

Part IB - Program Assurances

Note: If selected for nomination to ED-GRS, the school principal and district superintendent* must be prepared to certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true; however, in no case is a private school required to make any certification with regard to the public school district in which it is located.

1. The school has some configuration that includes one or more of grades PreK-12. (Schools on the same campus with one principal, even a PreK-12 school, must apply as an entire school.)
2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction as highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.
4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state, or public school district has corrected, or agreed to correct, the findings.
7. The school meets all applicable federal, state, local, and tribal health, environmental and safety requirements in law, regulations, and policy and is willing to undergo EPA on-site verification.

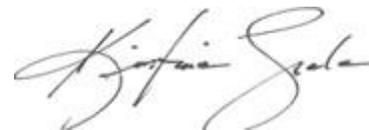
Lynda Sailor

Co-Founder, Business and Operations



Co-Founder, Business and Operations Signature

Kristina Scala



Executive Summary

Aspen Academy is a national leader in innovative education driven by the following values:

- Be Kind.
- Do Good.
- Work Hard.
- Make the World Better.

One of our primary goals is to apply these values not only to our human community but also to our environment. We want our students to be as ecologically responsible as possible and to instill the responsibility of preserving our planet in our students. Our community thrives with people committed to these values and we're serious about making the world better: one student at a time.

Since moving to our ten-acre campus in 2008, every bit of our 80,000-square-foot building and campus has been renovated in a manner that maximizes sustainability and offers our students innovative learning spaces including 14 outdoor labs and classrooms and over 50 teaching gardens. All renovations were intentionally designed to minimize the carbon footprint and to maximize the sustainable practices of the school. We used recycled materials whenever possible and installed energy-saving and water-saving technologies throughout our buildings. Aspen's most economically effective update to decrease our carbon footprint came when we updated the lighting to LED throughout the campus. Besides the benefit to our students which has been proven to boost focus, assisting concentration and relaxation and improve overall mood and behavior, having LED lighting throughout the campus consumes up to 90% less power and is equivalent to planting over 6,100 trees each year.

In addition, environmental and sustainability education is infused throughout the curriculum in all grades. Students also participate in an active service learning program that provides them with the opportunity to explore and volunteer in the outdoors.

Effective Environmental and Sustainability Education

- Our Kindergarteners learn the concept of sharing with their community as they plant, harvest and produce consumable goods from their "KinderGarden".
- The third graders learn about sustainability and how they can take an active role by participating in various projects focused on reducing, repurposing and recycling. The third graders created a "waste station" in every classroom consisting of a green bin for compost, blue bin for recycling, and black bin for trash. Students also created educational posters above each waste station to help students decide which bin their waste goes in. This "Toss like a Boss" campaign, led by the third grade, greatly impacted the effectiveness of our recycling program at Aspen.
- Fourth graders develop their skills as "Citizen Scientists" through researching, designing and maintaining Aspen Academy's Wetlands Environment.
- The sixth graders complete a project-based unit on renewable and non-renewable resources and designed action plans to reduce energy and water use on campus.
- The National Wildlife Federation recognized Aspen as a Certified Wildlife Habitat because of our student's role in creating and maintaining our gardens and wetlands. This habitat provides natural sources of food, and water for our native plants and animals, all without the use of pesticides.
- 50+ teaching gardens, a wetlands garden, and a bee hive were installed on campus in 2015. Each teaching garden is named for the type of plants it holds (i.e. Sensory Garden, Rose Garden, Colorado Native Garden, etc) and allows for students to study the specific characteristics of those plants in the ecosystem. In addition to ecological lessons, the wetlands garden provides a quiet

place for students to work. The beehive is an essential resource for the 4th graders in their unit studying the vital importance of bees in our world.

- 14 outdoor classrooms were designed in 2013 for art, design, theater, and environmental education as well as outdoor window well reading nooks for the 2nd and 3rd grade classrooms.

Improved Health and Wellness

- Each student participates in at least one 30-45 minute fitness-related class every day. 40% of physical education classes are held outside.
- Faculty and staff participate actively in the “Wellable” fitness program.
- Two mental health professionals and a Health and Safety Manager are on staff and a nurse is on contract.
- The *Aspen Youth Leadership Institute (AYLI)* provides a curriculum that addresses the development of emotional and social intelligence as well as community and civic leadership at Aspen.
- The cafeteria contracts with a local food service that provides locally-sourced ingredients.
- Fresh air is circulated throughout the buildings using HVAC economizers and classroom windows.
- Daily maintenance inspections ensure that the campus is free of pests, pollutants, moisture/leaks, allergens, and other hazards.

Reduced Environmental Impact and Costs

- Aspen Academy won the Environmental Leadership Program Bronze Award through the Colorado Department of Public Health and Environment in 2019.
- The annual energy consumption decreased by 45% from 2014-15 to the 2017-18 school year due to the installation of LED lights, occupancy sensors, lighting timers, and Energy Star appliances throughout the school campus and parking lots.
- The amount of paper used for printing was reduced by more than 26,500 sheets per school year since 2018 by using documents electronically. These include employee contracts, safety documents, benefits enrollment, and curricular materials.
- On average, 400 lbs. of waste is diverted to recycling and compost each month.
- Four water bottle filling stations (installed between 2014 and 2018) have saved 47,500 plastic bottles.
- Trex decking (recycled plastic material) was used to build an outdoor stage and a bridge over the wetlands garden in 2012.
- White roofs, painted between 2011 and 2017, covering 3,260 square meters of the school buildings, have reduced energy use, have reflected 85% of the sunlight, and have greatly reduced the total Urban Heat Island effect in the area.
- Low VOC paint and carpet tiles made from recycled materials are used throughout the school buildings.
- Remote Terminal Units (RTUs) are used to monitor all HVAC equipment and are updated each year.
- Artificial turf (made from recycled tires) was installed in 2012 to cover 1,525 square meters of a field to replace water-consuming grass on the playground. Water consumption decreased 50% since 2011.
- The area around the building was graded to improve water drainage and windows were installed in the below-ground middle school classrooms.
- Electronic hand dryers were installed in all restrooms to reduce the use of paper towels.
- Automated rain sensors were installed on the irrigation system in 2014 to reduce water usage when there is natural precipitation.
- Beetlekill Pine Wood was used to panel walls in the school’s entry and in the music studio in 2016 and in the cafeteria in 2019.
- Alpine Waste collects recycling and compost on a weekly basis.

