

School Information

CDS Code: 01-61119-0106401
County: Alameda
District: Alameda Unified
School: Alameda Science and Technology Institute

Address: 555 Atlantic Ave., Alameda, CA 94501-2109

Grades Served: 9–12

Enrollment: 175

Is the school a private school? No

Is the school a charter school? No

Administrator Name: Tracy Corbally

Lead Applicant Name: Chantal Currid

List any changes or corrections to the above. If a new Administrator or Lead Applicant is identified, please include contact information.

Click here to enter text.

List any school or district social media accounts. *This information is for purposes of communications and outreach only, if state or federal recognition is earned.*

School Website: <https://asti-alamedausd-ca.schoolloop.com/> School Loop site:
<http://asti.alamedausd.ca.schoolloop.com/> AUSD Website: <http://www.alameda.k12.ca.us/> COA
Website: www.alameda.peralta.edu ASTI Facebook pages: ASTians Announcements
<https://www.facebook.com/groups/273112132702112/> Green Club:
<https://www.facebook.com/groups/214493958674616/> Alumni:
<https://www.facebook.com/groups/asti.alumni/>

Narrative

Provide a narrative describing your school's efforts to reduce environmental impact and costs; improve student and staff health; and provide effective environmental and sustainability education. Focus on unique and innovative practices and partnerships. *This section is not scored, but forms the basis of nomination packages that are sent forward to the U.S. Department of Education. (4,000 characters)*

Alameda Science and Technology Institute is a public magnet high school in the Alameda Unified School District (AUSD). Founded in 2004 through a grant from the Bill and Melinda Gates foundation, ASTI exists as a partnership between AUSD and the Peralta Community College District (PCCD), and more specifically the College of Alameda (COA). As an Early College High School, ASTI provides students the opportunity to enroll as full-time community college students during their 11th and 12th grades. This early college experience has translated into a track record of success that includes all graduates going on to pursue further college studies. In addition to earning their high school diploma, graduates routinely pursue higher goals, with 88% meeting UC 'a-g' requirements, 35% completing an Associate of Arts (AA) degree and 58% completing requirements for the Intersegmental General Education Transfer Curriculum (IGETC). In the course of their studies at Peralta Community College District campuses, ASTI students have maintained an average GPA above 3.00, with many students earning honors upon graduation. As a group, graduates have earned approximately 58 college units each during their 4 years at ASTI. ASTI's efforts to reduce environmental impact and costs include sustainable purchasing, use of green cleaning items, reduction of blacktop with planter boxes, maintenance of an organic school garden with food-bearing and drought resistant plants irrigated by drip system, a recycling program, environmentally-conscious curriculum across all content areas, and powering down all machines at night. This year ASTI added green bins in all areas to reduce the amount we send to landfill, supplied teachers with microfiber cloths to clean with reducing the waste when using disposable wipes and purchased green asthma-safe cleaning product to improve student and staff health. Refillable pens and reusable whiteboards help reduce waste and cost. ASTI purchases used textbooks whenever possible for our dual enrollment college program. ASTI's efforts to improve student health include The Positive Behavior Interventions and Support (PBIS) program, a district initiative to improve student wellbeing as the foundation of performance in school. The PBIS system includes the RISE matrix to encourage and recognize Reflective, Integrity-focused, Safe and Empathetic behavior. These awards are given to students who exhibit positive behavior, including recycle and compost in classrooms, in outdoor areas and at school wide events. ASTI's small size allows personalized service for students and families; struggling students are supported in Student Success Team meetings that include parents, teachers, student and staff to support emotional and academic needs. Student organizations such as Green Club and Advisory provide community activities to improve morale and build a sense of belonging for all students. The active Tobacco Use Prevention team endorses a healthy lifestyle. Student groups also support teacher wellbeing with quarterly teacher appreciation events; the school itself provides a small supportive workplace and an Employee Assistance Program for staff. ASTI's school garden supports environmental education as an outdoor learning space; ASTI classes also include units on global warming, social activism, and personal health/nutrition. ASTI Green Club members volunteer with a number of local organizations, including a local co op nursery called Ploughshares, the Golden Gate Audubon Society and Community Action for Sustainable Alameda (CASA); Green Club also has a booth at the annual Alameda Earth Day festival. Green Club provides numerous opportunities for students to discover roles in peer leadership, community outreach, botany and plant growth, landscaping and composting.

You may continue your narrative on this page. Remember not to exceed 4,000 characters total.

[Click here to enter text.](#)

Cross-Cutting Questions

C-1 *Is your school participating in a local, state, or national school program which asks you to benchmark progress in some fashion in any or all of the Pillars?*

What program(s) and level(s) were achieved? (500 characters)

ASTI is part of AUSD's Green Schools Program where the amount of waste the district recycled and composting grew to 68%, up from 41% prior to the program. ASTI is part of the California's Department of Education's TUPE (Tobacco Use Prevention & Education) Program, which gathers data that enables our school to provide programs targeted to students' needs. ASTI participates in the AUSD energy conservation program that tracks and strives to reduce carbon footprint.

Points Possible	Score	CDE USE ONLY
1.50		

C-2 *Has your school, staff, or student body received any awards for facilities, health, or environment?*

List the award(s) and year(s) received. (500 characters)

ASTI received 2015 Blue Ribbon for academic excellence inc. areas where it's curriculum overlaps environmental education. AUSD received a CBSA Golden Bell 2014 Award & \$5k for district wide Green Schools Program; ASTI parent Chantal Currid named as one of the main contributors on this award. ASTI teacher Todd Higashi received 2016 Step Up to the Plate Award & \$5k. ASTI students, Tram Huynh 2013 & Fernanda Castro 2016 named Girls Inc. Women Who Dare for work in health and environmental fields.

Points Possible	Score	CDE USE ONLY
1.50		

C-3 *Is there a forum provided where all representative stakeholders involved in the daily operation of the school (such as students, faculty, maintenance, and cafeteria staff) can meet to discuss, plan, and implement ongoing green efforts?*

Describe your efforts. (1,000 characters)

In the school community there are many forums where students and faculty meet to discuss green efforts. The ASTI Green Club, the school's student led environmental club, meets once a week with student members and the teacher in charge during lunch to discuss ongoing projects of the school garden, the campus composting/recycling/waste system, as well as community events pertaining to improving the environment. There is also a Facebook page and Instagram for the club where students and members of the school community are updated and discuss new green activities. Currently, there are 114 members from previous and existing classes in the club page. Additionally, the student environmental leaders are also members of the school's PTSA (Parent Teacher Student Association) which meets once a month in the evening to discuss school related matters such as ASTI's green efforts.

Points Possible	Score	CDE USE ONLY
2.00		

Pillar I: Reduced Environmental Impact and Costs

Element IA – Energy

IA-1 Does your school have a plan in place to manage and reduce energy use, such as an energy master plan, an energy conservation plan, an energy charter, an energy action plan, or energy conservation guidelines?

Describe what type of plan. (500 characters)		
<p>ASTI uses the 2010 Energy Audit Recommendations created for AUSD by Alameda Municipal Power. AUSD board approved a 2016 Energy Conservation Policy BP 3511 to address conservation actions in AUSD's 2015 Conservation, Efficiency & Generation Plan. Peralta District has a full time Energy & Environmental Sustainability Manager, a 2009 Master Plan drafted by Chevron Energy Solutions, a Climate Action Plan (CAP), a Solar Sustainability plan, & an Electrical Vehicle Charging Stations plan.</p>		
Points Possible	Score	CDE USE ONLY
1.00		

IA-2 Can your school demonstrate a reduction in greenhouse gas (GHG) emissions?

Percentage reduction over time (Example: 15% reduction, 09/2010 to 06/2016)	31%	
Initial GHG emissions rate (MTeCO2/person)	0.08	
Final GHG emissions rate (MTeCO2/person)	0.06	
Offsets purchased, if any	NA	
How did you calculate the reduction? (500 characters)		
<p>Using the University of New Hampshire Campus Carbon Calculator ASTI calculated the metric tons of CO2 equivalent (MTeCO2) associated with energy use, wastewater use & landfill tons. Total emissions for ASTI in 2015 were 16 MTeCO2. In 2016 ASTI's program to divert food scraps & compostable paper (paper napkins/towels) from landfill amounting to 13.2 tons per year. Using the U.S. EPA Waste Reduction Model, this is -5 MTeCO2 per year. Based on this analysis, ASTI has reduced MTeCO2 by 31%.</p>		
Points Possible	Score	CDE USE ONLY
2.00		

IA-3 Do you track resource use in EPA ENERGY STAR [Portfolio Manager](#) or a similar tool?

What is your ENERGY STAR score?	NA	
Year(s) of ENERGY STAR certification	NA	
If another tool or program is used, describe any ranking or certification earned.	In 2016 AUSD approved a full time conservation contractor to work with all of the schools to measure and reduce energy consumption. The District’s Energy Specialist will regularly inspect district facilities and operations and make recommendations for maintenance and capital expenditures to help the district reach its conservation and management goals.	
Points Possible	Score	CDE USE ONLY
2.00		

IA-4 Has your school reduced its total non-transportation energy use from an initial baseline?

