

## **ELIGIBILITY CERTIFICATIONS**

#### School and District's Certifications

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of their knowledge. *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 grades early learning to 12.
- 2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement 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. The Department of Defense Education Activity (DoDEA) is not subject to the jurisdiction of OCR. The nominated DoDEA schools, however, are subject to and in compliance with statutory and regulatory requirements to comply with Federal civil rights laws.
- 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.

## U.S. Department of Education Green Ribbon Schools

Public Charter Title I Magnet Private Independent Rural
Name of Principal: Mr. Joseph Loftin
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)
Official School Name: Wasatch Academy
(As it should appear on an award)
Official School Name Mailing Address: 120 South 100 West Mount Pleasant, UT 84647
(If address is P.O. Box, also include street address.)
County: State School Code Number *: N/A
Telephone: 435-462-1461 Fax: N/A
Web site/URL: <a href="https://www.wasatchacademy.org/">https://www.wasatchacademy.org/</a> E-mail: joseph.loftin@wasatchacademy.org/
*Private Schools: If the information requested is not applicable, write N/A in the space
A = A + A + A + A + A + A + A + A + A +
I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.
Date: Date:
(Principal's Signature)



Name of Superintendent: Mr. Joseph Loftin

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in official records)

District Name: N/A

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

Date: 7 16 3

Superintendent's Signature

Nominating Authority's Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

- 1. The school has some configuration that includes grades Pre-K-12.
- 2. The school is one of those overseen by the Nominating Authority which is 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. The school meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: Utah State Board of Education

Name of Nominating Authority: Patty Norman, Ph. D.

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the

provisions above

Date: 2/11/20

(Nominating Authority's Signature)

#### **SUBMISSION**

The nomination package, including the signed certifications, narrative summary, documentation of evaluation in the three Pillars, and photos should be submitted online according to the instructions in the Nominee Submission Procedure.

> OMB Control Number: 1860-0509 Expiration Date: March 31, 2021

> > **Public Burden Statement**

# Wasatch Academy National Green Ribbon Schools Nominee Application

## **Summary Statement**

Since 1875, the picturesque 30-acre campus of Wasatch Academy, located in Mount Pleasant, Utah has been home to a diverse international student body with students from over 35 countries and 30 states. Wasatch Academy has prized its status as a diverse, dynamic, and global community dedicated to sustainability, both in theory and practice, within the school community and the greater world. Sustainability education has provided a context for interdisciplinary, project-based learning that is integrated across academic disciplines. Our teachers set the stage for student-driven projects that encourage self-discovery as an essential component of experiential learning. Students connect their knowledge with their own life experiences and values, and build life-long skills in critical thinking, collaborative learning, communication, and problem-solving. As they apply their new knowledge and skills in the context of real world issues, they are empowered to understand the world that lies beyond the campus borders.

Sustainability has been a core value at Wasatch Academy for decades. In 1994, the Wasatch Academy community expressed its commitment to work towards a sustainable future and establish itself as a national and international leader in secondary education in the 21st-century. At the core of this commitment was our **Net Zero Energy** initiative, which took the form of an action plan for becoming a net zero energy campus and created project-based learning opportunities for students and teachers. This initiative is a multi-year plan for reducing our carbon footprint though energy and water conservation, a shift to renewable energy sources, and community-based projects in waste management, permaculture-based landscaping, and sustainability education. The design and construction of eco-friendly campus buildings is another primary focus. In 2012, we designed and installed a state of the art geothermal system that heats and cools seven of our campus buildings. Through this Net Zero Energy initiative, Wasatch Academy is being transformed into a campus in which the energy required to operate campus buildings and facilities is generated on campus from renewable sources, with consumption and waste management practices that are grounded in principles of sustainability. As a compliment to our Net Zero Energy initiative, we have a campus-wide recycling cooperative and an active community garden.

Our **Sustainability Council** student club is one of the driving forces that promotes sustainability education on campus through student-driven projects and events. The Sustainability Council, or Susty Council for short, consists of four faculty members and eight student members, that meet weekly throughout the academic year to discuss matters related to sustainability education and plan for upcoming projects, events, and fundraising efforts.