- The water heater was updated in 2016.
- A coffee maker that brews individual cups of coffee without brewing cups is provided by a hired coffee service.

Aspen Academy is an inclusive and accepting community where our staff and faculty feel empowered to create learning that engages students emotionally and intellectually. We aim to provide each and every student with an education of consequence that equips them with the skills, habits, attitudes and content needed to successfully develop and navigate an extraordinary and purposeful life.

Pillar 1: Reduced Environmental Impact and Costs

- Reduced or eliminated greenhouse gas emissions, using an energy audit or emissions inventory and reduction plan, cost-effective energy efficiency improvements, conservation measures, and/or on-site renewable energy and/or purchase of green power;
- Improved water quality, efficiency, and conservation;
- Reduced solid and hazardous waste production through increased recycling and composting, reduced consumption, and improved management, reduction, or elimination of hazardous waste; and
- Expanded use of alternative transportation, through active promotion of locally available, energy-efficient options and implementation of alternative transportation supportive projects and policies.
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Element 1A: Reduced or eliminated Greenhouse Gas Emissions

Describe the school’s plan to manage and reduce energy use, such as an energy master plan, an energy conservation plan, an energy charter, an energy action plan, and/or energy conservation guidelines.

Aspen Academy’s Strategic Plan includes an Evergreen Strategy to increase efficiency and effectiveness in every component of the school, every department and classroom curriculum. Conservation strategies have been employed through every building renovation that has occurred on the campus since 2011. These measures have included installation of LED lights, occupancy sensors, lighting timers, and Energy Star appliances throughout the school campus and parking lots. In addition, white roofs, painted between 2011 and 2017, covering 3,260 square meters of the school buildings, have helped to reduce energy use, have reflected 85% of the sunlight, and have greatly reduced the total Urban Heat Island effect in the area.

Describe how, and to what degree, the school can demonstrate a reduction in energy use and/or in greenhouse gas (GHG) emissions from an initial baseline. Include data on baseline and current energy usage (kBTU/student/year and/or kBTU/sq.ft./year), percentage reductions, and years.

The annual energy consumption decreased steadily from 3,484 kBTU/student/year in the 2014-15 school year to 1,909 kBTU/student /year in 2018-19. This is a 45% decrease in energy use over a 5 year period.

Describe how the school tracks resource use in EPA ENERGY STAR Portfolio Manager or a similar tool and what the results of the tracking have shown. Include ENERGY STAR Rating if possible.

Aspen currently tracks its energy resource usage by analyzing the energy consumption stated on the bills received from Xcel Energy. The monthly consumption is recorded and analyzed by our sustainability consultant. The facilities manager has evaluated Dude Solutions Energy Manager which is incorporated into the program already used at Aspen. We are alternatively considering uploading energy data into the

EPA Energy Star Portfolio Manager. One of these data collection sources will be in place by the end of the 2019-2020 school year.

Describe how/whether the school's energy is obtained from on-site renewable energy generation, purchased renewable energy, or other renewable/green energy sources. Include specific energy sources and percentages if possible.

At this time, Aspen does not obtain any energy from renewable sources. However, we have researched the feasibility of installing solar panels on the roof of the school. Several solar contractors have visited the campus and mapped locations for solar panels and confirmed that we are an excellent candidate for solar energy production. We have received bids for setting up appropriate solar arrays. The timing of this initiative will be incorporated into our next strategic planning session and will be contingent on our reaching full enrollment in the next 5 years. A future capital project would cover the cost of the installation.

Describe how/whether the school has constructed or renovated portions of the school building(s) in the past 10 years that meet "green" building standards or have focused on improved energy conservation.

When Aspen Academy purchased its current site in 2008, the existing buildings were extremely outdated. Aspen has undergone several renovations in the past 10 years. Every construction plan has incorporated "green" building techniques and improved energy conservation systems. Renovations and upgrades have included the installation of LED lights, occupancy sensors, lighting timers, low VOC emission carpet, and Energy Star appliances throughout the school campus. Remote Terminal Units (RTUs) are used to monitor all HVAC equipment and are updated each year. In 2013, the average age of our 21 RTUs was 22 years; the average age of the 21RTUs is currently 6.5 years. During the most recent renovation of the cafeteria (summer 2019), the old insulation was removed and new insulation was blown in.

Are there any other actions your school has taken (not covered above) to support Element 1A?

In addition to providing carpool services, the school is currently exploring ride share services for students and families which would allow for fewer cars driving to and from the school. We plan to add energy efficient school buses to our transportation services in the next five years.

Element 1B: Improved Water Quality, Efficiency, and Conservation

Describe how, and to what degree, the school can demonstrate a reduction in the total water consumption from an initial baseline. Include data on baseline and current water usage (gallons per occupant), percentage reductions, and years.

In 2011-12, Aspen Academy used nearly 3 million gallons of water, averaging 7,912 gallons per student/staff per year. Upon replacing the grass on the playing field with 1,525 square meters of artificial turf, the overall water consumption has been reduced by 50% to an average of 3,136 gallons of water per student/staff per year in the 2018-19 school year.

Describe school's water-conserving efforts, including fixtures and appliances (e.g., waterless urinals, dual flush toilets, etc.)

Artificial turf (made from recycled tires) was installed in 2012 to cover 1,525 square meters of a playing field to replace water-consuming grass on the playground. Automated rain sensors were installed on the irrigation system in 2014 to reduce water usage when there is natural precipitation. All bathroom sinks

have automatic sensors on the faucets that are set to the lowest volume of water released as school licensing allows.

