully and without remediation."

#### Instructional program -

- 1) Personalized Interdisciplinary Service-Learning Community Structure
- 2) Project-Based Environmental Science Curriculum
- 3) Complex Performance-Based Assessment and Evaluation

#### Our PD plan is linked to our Performance Plan for All Students as outlined in Section A Data Analysis and meets the needs of a diverse student population:

√ Problem-Based Learning – supports all learners, particularly EL's, SWD's, GATE, and Economically Disadvantaged, by allowing students to make interdisciplinary connections, collaborate with diverse learners across all grade levels, and engage in critical thinking and problem-solving

 $\sqrt{\text{SDAIE}}$  - supports EL's to access and comprehend the core content

√AVID – supports all highly-motivated learners in college-career readiness by altering teacher expectations

√Scottish Story-Line – supports all by accessing prior knowledge, making connections to new learning, and identifying multiple perspectives.

√Singapore Math – supports conceptual understanding through non-linguistic representations of higher order mathematics (Algebra, Geometry, Trigonometry)

Teachers will be supported in the implementation of the instructional strategies across different grade levels and content areas by: (1) participating in small professional learning collaborative groups (Environmental Science Communities (ESC's); department/grade learning communities); (2) engaging in the Professional Teaching and Learning Cycle; (3) learning through professional reading using the Socratic Seminar.

#### **GOALS and STRATEGIES:**

#### Institute of Environmental Science at Walnut Park MS Expectations:

The Professional Teaching and Learning Cycle (adapted from *The Professional Teaching and Learning Cycle, Introduction 2nd Edition.* Southwest Educational Development Laboratory (SEDL).2008. U.S. Department of Education)

Key Personnel	PD Instructional Specialist	Environmental Science Communities	Key Teacher- Leaders	Content Specialists	School and District Leaders
Activities	Ensures everyone understands the work and the implementation of the PTLC model is aligned to the academic needs of the students	Problem-Based Environmental Science Learning	Provides guidance as teachers design research-based lessons aligned to CA/Common Core State Standards	Provides Content Expertise	Monitor PTLC implement- ation and impact; by ensuring support
Structure	Provides school-wide PD prior to school year; during Faculty/Staff meetings; and other identified PD days.	Plan environmental science learning experiences during Common Planning Time (CPT), which meets twice weekly during the teacher conference period. May meet once a month on a designated Saturday if funds are available.	Plans with the ESC's during Common Planning Time; helps ESC's to identify learning objectives	Provides support each week during "Banked Time" to support department/ grade-level planning	Collaborates with school site leadership committees to establish PD calendar "Banked Time" and Critical Needs; communicate s clear expectations; builds capacity of staff members who need support
PD Research- Based Method- ologies and Strategies	ESCs: Throughou Socratic Seminar I SDAIE – EL's AVID – Differentia Marzano's High Pi Strategies	Readings ted Instruction	PLCs: Throughout Lesson Study and Coaching ELA/SS: Scottish Math/Science: Sin Science: PBL	Cognitive Story-Line	

The PD will be differentiated to support teachers at varying stages of their career. At the Institute of Environmental Science (IES) at Walnut Park Middle School, we will implement the LAUSD Educator Growth and Development Cycle to: (1) Identify effective teachers to demonstrate/model instructional practice for peers; and (2) Implement strategies designed to meet the needs of individual teachers through the Cognitive Coaching model.

At IES teachers will meet in their ESC's three times per week during their conference period: twice for planning and once for conferencing with students and parents. In addition, teachers will meet weekly during banked-time for content/grade-level area instructional planning alignment. School-wide differentiated professional development will take place Mondays mornings. At the end of first semester the School Leadership Team will meet to reflect and evaluate on the need for increased Common Planning Time.

IES will collaborate with the surrounding professional growth institutions (universities) to make available PD for teachers seeking leadership/career advancement opportunities.

*i. Autonomy* IES will seek Autonomy to implement IES PD and Common Planning Time (CPT) during conference periods, three days per week. At the end of first semester the School Leadership Team will meet to reflect and evaluate on the need for increased Common Planning Time (see Autonomy page).

#### ii. Management of Multiple Schools Not Applicable

- **(c) Teacher Orientation** Orientation to the Institute of Environmental Science at Walnut Park MS will occur the first seven days before the school year begins. Throughout the Orientation teachers will participate in professional development aligned with our Belief System (Mission and Vision) statements; plan CA/Common Core State Standards-based lessons aligned with our research-based instructional methodologies and strategies; build team with colleagues and with students; and meet with parents.
- (d) PD Program Evaluation The effectiveness of the PD will be determined by asking ourselves three questions aligned to our Belief System: (1) Who are we? (2) Why are we doing this? And (3) Why are we doing it this way? (*Adaptive Schools Model*). These reflective questions enable us to look at our formative and summative data from the lens of a learner and push us to walk our core values the belief that all students can and will learn a rigorous, 21st Century CA/Common Core State Standards-based content, that prepares them for a college-career program.

### B. INSTRUCTIONAL PLAN: Unwavering Focus on Academic Achievement

### B.3 Assessments and School-wide Data (3 pages + attachments: LIS Waiver #4, TA page 2)

(a) Effectiveness of Student Assessment Plan At Institute of Environmental Science (IES) at Walnut Park MS we endorse an "authentic pedagogy – instruction is focused on active learning in real-world contexts calling for higher-order thinking, consideration of alternatives, extended writing, and an audience for student work" (Hammond, 2002:p20). By focusing on two critical questions: (1) What do we want our students to know and be able to do by the time they leave School of Social Justice and Service-Learning at Walnut Park? And (2) How will we know we are succeeding? – Institute of Environmental Science (IES) at Walnut Park MS will use problem-based learning and assessment as concrete representations of academic progress in meeting proficiency on the CA/Common Core State Content Standards. Student writing, artwork, and other projects be prominently displayed throughout the school; students will maintain personal electronic portfolios, and participate in oral presentations and performances before peers, parents, and community.

In addition, through the problem-based learning model students will be guaranteed an opportunity to participate in intellectually challenging work, which is linked to their lives and interests. Students will use engage in inquiry, experimentation, research, and data collection in response to complex community-based environmental problems. In addition, students will use technology to design and engineer environmental sustainable solutions which they will display or defend before peers, at local community centers, city library, city hall, and local businesses.

- **c. Data Collection and Monitoring:** Research shows that use of teacher common planning time to: (1) analyze research-based classroom practices, (2) develop and implement engaging instructional lessons that meet the needs of all students, and (3) design common progress monitoring instruments increases student achievement. At the Institute of Environmental Science (IES) at Walnut Park MS interdisciplinary teams of teachers will meet weekly in their environmental science community (ESC) to collaboratively:
- 1. Design a rigorous instructional curriculum based on the CA/Common Core State Standards and
- 2. Implement the school-wide methodologies (PBL, SDAIE, AVID, Scottish Story Line, and Singapore Math);
- 3. Develop common assessments and rubrics to measure student achievement in linguistic and non-linguistic representations;
- 4. Examine formative student achievement data in order to target student needs;
- 5. Identify a forum for student expression of learning; and

6. Provide feedback to parents and students regarding academic and social-emotional progress.

Student Assessment Plan	Curriculum-Based Assessment	Project/Performance-Based Assessment
Core Content-Area Learning English Language Arts Mathematics Science Social Studies	Common Core Standards California Standards Test (CST) District Periodic Assessments Locally designed Common Formative Assessments based on Student Achievement Data	Common Formative Assessments (CFA's) – Open- Ended Questions Disciplinary Literacy – Student Writing Portfolio – Student Self- Assessment
Problem-Based Learning in Environmental Science	Common Core Standards California Standards Test (CST) District Periodic Assessments Locally designed CFAs	Open-Ended Ethical Questions Extended sustained tasks (PBL) Environmental Sustainability Problem Solving
Scottish Story Line Method	Common Core Standards California Standards Test (CST) District Periodic Assessments Locally designed CFAs	Disciplinary Literacy Open-Ended Ethical Questions Extended sustained tasks (PBL) Problem Solving
Singapore Mathematics	Common Core Standards California Standards Test (CST) District Periodic Assessments Locally designed CFAs	Problem Solving Constructing Non Representational Models (PBL)
Physical Education, Art, Music, Dance, Electives	Locally designed CFAs to measure to student performance/product outcomes	Criteria Charts/Rubrics Portfolio – Student Self- Assessment

During collaborative planning, teachers will ensure that the specific needs of our students are met by utilizing research-based methodologies and instructional strategies that address the needs of a diverse school population: English learners, students with disabilities, gifted and talented students, and economically disadvantaged.