Current energy usage by student (kBTU/student/year)	985	
Current energy usage by area (kBTU/square feet/year)	36	
Percentage reduction over time (Example: 15% reduction, 09/2010 to 06/2016)	-	
How did you document this reduction? (500 characters)		
ASTI's electric and gas are not separated from the College of Alameda's utilities, so no data. Energy usage numbers for 2015 are calculated below with College of Alameda data. The College of Alameda is part of the Peralta District, which recently devolved it's utilities to the individual colleges. ASTI was unable to acquire old data. In 2016-17, ASTI began turning computers off nightly in AUSD conservation efforts.		
Points Possible	Score	CDE USE ONLY
2.00		

IA-5 What percentage of your school's energy is obtained from on-site renewable energy generation and what type?

Include context on the impact of on-site renewables, including cost savings, if quantified. (500 characters)

Currently none onsite. AUSD has adopted a solar master plan and is completing their Conservation, Efficiency and Generation Plan adopted in the fall of 2016 to identify the best sites for on-site solar installations. Peralta also has a Solar Sustainability Plan that includes installing a solar carport covering on Parking Lot C; the plan estimates that the total annual production of 915,000kWh would offset College of Alameda's electricity use by 30%.

Points Possible	Score	CDE USE ONLY
1.00		

IA-6 What percentage of your school's energy is obtained from purchased renewable energy above the portfolio minimum of your utility, and what type?

Include the name of your local electric utility and identify its portfolio minimum. (500 characters)

COA has a partnership with our local utility, Alameda Municipal Power (AMP). AMP supports COA in energy efficiency and conservation measures. AMP is one of the greenest utilities in the U.S. with 60% renewable energy sources including geothermal, biomass, wind and small hydroelectric. An additional 15% comes from large hydroelectric sources. This means that nearly 75% of AMP's power is carbon neutral.

Points Possible	Score	CDE USE ONLY
1.00		

IA-7 Does your school participate in federal, state, or utility school energy program(s)?

Describe these programs. (500 characters)

AUSD is a partner with our local utility, Alameda Municipal Power (AMP). AMP works closely with AUSD on energy efficiency programs and rebates for replacing lighting and equipment. AUSD has a contract with Cenergistic an energy conservation company, to meet the needs of it 2015 Conservation, Efficiency and Generation (CEG) Plan. The district is in the implementation stage to apply for additional Prop 39 funding to help upgrade lightings.

Points Possible	Score	CDE USE ONLY
1.00		

IA-8 Describe how any school construction or renovation projects occurring in the past ten years meet green building standards, including any certification earned.

Describe your efforts and demonstrate high performance in terms of percent better than Title 24 when possible. (1,000 characters)

ASTI was founded in 2004. In 2007 two more portables were added and water was added to the science block. Because the portables are relatively new they conform to more standards than older portables found in district. The organic garden broke ground in 2014; construction of fenced area uses wood that does not contain chromate copper arsenate. The College of Alameda (COA) has a 5 year renovation plan; recent renovation of building A including low energy lighting, insulation, more efficient HVAC system, and sensors for auto shut off of lights when rooms are not in use. COA also replaced 3 old boiler in 2008 with more up to date/efficient ones. Feb 2016 the Peralta District broke ground for their Zero New Energy building for education to promote environmental sustainability; this building, is designed to achieve a LEED Platinum certification and exceed standards for zero-net energy design, using building-integrated photovoltaic panels. It's anticipated to be completed in 2017.

Points Possible	Score	CDE USE ONLY
2.00		

IA-9 Has your school developed a program or made progress toward reducing the heat island effect with cool roofs, reduced pavements, or reflective coatings on pavement?

Describe the program(s) and/or physical improvements made. (500 characters)

In 2010 ASTI has reduced its ASTI's paved concrete quad area by 50 sq ft by adding 11 planters/pots in the concrete area of the quad. Not only do they add extra plants to convert CO2 to O2 they make the area more pleasant to hang out in. This year the College of Alameda has reduced its pavement area by 77 sq ft by adding 32 pots/planters.

Points Possible	Score	CDE USE ONLY
1.00		

IA-10 What has your school done to reduce energy use?

Describe projects such as lighting retrofits, installation of an energy management system, planting shade trees to cool classrooms and air conditioning units, etc. (1,000 characters)

All ASTI florescent tubes were changed from T-12 to T-8. AUSD is in the implementation stage to apply for additional Prop 39 funding to help upgrade lightings. AUSD has a contract with Cenergistic an energy conservation company, to meet the needs of it 2015 Conservation, Efficiency and Generation (CEG) Plan. COA's recent renovation of building A included LED lighting, insulation and sensors for auto shut off of lights when rooms are not in use. Three old boilers were also replaced with more efficient ones on the COA site in 2008. COA has planted more than 20 trees it 20015/16 drought tolerant landscaping plan many of which will provide shade when fully grown.

Points Possible	Score	CDE USE ONLY
2.00		

Element IB – Water and Grounds

IB-1 How does your school track water use?

Select from below.

We meter indoor and outdoor water use together.

Points Possible	Score	CDE USE ONLY
0.50		

IB-2 Can you demonstrate a reduction in your school's indoor water consumption from an initial baseline?

If you do not separate indoor and outdoor water use, enter data for your total water use.		
Baseline established and year established (gallons/occupant/year)	961 (for 2015)	
Percentage reduction over time (Example: 15% reduction, 09/2010 to 06/2016)	-	
How did you document this reduction? (500 characters)		
Data for previous years was not available (COA only started paying it's utilities recently, prior to that they were paid by the Peralta district). The data above was calculated by adding all the water usage over the period of 2015 from the four different accounts that COA pay and dividing that by the sum of the students and staff on both ASTI and COA sites.		
Points Possible	Score	CDE USE ONLY
1.00		

IB-3 Can you demonstrate a reduction in your school's outdoor water consumption from an initial baseline?

If you do not separate indoor and outdoor water use, leave this section blank.		
Baseline established and year established (gallons/occupant/year)	Click here to enter text.	
Percentage reduction over time (Example: 15% reduction, 09/2010 to 06/2016)	Click here to enter text.	
How did you document this reduction? (500 characters)		
Click here to enter text.		
Points Possible	Score	CDE USE ONLY
1.00		

IB-4 What has your school done to reduce water use?

Describe projects such as mulching, leak detection/monitoring, installation of water-efficient plumbing fixtures or appliances, rainwater capture, etc. (1,000 characters)		
<p>In 2013 ASTI sheet mulched its Community Garden area 2500 sq feet and installed drip irrigation system. This replaced an existing grassed area with a sprinkler system. In 2016 ASTI sheet mulched the orchard area and a median area, in total 3500 sq feet and installed drip irrigation system. These were also originally grassed areas with a sprinkler systems. In total ASTI has now sheet mulched 5500 sq feet, that's 100% of its available landscape and replace sprinkler systems with drip irrigation. The Green Club regularly inspects the drip irrigation system for leaks and students learn how to fix these. They also monitor for over/under watering and learn how to adjust the system. COA has replaced 8500 sq ft of its grassy areas with low water plants and mulched ground all on a drip irrigation system. No leaky faucets have been reported in the past four years.</p>		
Points Possible	Score	CDE USE ONLY
1.00		

IB-5 Describe the efficiency of your school's landscape.

What percent of the landscape areas on the school site has an irrigation system? What year was the current system installed?
100% drip irrigation; installed in the garden in 2013, expanded/installed to the orchard/median in 2016.
What percentage of the turf area is used for physical education or other educational purposes?
ASTI has no turfed area. PE takes place on the college fields. These fields are artificial turf and require no watering.
What types of water-efficient and/or regionally appropriate plants and trees are used? What percentage of all plants are water-efficient and/or regionally appropriate?
2016 Drought tolerant Willows in orchard used as living fedges and sculptures. More local plants will be introduced in the Spring of 2017 in the orchard expansion. In 2015, COA planted drought resistant bushes, grasses, shrubs and small trees to reduce water usage and increase CO2 uptake.
Describe alternate water sources used for irrigation. (500 characters)
NA

Describe any efforts to reduce storm water runoff and/or reduce impermeable surfaces. (500 characters)		
Planters in concrete areas soak in rainwater reducing runoff. In 2010 ASTI has installed 11 planters covering 50 sq feet. Earlier this year COA added 32 planters covering 77 square feet. During mulching of the garden and orchard areas the ground level was lowered to below the level of the concrete sidewalks & driveways around those areas. This reduced water runoff during really heavy rain where water would have previously run off into the street/gutters.		
Points Possible	Score	CDE USE ONLY
1.00		

IB-6 What percentage of the school grounds is devoted to ecologically beneficial uses?