Describe the school's efforts and results for developing water-efficient and/or regionally appropriate plant selection and landscaping and the use of alternative water sources (e.g., non-potable water) for any irrigation needs.

Aspen currently has over 50 teaching gardens around campus in which native Colorado annuals, perennials, and wildflowers are grown, as well as gardens featuring high plains and alpine plant species, pollinator plants, roses, and raised beds for growing produce. In addition, the southeast corner of the Aspen campus is in a 100 year flood plain and features a preserved wetland and garden which serves as a management strategy to curb the impact of flooding in the area. The natural vegetation of the wetland also filters out impurities and reduces the amount of water entering the storm drains at one time. Furthermore, the wetland provides areas for scientific study and outdoor education for Aspen students. The Aspen campus is also a National Wildlife Federal Certified Schoolyard Habitat which recognizes the school's *"commitment to sustainably provide the essential elements of wildlife habitat and provide students a place to learn outdoors and connect with nature."* (<http://nwf.org/schoolyard>)

Describe the school's efforts and results in reducing storm water runoff from the school site and/or reducing impermeable surfaces on school grounds.

70% of the outdoor area surrounding the building (not including the parking lot) consist of permeable surfaces in the form of gardens, wetlands, mulched play areas, and turf fields. The natural vegetation of the wetland filters out impurities and reduces the amount of water entering the storm drain at one time. In addition, the area around the building was graded to improve water drainage.

Describe how the school ensures that all school water sources are protected from potential contaminants including lead.

Aspen meets all industry standards as outlined and required by Denver Water Company. In addition, the facilities manager tests the school's water monthly using a [Watersafe City Water Test Kit](#) which tests for lead, chlorine, nitrates, nitrites, pesticides, and bacteria.

Describe the school's planning and implementation to develop school grounds for ecologically beneficial uses such as rain gardens, wildlife and native plant habitat, and outdoor classrooms. Include percentage of school grounds for school garden, xeriscaping, etc.

In 2014, Aspen installed the teaching gardens and outdoor labs/classrooms which are now actively used and maintained for educational and ecological purposes. Native Colorado annuals, perennials, and wildflowers are grown as well as high plains and alpine plant species, pollinator plants, roses, and raised beds for growing produce. An active beehive was installed on campus in 2015. Approximately 30% of the school grounds is dedicated to teaching gardens and outdoor learning spaces. The Aspen campus is also a National Wildlife Federal Certified Schoolyard Habitat which recognizes the school's *"commitment to sustainably provide the essential elements of wildlife habitat and provide students a place to learn outdoors and connect with nature."* (<http://nwf.org/schoolyard>)

Are there any other actions your school has taken (not covered above) to support Element 1B?

5 bottle refill stations have been installed throughout the school to encourage students to drink filtered water in reusable bottles. The refill stations are actively used by everyone in the Aspen community.

Element 1C: Reduced Waste Production

Describe how, and to what degree, the school implements a school-wide plan of waste reduction, recycling, and/or composting in order to divert significant solid waste from the landfill or incineration. Include data on baseline and current recycling and composting rates (e.g., cubic yards per year, monthly waste generated per person, monthly recycling/composting rates), percentage reductions, and years.

Every classroom has a “waste station” with a green bin for compost, blue bin for recycling, and black bin for trash. Third grade students created educational posters above each waste station to help students decide which bin their waste goes in. GFL (formerly Alpine Waste) and Altogether Recycling collect recycling, compost, and landfill waste on a weekly basis. An average of 550 pounds of recycling and compost is picked up each month from the Aspen campus. The yearend reports below show a decrease of 10,000 lbs of waste between 2018 and 2019 and a 1% increase in the diversion rate (percent of materials recycled and composted) over the same time period. Peaks in the data below coincide with recent renovation and construction projects.

Several times a year, we have found it necessary to re-educate and remind our students and staff about the proper way to dispose of trash.

Describe how, and to what degree, the school uses office/classroom paper content that is post-consumer material, fiber from forests certified as responsibly managed and/or chlorine-free.

At this time, Aspen seeks the most affordable options for paper which often does not include the most responsibly managed paper sources. However, the amount of paper used for printing was reduced by more than 26,500 sheets per school year since 2018 by using documents electronically. These include employee contracts, safety documents, benefits enrollment, and curricular materials.

Describe the school’s efforts in storing/maintaining an inventory of potentially hazardous materials used in various programs, if any (e.g., science, art, maintenance, cleaning, pest control, etc.).

All chemicals used for maintenance, cleaning, and pest control are stored in a locked outdoor shed. No potentially hazardous chemicals are used in any classroom or lab at Aspen.

Describe how, and to what degree, the school has reduced/eliminated hazardous waste generation over a measurable baseline. Include specific waste such as batteries and CFL light bulbs.

All used batteries are taken to a battery recycling center in the Denver area. All CFL light bulbs were replaced with LED bulbs in 2015. The CFL bulbs were disposed of properly. The number of CFL light bulbs removed was not recorded.

Describe the school’s green cleaning custodial practices, including green cleaning products, services, advanced equipment, and/or policies.

Aspen does not use green cleaning products or services at this time. PreKindergarten is licensed through the State of Colorado and meets all cleanliness requirements of the Colorado Department of Human Services.

Describe how the school’s purchasing practices specifically promote environmentally preferable purchasing/green purchasing, as applicable, for consumable products, furniture, and equipment for administration, instruction, and/or maintenance.

Upon the founding of Aspen Academy in 2005, all furniture for the new school was used, either purchased from a thrift store or donated by other businesses and schools. Since then, when new furniture has been purchased, the old furniture has been donated to other businesses and schools. During the 2017-18 school year, Aspen donated all of the classroom and office furniture from the West Wing and the Administration Wing to four schools in Nicaragua.

Element 1D: Use of Alternative Transportation

Describe how/whether the school is reducing its transportation energy use through means such as encouraging a) walking or bicycling to and from school, b) expanded school bus use, or c) EV charging stations. Include data and results of the efforts.