In 2017 a new position was created, **Director of Sustainability and Experiential Education**, to strengthen sustainability and experiential education across the Wasatch campus and throughout the school curriculum. The Susty Council, with oversight from the director, has put into place several projects at Wasatch Academy. In 2017, a **campus-wide recycling cooperative** was created, and since then our students, faculty and staff have stepped up to work together in cultivating a culture of "reduce, reuse, and recycle" in which everyone is mindful of their consumption and waste management habits. The **Ban the Bottle Campaign** drastically reduced consumption of bottled water, and served as a springboard for the Susty Council to raise money for the purchase and installation of water bottle filling stations for student dorms and other campus buildings. Funds raised by students have also been used to support our **Community Garden**, which was recently expanded and upgraded, allowing us to integrate this living classroom into courses through project-based learning. The Susty Council funds have largely been raised

from silent auction events where handmade artisan quilts, up-cycled cloth shopping bags, and baked goods are sold.

Wasatch Academy's commitment to the health of its students, faculty, and staff is demonstrated through its facilities, including a 35,000 square-foot **Recreation Activity Center**, and **Wellness Center** staffed by certified health professionals. The Activity Center represents Wasatch Academy's commitment to the holistic health and well-being of the students, teachers, and staff. Team sports and other organized athletics are also very popular. Our **Weekend Recreation program** includes field excursions that explore the local and regional nature trails, national parks, and forest service lands. Wasatch Academy also has a strong **Residential Life program** and **Student Advisory program** that weave together seven themes - empathy, community, responsibility, accountability, diversity, respect, and safety.

Our **Global Sustainability Education Partnerships Initiative** has joined forces with the Global Cultural Education Initiative to focus on building partnerships with other independent schools across the globe with special focus in India. Our India partnerships have woven together a sense of place, water resource management, and global sustainability themes. During the fall of 2019, we conducted on-site visits with 11 schools in India as part of our effort to expand our Global Sustainability Education Partnerships.

Wasatch Academy partners with several environmental education organizations that offer support for K-12 schools to embrace sustainability education. By pursuing designations as a **Utah Green School** with the Utah Society of Environmental Education, and as an **Eco-School** with the World Wildlife Federation (WWF), we are using the guidance and structure provided by these programs to strengthen sustainability education throughout our curriculum and across campus, and to make progress on our Net Zero Energy Initiative. In the 2018-2019 academic year, we received the **Eco-Schools USA Bronze Award and Silver Award** from the National Wildlife Federation, as well as the **Utah Green School Award of Excellence** through the Utah Society for Environmental Education. Completing these applications has been incredibly rewarding and empowering, as they have pushed us to inventory, organize, strengthen, and better track our efforts to adopt more sustainable practices on a systems level.

At Wasatch Academy, each and every person matters—every student and parent, every alumnus, every staff and faculty member. We strive to make sure each student is challenged appropriately while preserving personal dignity and a global culture of kindness. Every individual is treated with thoughtful care and compassion. Wasatch Academy respects and nurtures each person's unique talents, skills, passions, and potential. The school strives to foster an environment open to personal discovery, understanding, and growth. Whatever we set out to do, we act with the highest level of integrity by honoring and cultivating individual strengths. We are always looking for ways to improve our sustainability in practice, and by example, serve as a role model for others to create a more sustainable future.

## **Members of the GRS Application Consulting Team:**

Mr. Joseph Loftin, Head of School

Mr. Paul Applegarth, Assistant Head of School for Finances and Facilities

Joe Porter, Board of Trustees

Dr. J Dianne Brederson, Assistant Head of School for Academics

Dr. Joel Barnes, Director of Sustainability and Experiential Education

Ms. Brooke Allred, Marketing and Communications Director

Ms. Emma Chiapette, Curriculum Coordinator and Math Dept. Faculty

Ms. Renee Thibodeaux, Project-Based and Service Learning Coordinator

Mr. Joseph Impala, Executive Chef, Food Service

Ms. Melissa Davis, Recreation Director

## Awards received in the last four years related to our efforts in any of the pillars:

Utah Green School Award of Excellence, Utah Society of Environmental Education (2018-19)

USA Eco School Silver Award, National Wildlife Federation (2018)

USA Eco School Bronze Award, National Wildlife Federation (2018)

Certified Wildlife Habitat Site, Certificate of Achievement, National Wildlife Federation (2019)

Wasatch Academy has won the **Best of State awards** in Utah in these categories...