Expected practice will provide individualizing instruction, and providing a safe, personalize learning environment for both students and staff. IES will address the diverse learning needs of our students by staffing of highly qualified teachers whose instructional practice is:

1. Aligned with the Constructivist pedagogy; and

2. Collaboratively designed with instructional methodologies/strategies identified in the Plan.

Enrollment data and on-going progress monitoring will be used to plan and address the unique **performance levels and needs of individual students**.

IES at Walnut Park MS Data Collection and Monitoring

Assessment Data	All	EL	SWD	GATE
LAUSD CoreK-12 Progressing Monitoring (Fluency and Vocabulary)	Incoming 6th-Grade to determine instructional needs/programming and every three weeks thereafter	Every three weeks	Aligned with IEP Goals & Objective	Every three weeks
CELDT (California English Language Development Test)		Yearly – EL Progress Monitoring through MyData (AMAO 1 & 2)	Yearly - IEP Goals & Objective	
CST (California Standards Test)	Incoming 6th-Grade to determine instructional needs/programming	Yearly - EL Progress Monitoring through MyData (AMAO 3)	Yearly - IEP Goals & Objective	Yearly – Progress Monitoring
	7th/8th Grade to determine programming needs	Yearly	Yearly - IEP Goals & Objective	Yearly - Progress Monitoring
Common Formative Assessments	Δ LAUSD CoreK-12: Progress Monitoring Δ Department-created Formative Assessments aligned with department-created curriculum maps and pacing guides for Core to be administered every three weeks for progress monitoring Δ Environmental Science Community CFAs to determine progress monitoring of interdisciplinary learning Δ Physical Education, Art, Music, Dance, Electives CFA for progress monitoring			
Screener for Math	Incoming 6th-Grade to for acceleration	o determine inst	ructional needs/	programming

#### B. INSTRUCTIONAL PLAN: Unwavering Focus on Academic Achievement

#### B-4 Instructional Plan School Culture and Climate (11pages + attachments: LIS Waiver #5, TA page 2)

(a) Description of School culture. Describe the culture and climate envisioned for the school, particularly as it relates to academic achievement, student motivation to succeed, personalization, and safety. Identify specific practices, routines, activities, structures, etc. that will support the achievement of the culture and climate envisioned, and how they will be introduced to teachers, students, and parents.

Without a doubt school is an important context for children's academic and social development. **A key component of our mission and vision** for the students who will attend the Institute of Environmental Science (IES) at Walnut Park MS is to provide them with "...a rigorous dual-language, college-readiness, standards-based instructional program aligned with community-based service-learning projects".

At IES students will acquire the skills necessary to effectively compete in a global economy: critical thinking and problem solving; communication and technology; collaboration; creativity and innovation; and core knowledge.

Based on the research findings reported in Leading the Conversion Process, Lessons Learned and Recommendations for Converting to Small Learning Communities (Prepared for the Bill & Melinda Gates Foundation, September 2006), our plan at IES will focus on developing and maintaining a culture that is safe, supportive, and sustainable, promotes student learning, alleviates negative behaviors and maximizes learning. To ensure successful implementation of our stated mission and vision for IES and be able to develop "...students who are capable, articulate, responsible citizens who take ownership for their learning," the school culture at IES will focus on three objectives:

- 1. Building academic self-concept and psychological well-being through relationships among students and teachers, students and peers, and among students and families/community.
- 2. Promoting social acceptance in a safe learning environment; and
- 3. Connecting students' social experiences to learning.

**Objective #1:** Building Academic Self-Concept and Psychological Well-Being "Middle childhood is a critical period for self-concept formation... While at school, children are developing a sense of themselves, both as students and as social beings, and the beliefs that they form about their academic abilities affect their classroom performance." (Classroom Social Experiences as Predictors of Academic Performance. Lisa Flook, R. Repetti, J.B. Ullman. Developmental Psychology 2005, Vol. 41, No. 2, 319–327). Entering sixth grade students transition to middle school will focus on building

community, study skills, and behaviors for success. This will be accomplished at IES by providing sixth grade students with a self-contained classroom with one teacher for the core content areas. At the time sixth grade students enter IES they will be placed in one of the three Environmental Science Communities (ESCs) – Earth Science, Life Science, or Physical Science – based on a completed student survey of interest. Students will participate in their ESC throughout the

Similar to the sixth grade students, each year the seventh and eighth grade students will select their ESC based on their interests. As a result, these ESC's will be composed of multi-age/grade collaborative teams and structured so that these teams will not only showcase their environmental sustainability projects for their parents/families, but also the community at-large, while still preparing a multi-media presentation for their college-career portfolio a requirement for high school graduation.

Objective #2: Promoting Social Acceptance in a Safe Learning Environment There is a direct association between a lack of social acceptance at school and declining academic performance. Researchers in the field of self-esteem and academic achievement have reported that as the level of self-esteem increases, so do achievement scores. Furthermore, self-esteem can be modified through direct instruction and that such instruction can lead to achievement gains. These researchers agree that the best way for a child to sustain a sense of confidence is to (1) demonstrate competency in skill development and learning; and (2) set meaningful and realistic goals.

Three conference periods per week will be set aside as common planning time in order for teachers within the ELC to collaborate on interdisciplinary instruction, to examine student achievement data, and to meet parents regarding student academic/social-emotional needs. In order to accomplish this, each Environmental Science Community will implement Rtl² model (response to instruction and intervention) to monitor student-learning progress. In addition, an acceleration model will be implemented for mathematics and English. Furthermore, one day per week teachers within their departments will collaborate during banked time to plan vertically-aligned content instruction and monitor student progress.

Furthermore, the school day will be structured into block scheduling so as to minimize transition from period to period. This will be accomplished by providing a self-contained 6th grade with a multiple subject credentialed teacher; and 7th-8th grade core (English-Social Studies and Math-Science) with a highly qualified teacher.

Objective #3: Connecting Student's Social Experiences to Learning The Institute of Environmental Science (IES) at Walnut Park MS is committed to providing a rigorous CA/Common Core State standards-based environmental science curriculum. Through a cycle of collaborative inquiry, planning, action, and reflection, students will identify environmental sustainability solutions to community issues and concerns. Problem-based learning is effective for enhancing student achievement for English learners,

economically disadvantaged students, students with disabilities, gifted and talented students, and Native Americans (American Indians, Native Hawaiians, and Native Alaskans).

Current research on truancy and absenteeism by Joyce Epstein reveals students with better attendance score higher on achievement tests than peers with chronic absenteeism. **Given the unique demographics of our students** – 100% economically disadvantaged; 60% transiency; 20%+ English language learners; and 10%+ students with disabilities – additional practices, routines, activities, and structures to improve teacher/student attendance and a culture of achievement will be implemented.