- Biking to school is encouraged and supported with bike racks on campus.
- 10-20% of staff members and 10% of students use green transportation options (bike, walk, public bus) on a regular basis to get to school.
- Our physical education teacher recently started a “bicycle safety club” for which students and teachers meet at a local park and ride bikes to school as a group.
- Installation of an EV charging station on campus is currently being considered.

Describe the school’s implementation of the following green transportation practices: a) efficient carpooling; b) no-idling loading areas; c) safe routes to school; and/or d) expanded bicycle storage.

Aspen encourages carpooling by the students’ families. The school community uses the “[Way to Go](#)” app as a way for families to coordinate carpooling. Recent data from “Way to Go” indicates that 95 out of 264 (36%) families at Aspen carpool. The average carpool size is 2.57 people and the average one-way trip distance is 8.07 miles. “[Hop, Skip, and Drive](#)” has also been used as a dependable transportation solution for the school. Biking and walking to school are highly encouraged. There is a “no-idling” policy at the front entrance of the school.

Describe how/whether the school has implementation practices that focus on transportation efficiency, reduced environmental impact, or other creative ways of promoting alternative transportation. Include data and summary results of the efforts.

Aspen has worked to implement as many alternative and energy-efficient transportation options as possible given that students are driven from all over the Denver metro area. The school is currently exploring ride-sharing services for students and families, which would allow for fewer cars making trips to the school. The addition of bus services is expected within the next five years. Our student dropoff procedures (“Kiss-and-Go”) are intended to reduce environmental impact on our campus. The procedure states that all cars enter the drop-off lane, pull all the way forward to the first student drop off station at the northwest corner of the building. Parents are asked to have children exit the car quickly. By mandate of Greenwood Village City Council, students are to exit their parents’ car within seven seconds to keep traffic flowing and to prevent a backup on neighboring roads. Students are to have their coats on, backpacks and lunch bags in their laps so that they can exit the car within 7 seconds. Multiple members of the administration team staff the student drop off lane and manage the crosswalk. When students are safely on the sidewalk, parents proceed to the exit as directed by the staff. A similar “Kiss-and-Go” procedure exists for afternoon pickup.

Are there any other actions your school has taken (not covered above) to support Element 1D?

Aspen put in a crosswalk from the front of the school across the street to the public bus stop to allow students to cross the street safely. The crosswalk is marked with a solar-powered sign.

Pillar 2: Improving the Health and Wellness of Students and Staff

- High standards of coordinated school health, including health, nutrition, and outdoor physical education; health, counseling, and psychological services for both students and staff; family community involvement; and an integrated school environmental health program that considers occupant health and safety in all design, construction, renovation, operations, and maintenance of facilities and grounds.

Element 2A: Integrated School environmental Health Program

Describe the efforts in implementing the school's or the school division's Integrated Pest Management (IPM) plan in the school, including: year of implementation, program responsibility/oversight, pest monitoring process, record keeping, notification practices, and efforts to reduce pesticide use.

Aspen has never experienced any significant pest issues and does not use any pesticides or chemicals to ward off pests. Should a pest issue arise, it would be mitigated with safe bait traps or with the assistance of a local pest management company, [Critter Control](#), which provides humane means of removing wildlife and/or pests from the campus.

Describe how, and to what degree, the school's efforts and practices have minimized/eliminated student and staff exposure to the potentially hazardous contaminants including: cigarette smoke, mercury, carbon monoxide, fuel burning combustion appliances, airborne contaminate sources, asbestos, radon, chromated copper arsenate, and lead.

Aspen is a smoke-free campus. All installed carpeting is low VOC and all paint is lead-free. Carbon monoxide sensors are mounted throughout the school. As required by the city of Greenwood Village, asbestos testing has been completed prior to every renovation project since 2011. Radon testing was completed in May 2017 and showed an average of 1.1 picocuries per liter of air which is well below the EPA action level of 4 picocuries per liter of air. The facilities manager at Aspen has both Asbestos Hazard Emergency Response Act (AHERA) Management Plan and the radon testing results on file.

Describe the plan and timetable for inspecting and maintaining the school's ventilation systems and all unit ventilators and for ensuring that the systems are clean and operating properly.

Filters are replaced in all HVAC systems on a quarterly basis. The HVAC systems were updated to standard in 2015 and are monitored with remote terminal units (RTUs) which are updated annually. Old HVAC systems are upgraded on a regular basis.

Describe how, and to what degree, the school ensures that all classrooms and other spaces are adequately ventilated with outside air, consistent with state or local codes, or national ventilation recommendations and standards.

The majority of classrooms have windows/doors that can be opened to the outside. Outdoor window wells were added to classrooms below ground. All new HVAC units use economizers which draw fresh outdoor air into the building depending on the set temperature and humidity. This reduces HVAC energy consumption and ensures that the classrooms are ventilated with fresh air.

Describe how the school has taken specific and comprehensive actions to prevent exposure to asthma triggers in and around the school.

Animals and pets are not allowed on campus with the exception of service animals. Dead organic material is cleaned out of gardens each fall to remove potential molds, funguses, and pollen from campus. Filters in the HVAC units are replaced quarterly.

Describe how the school has taken specific steps to protect indoor environmental quality, such as implementing EPA “IAQ Tools for Schools” and/or conducting other periodic, comprehensive inspections of the school facility to: a) identify environmental health and safety issues; and b) take corrective actions.

Aspen Academy uses [Dude Solutions](#), an operations management software that helps to optimize facility and operations processes. This ensures that classrooms are maintained to a high standard of cleanliness and that all equipment and structures are in good condition. The facilities manager completes a daily walk-through of the campus and confirms that the maintenance items on the Dude Solutions checklist are complete. In case of water leaks or spills, the school has dehumidifiers, fans, and wet vac equipment available on campus for immediate mitigation.

Describe the school maintenance and implementation of an up-to-date plan and its careful enforcement in managing and controlling student and staff exposure to chemicals that are used in the school (e.g., pesticides, cleaning supplies, fuel, paint).