Best Private School K-12 (for 8

consecutive years)
Educational Institution
Administrator of the Year
Principal of the Year
Teacher of the Year K-12

Special Interest Education

Teacher Training
High School Coach
Best Male Athlete
Talent Representation
Heritage/Historic Site
Equestrian Program

## Pillar I: Sustainability - Reduced Environmental Impact and Costs

## Net Zero Energy Program

Wasatch Academy is being strategically transformed into a Net Zero Energy campus in which the energy required to operate campus buildings and facilities is generated entirely on campus from renewable energy sources. In 1994, Wasatch Academy began a program to upgrade existing buildings and facilities and develop new ones based on net zero principles. This set the stage for Wasatch Academy to begin a new chapter in its long history; a chapter that acknowledged the immense challenges of sustainability in the new millennium, and re-affirms our role as a national and international leader in secondary education.

A core principle of the plan is to "...work toward a sustainable future at Wasatch Academy and, by example, to influence others to do the same." This has resulted in initiatives to reduce energy use, create biodiversity in the campus landscape, conserve water, and reduce waste. The 2016 plan established a "Net Zero Energy Scenario" to guide the process of working toward net-zero energy use on campus by:

- Maximizing the energy efficiency of all campus buildings.
- Managing energy use in all buildings through a central global control system.
- Developing energy sources on campus to meet all campus energy needs.
- Educating all students, faculty and staff in how to reduce their energy use.

As existing buildings are remodeled and new buildings are designed, each are constructed to be net zero ready, defined as requiring the lowest level of energy use that can reasonably be achieved based on a building age, configuration, orientation, materials and appropriate level of historic preservation.

Wasatch Academy was founded in 1875 as the first secondary school in Utah. While the fifteen historic buildings on the campus are an important legacy of the school's history, they also present a challenge with energy efficiency; retro-design is a complicated undertaking with historic buildings. Five of the historic buildings on campus have undergone major improvements and are major components of the net zero initiative - the Music Conservatory, Studio Arts Building, and the Learning Services Building. These buildings have been repurposed and redesigned for new uses, and go beyond simply reducing energy use. The repurpose/redesign approach contributes to sustainability by avoiding 1) the waste created by destroying a building, 2) the consumption of natural resources required to build a new building, and 3) the historic value lost by demolishing historically relevant buildings 4) maximizing natural light and reducing the need for artificial lighting.

The remaining campus buildings are systematically being upgraded to net zero status, as they are remodeled and mechanical systems replaced, as prioritized on the "Campus Buildings Deferred Maintenance Schedule." New campus buildings are being designed to LEED standards and constructed as net-zero ready buildings. These include the Lewis/Loftin Student Center, Zoe Dormitory, and the Martin and Beverly Pierce Administration Building.

## Campus Energy Sources

In 2015, development of geothermal source systems and solar energy sources began on campus. Seven campus buildings currently receive heating and cooling from 119 geo-exchange wells located in seven well fields. These wells are closed loop systems, 300-500 feet deep, where the temperature is a constant 50-55°F. As the heating and cooling water is circulated into these wells the water temp drops or rises (depending if we are heating or cooling), water is then circulated through a refrigeration cycle that uses the ground source water to create 130°F water during winter or 45°F water during summer. Plans are to make this system more efficient by creating a piping system that moves geo-energy between buildings.

The first photovoltaic panels were installed on the new Physical Arts Center in 2018. The Zoe Dormitory, Pierce Administration Building, and the Engineering Building are designed to accommodate photovoltaic panels. We recognize that developing solar power on the campus is a central piece of the Net Zero Initiative. While converting gas-fired boilers to geo-source based heating and cooling systems significantly reduces energy use, this does not yet complete the Net Zero Initiative because geo-source, heat pump and variable refrigerant systems operate on electricity.

A Global Control Energy Management System has been installed to regulate energy use in individual buildings. The system is currently operational in twelve buildings and will eventually control all campus buildings. The system includes sensors in mechanical systems and building zones in each building that monitor and transmit their operation and temperatures in real time. The information is available on-line to staff, faculty and students engaged in operating and studying the system.