**IES is structured** to provide small safe personalized learning environments through the Environmental Science Communities (ESC's) which engage students in meaningful choice, active learning, plan-do-review, cooperative learning, and project management-leadership development. At IES we will develop a **practice** that builds a productive school-family-community connection based on Joyce Epstein's model of effective parent-community involvement – (a) parenting, (b) communicating, (c) volunteering, (d) learning at home, (e) decision-making, and (f) collaboration with the community – is proven to result in greater student attendance (*Present and Accounted for: Improving Student Attendance Through Family and Community Involvement.* Joyce L. Epstein and S. B. Sheldon. John Hopkins University. The Journal of Educational Research. May/June 2002.[Vol.95(No.5)].

The Institute of Environmental Science (IES) at Walnut Park MS will implement proven activities designed to improve on daily attendance and reduce chronic absenteeism.

- 1. Attendance will be celebrated and rewarded.
- 2. Establish effective communication between IES and students' families.
- 3. Provide After-school programs for students and families.
- 4. Using community resources, such as "recovery days", for cadres of teachers and staff to make home visits.

**B-4 (b) Student Support and Success** At IES all students are expected to academically succeed. To achieve this goal **specific research-based instructional methodologies** that are aligned with the Constructivist model of learning will be put into practice.

At IES our definition of student success is multi-faceted. Student success is the degree to which our students are satisfied with their learning experience and feel safe, comfortable, and affirmed in the learning environment. Student success is defined as: (1) academic achievement; (2) engagement in educationally purposeful activities; (3) acquisition of the desired content-knowledge, skills, and competencies; (4) persistence; (5) attainment of educational objectives; and (6) post-secondary performance. In various degrees all stakeholders – school, student, and family – share responsibility for student success.

Institute of Environmental Science at Walnut Park MS: Student Success Behaviors						
School Behaviors	Student Behaviors	Family Behaviors				
ESCs (Environmental Science Communities) plan collaborative lessons for high-level student engagement.  ESCs provide an allinclusive, safe, personalized learning environment = a psychological safety net.  ESCs communicate high expectations for academic performance, providing the support required for diverse students (EL's, SEL's, SWD's, GATE).  ESCs effectively communicate "intelligence" can be expanded through continued learning and experience by structuring learning with what students are good at.  ESCs focus on the developmental and learning needs of students who are leaving middle childhood and entering early adolescence.	Students learn to successfully negotiate a new learning environment and effectively interact by establishing "trusting relationships" within the SLC's with peers and adults.  Students successfully "transition" by positively interacting with peers and incorporating expected values and behaviors typical of middle school; e.g., work and study habits; participation in extended school activities; seeking academic assistance/support; and earning passing grades.  Students learn to navigate the dual environments of home and school.	Joyce Epstein's Framework for 6 Types of Involvement  Families provide a supportive environment and reduce the conflict between home and school by:  1. Parenting - Establishing daily family routines  2. Parenting- Monitoring out-of-school activities  3. Volunteering/Collaborating with Community/Decision-Making - Modeling the value of learning, self-discipline, and hard work  4. Communicating-Expressing high, but realistic, expectations for achievement  5. Communicating - Encouraging student progress at school  6. Learning at home - Encouraging reading, writing, and discussion among family members				

- B-4 (c) Social and Emotional Needs Based on data analysis in Section A, we anticipate the following needs of our students:
- $\sqrt{\text{One-third or approximately 170 students will be English language learners.}}$  Approximately 50% of our students will score below basic on state standardized assessments.

- $\sqrt{}$  Nearly all our students will be eligible for free or reduced lunch.
- $\sqrt{\text{One-fourth or approximately 125 of our students will move in and out of our school.}}$
- √ Approximately 10% of our students will be identified as either students with disabilities (SWD) and approximately 10% of our students will be identified as gifted and/or talented (GATE).
- $\sqrt{\text{One-third of our students will miss more than seven days of school.}}$
- $\sqrt{\text{Approximately 2-4}\%}$  or 10-20 students will be suspended more than once.

To say the least these are sobering statistics. Our Teacher-Leaders for Social Responsibility Writing-Design Team have identified **some additional student support for success** beginning with a late start school day. Since 1996, researcher, Kyla Wahlstrom, Center for Applied Research and Educational Improvement at the University of Minnesota College of Education and Human Development, has supported a later start for adolescents (ages 12-18) based on medical research showing adolescents based on the brain's maturation to the circadian cycle and release of melatonin. In other words, adolescents remain in sleep mode from 11 p.m. until about 8 a.m. regardless of the time they go to bed. Loss of adequate sleep each night results in sleep deprivation in which students are more likely to experience depression, difficulty relating to peers, and alcohol/drug abuse.

This researcher supports that a later school start time better aligns with peak times in the day for adolescent (between ages 12-18) alertness and learning potential. By having a later start time, students get more sleep which improves the health and school attendance of the student. Improvement in school tardiness and attendance resulted in academic achievement. In addition, Wahlstrom found there was a significant reduction in school dropout rates, less depression, and students reported earning higher grades.

Another support for student success will be our Coordination of Services Team (COST). This student-centered decision-making team will focus on supports and services to help students identify realistic goals and outcomes. Our team will include: teachers, counselors, administrative support, and any other specialists working with the student. In addition to identifying academic supports for our students, COST will develop and implement positive behavior support plans that align with our vision and mission statement: "In a personalized, safe learning environment,... Our students will be capable, articulate, responsible citizens who take ownership for their learning...".

Common Planning Time is another support for success in which ESCs will carefully monitor student progress through data collection and analysis, implementation of behavioral support plans, and on-going collaboration with parents. At IES we will use a variety of informal and formal measurements — anecdotal records, observations, student, parent, teacher surveys, standardized test scores, periodic assessments — to measure our definition of Student Success: "the degree to which our students are satisfied with their learning experience and feel safe, comfortable, and affirmed in the learning environment.

For a middle school student, school is more than academics; it is an opportunity to engage with peers socially. In order for students to develop meaningful and long-lasting relationships with their peers, extracurricular activities, such as, clubs, dance classes, band, music and art festivals, intra-mural sports, and personal fitness, will be provided. In order to foster a culture of excellence, students will receive public recognition for their achievements.

#### **B-4 (d) College and Career Readiness**

Our environmental science communities (ESCs) will not only include the student's core teachers, but also, a school counselor or dean who works with the individual student and family. In order for our students to take ownership for their learning we at the Institute of Environmental Science (IES) at Walnut Park MS will be explicit about what students should be able to do in order to be **college-career ready**. These expected school-wide learning results (ESLR's) are aligned with 21st century essential learning: (1) multicultural and global literacy; (2) positive interpersonal skills and collaboration; (3) curiosity, creativity, intellectual risk-taking and adaptability; and (4) personal , social, and civic responsibility.