Paint and cleaning supplies are stored in a locked shed which was rebuilt during the summer of 2019 to include insulation and temperature controls.

Describe the school’s routine inspections and prompt action to: a) control moisture from leaks, condensation, and excess moisture; and b) clean up mold or remove moldy materials promptly when found.

The facilities manager completes a daily walk-through of the campus and confirms that the maintenance items on the Dude Solutions checklist, including signs of moisture or mold, are complete. In case of water leaks or spills, the school has dehumidifiers, fans, and wet vac equipment available on campus for immediate mitigation

Element 2B: Nutrition and Fitness

Describe the school’s implementation of the following programs (or programs with similar intent) and results and outcomes related to the targeted efforts.

Nutrition and fitness recognition programs (such as USDA's HealthierUS School Challenge and the Governor’s Nutrition and Physical Activity Awards Program)

Aspen gives school-based awards for performance in various sports such as cross-country, volleyball, basketball, and lacrosse.

A “farm to school” program to use local, fresh food and/or a food purchasing programs identified as "environmentally preferable”

The cafeteria at Aspen contracts with a local school food service, [Grateful Plate](#), a scratch-cooking kitchen. They provide fresh ingredients without chemicals, high fructose corn syrup, dyes, or nitrates and source their products locally and seasonally whenever possible.

On-site garden that may supply food for students in the cafeteria or to the community

Currently, among the many gardens on Aspen's campus, there is a vegetable garden that produces snacks and "munchies" for the students. Students make zucchini bread from the squashes grown in the garden as well. Herbs are grown on the cafeteria patio and used to enhance cafeteria meals. Honey from the beehives has also been harvested and shared with the Aspen school community.

UV protection and skin health promotion, such as the EPA's "Sunwise" Program

Aspen maintains a sunscreen policy as follows: Parents are to ensure that sunscreen is applied to their child prior to school each day. We spend a fair amount of time outside each day and we want to ensure that students are not sunburned during outside activities. Students are also highly encouraged to wear hats when outside.

Describe the school's practice related to physical education and whether they meet or exceed state guidelines and minimum requirements.

All students from Pre-K through 4th grade have PE or Dance every day. Students from 5th-8th grade have more options to choose from, such as fitness, speed and agility, hockey, dance, etc, and participate in at least one fitness-related course each day. The Physical Education curriculum is based on the [SPARK](#) fitness program which is designed to develop healthy lifestyles, motor skills, movement knowledge, and social & personal skills.

Describe the type of outdoor education, exercise, and recreation activities available to students.

Aspen offers a wide variety of extra-curricular exercise and recreation activities throughout the school year. Some classes/camps are weekly others are offered on "no school" days. The offerings include: ice skating, hockey, hula hooping, yoga, speed/agility/conditioning, taekwondo, volleyball, cross country, basketball, fencing, ballet, Zumba, "clown college" (acrobatics, juggling, dancing), and Outdoor Explore club.

Describe the school's efforts and progress to improve staff wellness in the areas of nutrition and increased physical activity.

Aspen Academy subscribes to [Wellable](#), an online platform that allows faculty and staff to participate actively in a wellness program that encourages exercise, nutrition, and stress-relief. All employees of Aspen have an account with Wellable and are encouraged to use it as often as they can. 50% of the staff participate actively in the monthly challenges and classes which include cooking, self-defense, and meditation. In addition, each month the staff holds a potluck to which employees share healthy food options.

Are there any other actions your school has taken (not covered above) to support Element 2B?

Aspen also offers two extracurricular cooking opportunities: 1) A Journey in Cooking which focuses on the cultural experience of food preparation and the celebration of its sharing together; and 2) Sticky Fingers which offers hands-on, real-world cooking classes.

Element 2C: Coordinated School Health, Mental Health, School Climate, and Safety

Describe how the school is implementing a range of partnership programs with the local health department, businesses, postsecondary institutions, and other members of the community to improve students' and school staff members' nutrition, fitness, and safety.

The Risk Management Committee (consisting of administrators and faculty) is tasked with addressing all health- and safety-related issues at the school. Aspen has a full-time Health and Safety Manager and contracts with a private nurse to monitor the health of the school community. Staff members are certified in CPR and First Aid and are trained as medication delegates. Staff who are in regular contact with students having special health concerns are trained to address the specific needs of those students. To further promote safety on campus, Aspen follows strict visitor and volunteer procedures, sign-in and out system, and security protocols, which are practiced regularly. Aspen also maintains an active working relationship with the local police and fire departments. Aspen contracts with [Grateful Plate](#), a local school food service which focuses on providing school communities with fresh, healthy, and nutritious meals.

Describe the school’s use of a Coordinated School Health approach or other health-related initiatives to address overall school health issues. This could include comprehensive wellness policies and/or a health and wellness committee/team.

The Risk Management Committee (consisting of administrators and faculty) is tasked with addressing all health-related issues at the school. Aspen has a full-time Health and Safety Manager and the entire staff is certified in CPR and First Aid and is trained as medication delegates. Staff who are in regular contact with students having special health concerns are trained to address the specific needs of those students. Aspen Academy complies with state requirements for parent notification when students are exposed to contagious diseases or have an accident. Parents are required to notify Aspen Academy when a student becomes exposed to a contagious disease. The “Sick Child Policy” states that a child with a contagious disease or fever may not attend school until they are fever-free and symptom-free for 24 hours. Accident reports are always completed and filed following an incident in which a student is injured.

Describe how the school addresses school health professional services for student needs, including the presence of a full-time school nurse in the school and/or a school-based health center.

Aspen contracts with a private nurse who monitors the health of the Aspen community. A full-time Health and Safety Manager is also on staff.

Describe how the school addresses and implements comprehensive programs to support student mental health and positive school climate (e.g., anti-bullying programs, peer counseling, etc.).