Working toward Net Zero has been, and will continue to be, an enormous learning opportunity for the entire Wasatch community. It supports and encourages project-based learning on a campus-wide scale, and provides more opportunities to use the campus as a laboratory for critical thinking and problem solving, qualities that are foundations for learning at Wasatch Academy.

In 2017, the school established a new position of Director of Sustainability and Experiential Learning to oversee student and faculty-driven sustainability initiatives, and to make information about the Net Zero Initiative and other sustainability projects on campus available to students, faculty, and staff. The director provides leadership by building a bridge between the technology and engineering aspects of net zero, with the goals of sustainability education.

Our students are passionate about the environment and have great concern for the future of the planet. They come from 35 countries and nearly all 30 states; many return home to make a difference. Exposing them to how Wasatch Academy is working to achieve Net Zero and a sustainable future provides a point of reference for them to influence environmental quality in their time and place.

#### Moving Forward

Working toward net-zero requires maximizing the energy efficiency of 25 campus buildings constructed over 140 years; generating energy on campus; sophisticated energy management and changing the culture of how people live in and use buildings. This is a comprehensive and complex undertaking that has required Wasatch to build new capacities to program, design, construct, maintain and use buildings and infrastructure.

Working toward net-zero has been, and will continue to be, an enormous learning opportunity. It is project-based learning on a campus-wide scale.

## **Sustainable Landscaping and Water Conservation**

"When you walk into a space where the environment is taken care of, it invigorates a connection and makes you feel good. I want everyone to walk on campus to feel that connection." - Bridger Varga

There is no question that Utah is home to extreme climate patterns, from cold, icy winters to summer heat. As the second driest state with one of the fastest growing populations, Utah communities are faced with managing increased demands on water supplies.

In 2010, Bridger Varga, a horticulturist teaching at Wasatch Academy, was given the task of reevaluating the campus landscaping plan with the goal of water conservation. With the assistance of his father, Dr. Bill Varga, a retired horticulture professor at Utah State University and a past director of the Utah Botanical Garden, a progressive xeriscaping plan was developed for the evolving Wasatch Academy campus.

Changing an established landscape comes with plenty of challenges. Weed management can seem impossible without the use of harsh chemicals. To limit additional chemicals being introduced to the humans and wildlife that surround campus, Varga and his team diligently hand weed, especially when a new landscape is establishing itself.

The landscaping around Wasatch Academy's Studio Arts Building has proven that this philosophy stands true. When initially planted in 2014, Varga's team spent 70-80 hours of weeding manpower just to manage the space over the summer. Now, six years later, the same area takes about six hours each summer to maintain, and offers a striking complement to the art building on Mt. Pleasant's State Street.

The campus landscape also includes a strategy of landscaping and planting local native plants that assist with keeping invasive weeds down, provides native ecosystems to the wildlife that surround the campus, and are hardy in minimal water conditions. Areas of campus that are lawn-heavy, are evaluated each year to decide if they are necessary and utilized by the community or if they can be better landscaped with local plants or xeriscaping to reduce water consumption.

Wasatch Academy's campus not only applies the principles of sustainability through the wise use of water and ecologically appropriate materials but also provides a laboratory where students learn about the environment. The school's overall landscape strategy is motivated by creation, observation, and is a measurement of the success of the landscape as it continually changes and improves.

Varga's work to conserve water and use ecologically appropriate materials shows that even the school's landscape strategy can be a laboratory for learning. When you walk into a space where the environment is well cared for, it enhances the connection and makes you feel good. We want everyone to walk on campus and feel that connection. Information regarding our water use for our campus native landscaping is available on-line to staff, faculty and students who are interested in operating and studying the system. This information is publically available on our website.

#### **Waste Management**

Campus-wide Recycling and Ban the Bottle Campaign

Students wanted to be involved in the movement Wasatch Academy was leading in sustainability. Under the guidance of our Director of Sustainability and Experiential Education, students created a Sustainability Council dedicated to looking at opportunities for students to be actively involved in reducing their environmental impacts. The Sustainability Council also works on creating innovative solutions to environmental and social justice issues on local, regional, national, and global levels. By emphasizing problem solving skills *and* solution generating skills, we are preparing our students to become leaders in sustainability in today's world. We believe that holistic sustainability (the nexus of ecological, social, and economic health) will prove to be the central challenge of this millennium.