At IES some of the expected learning results for college-career readiness:

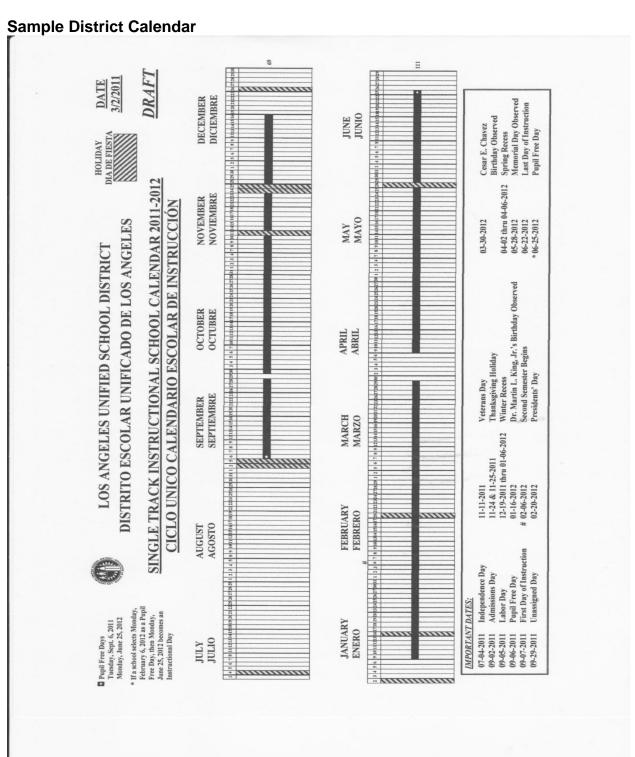
- ❖ All students are expected to collaboratively research, plan, design, and implement two environmental sustainability projects each school year.
- ❖ All students are expected to document in a digital-portfolio their environmental sustainability projects and work-in-progress in the core content areas.
- ❖ All students are expected to publicly share their problem-based learning before peers, families, and the community-at-large.
- ❖ All students will maintain a daily planner, establish a time schedule for daily study, and institute a time-line for product or performance completion.

#### B-4 (e) School Calendar and Schedule

The Institute of Environmental Science (IES) at Walnut Park MS will operate on a 180-day, Traditional Single Track calendar. With a seven period schedule, our school will engage all students in a school-wide environmental sustainability learning experience, as well as, offer more electives for our students. IES has organized a school schedule that maximizes student learning for diverse learners – English learners, students with disabilities, gifted and talented, and economically disadvantaged - by providing a seven-period day for the Environmental Science Communities to plan and implement the problem-based learning experiences. We will implement a combined-block schedule that allows for professional development and professional learning throughout the week.

A core-block schedule will be implemented throughout across all the grades. Sixth grade students will have one teacher for the core academic subjects. Common planning time – 3x per week for ESCs and 1x per week for department vertical articulation - and professional development time for teachers allows for greater collaboration and student support. As a District school, the Institute of Environmental Science (IES) at Walnut

Park MS will use the District-provided norm charts and resources to reduce class size. All schools in the LAUSD will be "early start" beginning in 2012-2013.



#### **CORE BLOCK\* BELL SCHEDULE**

382 Instructional Minutes

Period	Time	Minutes	7 <sup>th</sup>	8 <sup>th</sup> Grade	6 <sup>th</sup> Grade (Self
					Contained)
1	8:30 –	60	ELA/Social Studies	P.E.	English/ELD
	9:30		Core Block OR		
2	9:30 -	52	Math/Science Core	Elective	Social Studies
_	10:22		Block	2.5535	
N	10:22-	15		Nutrition	
	10:37				
Р	10:37 –	5		Passing Period	
	10:42				
3	10:42-	52	ELA/Social Studies	ELA/Social Studies	PE
	11:34		Core Block OR	Core Block OR	
4	11:34 –	52	Math/Science Core	Math/Science Core	Elective
	12:26		Block	Block	
L	12:26 –	30	Lunch		
	12:56				
Р	12:56 –	5		Passing	
	1:01				
5	1:01 -	52	Elective	ELA/Social Studies	Math
	1:53			Core Block	
6	1:53 -	52	PE	OR Math/Science Core	Science
	2:45		· <del>-</del>	Block	33.21100
7	2:45 –	52	School-Wide Environmental Science		
	3:37				
		l			

<sup>\*</sup>Core Block is defined as a contiguous period with one teacher, teaching two core content areas.

Homeroom is attached to the first period of each day. Range of homeroom minutes per day is 8-10 depending on the schedule.

#### CORE BLOCK\* BELL SCHEDULE PROPOSAL FOR P.D. MONDAYS

298 Minutes

Period	Time	Minutes	7 <sup>th</sup>	8 <sup>th</sup> Grade	6 <sup>th</sup> Grade (Self
. 00			·	o ordial	Contained)
1	8:30 –	56	ELA/Social Studies	P.E.	English/ELD
'	9:26	30	Core Block	l .E.	English/ELD
		40	OR	Flore	O colo lo Colo li co
2	9:26 – 10:12	46	Math/Science Core	Elective	Social Studies
			Block		
N	10:12 –	15		Nutrition	
	10:27				
Р	10:27 –	6		Passing Period	
	10:33				
3	10:33 –	46	ELA/Social Studies	ELA/Social	P.E.
	11:19		Core Block	Studies Core	
4	11:19 –	46	or	Block	Elective
	12:05		Math/Science Core	or	
			Block	Math/Science Core Block	
L	12:05 –	30		Lunch	
_	12:35	30		Lunch	
		0		Deseive Desired	
Р	12:35- 12:41	6		Passing Period	
5	12:41 –	46	Elective	ELA/Social	Math
	1:38			Studies Core	
6	1:38 –	46	P.E.	Block or	Science
	2:24			Math/Science	
				Core Block	
7	2:24 –	77	Profe	essional Developmen	t
	3:41				
		i			

#### **CORE BLOCK\* BELL SCHEDULE FOR SHORTENED DAYS**

Parent Conference Days 313 Minutes

During shortened and minimum days students will not attend 7<sup>th</sup> period Service Learning.

Sample Subject Schedule by Core Block

Period	Time	Minutes	7 <sup>th</sup>	8 <sup>th</sup> Grade	6 <sup>th</sup> Grade
					(Self
					Contained)
1	8:30 –	57	ELA/Social Studies	P.E.	ELA/ELD
'	9:27	37	Core Block	P.C.	ELA/ELD
	9.21		Cole block		
2	9:27 –	49	Or Math/Science	Elective	Social Studies
	9:46		Core Block		
N	10:16 –	15		Nutrition	
	10:31				
Р	10:31 –	5		Passing Period	
	10:36				
3	10:36 –	49	ELA/Social Studies	ELA/Social Studies	PE
	11:25	73	Core Block	Core Block	' -
4	11:25 –	49	Or Math/Science	Or Math/Science	Elective
	12:14		Core Block	Core Block	
L	12:14 –	30		Lunch	
	12:44				
Р	12:44 –	5		Passing Period	
	12:49				
5	12:49 –	49	Elective	ELA/Social Studies	Math
	1:38			Core Block	
6	1:38 –	49	P.E.	Or Math/Science	Science
	2:27			Core Block	
L					

#### **CORE BLOCK\* SCHEDULE FOR MINIMUM DAY**

248 Minutes

During shortened and minimum days students will not attend 7<sup>th</sup> period Service Learning.

#### Sample Subject Schedule by Core Block

Period	Time	Minutes	7 <sup>th</sup>	8 <sup>th</sup> Grade	6 <sup>th</sup> Grade (Self Contained)
1	8:30 – 9:17	47	ELA/Social Studies  Core Block	P.E.	English/ELD
2	9:17 – 9:55	38	Or Math/Science Core Block	Elective	Social Studies
N	9:55 – 10:10	15		Nutrition	
Р	10:10 – 10:15	5		Passing Period	
3	10:15 – 10:53	38	ELA/Social Studies Core Block	ELA/Social Studies Core Block	PE
4	10:53 – 11:31	38	Or Math/Science Core Block	Or Math/Science Core Block	Elective
L	11:31 – 12:01	30		Lunch	
Р	12:01- 12:06	5	Passing Period		
5	12:06 – 1:44	38	PE	ELA/Social Studies Core Block	Math
6	1:44 – 2:22	38	Elective	Or Math/Science Core Block	Science

#### (B)(4) (f) Policies Not Applicable Charter School Only

The Institute of Environmental Science (IES) at Walnut Park MS will follow LAUSD policies as they relate to retention, graduation, and student behavior.