Aspen Academy strives to provide a safe, secure and respectful learning environment for all students in school buildings, on school grounds, and at school-sponsored activities. *ELEVATE* teams, comprised of a lower school psychologist, middle school student success coach, and an all-school learning specialist, work together to support each and every student in their academic, social and emotional development. As a school that practices *Love and Logic* principles, Aspen Academy strives to take an individualized approach toward meeting the needs of each student while taking into account the multitude of any number of life variables and circumstances that may arise in the life of a student. The *Aspen Youth Leadership Institute (AYLI)* is an essential component of Aspen’s commitment to mental health and school climate. This school-based national youth leadership development program runs a curriculum that addresses the development of emotional and social intelligence as well as community and civic leadership at the school. Working in collaboration with the Aspen Youth Leadership Institute (AYLI), student development begins from a place of self-awareness and evolves toward empathy for others. Such student development is supported in both lessons and curriculum that range in topics, such as being a responsible and accountable community member to both self and others, life skills development and safe living, understanding personal learning styles and learning differences, the challenges of substance use/abuse, and human growth milestones and reproductive development. Additionally, partnerships with qualified outside

resources within the community include tutors, speech therapists, occupational therapists, hearing and vision specialists, psychiatrists and physicians, psychologists and counselors. Aspen consistently and vigorously addresses bullying so that there is no disruption to the learning environment and learning process. Every notification or report of bullying is investigated and appropriate discipline is imposed that may include suspension, expulsion or referral to law enforcement authorities. The school's bullying prevention and awareness program is in compliance with Colorado statutes. Each year, Aspen Academy Parenting Parent University Morning Program provides opportunities for the community of parents and caregivers to learn and grow together focusing on topics such as resilience and anxiety. Guest speakers are often invited to address the Aspen community regarding issues related to Element 2C. For example, in 2018, Rosalind Wiseman spoke about "Navigating Friendships, Social Conflicts & Popularity" and, in 2019, Aspen hosted a screening and discussion of "Won't You Be My Neighbor?", featuring the life of Mr. Rogers.

Are there any other actions your school has taken (not covered above) to support Element IIC?

In November 2018, Aspen joined EAP, Employee Assistance Program, which is a voluntary, work-based program that offers free and confidential assessments, short-term counseling, referrals, and follow-up services to employees who have personal and/or work-related problems. The Professional Development Center (PDC) on the lower level hosts a "quiet room" for nursing mothers to provide comfort and privacy.

Pillar 3: Providing Effective Environmental and Sustainability Education

Teachers at Aspen participate in online and in-person professional development opportunities, offered through the FOSS curriculum, that prepare them to implement each unit effectively in their classrooms. In addition, teachers also participate in relevant, local workshops to enhance their teaching of sustainability concepts. For example, to prepare for a unit on bees, the 4th grade team of teachers took a bee-keeping class which trained them to manage and monitor Aspen's beehives appropriately with their students.

Element 3A: Shared Responsibility for Environmental Learning

Describe the school's focus on environmental and sustainability literacy specifically reflected through schoolwide practices and programs, lesson planning, and/or school curriculum documents.

Aspen's focus on environmental and sustainability literacy is evident throughout the school's practices and programs, lesson planning, and school curriculum. The practice of repurposing, recycling and composting is physically evident throughout the school. Aspen students use the bottle-filling stations, recycling and composting stations, LED lighting, artificial turf fields, recycled plastic (TREX) decks, and outdoor classrooms and gardens on a daily basis. In addition, environmental and sustainability literacy is integrated throughout the school's curriculum and is grounded in the [Next Generation Science Standards \(NGSS\)](#) framework, Aspen's Service Learning and Project-Based Learning curricula. Aspen uses the [FOSS Next Generation](#) curriculum to integrate Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts. The FOSS tools and strategies engage our students and teachers in hands-on, inquiry-based experiences that lead to deeper understanding of the natural and designed world.

Describe how, and to what degree, the school has integrated environmental and sustainability concepts throughout its instructional program and across subject areas and grade levels.

Aspen Academy primarily uses the [FOSS Next Generation](#) curriculum and [Next Generation Science Standards \(NGSS\)](#) as the framework for integrating environmental and sustainability literacy into the curriculum. Students have opportunities to learn foundational skills and knowledge in the elementary grades and to understand concepts, principles, and theories at the middle school level. The scope and sequence of the FOSS spiraling curriculum allows students to see the same topics throughout their school career with increasing depth, complexity, and applications. The four specific domains of science instruction are Physical Science, Life Science, Earth and Space Science, and Engineering Design. In grades K-8, students address environmentally-related questions such as:

- Where do animals live and why do they live there?
- What is the weather like today and how is it different from yesterday?
- How does land change and what are some things that cause it to change?
- What is typical weather in different parts of the world and during different times of the year?
- How can the impact of weather-related hazards be reduced?
- How are plants, animals, and environments of the past similar or different from current plants, animals, and environments?
- What happens to organisms when their environment changes?
- How are energy and fuels derived from natural resources and how do their uses affect the environment?
- What effects do human activities in agriculture, industry, and everyday life have on land, vegetation, streams, ocean, air, and even outer space?
- How do individual communities use science ideas to protect the Earth's resources and environment?
- How is the distribution of Earth's limited and typically non-renewable resources (such as minerals, energy, and groundwater) changing as a result of removal by humans?
- What are the effects of resource availability on organisms and populations of organisms in an ecosystem?
- How do increases in human population and per-capita consumption of natural resources impact Earth's systems?
- How can scientific principles be applied to design methods for monitoring and minimizing a human impact on the environment?

Examples of specific units of study include:

Kindergarten students investigate the school's trees, leaves, and weather throughout the seasons to gain a greater understanding of changing and living parts of their world.

1st Graders explore the Earth's dynamic atmosphere using simple tools and instruments to observe and monitor change in the school's environment.

2nd Grade students learn to respect and conserve water as a natural resource. Students focus on researching water consumption and quality in Colorado.

3rd Grade students research sustainable practices, such as recycling and composting, to build their knowledge of sustainability to create new eco-friendly habits that impact positive change.

4th Grade students develop their skills as citizen scientists through researching, designing and maintaining Aspen Academy's Wetlands Environment.