Describe uses such as rain gardens, wildlife or native plant habitat, outdoor classrooms, etc. Include any ranking or certification earned. (500 characters)		
100% of the schools landscapable grounds (grounds that are not concreted over) have been converted into ecologically beneficial use. These areas include an organic vegetable garden, a seated area, an orchard and compost area. Students use these areas for lessons, green club activities, to interact with wildlife and fauna and for having a place to hang out. The landscapable area is 36% of the total school footprint.		
Points Possible	Score	CDE USE ONLY
0.50		

Element IC – Waste

IC-1 What percentage of solid waste is diverted from landfilling or incinerating due to reduction, recycling, and/or composting?

Complete all of the calculations below.	
Is service stopped or reduced during non-service times?	No
A = Monthly garbage service in cubic yards: garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected	4.56
B = Monthly recycling volume in cubic yards: recycling dumpster size(s) x number of collections per month x percentage full when emptied or collected	4.18
C = Monthly compostable materials volume(s) in cubic yards: food scrap/food soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected	3.42
Recycling rate: $((B+C)/(A+B+C)) \times 100$	$(7.6/12.16) \times 100 = 63\%$

Monthly waste generated per person: A/number of students and staff	4.56/192 = 0.02375 cubic yards/person
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Points Possible	Score	CDE USE ONLY
1.50		

IC-2 Describe your school's compost system.

Describe practices such as compost produced from schoolyard green waste and/or lunchtime waste generated on-site, and/or locally-sourced compost or mulch used for landscaping purposes. (1,000 characters)

We compost approximately 2/3 of all food scraps, food soiled and paper towel waste and are working to improve this each year. We collect organic waste at lunch in a green slim jim located in the quad and green desk side bins in the classroom. Recycling/composting procedures will be reviewed at the start of every school year. We have compost bins in every classroom, collaborative workspace, bathroom & outside. Bins are labeled with signs as guides. Custodians empty green bins daily. The garden uses plant waste and green manure grown for the compost pile. The Green Club builds, observes & maintains a compost pile to be used in the garden. The soil in the garden comes either from city compost programs or local businesses that make their own compost.

Points Possible	Score	CDE USE ONLY
1.00		

IC-3 How is waste disposal and recycling tracked?

Describe your practices. (500 characters)

The only way ASTI can track its waste and recycling separate from the college is by conducting an audit or audits. For audits we collect all the waste from the site at the end of the day to see how much we have in each stream and also to see where we can improve i.e. what items are commonly placed in the wrong bins and what could still be saved from landfill.

Points Possible	Score	CDE USE ONLY
0.50		

IC-4 Describe the hazardous materials used at your school and how they are disposed of properly.

Describe use, storage, and disposal practices for flammable or corrosive liquids, toxins, mercury, lamps and tubes, etc. Include other progress and measures taken to reduce solid waste and eliminate hazardous waste in relation to <i>Education Code Section 49341</i> (1,000 characters)		
<p>AUSD’s hazardous wastes are handled by a licensed environmental company. All hazardous waste disposals are properly documented by the EPA’s hazardous waste manifest system. We do not keep hazardous materials at our school with the exception of CFL lighting. Nonworking CFL tubes and ballasts are disposed of properly using district procedures for disposal. We have eliminated any need for the use of poisons in the garden to deal with rodents through a program where we regularly feed the local cats in the area. In 2010, the maintenance, operations & facilities (MOF) program coordinator at AUSD collaborated with and received a grant from the California Department of Public Health to build a district-wide green cleaning program. Through the Cleaning for Asthma Safe Schools (CLASS) Pilot Project AUSD reduced dozens of cleaning chemicals down to a few Green Seal-Certified alternatives: all-purpose cleaner, disinfectant, neutral cleaner, and graffiti wipes.</p>		
Points Possible	Score	CDE USE ONLY
0.50		

IC-5 Describe how your school is implementing Environmentally Preferable Purchasing/Green Purchasing for administration, instruction, and/or maintenance.

Complete all sections below.	
Does your school have an environmentally preferable purchasing policy and/or procedure?	Yes
Does your school track its green purchases?	Yes
Are school employees trained on how to identify and use green products?	Yes
What percentage of your school's total office/classroom paper content is postconsumer material, fiber from forests certified as responsibly managed, and/or chlorine-free? (250 characters)	
<p>Approximately 8%. ASTI has taken action to reduce the total paper count overall. In the past year, the use of paper has significantly dropped by means of using methods that would decrease the use of paper.</p>	

Describe how your school identifies green products. Include any specific third-party-certified standards that are used and what percentage of cleaning products is third-party-certified as green. (500 characters)

All Teachers are provided with information on how to look up if a product is green, and information discouraging use of any cleaning or deodorizing products that may contain toxic and asthma-inducing chemicals. The school purchases text books second hand, if available, before purchasing new. Staff also uses refillable dry wipe pens, and washable reusable microfiber wipes to cut down on landfill waste. AUSD has a program where custodians use Green Seal-Certified cleaners where possible.

Points Possible	Score	CDE USE ONLY
1.50		

Element ID – Alternative Transportation

ID-1 *What percentage of students take the following to get to/from school?*

Indicate your school’s mode share below.

Walk	22.45%
Roll (i.e., bicycle, scooter, or skateboard)	12.24%
Carpool with 2+ students in the car	8.16%
School bus	0%
Other public transportation	40.82%

Describe how these percentages were collected and calculated. (500 characters)

These statistics were taken and calculated from surveys administered via email to students by the Green Club. The number of students who checked a box for a transportation type was counted, divided by the number of students who replied and multiplied by 100 to calculate each percentage. This survey will be administered each year to track progress. Percentages may exceed the total 100% due to the fact that students may use multiple methods of transportation in one week.

Points Possible	Score	CDE USE ONLY
1.00		

ID-2 *Has your school implemented any of the following?*

Select all that apply.

<input type="checkbox"/>	Designated carpool parking stalls.
<input type="checkbox"/>	A well-publicized no-idling policy that applies to all vehicles (including school buses that are required to meet the California Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools Regulation).
<input type="checkbox"/>	Vehicle loading/unloading areas are at least 25 feet from building intakes, doors, and windows.
<input type="checkbox"/>	Designated Safe Pedestrian Routes to School or Safe Routes to School.

	A “walking bus” program in which adults accompany groups of students as they walk to school along a given route.	
	Electric vehicle charging stations have been installed to encourage the use of these vehicles.	
	Secure storage (such as lockers, racks, or rooms) is provided to encourage human-powered modes of transportation to school.	
Points Possible	Score	CDE USE ONLY
1.00		

ID-3 Describe activities in your safe routes program.

Describe and quantify participation in school activities. Include outreach efforts and partners, municipal collaboration, and any funding applied to safe routes and/or active transportation programs. (1,000 characters)		
<p>The Safe Routes to School for Walking website and a link to Bicycling Map for Alameda is emailed to every student at the start of each school year and is available on our transportation page of our website. This page includes bike and pedestrian safety tips for families, our no idling policy for pickup and drop off and best places for drop off. ASTI has a no idling policy in its handbook and a prominent sign on the building closest to the road. The PTA purchased a bike rack a few years ago to encourage cycling to school. Because of demand and overcrowding on the original rack another was purchased in Oct 2016. Bike racks are located on the side of the computer lab. The College of Alameda is working in collaboration with Alameda Municipal Power (AMP) in early 2017 on a plan to provide two electric car charging stations on site.</p>		
Points Possible	Score	CDE USE ONLY
1.00		

ID-4 Describe how your school or district fleet is efficient and has reduced its environmental impact.

Describe practices and policies pertaining to on-site school transportation as well as district bus fleets and other vehicles used in school operations or activities. (500 characters)		
<p>Our goals as a school include increasing physical activity and reducing our carbon footprint. Our teachers use alternative transportation for class trips like taking the bus to the theater and walking trip to the USS Hornet Museum. Teachers take students on walking/biking field trips to close destinations. Long-distance trips use Amtrak, SF/ferry, public or charter bus, or carpool. In 2016 AC Transit, the local bus company students use, runs 12 zero emission buses and have plans to expand this.</p>		
Points Possible	Score	CDE USE ONLY
1.00		

ID-5 Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships.

Describe any programs or efforts not covered in the previous questions for Pillar I. Content does not need to be specific to Element ID – Alternative Transportation. (1,000 characters)

In Oct 2016 PTA purchased a number of green cleaning products and microfiber cloths for teachers to try out using the guidelines set out by the California's Department of Public Health's Asthma-Safe Schools Microfiber Pilot Project. This will not only reduce landfill but also make the school environment healthier. In subjects where this is possible, the school policy is to provide an online copy of homework using the School loop system. This drastically reduces the number of worksheets given out. Worksheets are only given out to students without internet access at home. In Math students are given personal whiteboards to use for calculations and graphing, this has approximately halved the classroom paper usage for this subject. ASTI and AUSD partner with Stopwaste. Students at ASTI take part in StopWaste's Ambassador Program (SWAP) and have volunteered as trash talkers at local events to help reduce waste.