#### B. INSTRUCTIONAL PLAN: Unwavering Focus on Academic Achievement

B-5 Instructional Plan Parent and Community Engagement (<u>3 pages</u>) (a) Background Describe the community you will serve.

Based on analysis of 2010 U.S. Census data, Walnut Park is a high-density community in urban Los Angeles with almost 16,000 people living on less than 0.75 square miles! 98% of the population is identified as Hispanic, with over 52% identified by the 2010 census as immigrant. The per capita income is about \$11,500 and over 12% of the population is unemployed. Although there are common industries – accommodation and food services; apparel; educational services; administrative support and waste management; health care repair and maintenance; and metal and metal products – there are no major industries in Walnut Park. Interestingly, less than five percent of the population lives and works in Walnut Park! Without a doubt, a critical community need is employment in viable industries that support those living in the community.

The strengths of the community are the fifth grade students attending Walnut Park ES, one of the feeder schools into Walnut Park MS, who are scoring 39% in the CST/ELA, 69% in the CST/Math, and 45% in the CST/Science for 2010-11. Zero percent students were suspended one or more times; 62% of the students have 96% or higher attendance. 56% of English learners scored basic or above in CST/ELA. Students in special education scoring proficient or advanced in CST/ELA are 23% and in CST/Math 34%, both near the District's average of 29% and 40% respectively.

Even though 98% of the community is Hispanic, in reality Walnut Park is two distinct Hispanic communities – the immigrant population and the second-third generations of Hispanics who have lived in the community. These two distinct populations present challenges for the community, as well as, distinct expectations. Newcomer Latino immigrant families are adapting to a new culture, language, and environment. Their reasons for immigrating to a new country are primarily a parenting decision to secure physical security and/or a better education and economic future.

On the other hand, students of Latino families who have acculturated into the greater society, experience "marginalization" in the school culture which divides students by race and gender, distributing opportunities and resources that would enhance student learning or parent expectations. This devaluation of the culture, language, and ideals causes an intergenerational conflict exacerbated by adolescent rebellion and disengagement in the parent-child relationship.

Our goal at the Institute of Environmental Science (IES) at Walnut Park MS is to empower parents to become involved in school activities, monitor teacher performance, and organize the community to protect school resources that they value, as they assert

their authority and cultural values at home. (*Becoming an American Parent: Overcoming Challenges and Finding Strength in a New Immigrant Latino Community*. Krista M. Perreira, Mimi V. Chapman, and Gabriela L. Stein (2006).

b. Strategies: The Teacher-Leaders for Social Responsibility Writing-Design Team has extensive experience serving this community, as many of our members were raised in similar communities (Bell, El Sereno, Huntington Park, South Gate). Cumulatively, we have a century of Teacher-Leadership experience, with expertise in serving diverse populations: English learners, students with disabilities, gifted and talented; and economically disadvantaged. The entire Teacher-Leadership Team at the School for Social Justice and Service-Learning at Walnut Park has had ample experience in training and promoting parent and community involvement in Local District 6 and is not only fully vested in seeing the community thrive, but also, are keenly aware of the hurdles that students, parents and community need to overcome to reach academic success.

A key component to student success requires the inclusion of those persons who play a significant role in our students' lives outside of the school, primarily, families and communities (School, family, and community partnerships: Preparing educators and improving schools. Epstein, 2001). Joyce Epstein, director of the Center on Families, Communities, Schools, and Children's Learning, emphasized the importance of this integration of school and family to promote student achievement. The Teacher-Leadership Writing-Design Team plans to integrate Epstein's overlapping spheres of Influence where we not only recognize the power that family and community have in enhancing the learning and long-term success of every child who enters our school, but actively seek and create the conditions for their active participation. At IES we believe that every student can achieve the 21st Century skills that will prepare for a college-career readiness program within a safe and personalized Environmental Science Community (ESC). We believe our parents should be empowered to make those decisions that affect their students education.

#### Strategies to authentically and meaningfully engage parents and guardians in their children's education are:

- ➤ Parents Teachers Working Together (PTWT) Instructional Specialist, Instructional Coach, Teachers, and/or Counselors will provide on-site parent workshops on topics to improve student achievement and success.
- Family as Reading Partners In collaboration with our Feeder Schools IES will implement a monthly school-wide invitation to parents to read with their child
- > Danza Folklorico School-wide performances celebrating the community culture
- Band Performances Twice yearly performances celebrating the community culture and greater community at-large
- Art Displays Twice yearly displays of student art projects
- Environmental Science Fairs Twice yearly display of environmental sustainable projects

- Nutrition/Exercise Workshops Weekly classes to improve community health behaviors
- **c. Key Community Partnerships:** The Institute of Environmental Science (IES) at Walnut Park MS has a **clear and strategic plan for parent engagement**. Using as a reference Epstein's Framework of Six Types of Involvement: parenting, communicating, volunteering, learning at home, decision making and collaborating with community, the leadership team in collaboration with our partners: *Families in Schools*, *Padres Unidos*, *First 5*, and The UCLA Parenting & Children's Friendship Program will provide ongoing workshops throughout the school year that address all six areas. Our first-year parents will improve their parenting skills, become more involved in our schools, and collaborate to co-present for the following year parent workshops. Our parents and community members will be comprised of our categorical program advisory councils (ELAC, CEAC and SSC), giving parents authentic decision-making roles with real authority and the platform to voice their opinions and guide the allocation of a significant portion of school funds. Categorical school budgets are allocated or adjusted based on the recommendations of ELAC, CEAC, and SSC.

#### B. INSTRUCTIONAL PLAN: Unwavering Focus on Academic Achievement

- B-6 School Governance and Oversight (a) Not Applicable. School governance model will be determined by faculty vote during spring of the first year of implementation. (2 pages + attachments: TA page12)
- **b. School Level Committees:** Describe the decision-making bodies and general areas of responsibilities for each body that will exist at your school. Detail how your school governance structure allows for a real and meaningful impact on school decision-making. Describe the process for gaining input from all stakeholder groups in making key decisions.

At the Institute of Environmental Science (IES) at Walnut Park MS, we believe that our decision-making council are the bases for a successful educational system. It is through our councils that decisions about budget, curriculum, school improvements and programs will be made. At IES we will have various decision-making councils as outlined by federal and mandated programs as well as councils exclusive to our school. The federally mandated programs councils include Compensatory Education Advisory Council (CEAC), English Learner Advisory Council (ELAC) and School Site Council (SSC). These councils will follow all guidelines as provided through LAUSD's bulletin-5430.0.

The role and responsibilities of the CEAC and ELAC, will be as follows:

- Advising and providing recommendations on the effectiveness of programs
- Conduct program evaluations and review of student achievement
- Review Data
- Participate in Budget Development
- Receive trainings in order to be able to provide above responsibilities.

School Site Council will serve as the principle decision making council. This council will, upon recommendations from CEAC, ELAC and teachers, make budgetary and school policy decisions. A needs assessment from all councils including teaching staff, will be conducted prior to making budgetary decisions. Decisions will be data-driven and made to provide the best quality education for our student population.

School Site Council will be composed of equal amount of parents and staff, including administrative personnel. There will be 5 parents, 1 administrator, 1 classified and 3 certificated members. All members will serve for one year at a time but can only serve two consecutive terms. This will allow for more input from other individuals.

All council meeting will be open to the public and all staff members to allow for input. Decisions will be made by members only. Once decisions are made, it will be the responsibility of the council to inform all other councils and staff members of their final decisions.

#### c. Governing Council:

The governing council of the Institute of Environmental Science (IES) at Walnut Park MS also known as the Leadership Council will be the primary decision making council in regards to curriculum and instruction. As an environmental science institution our campus will require on-going evaluation of sustainability projects. Curriculum centered on these environmental projects will require monitoring during planning, implementation and application phases. Our Leadership Council will serve as the central communication and supervising council.