5th graders study living systems —ecosystems, populations, and individual organisms— to gain an appreciation of the diversity and wonder of life on Earth.

6th Grade students perform an energy audit of the school in order to estimate the types of energy used, the wattage that the different forms take, and the cost of these sources. Students research different forms of renewable and nonrenewable energy in order to determine if adding solar panels would allow the school to offset energy costs. They calculate how much solar panels would offset the school's energy costs over time. Students recommend changes that should be made to offset our energy consumption.

7th grade students examine water scarcity in the US and around the world and study the related causes, solutions, and impact through their Social Studies class. Students then track and cut their own water usage. 7th graders read "Long Walk to Water" in Language Arts, examine the water flow and volume of rivers in Math, and examine and test water for cleanliness in Science. 7th graders also study soil as part of a chemistry unit and investigate the various chemical components of the soil as they prepare several gardens for planting in the spring.

Describe how the school's assessment materials across subject areas and grade levels have clear expectations and target proficiency levels for environmental and sustainability concepts. Include quantifiable measures, indicators, or benchmarks of progress toward environmental literacy and/or environmental proficiency.

The [FOSS assessment system](#) incorporates both formative and summative assessments that measure learning, progress, and achievement. The FOSS units also include performance assessments which measure students' conceptual understanding, their science and engineering practices, and how they employ crosscutting concepts to investigate a variety of phenomena.

Describe the school's emphasis on ensuring that professional development in environmental and sustainability education is offered to teachers.

Teachers at Aspen participate in online and in-person professional development opportunities, offered through the FOSS curriculum, that prepare them to implement each unit effectively in their classrooms. In addition, teachers also participate in relevant, local workshops to enhance their teaching of sustainability concepts. For example, to prepare for a unit on bees, the 4th grade team of teachers took a bee-keeping class which trained them to manage and monitor Aspen's beehives appropriately with their students.

Are there any other actions your school has taken (not covered above) to support Element 3A?

In response to a recent lull in our recycling and litter pick-up efforts, our community, led by third graders, initiated a new program called "Leaf it Better" which encourages students to leave the campus in better condition than they found it by picking up after themselves and others and placing trash and recycling in appropriate bins. Students who are caught "leafing it better" earn a "Leaf it Better" sticker.

Element 3B: Use of the Environment and Sustainability to Develop STEM Content

Describe how the school uses sustainability and the environment as a context or theme for connecting/learning STEM thinking skills and content knowledge.

Standards for Science and Engineering Practices are included at each grade level and differ from the other standards in that they do not represent a specific content area. Science and Engineering Practices cut across all content areas and those standards are taught in the context of the grade-level content. The STEAM Lab and Tinkering Studio provide spaces for students to think critically and collaborate in order to solve real-world problems. In 2016, Aspen's STEAM Lab was renovated to feature 14 stations that involve STEAM-related technology and engagements. One of these stations is titled "Renewable Energy",

where students can build Solar Cars, Ovens, and research other methods to generate clean and green energy. Students have also been a part of trying different types of "green" filament for the 3D printer, that is made from more recycled materials. The Tinkering Studio also provides a place for students to collaborate, ideate and innovate with tools in a dynamic building environment.

Aspen students participate in engineering design challenges throughout the year. Some examples of these include the Humpty Dumpty STEAM challenge, introduction to coding, rocket construction, spaghetti bridge building, balloon-powered race cars and catapult prototyping. The Innovation Lab is also a place for students to use technology in order to enrich projects integrated into their core classes. 6th grade students in science class enjoy using the STEAM Lab to design and print 3D fins for their rocket launch project as they explore physics. Other students use Photoshop or other design applications to design book covers or infographics to showcase their writing. Fifth grade language arts students design artifacts in the Tinkering Studio, then write creatively about the artifact's origin in their "Near and Dear" project. The STEAM Lab is truly a place that facilitates the learning of all of our students on a daily basis.

Describe the school use of sustainability and the environment as a context for connecting and learning green technologies and career pathways.

At the end of each of the STEAM lab stations, students present what they did while at each station. This presentation involves students connecting what they learned with something that may be used in a real-world career. Students address the question: "How would you use this technology to make the world better"? We then take that question a step further and ask the student to consider and address how the technology may affect the environment. For example, many technologies use batteries, but the disposal of old batteries is definitely an issue that our global community is struggling with. We discuss these global issues surrounding the sustainability of technology, and they include their thoughts in each presentation.

Describe how the school's environmental and sustainability focus supports an age-appropriate understanding of natural systems.

Students have opportunities to learn foundational skills and knowledge of natural systems in the elementary grades and to understand concepts, principles, and theories at the middle school level. The scope and sequence of the FOSS spiraling curriculum allows students to see the same topics throughout their school career with increasing depth, complexity, and applications.

Are there any other actions your school has taken (not covered above) to support Element 3B?

As part of a STEAM project in 2017, students and staff realized that we needed more versatile furniture in the lower school to enhance the learning experience and to accommodate learning differences. We aimed to design a solution that allowed students to "move and discover" instead of "sit and get". The first graders worked with an engineer and the staff to design and build prototypes of a "chair" that allowed students to sit, kneel, wobble, wiggle, and rock as needed during class. The resulting product was called the MODI Chair. We replaced all the chairs in the lower school in 2018 and were granted a patent in 2019.

Element 3C: Development and Application of Civic Knowledge and Skills

Describe the school's emphasis on outdoor learning as a tool to: a) teach an array of subjects in context; b) engage the broader community; and c) develop important civic skills.

As part of the FOSS curriculum, every unit incorporates journaling in the outdoors. Teachers and students spend their journaling time in the many garden spaces on campus.

The kindergarten service project focuses on learning how to take care of the apple orchard and observing the trees through the seasons. The students harvested apples in the fall and are learning about the importance of taking care of plants and animals. The class takes a field trip to the Children's Growing Gardens in Boulder to learn about harvesting, insects, and how to make food from gardens. The kindergarteners also work on keeping the school campus clean by picking up trash on the playground on a regular basis.