Points Possible	Score	CDE USE ONLY
1.00		

Congratulations, you have completed Pillar I! Pillar II begins on the next page.

Pillar II: Improve the Health and Wellness of Students and Staff

Element IIA – Environmental Health

IIA-1 Is your school in compliance with the [Healthy Schools Act](#)?

Select all that apply.		
<input type="checkbox"/>	Our school or school district has a written Integrated Pest Management (IPM) Plan.	
<input type="checkbox"/>	Our school or school district has an identified IPM Coordinator.	
<input type="checkbox"/>	Our school or school district sends annual written notification regarding pesticide applications.	
<input type="checkbox"/>	Our school or school district has a 72-hour individual notification registry for pesticide applications.	
<input type="checkbox"/>	Our staff completes annual IPM training.	
<input type="checkbox"/>	Our school or school district posts warning signs for pesticide applications (if applicable).	
<input type="checkbox"/>	Our school or school district retains pesticide use records on-site for four years.	
<input type="checkbox"/>	Our school or district reports pesticide use to the California Department of Pesticide Regulation as required.	
Points Possible	Score	CDE USE ONLY
1.00		

IIA-2 Describe your school's efforts to practice IPM and reduce overall pesticide use.

Include IPM/green certifications earned, routine pest inspections and monitoring, pest identification, recordkeeping, etc. (1,000 characters)		
<p>ASTI uses the district IPM plan which follows strict regulatory mandate on the use of chemicals for pest management. Every prevention & treatment uses the least toxic approach. We use no pesticides for pests or weed control. Routine inspections & recordkeeping are managed by district. The school Health & Wellness Committee provides teachers with information to discourage use of any cleaning or deodorizing products that may contain toxic and asthma-inducing chemicals. Our School Garden uses no pesticides. We have a program where we feed local cats to keep down the rodent population. The plant diversity attracts enough beneficial insects to keep common pests in check. Garden staff teaches students to do routine checks to make sure plants look healthy. Students help remove by hand anything that's causing too much trouble, such as snails or aphids. Sheet mulching is used as a method to control weeds without use of pesticides or herbicides.</p>		
Points Possible	Score	CDE USE ONLY
1.00		

IIA-3 Describe your school’s use of chemical pesticides, including insecticides, herbicides, and disinfectants.

Select all that apply.		
<input type="checkbox"/>	Our school does not use any chemical pesticides.	
<input type="checkbox"/>	Our school does not routinely apply any chemical pesticides.	
<input type="checkbox"/>	Our school uses one or more chemical pesticides outdoors on a routine or scheduled basis.	
<input type="checkbox"/>	Our school uses one or more chemical pesticides indoors on a routine or scheduled basis.	
What percentage are safer products from the <i>Healthy Schools Act</i> exempt products list?		We do not use pesticides in our school
Points Possible	Score	CDE USE ONLY
0.50		

IIA-4 Which of the following practices does your school employ to minimize exposure to hazardous contaminants?

Select all that apply.	
<input type="checkbox"/>	Our school prohibits smoking on campus and in public school buses.
<input type="checkbox"/>	Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school.
<input type="checkbox"/>	Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO).
<input type="checkbox"/>	Our school does not have any fuel burning combustion appliances.
<input type="checkbox"/>	Our school adheres to the Asbestos Act and has an asbestos management plan in place.
<input type="checkbox"/>	Our school has tested all frequently occupied rooms at or below ground level for radon gas and has fixed and retested all rooms with levels that tested at or above 4 pCi/L or our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L.
<input type="checkbox"/>	Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure.
<input type="checkbox"/>	Our school has a chemical management program that includes: chemical purchasing policy (low- or no-volatile organic compounds (VOC) products), storage and labeling, training and handling, chemical inventory, hazard communication (clean-up and disposal), purchasing policy for less toxic products including less toxic art supplies, and selecting third-party-certified green cleaning products.

Provide specific examples for the practices checked above. (1,000 characters)		
<p>“No Smoking” signs are posted throughout campus and ASTI is part of the Tobacco-Use Prevention Education (TUPE) program. CFL lighting containing mercury that needs replacing is treated as hazardous waste and custodians use proper disposal methods. No other sources of elemental mercury are in use in the school and school is compliant with district asbestos management plan. During the summer break, a thorough inspection is done in each room and of the central gas heating system to identify any issues and make sure school is protected from carbon monoxide. Filters are changed in every vent yearly. All classrooms are above ground level. ASTI does not have any fuel burning appliances or any wood playground structures. School garden beds were constructed using wood that does not contain chromate copper arsenate to eliminate exposure to students. Custodial staff has been trained to on proper storage and labeling, handling chemical inventory, clean-up and disposal and hazard communication.</p>		
Points Possible	Score	CDE USE ONLY
2.00		

IIA-5 Which of the following indoor environmental standards are employed at your school?

Indicate the percentage of classrooms that meet the standard.	
The classrooms in our school have good acoustics (less than 45 dBA).	Yes
The classrooms in our school have good daylighting and high-quality electrical light when needed.	Yes
The classrooms in our school have good relative humidity control (ASHRAE 30-60%).	No
The classrooms in our school exceed minimum outdoor air exchange rates (<i>California Mechanical Code, Table 402.1</i>).	Yes
The classrooms in our school have views of trees and nature.	Yes

Provide specific examples of actions taken for each checked practice above. (1,000 characters)

With acoustic ceiling tiles, fabric wall panels and large windows, classrooms and offices were designed to provide good acoustics, maximize daylighting and increase airflow. Windows open to vent from opposite sides of the room and generate good airflow. AUSD uses dehumidifiers, fans and extractors in cases of roof leaks or mold. Remediation work is done by a licensed environmental company. Classrooms have views of trees and nature. Plants in classrooms help to improve air quality through their air purifying properties.

Points Possible	Score	CDE USE ONLY
4.00		

IIA-6 Describe your school's maintenance and operations practices related to ventilation.

Complete all sections below.

Our school has installed local exhaust systems for major airborne contaminant sources.

No

Describe your school's practices for inspecting and maintaining the building's ventilation system and all unit ventilators to ensure they are clean and operating properly. (1,000 characters)

During summer break, a thorough inspection is done of each room by district maintenance staff and of the school heating gas system to identify any issues and make sure school is protected from carbon monoxide. Filters are changed in every vent before school begins. Portable classrooms are equipped with HVAC systems and undergo the same annual maintenance and inspection.

Points Possible	Score	CDE USE ONLY
1.00		

IIA-7 Describe actions your school takes to prevent exposure to asthma triggers in and around the school.

Describe actions and practices, including the use of asthma-safer chemicals. (1,000 characters)

Faculty receives an updated list of Student Health Concerns at the beginning of the school year. Asthmatic students are identified so that teachers can work with parents to understand concerns and asthma triggers. The Health and Wellness Committee compiled information for email distribution to teachers to inform them of cleaning products and air fresheners that can trigger asthma. This information was compiled and links to the California Department of Public Health to support the development of the Work-Related Asthma Prevention Program (WRAPP) developed Healthy Cleaning & Asthma-Safer Schools: A How-To Guide, published in Oct 2014. Staff discontinued use of plug-in air fresheners in bathrooms and classrooms, and the use of bleach wipes for general cleaning due to health and asthma concerns. AUSD's maintenance, operations & facilities (MOF) have a district-wide green cleaning program that reduced dozens of cleaning chemicals down to a few Green Seal-Certified alternatives.

Points Possible	Score	CDE USE ONLY
1.00		

IIA-8 Describe actions your school takes to control moisture from leaks, condensation, and excess humidity.

Describe actions and practices for moisture control, including mold abatement. (500 characters)

Our facility and every room is inspected during summer break to identify any issues with the HVAC system. School staff is reminded not to block heating vents with shelving or boxes. Filters are changed at every vent annually. Staff is instructed by Maintenance Operations and Facilities to report any indoor air quality concerns by submitting a work order.

Points Possible	Score	CDE USE ONLY
0.50		

IIA-9 Describe the procedures and policies your school follows to ensure buildings and site soils are lead-safe.

Describe procedures or policies related to lead-containing building or finishing materials, especially lead-based paint. (500 characters)		
<p>ASTI was constructed in 2004 and is one of the district’s newer facilities. All paint and construction materials used are lead-free. Soil samples were taken and tested before the installation of the school garden. Tests came back negative for dangerous levels of lead. There are no painted surfaces or windows near the garden only untreated concrete walls.</p>		
Points Possible	Score	CDE USE ONLY
0.50		

IIA-10 Describe your school’s access to clean drinking water.