The Leadership Council will be comprised of parents, administrators, and staff. There will be representation from teachers at all grade levels, and all out of classroom administrative personnel. Parents will also be invited to participate.

#### B. INSTRUCTIONAL PLAN: Unwavering Focus on Academic Achievement

#### B – 7. School Leadership (6 pages + attachments: LIS Waiver #11, TA page3; Waiver Side Letter)

**a. Principal Selection:** Criteria for selecting school leader. Process for selection.

The principal for the Institute of Environmental Science (IES) at Walnut Park Middle School must meet the following LAUSD minimum requirements to hold a principal's position.

- California Administrative Credential
- California K-12 Teaching Credential
- Master's Degree from accredited college or university
- Multicultural Coursework
- Master Plan Coursework
- 8 years of successful full-time public school certificated service, with no fewer than 3 years as a teacher
- No fewer than 2 years in an administrative position
- At least one year of administrative experience in a school-based position
- Experience must include certificated services at a minimum of two locations

Additionally, the following criteria, aligned with the vision and mission of the plan, will be utilized at the Institute of Environmental Science (IES) at Walnut Park MS for its principal.

- Educator with proven, successful results in serving the student population at Local District 6.
- Learner who practices a constructivist approach to leading, and creating curriculum.
- Collaborative individual who will engage in constructing curriculum with and for students, parents and teachers IES at Walnut Park Middle School.
- A leader who believes in shared leadership, willing to share this leadership by going back to the classroom at the school site after two to three years in the principal's position, and supporting the school's vision and mission in a different capacity.
- A leader who will participate in selection committee for proceeding principal, to ensure continuity of vision and mission.
- A bilingual administrator who promotes the appreciation and value of cultures, languages and community.
- A leader and learner who practices 21<sup>st</sup> Century skills
- A leader who models and believes in service to the community, whether local or global, as the pathway to a successful society.

The interview process for the principal's position will consist of four components: application process, an oral interview, a collaborative exercise and a professional development. The candidates will be interviewed by a committee comprised of writing team members, parent/s from the community, a feeder school (Huntington Park High School) student leader, community member/s (Marbrisa Condominium Association, Huntington Park City Council member, Claremont Colleges School of Education) and a Local District 6 administrator. Rubrics for each of the components will be utilized to appraise the competencies of the candidates and make a final recommendation to the superintendent.

- Application Process: A resume, letter of intent, letters of support from: student, teacher, current administrator, parent, and student.
- Oral Interview Process: A series of 5 6 questions intended to get to know the candidate's belief system, vision for her/his role and perceptions on bilingual education, service learning, social justice and constructivism.
- Collaborative Exercise: Simulation where candidate would be able to demonstrate her/his ability to think critically, problem solve, innovate or create, collaborate, develop relationships, use multiple processes and strategies to move a group towards a specific end/outcome.
- Professional Development: Engage the interview committee on a professional development experience or bring a recorded professional development she/he has led where the following aptitudes could be measured: understanding of learning and teaching, use of research based pedagogies which engage all learners (teachers, parents, students).

The responsibilities of the principal will be:

- Lead the school, together with the leadership team, in implementing the Design Team's plan
- Set the conditions for a collaborative, interdependent culture, where all stakeholders' voices are heard as the school takes ownership in ensuring student achievement, well being, and success
- Set the conditions for a safe, welcoming and nurturing school culture and environment where learning is valued and operational structures are set in place to support a learning culture
- Provide leadership for and facilitate collaboration with the Leadership Team and all stakeholders to ensure that the instructional plan is reviewed, monitored, and revised as needed to meet Federal, State, District and school goal's and benchmarks
- Provide differentiated professional development which augments professional knowledge and practice of constructivist principles called out in the Design Plan including: Problem-Based Learning methodologies, AVID methodologies, SDAIE methodologies, Scottish Story Line methodologies, and Singapore Math
- Collaboratively, work with all stakeholders, including Leadership Team, advisory councils, and School Site Council in developing a budget that is linked to

- students' needs and success, based on the vision, mission and goals of the Design Team's plan
- Ensure that students are placed in the correct classes and Service Learning Communities based on EL needs, IEP goals, student's interest, ICP plan goals, and that their progress is reviewed and monitored systemically and consistently
- Supervise and improve instruction
- Interpret and engage Leadership Team in the implementation of school practices that uphold state laws, Board of Education rules, policies, procedures, and Design Plan reform efforts
- **b.** Leadership Team: Leadership positions, role of the leadership team in curriculum development and implementing the professional teaching and learning cycle.

The Institute of Environmental Science (IES) Learning at Walnut Park MS will be a school where shared leadership is practiced. In keeping with this shared leadership the following structure will be utilized to develop, implement, reflect and evaluate the instructional program as it achieves its vision and proves its academic success by meeting Federal, State, District and school set goals/benchmarks.

The Leadership Team will be comprised of: Principal, Instructional Specialist, Instructional Coach, Department Chairs, Problem Solving Data Coordinator, Community Outreach Coordinator (Parent/Community Member), Student Leaders, Parent Leaders, and Title I/Bilingual Coordinator.

The responsibilities for this leadership team will be the following:

- Develop instructional program that will lead to achieving school's vision, mission and goals, as well as Federal, State and District achievement goals/benchmarks.
- Lead the implementation of the instructional program by creating a culture of shared responsibility and accountability, with concrete processes to support, analyze, reflect and revise the existing plan.
- Meet weekly at the beginning of implementation to discuss, review, reflect on implementation of plan. Continue to meet bi-monthly as the plan is being implemented.
- Plan professional development by ESC, Department, school wide, with parent groups that aligns to the units of study and is based on analysis of data and learning results.
- Develop professional development (P.D.) plan which includes: Cognitive Coaching, Lesson Study, and Socratic Seminar.
- Develop structures for reflection and revision of this plan based on learning results, observed lessons and vital behaviors that are part of the outcomes expected from the P.D.
- Provide differentiated support to teachers based on results of observations and student learning.

The following criteria will be utilized for the selection of the specialist and coordinators:

- In depth knowledge of the Design Plan
- Selected by colleagues, peers or same capacity stakeholders
- 21<sup>st</sup> Century Learners
- Equitable membership of plan writers and non-plan writers
- Willingness to meet during and after the school day to provide the top notch quality education students deserve

The Leadership Team will collaborate with the entire faculty during bank time professional development meetings, department meetings and committee meetings. Agendas will include opportunities to systemically and consistently include dialogue, discussion or recommendations related, but not limited to: the implementation of the Design Team's plan, the interpretation of results and next steps resulting from these interpretations, advise for school wide changes to the Leadership Team which could include instructional, as well as safety and procedural changes and systems of evaluating the effectiveness of these changes, etc. Likewise, meetings with the community, the CEAC, the ELAC, School Site Council, Volunteer parent groups, will include opportunities to systemically and consistently include dialogue, discussion or recommendations related, but not limited to: the implementation of the Design Team's plan, the interpretation of results and next steps resulting from these interpretations, advise for school wide changes to the Leadership Team which could include instructional, as well as safety and procedural changes and systems of evaluating the effectiveness of these changes, etc.

#### B. Instructional Plan: Unwavering Focus on Academic Achievement

B-8 Staff Recruitment and Evaluation (6 pages + attachments:LIS Waiver #10,, TA page3; Waiver-Side Letter Request Form Attachment 2; LIS Waiver #9, TA page3)

**a. Staffing Model** Academic and non-academic personnel through year three, alignment with the mission, vision and instructional program.