Recently, the 1st grade embarked on a research project to find out why the FOSS science kits use plastic straws instead of a better alternative. The class spent a week researching and learning about civic action. They then wrote letters to FOSS explaining their concern about using straws and suggesting possible solutions that won't harm the environment. Through this project, the 1st graders learned that their voices are powerful, and they can make a change in the world.

The 4th grade focuses on our "backyard habitat" as the theme of our service learning. Students manage the beehive and have planted the garden with plants and flowers that are bee friendly. They also participate in the Audubon Society's Backyard Bird Count by learning about and counting species of birds that are in our area. We have a "wild wetlands" area that 4th graders use in science class to observe the interactions between elements of the environment as well as for teaching biodiversity and interdependence.

The 5th grade math classes practice finding the area and perimeter of things in our outdoor space. Examples include the turf field, the fences, sport court, and volume of wood chips needed. We also do an outdoor scavenger hunt at the end of the school year that asks kids to find angles and 2D & 3D shapes.

5th-8th graders are invited to participate in a week-long Outdoor Education Program with [Expedition Backcountry Adventures](#) during which students are empowered to step out of their comfort zone, develop a robust knowledge of outdoor skills, and cultivate an appreciation and commitment to serving others. Students participate in five adventures: hiking, rock climbing and rappelling, orienteering, mountain biking, and wilderness medicine training.

- 5th Graders take an educational trip to Moab, UT, during which the student hike, raft, and camp in the outdoors.
- 7th Graders participate in a trip to the San Francisco Bay area where they kayak, hike, and participate in a beach restoration service project with the [Seymour Marine Discovery Center](#)
- 8th graders travel to Costa Rica where they participate in service projects at the [Asis Animal Rescue Center](#) and [Life Monteverde](#) where students learn conservation and sustainable practices.

Describe: a) how/whether, and to what degree, the school promotes and encourages students to conduct class or individual, age-appropriate, civic/community engagement projects; and b) the important outcomes that have been achieved (using data as appropriate).

Every grade at Aspen Academy participates in a Service-Learning Project that meets an authentic need in the community each year. The following service learning experiences are environmentally-oriented:

- The kindergarteners, with the help of [Slow Food Denver's Seed to Table](#), plant and harvest food in our school's edible garden and study the role of nutrition in our lives and determine how their garden can contribute to the health of others.
- Our second graders research water consumption and water quality in Colorado through [Conservation Colorado](#). The students study the implications of clean, safe water not being accessible to everyone and determine possible solutions.

- Third graders go to the [Grow Haus](#) to learn about sustainability and then monitor our trash/recycling/compost program and investigate innovative ways to make our school more eco-friendly. The third graders also create educational posters to post above waste bins to create a "waste station" in every classroom at Aspen. Students refer to the pictures to help them decide which bin their waste goes in. Each classroom has a green bin for compost, blue bin for recycling, and black bin for trash.
- With support from the [Audubon Society of Greater Denver](#), fourth graders research, design, create and maintain the schoolyard habitats and determine how Aspen's habitats can serve the local wildlife.
- The fifth graders volunteer with the [Humane Society of the South Platte Valley](#) to delve into our community's relationship with animals, both past and present, and execute student-led initiatives that address real animal needs.
- Seventh Graders participate in a trip to the San Francisco Bay area where they participate in a beach restoration service project with the [Seymour Marine Discovery Center](#).
- Eighth graders travel to Costa Rica where they participate in service projects at the [Asis Animal Rescue Center](#) and [Life Monteverde](#) where students learn conservation and sustainable practices.

Monthly "**Dress Down Dollar Days**" are opportunities for all Aspen students to wear non-uniform clothing while responsibly and intentionally contributing a dollar to non-profit organizations that align with grade-level Service Learning Projects. The Colorado-based organizations that benefit from our Dress Down Dollar Days include Cherry Hills Assisted Living, the Dumb Friends League, Coats for Colorado, 4-H, the Gathering Place, Valor Bridge, and Canine Companions for Independence. In addition, annual "**Penny Wars**" collect more than \$500 annually to support the Leukemia and Lymphoma Society.

Describe the innovative practices and/or partnerships the school promotes and participates in to support environmental and sustainability education.

As mentioned above, Aspen Academy maintains active relationships with [Slow Food Denver's Seed to Table](#), [Conservation Colorado](#), [Grow Haus](#), [Audubon Society of Greater Denver](#), [Humane Society of the South Platte Valley](#), [Seymour Marine Discovery Center](#), [Asis Animal Rescue Center](#) and [Life Monteverde](#), all of which assist in providing Aspen students with enriching, environmentally-oriented community service opportunities each year.

Aspen Academy has recently embarked on partnerships with [Arapahoe County 4-H](#) and the [Colorado State University Extension Service](#) to create a Master Campus Plan which includes increased integration of environmental and sustainability concepts into the school's curriculum as well as a design for more natural playscapes, xeriscaping, and shaded areas on campus.

Describe how, and to what degree, the district's environmental and sustainability education efforts have shown growth in academic achievement among students over time. *Include data as applicable.*

Aspen Academy does not currently have a means by which to measure academic achievement as specifically related to environmental and sustainability education. While our academic achievement has steadily improved year after year, it is difficult to attribute that growth to any particular effort to incorporate sustainability into the curriculum. Multiple initiatives in the same year, such as facility improvements and curricular integration, make it difficult to identify cause and effect.

Are there any other actions your school has taken (not covered above) to support Element 3C?

The 8th grade culminating project for our entrepreneurial curriculum requires students to launch their own business venture that they present to a "Shark Tank" of judges. Part of the scoring on their business plan

is an element of social impact for which they are required to demonstrate how their business will prompt a positive change on the community. To date, we've had 310 businesses launched from our 8th grade graduates all of which demonstrated significant impact on a cause of concern for the business owner. One business, "Team Up Athletes", recently was honored by the Colorado Depression Center for the funds and awareness generated around youth depression and teen suicide.