Complete all sections below.	
The school’s drinking water comes from:	Municipal water source
Describe how the water source is protected from potential contaminants. (500 characters)	
<p>We receive our water from East Bay Municipal Utility District, which filters all water through sand, and anthracite or carbon. Each water treatment plant also provides disinfection, fluoridation and corrosion control.</p>	
Describe the program in place to control lead and other contaminants in drinking water. (500 characters)	
<p>All plumbing is lead-free and compliant with California’s AB 1953. State law since 2006, this legislation establishes the toughest drinking water plumbing lead content standard in the world.</p>	
Points Possible	Score
1.00	

IIA-11 Describe how your school controls and manages chemicals routinely used in the school to minimize student and staff exposure.

Describe actions and practices, including staff training programs and safer alternatives. (1,000 characters)

All custodial staff is trained on safe use of chemicals routinely used at school. These safety measures are reviewed before every school year by MOF managers. Cleaning products are locked in custodial supply rooms and inaccessible to students. Staff have been trained to use safe cleaning products for general cleaning. They are trained on how to identify and what to do for cases where bleach or antibacterial cleanup is needed. Staff qualified to perform this type of cleanup have been trained on how to minimize the use of these chemicals, student and staff exposure and their effect on the local environment.

Points Possible	Score	CDE USE ONLY
0.50		

IIA-12 Describe your school's healthier and greener cleaning custodial program, including green cleaning products, services, advanced equipment, and/or policies.

Describe actions and practices; specify if you have implemented the California Department of Public Health's "Healthy Cleaning & Asthma-Safer Schools: A How-To Guide." (1,000 characters)

In 2010, the maintenance, operations & facilities (MOF) program coordinator at AUSD collaborated with and received a grant from the California Department of Public Health to build a district-wide green cleaning program. Through the Cleaning for Asthma Safe Schools (CLASS) Pilot Project AUSD reduced dozens of cleaning chemicals down to a few Green Seal-Certified alternatives: all-purpose cleaner, disinfectant, neutral cleaner, and graffiti wipes; transitioning from disposable cotton mops and rags to nylon microfiber ones and laundering system via mobile washing machines; removing the use of bleach from non-food servicing areas; switching out buckets and mops for automated restroom cleaning machines; and increasing staff training for the new equipment. AUSD collaborated with the California Department of Public Health to support the development of the Work-Related Asthma Prevention Program (WRAPP) developed Healthy Cleaning & Asthma-Safer Schools: A How-To Guide, published in Oct 2014.

Points Possible	Score	CDE USE ONLY
1.00		

IIA-13 Describe other steps your school takes to protect indoor environmental quality.

Describe practices such as implementing EPA's IAQ Tools for Schools and/or conducting other periodic, comprehensive inspections of the school facility. (1,000 characters)

Our facility and every room is inspected during summer break to identify any issues with the HVAC system. School staff is reminded not to block heating vents with shelving or boxes. Filters are changed at every vent annually. Staff is instructed by Maintenance Operations and Facilities to report any indoor air quality concerns by submitting a work order. Our school Health & Wellness Committee provided staff with information about cleaning products and plug-in air fresheners that may adversely affect indoor air quality. A list of nontoxic methods to clean and deodorize air in the classroom was distributed to staff

Points Possible	Score	CDE USE ONLY
0.50		

IIA-14 Describe other steps your school takes to protect outdoor environmental quality.

Describe practices such as reducing vehicle idling, planting trees, etc. (1,000 characters)

ASTI has a no idling policy, this is posted on the website, handbook, and also sent out to parents annually. We also have a no idling sign prominently displayed on the building closest to the road. The sign has a no idling graphic and the words "No Idling - Lungs At Work, Save The Air, Turn Off Engine". ASTI provides recycling, composting, and landfill bins outside to discourage littering and encourage a reduction of landfill waste. ASTI has replaced it's grassy areas with school garden and has planted 14 trees, mulched, and provided low water irrigation. We have also added a bench, 4 pots and 5 planters around the main courtyard that not only helps cut down on the thermal heating of the concrete in this area, reduce rain water runoff and makes the environment more pleasant to hang out in.

Points Possible	Score	CDE USE ONLY
0.50		

Element IIB – Nutrition and Fitness

IIB-1 Which practices does your school employ to promote healthy food and nutrition?

Select all that apply.		
<input type="checkbox"/>	Our school has been recognized in the USDA's <u>HealthierUS School Challenge</u> and/or <u>Alliance for a Healthier Generation</u> ; provide level and year in the space below.	
<input type="checkbox"/>	Our school participates in a Farm to School program to use local, fresh food (e.g., <u>California Thursdays</u>).	
<input type="checkbox"/>	The food purchased by our school is certified as environmentally preferable; provide the percentage and type in space below.	
<input type="checkbox"/>	Our school provides staff, students, and families information on nutrition education and/or programs.	
Provide specific examples of actions taken for each checked practice, focusing on innovative or unique practices and partnerships. (1,000 characters)		
<p>AUSD's school meals meet or exceed all State and Federal regulations and are looking to introduce a Farm-to-Fork program next year. School meals contain no added trans-fats; chocolate milk does not contain High Fructose Corn Syrup (HFCS); they serve whole grain breads and pastas; pizza crust is whole grain; no deep fried foods; breakfast cereals are whole grain with reduced or no added sugar; fresh fruits and vegetables with meals; all members of AUSD food services are trained as Safe Food Handlers. AUSD website includes links for parents and students to websites promoting healthy food and nutrition. ASTI's Green Club partners with StopWaste's Ambassador Program (SWAP); in Sept 2016 Green Club students volunteered at the Eat Real Festival in Oakland. ASTI's Current Life class has a unit that teaches about health related matters that includes nutrition and eating disorders. ASTI's students take part in Alameda Food Bank's annual food drive to help feed low-income residents.</p>		
Points Possible	Score	CDE USE ONLY
1.00		

IIB-2 Which practices does your school employ relative to school gardens?

Select all that apply.		
<input type="checkbox"/>	Our school has one or more on-site gardens maintained by students, staff, and/or families.	
<input type="checkbox"/>	Our school garden supplies food for our students in the cafeteria, a cooking or garden class, or to the community.	
<input type="checkbox"/>	All students in every grade receive instructional time in a school garden.	
Provide specific examples of actions taken for each checked practice, focusing on innovative or unique practices and partnerships. (1,000 characters)		
<p>ASTI high school has a small community garden maintained by the ASTI Green Club consisting of over a quarter of the student body. The garden is tended to on a daily basis where specific tasks are to be completed as a group creating many opportunities for Green Club members to guide others to complete tasks such as weeding, planting and overall maintaining the health of the garden. The 9th grade biology class also receives instructional time as part of the curriculum learning the basic skills of growing healthy plants. The food grown is later distributed amongst the club members as well as the school community where it is used for cooking. Outside of the garden, club members have worked alongside Ploughshares Nursery, a community garden where members are able to receive outside expertise. Also, members have participated in the Community Action for a Sustainable Alameda program and Green Festival Expo in SF where they promote recycling and green activities.</p>		
Points Possible	Score	CDE USE ONLY
1.00		

IIB-3 Which practices does your school employ relative to physical education?

Select all that apply.		
<input type="checkbox"/>	Our students spent at least 120 minutes per week over the past year in school-supervised physical education.	
<input type="checkbox"/>	At least 50% of our students' annual physical education takes place outdoors.	
<input type="checkbox"/>	Health measures are integrated into assessments.	
Provide specific examples of actions taken for each checked practice, focusing on innovative or unique practices and partnerships. (1,000 characters)		
<p>9th and 10th grade students participate in the required PE course. They receive 225 minutes of PE every week, instruction takes place typically outdoors. Structured physical fitness activities include daily running and stretching along with a monthly sports unit; these ranges from ultimate frisbee and volleyball to yoga and track. The curriculum is designed so students will come away from the class more fit, with healthier bodies and a better understanding of physical and mental well-being. All 9th grade students are assessed using the standard Physical Fitness Testing requirements every year. ASTI high school will be integrating aspects of the SunWise program into the PE curriculum next year to teach students about the risks of skin cancer and about protection from overexposure from the sun. AUSD partners with Alameda Education Foundation (AEF) who provide after-school sports and fitness classes for younger students. High schoolers can sign up for as summer camp interns.</p>		
Points Possible	Score	CDE USE ONLY
1.00		

IIB-4 Which practices does your school employ to promote wellness?

Select all that apply.		
<input type="checkbox"/>	Our school has an active wellness committee that meets at least quarterly.	
<input type="checkbox"/>	Our local school wellness policy addresses positive environmental and health impacts that have helped green our school.	
<input type="checkbox"/>	Our wellness policies and practices extend into afterschool programs and/or activities.	
<input type="checkbox"/>	At least 50% of our students has participated in the <u>SunWise</u> program (or an equivalent program).	
Provide specific examples of actions taken for each checked practice, focusing on innovative or unique practices and partnerships. (1,000 characters)		
<p>Our active school Health & Wellness Committee plans actions that will improve the health, wellness of students, staff & school. We easily implement much of our district wellness policy with our school's green initiatives. All students have daily access to fresh produce in AUSD school meals, from the onsite College Cafe and from our school garden. AUSD food services strives to serve healthy food by serving no trans fats, and more fresh fruits and whole grains. Students study a number of health related topics in their Current Life Issues class. Our wellness policies and practices extend into afterschool programs in partnerships with TUPE, and our green club programs. Students in the green club program spend the majority of their time outside using the school's garden and quad. ASTI high school will be integrating aspects of the SunWise program into the PE curriculum next year which to teach students about the risks of skin cancer and about protection from overexposure from the sun.</p>		
Points Possible	Score	CDE USE ONLY
1.00		

IIB-5 Describe the types of outdoor education, exercise, and recreation available outside of formal physical education.