As a result of the Sustainability Council, the school started a campus-wide recycling co-op that utilizes student groups who regularly volunteer to empty recycling bins around campus. Our school kitchen, housekeeping staff, and Student Store are fully on board with recycling, and are more than willing to make this extra effort.

As students recognized the amount of waste produced by plastic water bottles, in the spring of 2018 the school started a "Ban the Bottle" initiative to reduce the consumption of single-use plastics. Students worked together with the Sustainability Council to raise money for water bottle filling stations to be installed in key locations around campus. This immediately reduced the use of single-use plastics in our community and gave students a sense of awareness and ownership of their daily habits as consumers.

## Pillar II: Improving the Health and Wellness of Students and Staff

We strive for faculty, staff, and students to feel engaged in developing a climate of joyful learning, inspiring instruction, ethical commitment, and individual creativity. Wasatch Academy works to develop a transformative experience for its students, enabling time spent at Wasatch Academy to be especially influential in their lives. As an Academy, we shape what's next—from the surrounding community to the rest of the world. Wasatch Academy empowers a community of thinkers, creators, and doers—preparing our employees and students to make a tangible, positive difference wherever they go.

We recognize and celebrate that human health depends, both directly and indirectly, on planetary health. When looking at ways to support the human sustainable experience, we look to maximize natural light in our facilities and utilize hand weeding to reduce the introduction of harsh chemicals to the community and the wildlife that abound on campus. Each time a facility is renovated or constructed, utmost care is taken to ensure that we are compliant with Utah State International Building Code standards. Before beginning any construction, the architecture of facilities is evaluated for overall well-being of the learning environment and how it encourages overall community satisfaction and growth.

Through various health and well-being initiatives and facilities available to own one's health, the sense of community and safety permeates students from the moment they step on campus, to long after they have left.

## **School Environmental Health Programs**

As an international boarding school, we place a very high priority on maintaining the indoor air quality (IAQ) in our buildings. Our Facilities Department adheres to the International Building Code (amended by the State of Utah) for maintaining the indoor air and environmental quality of all our buildings; this includes following an established, posted schedule for inspecting, cleaning, and resolving any issues in all buildings biannually (August and December) as well as on an immediate, as needed basis. These **routine building inspections include testing, monitoring, and remediation of indoor contaminants (e.g. radon, carbon monoxide, mold and moisture), as well as pest management and thermal comfort.** For example, the biannual building inventory in 2018 revealed that several of our buildings had levels of radon above the recommended levels for the state of Utah (4.4 pCi/L), and venting systems were installed in each of these buildings within a few short months.

In an effort to improve and maintain thermal comfort and indoor air quality, in 1990 the Wasatch Academy campus converted from the use of coal heat in all buildings to natural gas. Taking thermal comfort and indoor air quality to the next level, buildings are in the process of being converted to our geo-thermal exchange system that keeps buildings at a comfortable 70-72 degrees.

Located in rural central Utah's Sanpete County, Wasatch Academy boasts excellent air quality. Based on the EPAs scale of 1 (worst) to100 (best), Sanpete County's air quality is 96 (the US average is 58). Utah is also a

very dry state and problems with indoor mold are not common; as such, this has not been a significant issue in our buildings. Even so, our campus landscaping has been intentionally designed to pull moisture away from buildings and redirect it to benefit plants (a core principle of permaculture design). This helps to reduce structural mold possibilities and deters pests from being attracted to the buildings in search of a water source in our dry climate.

Our Housekeeping Staff is committed to using environmentally friendly cleaning products whenever possible, and have voiced their commitment to adopt sustainable practices. The housekeeping staff clean and disinfect all common areas daily. They are trained annually about proper use of the chemicals used and are informed on any updates/changes to the schools SDSs. Additionally, all chemicals used in or around facilities are in locked closets or receptacles so students can not access them, with the exception of hand sanitation stations strategically placed around campus and disinfectant wipes in the dorms and classrooms. The housekeeping team uses vinegar solution (a ph balanced cleaning product) as often as is reasonably possible to clean and disinfect areas. However, when more abrasive cleaners are needed, the team uses Waxie's Green products that deliver superior cleaning results and have been certified by third-party ecolabels. The housekeeping team uses eco friendly paper towels in restrooms that don't have air dryers (we are in the process of replacing paper towel dispensers with air dryers), aerosol spray cleaners are not used, and they recycle all boxes that cleaning supplies come in.