At the Institute of Environmental Science (IES) at Walnut Park MS, we believe it is in our students best interest to determine the staffing patterns and work assignments that will create the optimal learning conditions for our students. IES will hire the staff who best fit the needs of the school (regardless of seniority or status. Staffing will be upheld through the Elect-to-Work Agreement (EWA).

In order to serve a population of approximately 420 students, the Institute of Environmental Science (IES) at Walnut Park Middle School will be staffed by highly qualified Multiple Subject credentialed teachers at sixth grade so students have a teacher with a multiple-subject credential for the core subject areas: English language arts, social studies, math, and science. At seventh and eighth grades, there will be core teachers for ELA/Social Studies and Math/Science requiring either multiple-subjects credentialing, dual credentialing, or single subject credential, such as math, with units in a second subject, such as science. Some single subject credential teachers, such as Physical Education and the Arts, may be required. These teachers will also have English Learner certification. Additionally, the School of Social Justice and Service Learning at Walnut Park Middle School would hire a minimum of two teachers with Special Education credential which would qualify them to teach students identified with Mild to Severe needs. It is our intent to provide for the needs of all students at the school site and implement all IEPs, with mainstreaming and inclusion as part of our learning culture.

Per Bulletin 1123.6, with an anticipated norm of 420 students, the following number of staff would be needed: 14 teachers, one full time counselor, one principal, one school administrative assistant and one plant manager. The expected number of general education students per grade level would be 160. Thus, in the fall of 2012 the following staff would be in place:

- 4 6<sup>th</sup> grade teachers
- 4 Multiple subject teachers, or dual credentialed teachers, or single subject with emphasis in another core content area, to teach English Language Arts/Social Studies for 7<sup>th</sup> & 8<sup>th</sup> grade
- 4 Multiple subject teachers, or dual credentialed teachers, or single subject with emphasis in another core content area to teach Mathematics/Science teachers for 7<sup>th</sup> and 8<sup>th</sup> grade

- .5 P.E. teachers to complement .5 P.E teachers from School of Social Justice and Service-Learning (SSJ-L) sharing our campus
- .5 Music teachers to complement .5 Music teacher from School of Social Justice and Service-Learning (SSJ-L)sharing our campus
- .5 Art teacher to complement .5 Art teacher from School of Social Justice and Service-Learning (SSJ-L)sharing our campus
- .5 Instructional Coach to complement .5 Instructional Coach from School of Social Justice and Service-Learning (SSJ-L)
- 1 principal
- 1 SAA to be shared with School of Social Justice and Service-Learning (SSJ-L) sharing our campus (convert SAA position from one of the school's to two clerk positions, and one community representative to provide more personalized assistance to parents and community)
- 1 plant manager
   Additional teaching positions generated by students with IEPs would be:
- 2 Special Education teachers (1 SDP, 1 RSP or as determined by student population)

Once the School Single Plan has been completed and submitted for approval, and the school qualifies for Categorical Funds the following purchases would be recommended to the School Site Council:

- 1 Title I/Bilingual Coordinator to be shared with SJS-L
- 1 Psychiatric Social worker to be shared with SJS-L
- 2 days psychologist
- 2 days of nurse

Multiple subject credential teachers will work in both self-contained classrooms in the 6<sup>th</sup> grade, as well as core classes in the 7<sup>th</sup> and 8<sup>th</sup> grade. The 6<sup>th</sup> grade teachers will provide a self-contained curriculum, with a specialized period to prepare students a bridge program to core classes for 7<sup>th</sup> and 8<sup>th</sup> grade. The rationale for maintaining a self-contained 6<sup>th</sup> grade are twofold: 1) data shows that students in LAUSD who complete 6<sup>th</sup> grade in self-contained classrooms in elementary schools outperform their 6<sup>th</sup> grade counter parts in middle school and 2) during parent meetings in the South Gate and Huntington Park elementary and middle schools, parents expressed a desire to provide stability for their children by keeping them in self-contained classrooms, where a transition to middle school program would be implemented.

The seventh and eighth grade core model will offer students an equivalent of a seven period day, with one teacher providing instruction for both Language Arts and Social Studies; while a partner teacher will teach Mathematics and Science. Aside from the English Learner certification, Bilingual Credential teachers would serve the needs of any new comer EL, ESL and PRP students.

It is our mission to provide academic support for individuals with disabilities and at-risk students in order to have them participate fully in all learning opportunities, thus the more staff prepared to identify at-risk students, and with the knowledge of practices to support them the better. This is why it would be highly desirable for at least one teacher per Environmental Science Community (Earth Science, Life Science, and Physical Science) to have a counseling credential or be enrolled in a program for such a credential. Through the Environmental Science Communities, and Department/Grade levels Professional Learning Communities these counseling credentialed teachers would work to develop counseling skills in their colleagues.

#### b. Recruitment and Selection of Teachers.

The staff to join the Institute of Environmental Science (IES) at Walnut Park Middle School will be one that adheres to its core values and philosophy. The selection process will measure:

- Commitment to ensuring that all students will acquire the knowledge and skills that will prepare them for a college-career program.
- Commitment to a rigorous academic curriculum that affords entry into a college or career program, with an instructional focus that develops students into inquisitive, critical thinkers, and problem solvers, who will be capable oral communicators and expressive writers.
- Commitment to working collaboratively with Environmental Science Community colleagues, students and community and Professional Learning Communities to develop and implement curriculum and assessments.
- Understanding and commitment to problem-based learning, as it is applied to environmental sustainability projects
- Expertise, success and readiness to teach using the Constructivist pedagogy
- Commitment to professional development and implementation of research-based instructional strategies stipulated in this RFP that meet the needs of diverse learners

Staff members will be recruited from the Los Angeles Unified School District at large, and will not be limited to the schools being relieved of overcrowding. It is requested that members of the Writing Team be given priority placement at the Institute of Environmental Science (IES) at Walnut Park Middle School for they truly understand its vision, mission, and intent. The reason for this expanded opportunities for selection are rooted in the belief that the students in this community deserve the best. Settling is not an option, particularly when we know that, "Having an above average teacher for five years running can completely close the achievement gap between low-income students and others." (Schmoker, Mike, Results Now). Candidates will participate in the following selection process: application process, an oral interview, a collaborative exercise and a teaching experience. This teaching experience could be

an actual lesson in which the interview committee would participate as learners or a video demonstration focusing on the learners which the candidate would share and reflect upon during the interview.

The candidates will be interviewed by a committee comprised of Teacher-Leaders for Social Responsibility Writing Design team members, parent/s from the community, a feeder school (Huntington Park High School) student leader, community member/s (Marbrisa Condominium Association, Huntington Park City Council member, Claremont Colleges School of Education) and a Local District 6 administrator. Rubrics for each of the components will be utilized to appraise the competencies of the candidates as they align to the school's vision, mission and belief system. The committee will make final recommendations for all positions.

c. Performance Reviews. Development, evaluation, and support process for teachers, administrators, and other certificated staff. For internal teams: Explain how the following four measures will be incorporated into evaluations: observation of teacher practice, contributions to student outcomes, stakeholder feedback, contributions to school community.

Performance Reviews at the Institute of Environmental Science (IEP) at Walnut Park Middle School will answer the following questions: How well is the RFP being implemented? How is **achievement** defined, measured and monitored in terms of: student learning, student practice and staff learning and practice? What systems are in place for evaluations, revisions and next steps?