Include time spent in the garden and opportunities for students to engage in child-led, child-directed physical play activities. (1,000 characters)

Any ASTI student residing in the city of Alameda is eligible to try out for either Alameda High or Encinal High School's teams. We have students on the swimming, water polo, basketball, tennis, soccer and volleyball teams currently participating on competitive teams. In Green Club students are busy digging with tools, pushing a wheelbarrow, watering and weeding as part of everyday garden maintenance. The Green Club is student lead and directed. Every year all 9th and 10th graders have to create and perform a dance routine as part of their PE class. As one of ASTI's annual traditions students take this seriously and can often be seen practicing after school in the quad, garden or on the college roof. During the spring, every grade choreographs a high intensity dance performance for Sports O' Rama as well as competes in multiple physical activities and games like basketball, relay races and tug of war.

Points Possible	Score	CDE USE ONLY
1.50		

IIB-6 Describe the efforts being made to increase staff wellness.

Include physical fitness, mental health, nutrition, sun exposure, etc. (1,000 characters)

AUSD has an Employee Assistance Program EAP for staff wellness and mental health support. AUSD's EAP is provided by Magellan Health Services of California. Including access to a 24 hours, 7 days a week, toll-free Crisis Counseling number, and offers tools and resources on; achieving work-life balance, grief and loss, depression, family and relationships, living healthier and emotional wellness. They also write a bi-monthly newsletter including tips to improve health and wellness. Staff can also take advantage of membership discounts at four different local health clubs. Numerous studies have shown that indoor plants provide a number of benefits for health and wellbeing, including decreases in illness symptoms, increases in work performance, and job satisfaction and lift spirits. Classes are encouraged to have one or more class plants and currently 100% of classes have at least one plant.

Points Possible	Score	CDE USE ONLY
1.50		

IIB-7 Describe any other efforts to improve health and wellness.

Highlight innovative or unique practices and partnerships with local growers, businesses, and/or community partners. (1,000 characters)

ASTI partners with the Alameda Point Collaborative in support of homeless families and local farm and nursery Ploughshares to offer student volunteer opportunities and summer internships. Students attend Ploughshare’s free garden workshops and report back/teach Green Club members. ASTI boasts an active Tobacco Use Prevention Education (TUPE) program; three ASTI students (a remarkable number) sit on the Youth Advisory at the Alameda County Office of Education; one of those students is on the Leadership team that facilitates training of teen peer educators and events such as the Great American Smokeout. ASTI students often place Public Service Announcement run every year by TUPE. In 2013 ASTI student Tram Huynh was awarded a Girls Inc. 'Woman Who Dare' award. She lobbied with Advocates for Youth in Washington, D.C., for the Real Education for Healthy Youth Act. ASTI students also participate in the AUSD LGBTQ collective’s annual Harvey Milk poster contest and ceremony.

Points Possible	Score	CDE USE ONLY
2.00		

IIB-8 Does your school use a Coordinated School Health approach or other health-related initiatives to address overall school health issues?

Describe the health-related initiatives or approaches used by the school. (1,000 characters)

ASTI uses the district wellness policy & strives to integrate health related education into their curriculum and promotes healthy environment through policy and action; examples include a no idling policy and asthma-safe cleaning practices. ASTI provides health education/services through TUPE, Alameda Family Services, and COA. In the RISE program teachers give out awards across all disciplines for students showing positive behaviors. This program partners with the U.S. Department of Education's Office of Special Education Programs (OSEP) PBIS program - www.pbis.org. The six school wide learning results include two on health and wellness: Healthy Decision Makers and Engaged Citizens. The district and Alameda PTA Council partner to offer parent/community involvement in their Alameda Family Enrichment Speaker Series with topics "Raising Kids with Emotional Intelligence", "Is That Me Yelling?", & "Family Tech Talk Creating Safety, Trust, Awareness and Respect in the Digital Age".

Points Possible	Score	CDE USE ONLY
2.00		

IIB-9 Does your school partner with any postsecondary institutions, businesses, nonprofit organizations, or community groups to support student health and/or safety?

Describe these partnerships. (1,000 characters)		
<p>In 2016 ASTI student Fernanda Castro won a Girls Inc "Women Who Dare" award for her work in women's health justice. She worked with the Berkeley Free Clinic and the Martin Luther King Freedom Center. AUSD schools annually participate in the Great California ShakeOut; students are taught earthquake safety & practice behaviors that can help them survive/recover from a major earthquake. ASTI has its own School Site Emergency Plan that is reviewed yearly. ASTI works with the Tobacco Use Prevention Education (TUPE) who provide a counselor to visit ASTI every other week to run an educational group for our students about the use of alcohol, drugs, and tobacco. Students also celebrate Red Ribbon Week to educate themselves to be alcohol, tobacco, drug, and violence free. ASTI English and Social Studies teachers participate annually in Season for Nonviolence Speech Contest sponsored by the Alameda Youth Collaborative; our students have placed in the city wide speech contest every year.</p>		
Points Possible	Score	CDE USE ONLY
2.00		

IIB-10 Do your students have daily access to a school nurse and counselor and/or a school-based health center?

Describe these programs and the services they provide. (1,000 characters)		
<p>ASTI has available a full time school nurse on call; onsite there is a full time health clerk. Students have access to school based health center at Encinal High School and can also use the COA health center if they are 18 or older. ASTI full time counselor Kristen Jurkovich has an MA in Psychological Counseling & Ed.M Psychological Counseling w/school counseling emphasis. She is also available to students for personal, social, and academic concerns. ASTI's partner college's "Study Jam" program before finals provides assistance including counseling, stress balls, supplies, refreshments and/or tutoring as needed. ASTI Leadership students have developed a mentoring program for 9th graders that includes ice breaking activities and tours on Orientation Day, writing letters of support, pizza lunches and training future club leaders.</p>		
Points Possible	Score	CDE USE ONLY
0.50		

IIB-11 Describe your school's efforts to support student mental health and school climate.

Include anti-bullying programs, peer counseling, restorative justice, etc. (1,000 characters)

In Spring 2010 ASTI students collaborated on a school constitution that includes having a positive community impact and avoiding participation in bullying, harassment, threats, or intimidation, and resolving conflicts peacefully by using non-confrontational approaches. Administration takes a counseling approach to discipline that draws from the tenets of Restorative Justice. Student leaders reinforce this growth mindset by mentoring younger students and modeling appropriate online behavior. In April 2016 some families attended the Alameda Family Enrichment Speaker Series free screening of "Screenagers" which promotes awareness of online bullying and addiction. ASTI students participate in social justice programs with the MLK Freedom Center in Oakland, which “promotes the principles of nonviolence and offers an environment where young people actively seek peaceful, nonviolent solutions to the difficult challenges we all face in our communities”.

Points Possible	Score	CDE USE ONLY
1.50		

Congratulations, you have completed Pillar II! Pillar III begins on the next page.

Pillar III: Effective Environmental and Sustainability Education

Element IIIA – Interdisciplinary Learning

III A-1 Which policies does your school employ to help ensure effective environmental and sustainability education?

Select all that apply.	
<input type="checkbox"/>	A written definition of environmental literacy and/or a definition of environmental learning outcomes including knowledge, skills, positive attitudes, and civic responsibility.
<input type="checkbox"/>	An environmental or sustainability literacy requirement.
<input type="checkbox"/>	A set of policies to promote environmental education and sustainability.
<input type="checkbox"/>	California’s <u>Environmental Principles and Concepts</u> are an integrated element of instruction across disciplines.
<input type="checkbox"/>	A green schoolyard vision statement and/or master plan that guides the development of school grounds over time.