#### **Transportation**

We are a boarding school in a small, rural town, which results in approximately 70% of our teachers and staff walking to Wasatch Academy every day! Many of our faculty and staff live on or very near our campus. For student transportation on field trips we have a vehicle fleet that consists of 1 school bus, 14 twenty-passenger mini-buses, 2 twelve-passenger vans, and 4 small passenger cars. All of these vehicles run on regular gas. We are committed to writing a grant within the next 5 years to secure funds for converting some or all of our vehicle fleet from conventional gasoline to an alternative fuel such as propane, biodiesel, hydrogen fuel cells, ethanol, or electric (Kelly & Gonzales, DOE/GO-102017-5039. October 2017).

## **Residential Life Program**

Our year-round Residential Life Program weaves together seven themes - **empathy, community, responsibility, accountability, diversity, respect, and safety**, and makes connections with our school's core values of **respect, community, innovation, ownership, and health and safety**. Conflict resolution is another important area of focus for dorm parents, and presented as an essential life-skill.

The Residential Life Program engages students during weekly dorm meetings. Each team of dorm parents collaborate to explore content and develop activities that they feel is best suited for that particular group of students. Although the outline is set for the year, we understand the organic need for lesson shifts. Often times a pertinent topic will show the need for attention such as vaping on campus and the health concerns that accompany it. We constantly modify the program topics to meet student needs and support. Dorm Parents are trained to utilize a suite of teaching techniques, use research-based information and they lead by example setting a positive tone for growth.

#### **Advisory Program**

While all of our students come to know many members of the faculty and staff on an informal basis, each student has a faculty advisor with whom he/she can discuss matters of concern - academic or otherwise. The central goal of this program is to foster constructive, trusting relationships between the student and their advisor. Advisory groups (5-7 students and their Advisor) are centers of mutual support, interest and activity.

Advisors help to create a sense of community and belonging that successful Wasatch Academy students deserve. The Advisor also supervises each Advisee's academic progress, while representing the student and advocating for them when appropriate, in situations such as Academic Intervention Meetings (AIM), Behavioral Support Plan meetings (BSP), or other student meetings.

Each Advisory group meets once a week for Advisory sessions, and once monthly for a themed Advisory Night. The weekly Advisory sessions are the venue for delivering the <u>School-Connect Program</u> that empowers our students to explore and strengthen their social-emotional intelligence and prepare them for adulthood, both personally and professionally. The <u>School-Connect Program</u> also fosters academic engagement, reduces risk behaviors, facilitates supportive relationships, and cultivates a healthy sense of who we are as a unique learning community. School-Connect provides structure, fun activities, and a foundation for sparking meaningful conversations and relationships. Because all of our students and teachers are involved, the Advisory Program has a significant impact on our overall school climate and student motivation.

## **Coordinated School Health Programs**

Wellness Center

The goal of the Wellness Center is to help students maintain good health and develop good health practices. The Wellness Center offers supportive care in a professional and safe environment. Students may come to the Wellness Center for any health-related issues including medical assistance and emotional support.

#### Employee Mental Health Support Program

The LiVe Well Employee Assistance Program is Wasatch Academy's partner in living a life filled with energy, strength, and vitality. Taking care of mental health is essential to our school's well-being. Rewarding relationships at home and work, effective stress management skills, and learning to thrive with life changes all improve our ability to LiVe Well. Services provided through the program include:

- Counseling: Free, brief counseling for life problems such as conflict at work or with a family member, depression, anxiety, and life stress. Services are available to employees, spouses or partners, and dependent children (under 26 years old and single.)
- Help for Caregivers: Information, resources, and coaching for employees who are providing assistance
  to a spouse or relative who is ill, disabled, or needs help with basic activities of daily living. Caregiver
  services can help identify medical, legal, and financial resources, as well as provide support for the
  emotional issues of caregiving.
- Crisis Services: 24/7 telephone crisis services with a licensed mental health professional.