#### Question 1: How well is the RFP implemented? Development, Planning and Preparation:

- Recruitment of staff will measure candidates knowledge of RFP
- July Professional Development to:
  - develop common understanding of RFP
  - develop goals, outcomes, benchmarks for successful implementation of RFP (Example: By September 1, 2012 all School Service Communities would have identified the first Service Learning project they will be engaging in)
  - create Professional Learning Communities and agree upon the Guaranteed and Viable Curriculum for all students, as well as create a school wide Behavior Support Plan with clear expectations, supports for developing a learning community in the school
  - have PLCs create SMART goals and benchmarks for student learning (Example: 75% of students will meet proficiency in comprehension on first PA) by PA and reporting period
- Set dates to monitor implementation of RFP (Fall & Spring review) and to monitor student learning/achievement and practices, as well as staff learning and vital practices implemented during the first year.

 Set dates for system to review RFP yearly, analyze and interpret data yearly, revise RFP based on data

Question 2: How is achievement defined, and how is its success measured and monitored in terms of: student learning, student practice and staff learning and practice?

- Given RFP, data from feeder schools, all stakeholders will collaboratively define achievement and success at the beginning of the school year.
- Teachers and administrator will work collaboratively in PLCs and SLCs (common planning time and bank time Tuesdays) using Lesson Study as a Professional Development tool to develop units of study based on Service Learning Projects. Surveys from community as well as articulation with the School of Social Justice, currently located at Huntington Park Senior High, will be utilized to decide what projects would most benefit the community. For each Service Learning Project they PLCs and SLCs will:
  - Create curriculum and assessment
  - Plan rigorous lessons
  - Set SMART goals with specific gains and proficiency levels identified and quantified
  - Create PLC or SLC mutual accountabilities for the unit
  - Design criteria charts to measure teacher implementation of practices and strategies being planned for each unit

#### **Example of Criteria**

- Use the following SDAIE strategies: \_\_\_\_\_ during the directed lesson
- Walk around the room during small group work asking at least two reflective questions of each group that generate analysis and evaluation from the students
- Ensure students are talking ½ the time
- Design criteria charts and rubrics to measure student learning and practices

#### **Example of Criteria**

- Students will work collaboratively to complete tasks aligned with SLC project
- ½ of the lesson or more will be student talk
- Students will be heard asking clarifying questions of each other, debating their academic points to peers, providing evidence for their thinking and rationale
- Teachers and administrator will work collaboratively in PLCs and SLCs to schedule peer classroom visits, to observe implementation of lessons planned and to coach and provide feedback to colleagues using agreed upon criteria
- Parents and community will be trained weekly on the various SLCs projects being implemented at the school. The first three weeks of the month, background knowledge and standards being covered as well as strategies and

- criteria for learning and practice will be shared with parents. The fourth week of the month, classroom visits will be paid to observe units in practice and debrief based on criteria.
- Administrator will visit classrooms daily to observe units of study being implemented and will debrief with each teacher based on observations as they aligned to criteria created by PLC, SLC and as they align to the *Teaching and Learning Framework's* components which are aligned to the standards for the teaching profession: Planning and Preparation, Classroom Environment, Instruction, Professional Responsibilities and Professional Growth.

Additionally, all staff will participate in a formal evaluation process. Teachers will be evaluated using the revised LAUSD system resulting from the 2011-2012 Initial Implementation Phase for Teacher Effectiveness. The new evaluation instrument focuses on teacher support in order to improve instruction.

Teachers will submit their Initial Planning Sheet to administrator within the first three weeks of school, meeting with administrator to finalize their goals and objective and set formal observation dates. The administrator, as well, will meet with her/his immediate supervisor or Local District director to submit the Initial Planning Sheet and set dates for observation visits, again using as tool for evaluation the School Leadership Framework.

#### B. INSTRUCTIONAL PLAN: Unwavering Focus on Academic Achievement

#### B-9 Sharing a Campus (1 page)

a. For applicant teams proposing and/or expecting to share a building with other teams, whether they are internal or external teams, explain how you will ensure all operation run smoothly on-site. Describe how you would ideally like to coordinate key resources such as indoor/outdoor space and professional development staff, as well as critical protocols such as safety procedures and bell schedules.

South Region Middle School #3 at Walnut Park will be shared by the Institute of Environmental Science and the School of Service Learning and Social Justice. In order to provide for the safety of students and equity in curriculum the following will be shared:

- Cafeteria and Food Services Students from both campuses will have a seven period day with lunches at different times in order to accommodate the students and provide for their safety.
- Art, Dance and Music Students will be programmed separately, although band or dance troupe students from both schools will take classes jointly, based on interest, and when the specific elective period is scheduled. As noted before, staffing will be co-shared for these areas.
- Physical Education This is another area in which staffing will be co-shared. Students will be programmed by school, as much as possible, however, procedures and systems will be set in place for having joint classes, as long as the norms don't exceed 42.5 for non-academic classes in PHBAO schools. Cross country or any other athletic team will be composed by students from both schools.
- School Administrative Assistant will be shared by both schools, opening up the options for both schools to have increased number of clerical personnel by trading one SAA for two clerks.
- The following personnel and resources will also be shared once categorical monies become available and with the approval of the School Site Council:
  - Nurse
  - Psychiatric Social Worker
  - o Bilingual/Title I Coordinator

#### C. Internal Management

C-1. Waivers

C-2. Budget Development ( 2 pages + LIS Waiver #15, TA page 3)

The Institute of Environmental Science at Walnut Park MS will provide transparency around LAUSD, State and Federal Revenues and costs. We will use the monetary allocation for our school to build a student-centered budget that meets the needs of our student population and the schools instructional and operational program. The school leadership of Institute of Environmental Science at Walnut Park MS will leverage the budgetary autonomy granted through the Transparent Budget Initiative and use of unrestricted per pupil funding to help shape the professional culture and expectations of the school in the first year. The instructional leadership team, principal, and other committees will heavily focus on setting a strong Constructivist foundation for the school through intense professional development and attention to the adopted research-based methodologies stipulated in our Instructional Plan such as, Sheltered Instruction Observation Protocol (SIOP) Model, Achievement via Individual Determination (AVID) Summer Institute, Scottish Story Line Method, and Singapore Math.

The budget priorities for year two will address any additional needs or support that may have not been fulfilled in the initial year of operation and ongoing funding for professional development. During the second year the leadership also envisions purchasing hours of service of a Psychiatric Social Worker (PSW) to help provide a range of mental health services and interventions to supplement and support the core services of LAUSD and improve the academic achievements of students. Further, monies for bus transportation to locations that will support the focus of service-learning projects and curricular field trips are also foreseen.

Year three will mark the culmination of the first group of students completing a three-year sequence of environmental science, AVID, Scottish Storyline, and Singapore Math. Students in their third year at the middle school will also participate in a showcase ceremony where their service learning projects will be displayed, emphasizing the skills and concepts they mastered within their three years at the Institute of Environmental Science (IES) at Walnut Park MS.

The leadership team will explore using the per pupil funding allocation made available in years three, four, five, and beyond to address any further needs identified by the SPSA, advisory councils, and school committees. Priorities for the flexible budget development will be to continue the sequence of service learning and to enhance the intervention/acceleration opportunities in English Language Arts and Mathematics during the day by scheduling students to participate in lab classrooms or additional support classes in these subjects. Emphasis will remain on the classroom, keeping

student to teacher ratios low and personalizing the instructional needs of the students as much as possible.

The budget development process at the Institute of Environmental Science at Walnut Park MS will consider the input from all of the different groups of stakeholders. Prior to making any budgetary recommendations, the principal will meet with District fiscal specialists to estimate the basic allocation and per pupil funding amount available to the school. Then, the process will begin with input from the advisory councils (ELAC and CEAC) and school site committees. Recommendations will be presented to the School Site Council, and eventually be approved by the Governing School Council to determine the budget priorities. Throughout the budget development process, the minutes of any council meeting will be publicly posted, supporting the transparency of the budgeting process.

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