Provide specific examples of actions taken for each checked practice, focusing on innovative or unique practices and partnerships. (2,000 characters)

ASTI has a written definition of environmental literacy that can be found on the Environmental and Sustainability Framework page of our handbook; it includes ASTI's initiatives that integrate and promote environmental and sustainability concepts, on campus, in the classrooms, in the curriculum and outreach to the community. It also includes school policies that help protect the school environment. In April, 2009, the Alameda Unified School Board (AUSD) passed the Alameda Green Schools Resolution, recognizing that "schools have the potential to make positive, tangible environmental change in the world while teaching students to be stewards of their communities, the earth, and its resources." November 2016 the district hosted an "Environmental Literacy Reception" with ChangeScale and Lawrence Hall of Science including a presentation on AUSD's vision for environmental literacy. All Students will learn EEI topics in Modern World History, US History, Biology and Physics. The California's Environmental Principles and Concepts are integrated across all disciplines via ASTI's "RISE" awards program. Awards are given to students who show positive behavior in looking after themselves, others and their environment. This program partners with the U.S. Department of Education's Office of Special Education PBIS Program - www.pbis.org. ASTI Green Club Mission Statement - ASTI Green Club is a student led environmental club with the purpose of educating the school and community on sustainability, the importance non gmo/organic produce, as well as student leadership. The garden's vision for the future includes an herb spiral centerpiece for the orchard, sculpting the willows into living works of art, and a butterfly garden. We also envision adding trellises to grow vining berries and grapes. And finally, we hope to add seating in the orchard to create an outdoor learning space for all students to take advantage of.

Points Possible	Score	CDE USE ONLY
6.00		

III A-2 Which academic programs does your school employ to help ensure effective environmental and sustainability education?

Select all that apply.	
<input type="checkbox"/>	An academic program that integrates environmental and sustainability concepts across the curriculum in a single subject.
<input type="checkbox"/>	An academic program that integrates environmental and sustainability concepts across the curriculum in multiple disciplines.
<input type="checkbox"/>	An environmental or sustainability elective course, including an AP Environmental Science course (high schools only).
<input type="checkbox"/>	A garden program that is integrated in the curriculum.
<input type="checkbox"/>	A way to assess student environmental and sustainability learning and achievement.
<input type="checkbox"/>	Professional development in environmental and sustainability education for all teachers and staff.

Provide specific examples of actions taken for each checked practice, focusing on innovative or unique practices and partnerships. (2,000 characters)

Students learn about the mechanics of their environment and sustainability issues in Physics & Biology. In English students are encouraged to analyze texts through an environmental lens; e.g. 9th graders read John Steinbeck's "Of Mice and Men" where they talk about the environmental impact of the 1930's Dust Bowl. All students take Modern World History & United States History both contain many of the California EEI curriculum components including topics like 9/11 attack and its impact on environment and health of residents and workers, & emergence of environmental movement in 1960s, DDT, Silent Spring. Students will look at past events, compare them to current events, & learn how to research, debate and write about them. ASTI's RISE program gives out awards for positive behaviors across all disciplines; including looking after the environment, recycling and composting in classrooms & in outdoor areas/school wide events. ASTI students can take elective classes at Peralta/COA. Peralta/COA classes include Environmental Control Technology, The Financial Case for Clean Energy, Indoor Air Quality & Building Envelope, Native Plant ID & Culture, Global Climate Change, Sustainable Urban & Regional Planning, Lighting Efficiency Technology, & Nutrition. ASTI's garden program is integrated into the curriculum in Biology where all students study ecology & climate change; are introduced to urban organic farming in class & conduct organic vegetable growing experiments throughout the year. California state standards for life science overlap with the sustainability curriculum for grades 9-10. In 2016 100% of ASTI 10th graders passed life science CST with 72% in the advanced range demonstrating a high level of students' mastery in this subject matter including environmental & sustainability targets. Professional development is available to all staff; through AUSD's preferred partnership with StopWaste and also via the Alameda Green Schools Challenge program.

Points Possible	Score	CDE USE ONLY
8.00		

IIIA-3 Which co-curricular programs does your school employ to help ensure effective environmental and sustainability education?

Select all that apply.	
<input type="checkbox"/>	An environmental or sustainability student club, and/or a school Green Team that includes student representation and/or opportunities for student leadership.
<input type="checkbox"/>	Field trips for students to study environmental education at outdoor programs, science museums, zoos, aquariums, parks, and farms.
<input type="checkbox"/>	A school program that includes service learning projects that incorporate environmental topics.
<input type="checkbox"/>	A way to use the buildings, grounds, and neighborhood to teach place-based environmental education and foster local ecological literacy in a hands-on manner.
Provide specific examples of actions taken for each checked practice, focusing on innovative or unique practices and partnerships. (2,000 characters)	
<p>ASTI has an active Green Club mentored by a teacher with a strong interest and commitment to environmental stewardship. It is the largest club in the school with over a quarter of the students as members. This amazing group of students is led by 7 elected student leaders; positions include presidents, administrative positions, promoters and organizers for events. Every year in November, Green Club students take a field trip to volunteer at the Green Festival Expo in San Francisco. This Festival is a joint project of the Global Exchange and the Green America organizations and also offers students opportunities learn about green products and services and how to promote the best in sustainability and green living. ASTI's field trip all students take in 10th grade to the USS Hornet Museum has an environmental and science component, students create a photo essay as they go - experiencing seals, terns, cranes, seagulls, and assorted wildlife, reading the East Bay Parks informational placards along the way, and strolling past the huge Google X Makani Kite Turbine located at Alameda Point. ASTI's Green Club partners with StopWaste's service learning Ambassador Program (SWAP). This program facilitates student participation and waste reduction leadership in community events such as: Farmer's Markets, Festivals, Earth Day, etc. StopWaste aims to develop student waste reduction leadership skills and help students become StopWaste Ambassadors on campus and in the community. In Sept 2016 Green Club students also volunteered at the Eat Real Festival in Oakland. ASTI uses it gardens to teach place-based/hands on environmental education in many ways not only within the school's curriculum. It has partnered with Eagle Scouts for three hands on garden building projects. It has partnered with Ploughshares, a local nursery and farm attending several workshops and students have also received personalized guidance from their staff.</p>	

Points Possible	Score	CDE USE ONLY
6.00		

Element IIIB – STEM Content, Knowledge, and Skills

IIIB-1 How does your school use sustainability and the environment as a context for learning science, technology, engineering, and mathematics thinking skills and content knowledge?

Describe programs and coursework across grade levels. (2,000 characters)

Students in Biology use the school garden to learn the scientific method by conducting experiments in the garden. Students learn to collect data, make observations, select variables and run a controlled experiment while growing food in the garden. After the experiments end, the students learn about composting the plants and returning the materials back to the soil. In 9th grade all students in their Biology Spring Final project participate in a Climate Change Summit. The Summit takes part after students complete a climate change unit and it involves students researching current issues and policies and advocating for various solutions to help offset climate change. All students take a Global Warming unit in Physics in 10th grade. Students learn about the causes of global warming, how energy gets trapped, entropy in the system and the rise of chaos and disorder. In Math students learn and are encouraged to conserve through common practices. Math adopted new textbooks in 2016 that include online component, and the primary math classroom has been provided with a class set of digital student devices. For both Geometry and Algebra 2, practice tests and quizzes are no longer printed, and several classroom activities requiring printed worksheets have been replaced by interactive technologies such as Desmos and Geogebra. Students are also given personal whiteboards to use for calculations and graphing. Together, these practices have reduced the classroom paper usage for these subjects by at least 50%.

Points Possible	Score	CDE USE ONLY
2.50		

III B-2 How does your school use sustainability and the environment as a context for learning green technologies and career pathways?

Describe programs and coursework across grade levels. (2,000 characters)

In History students hold on average at least one debate per month many on environmental or related issues. The research and public speaking skills acquired can lead to a careers in environmental law, policy, advocacy or regulation jobs, and give students a greater ability to promote environmental and sustainability influence within whichever career field they choose to follow. History and Biology classes provide opportunities for students to create videos about current concerns including environmental concerns giving students insight into combining knowledge of the environment with documentary filmmaking and journalism careers. Students are encouraged to go to the annual Alameda Citywide College Fair held onsite in the COA gym where students fill out a questionnaire . Many of the 70 colleges attending have information available about programs that lead to careers in environmental, sustainability and green technology fields. Gardening made available in ASTI's Community Garden and partnerships with Ploughshares a local non-profit nursery and farm enable students to explore in fields such as agriculture, forestry, ecology, soil science, horticulture, botany, and cooking. In addition, gardening experiences foster a sense of responsibility and respect for all living things and provide a spirit of cooperation among those involved that transfers to the classroom in a strong sense of community and appreciation for others. Geography classes that students analyze and discuss causes and effects of major contemporary environmental changes. Geography is useful in many rewarding career paths including Urban planners design sustainable environments; environmental managers cutting costs by conserving our natural resources; hydrologists to manage increasingly scarce water resources; foresters to manage millions of acres of precious woodlands; park rangers who help to maintain the health and beauty of these places and share their knowledge through public information programs.

Points Possible	Score	CDE USE ONLY
2.50		

Element III C – Civic Knowledge and Skills

III C-1 Describe students' civic/community engagement projects integrating environmental and sustainability concepts.