#### **Employee Health Committee**

In 2017, Wasatch Academy established a Health and Wellness Committee comprised of various members from diverse departments on campus. The committee has created various wellness challenges that motivate employees to live active, healthy lifestyles, and better manage stress. The committee also created an active lifestyle reimbursement incentive program that promotes employees to get out and participate in their favorite activities. Whether it's rock climbing, skiing, marathon training, or simply gym or yoga studio memberships; employees are able to get part of their costs covered by the health and wellness committee. The program also utilizes Virgin Pulse; a web-based platform offered by our health insurance provider that promotes employee engagement and wellbeing; it builds an employee community that is happier, healthier and ultimately more productive. Teachers and staff create online teams and engage in friendly competitions (2-4 weeks long) to meet "healthy heart step quotas" and promote camaraderie amongst the school.

#### **Nutrition and Fitness**

The Sustainability Council works with "Chef Joe" in our school kitchen to offer healthy meals to students and staff *and* to adopt sustainable practices in our kitchen. Food scraps from meal preparation are collected and donated to local goat and pig farmers, and compostable food scraps from faculty households and student dorms are donated to our Community Garden. Our kitchen staff has drastically reduced their use of plastics and styrofoam in meal preparation and serving.

In addition to providing healthy meal options each day of the calendar school day, all students, faculty, and staff are encouraged to utilize the many fitness facilities available on campus. This includes our new Physical Arts Activities Center, a 35,000 square foot facility accommodating five indoor basketball courts, one outdoor basketball court, volleyball courts, badminton courts, a full size track, four outdoor tennis courts, and an indoor soccer field. Attached to the Activities Center is the original Multi-Purpose Building (MPB) that houses the Joseph Loftin basketball court, a fitness and weight lifting room, a rock climbing wall, a bouldering room, and dance studio. Wasatch Academy was a major funder of the City of Mount Pleasant Aquatic Center; through a partnership with the city government, we use the pool regularly for recreational and competitive swimming.

The school also has several outdoor recreation facilities including an equine indoor riding arena, a spacious 20 stall barn and turn out pens, outdoor riding pad and a galloping track. Each student can choose between three riding program options: English Competition Team, Western Competition Team, and our Recreational Riding group. Students of all skill and experience levels can have fun, learn, and thoroughly enjoy the equine experience. We go on several trail rides in the foothills and mountains. We also help students to learn skills and knowledge in areas like horse health and nutrition, stable management, equine reproduction, and horse training techniques to name a few.

#### Sports

Many of our students participate in organized sports through our Athletic Department and Sports Program; school teams include tennis, soccer, basketball, volleyball, swimming, golf, equestrian, bouldering, mountain biking, and snowboarding. In recent years, our varsity basketball team has been rated in the top 10 or 20 high school teams in the nation. Students are encouraged to discover and develop new kinesthetic strengths by picking a new sport and joining a school team. With a physical activity requirement each semester, our student scholars are exercising their brains *and* their bodies. The benefits of exercise are limitless, and students are encouraged to find a sport that suits them.

#### **Outdoor Recreation Activities and Cultural Events**

Wasatch Academy has a robust Weekend and Outdoor Recreation Program that runs throughout the regular school year and summer school. Trips and activities are offered nearly every weekend, after school and even during some of the holiday breaks. Student participation in outdoor rec activities, cultural events and community service projects is an ongoing graduation requirement. Outdoor recreation offerings include rock climbing, mountain biking, hiking, camping, paddle boarding, rafting, snowshoeing, sledding, skiing, and snowboarding. We have our own ski cabin and ski hill/terrain park on nearby US Forest Service lands. Cultural event offerings include musical and dance performances, theatrical productions, themed festivals, and comedy shows. Shopping and entertainment trips are also offered regularly. Faculty and staff serve as trip leaders as part of their core responsibilities.