Specify at which grade level each is implemented. (2,000 characters)

All students in 9th & 10th grades learn EEI units in History where students can choose to use the environmental movement as the basis for projects, speeches, editorials, and essays in self-selected topics presented to the class each year. Students are asked to interview parents and community members on the personal impact of 9/11 including its environmental/health impacts. ASTI's History teacher Brian Rodriguez who was named California History Teacher of the Year for 2016 also designed an interdisciplinary unit on the Zika virus as a grade level project. In US History student's final projects are to rewrite the Gettysburg Address with an issue of their choice; many choose the environment. AUSD students are required to complete 20 hours of community service to graduate. The graduation class of 2016 completed an average of 202 hours per student! To help achieve this ASTI has encouraged partnerships with a number of local green organizations. ASTI partners with CASA (Community Action for a Sustainable Alameda) in local projects. In July 2015 students volunteered as "Trash Talkers" at local concert at Crab Cove. In Aug 2015 students volunteered in a door to door outreach to educate families who live in multiunit apartments in Oakland on the importance of separating recycling & composting waste. In Feb 2016 students volunteered to give out compost pails and information at a local housing apartment complex. ASTI partners with the Alameda Point Collaborative; a nonprofit that supports formerly homeless families and Ploughshares; an Alameda community farm and nursery, to offer student volunteer opportunities and summer internships. Students have also attended many of Ploughshare's free garden workshops and used these to report back/teach Green Club members. ASTI also partners with the StopWaste Ambassador Program (SWAP); in 2016 ASTI students have taken part in local events as trash talkers and in SWAP's Sustainability Luncheon where students cook and share a meal together.

Points Possible	Score	CDE USE ONLY
2.00		

III-C-2 Describe students' meaningful outdoor learning experiences.

Specify at which grade level each is implemented. (2,000 characters)

The ASTI Garden gets integrated into school curriculum to help students become more involved with subjects outside of the textbook. ASTI's biology students (9th grade) learn how to perform the scientific method through planting organic vegetables and testing out various hypotheses to understand what conditions is best for their plant. Volunteers from all grades ASTI Garden Club learn how to use different tools and acquire new skills. Students start by learning the basics of gardening like starting seeds, transplanting seeds, and harvesting. Students learn about conserving water through mulching and drip irrigation systems. Throughout the year, students are taught how to churn compost, work the irrigation system, make neem oil, and prune leaves. The ASTI Community Garden is a safe environment where students learn, volunteer, and unite together. Every year all 9th and 10th graders have to create and perform a dance routine as part of their PE class. As one of ASTI's annual traditions students take this seriously and can often be seen practicing after school in the quad, garden or on the college roof. During the spring, every grade choreographs a high intensity dance performance for Sports O' Rama as well as competes in multiple physical activities and games like basketball, relay races and tug of war. ASTI will be integrating parts of the SunWise program into the PE curriculum next year to teach students about the risks of skin cancer and about protection from overexposure from the sun. ASTI encourages walk/roll to school in partnership with the PSTA by providing bike racks and info on their website. Students also get outdoor learning experiences on walking field trips For example History students walk to the USS Hornet Museum in 10th grade. History students occasionally use the garden for projects for example during a 10th grade unit where they study John Muir they use the garden to find plants, flowers or wildlife to draw.

Points Possible	Score	CDE USE ONLY
2.00		

III-C-3 How does your school participate in California’s annual celebration of Living Schoolyard Month (ACR-128)?

Include all green schoolyard activities taking place in the month of May. (1,000 characters)

We plan to participate in Living Schoolyard Month in May 2017 by completion of a butterfly habitat using mainly CA native plants this will serve as an outdoor lab where students will be able to observe pollinators in action. In May ASTI students take part in the StopWaste Ambassador Program (SWAP) for a weekend of environmental leadership training. Organized by StopWaste and the Alameda County Office of Education, the SWAP Meet is open to middle and high school students from participating schools; it includes a weekend of environmental leadership training featuring presentations from environmental experts, student-led workshops, hands-on environmental projects, camp activities and more. Every month is Living Schoolyard Month at ASTI School. We have 3 areas devoted to school gardens: a walled vegetable garden, an orchard and a tree area for shade that will eventually become the butterfly habitat. For every 18 sq ft of building space we have approximately 19 sq ft of garden space.

Points Possible	Score	CDE USE ONLY
0.50		

III-C-4 Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills.

Specify at which grade level each strategy or program is implemented. (2,000 characters)

ASTI students have completed outdoor student action projects each of the last three years. Including three separate Eagle Scout projects; one in the summer of 2014 where students added screened covers to the raised beds to minimize our food loss to squirrels and birds, one in the fall of 2014 where two decorative gates were added to the garden and another in the winter of 2015 where students installed 2 more raised beds in the vegetable garden. Students learn how to work in a team to accomplish a common goal. ASTI students have helped educate family, friends and the community by volunteering to be ‘Trash talkers’ at numerous events including in sept 2016 with the StopWaste Ambassador Program at Oakland’s street food festival “Eat Real Festival”, in July 2015 with CASA at Concert in the Cove event, in Apr 2015 at Alameda City’s Earth Day Festival and annually at the Green Festival Expo in SF. Green Club members learn how rodent populations can be controlled naturally without the use of poisons in a program where they feed local cats. Green Club members plant seeds, transplant plants, water, weed, work with tools, harvest plants, and eat & cook produce from the garden. The year round gardening engages students in relationships with learning, with nature and with the environment, with community resources, with adults, and with other students. In Aug 2015 Green Club students took garden grown vegetables to present to the school board. This year, members of the ASTI Green Club will be learning about and creating a new butterfly habitat for migrating butterflies. They will also be continuing the work on growing and creating a living fedge to surround the recent addition of a fruit orchard to the school garden. The orchard will also feature a few living sculptures made from willow cuttings that are currently being grown in the garden.

Points Possible	Score	CDE USE ONLY
2.00		

III-C-5 Describe partnerships with the local community that help advance the school, other schools (especially schools with fewer resources), school districts, and the greater community toward the Three Pillars.

Include partners from K–12 and higher education, business, government, non-profit, and non-formal science institutions. (2,000 characters)

ASTI boasts an active Tobacco Use Prevention Education (TUPE) program. TUPE provides a counselor to visit ASTI every other week to run an educational group for our students about the use of alcohol, drugs, and tobacco. Three ASTI students (a remarkable number) sit on the TUPE Youth Advisory at the Alameda County Office of Education; one of those students is on the Leadership team that facilitates training of teen peer educators and events such as the Great American Smokeout. ASTI students often place Public Service Announcement run every year by TUPE. ASTI students also celebrate Red Ribbon Week to educate themselves to be alcohol, tobacco, drug, and violence free. ASTI English and Social Studies teachers participate annually in Season for Nonviolence Speech Contest sponsored by the Alameda Youth Collaborative; our students have placed in the city wide speech contest every year. ASTI students participate in social justice programs with the MLK Freedom Center in Oakland, which “promotes the principles of nonviolence and offers an environment where young people actively seek peaceful, nonviolent solutions to the difficult challenges we all face in our communities”. In 2010, the maintenance, operations & facilities (MOF) program coordinator at AUSD collaborated with and received a grant from the California Department of Public Health to build a district-wide green cleaning program. Through the Cleaning for Asthma Safe Schools (CLASS) Pilot Project AUSD reduced dozens of cleaning chemicals down to a few Green Seal-Certified alternatives. AUSD collaborated with the California Department of Public Health to support the development of the Work-Related Asthma Prevention Program (WRAPP) developed Healthy Cleaning & Asthma-Safer Schools: A How-To Guide, published in Oct 2014. ASTI partners with Alameda Green Schools Challenge for signs and educational material and email notifications of environmental including events that are going on in the area & environmental information.

Points Possible	Score	CDE USE ONLY
2.00		

III-C-6 Distinguish any other programs or features not included in the application that demonstrate ways that your school integrates core environmental, sustainability, STEM, green technology, and civics into curricula.

Highlight innovative or unique practices and partnerships that provide effective environmental and sustainability education. If applicable, include examples of the evolution of your program(s) over time. (2,000 characters)

Spanish 3, which over a third of our students take, includes chapter “Que haremos para major el mundo?”; What can we do to better the world. Students learn how to discuss environmental problems and possible solutions in Spanish, and understand different cultural perspectives on ecological problems. Special lectures and guest speakers at Green Club have been arranged. Two examples are Feb 2016 environmental activist Nehanda Imara gave a guest lecture titled "No Bridge Over Poisoned Water: The Fight for Environmental Justice: It’s Bigger Than Flint." and Nov 2016 Green Club invited guest speaker Miss Alameda, Jessica Robinson who helped the City of Alameda reach a 75% diversion rate in 2012 and is part of the “Climate Reality Project”. Green Club received a “Step Up to the Plate” grant from KNBR last year for \$5000. We are going to use a portion of that money to give reusable, stainless steel water bottles to every student and staff member for free. The Green Club logo that will be printed on each bottle was designed by an ASTI student, which allowed them to display their skills in digital design. In March 2016 COA announced a partnership with TESLA auto company to help provide auto tech students with education in this growing field.

Points Possible	Score	CDE USE ONLY
1.50		

Congratulations, you have completed Pillar III!