#### **Sustainability Education**

At Wasatch Academy, the notion of community service takes on a broader, more eco-centric meaning. It extends beyond the human community to embrace the natural systems that ultimately support healthy human communities. We recognize and celebrate that human health depends, both directly and indirectly, on planetary health. All of our teachers have received training from The Cloud Institute and our Director of Sustainability & Experiential Education on integrating sustainability into course curricula. As of the spring 2019, teachers are required to align all of their courses with the Education for Sustainability Academic Content Standards from The Cloud Institute.

During the 2018-19 academic year, all of the students, faculty, and staff at Wasatch Academy worked together to develop a set of "Ethics for a Sustainable Future." Once finalized, the entire Wasatch Academy community committed themselves to incorporating them into their daily lives, and this commitment is renewed at the start of each year. This set of ethics is posted around campus and serves to inspire our community to adopt habits that support ecological health, social justice, and economic stability for all life, for the long run. These ethics are closely aligned with our school mission, Core Values, and Graduate Learner Outcomes.

#### Sustainability Education on a Systems Level

Over the last three years, Wasatch Academy has made a conscious effort to strengthen its support for students who are discovering how they can be leaders in sustainability education on our campus. The movement led to the creation of a group of passionate students committed to being kinder to one another and the planet by creating green projects and initiatives.

The Wasatch Academy Sustainability Council is comprised of students, faculty, and staff who each bring ideas to the table to envision and help create a more sustainable future. One of their more recent "aha's" was to create a Sustainable Events sub-committee to evaluate school events to see how they can reduce their carbon footprints.

This sub-committee is supporting class event coordinators by providing helpful insights into how the events can demonstrate sustainability in practice. They are evaluating and making suggestions on the environmental impacts of Wasatch Academy events such as the Horseshoe Mt. hike, prom celebration, Halloween and Valentine's Day dances, the international food court, parents weekends, and graduation. Some of the suggestions for these events include using no plastic or styrofoam, having recycling bins handy and clearly marked, using local and regional sources for purchases, and using water hydration stations instead of bottled water.

The Susty Council has already made a big impact on the campus over the past three and a half years. They've dedicated time to advocating for sustainability-themed projects in classes, and fundraising efforts with bake sales and making artisan quilts and cloth shopping bags. The students on the council have decided to use their funds to purchase and install several water-bottle filling stations in buildings across campus.

## Pillar III: Learning - Effective Environmental and Sustainability Education

## **Educational Model**

Wasatch Academy provides a 21st-century learning environment where students simultaneously gain knowledge and the capacity to critically and creatively apply knowledge to problem-solving. This is accomplished through project-based learning applied across disciplines. The collaborative curriculum moves away from an emphasis on teachers lecturing in a 16-student classroom, to students undertaking projects and teachers facilitating learning through doing. Life-long skills such as collaboration, communication, critical thinking, and creativity are learned in the process.

In project-based learning, students learn content by addressing a real problem called a driving question. For example, English students confront the question, "Can we do a better job than the media at representing the issue of immigration?" Statistics students grapple with, "Can we use data to predict how much food will be consumed during a given meal to save money and limit food waste?" Discrete Math students try to answer the question, "How can Wasatch Academy most effectively move towards a net zero campus?"

Driving questions inspire students with an immediately engaging prompt and provide them the opportunity to dive deeply into investigation, to be creative in their solutions, and to pursue the knowledge that is most relevant to the problem.

Project-based learning differs from typical classroom projects in that students drive the learning process through authentic experiences. Rather than creating a poster at the end of a series of lectures and homework assignments, students engage in activities to learn what professionals in the field do. An essential component of this process is interaction with people outside the classroom community. These interactions deepen learning and provide context and reality to the project.

Students collaborate with their community to enrich projects. Through collaboration, students learn empathy and provide relevance to the projects and problems they are trying to solve. By interacting with a group of stakeholders, students gain insight into how the work they do impacts real people. Students are allowed to look outside the school community for mentors. They form a mentor relationship, gain the opportunity for sustained collaboration and guidance, and learn new communication techniques with the adults they work alongside.

Working toward various sustainable practices has been, and will continue to be, an enormous learning opportunity for the entire Wasatch community. It encourages project-based learning on a campus-wide scale and provides many opportunities to use the campus as a laboratory for critical thinking and problem solving, qualities that are foundations for learning at Wasatch Academy.

Although there is no precise definition for the term "sustainable innovation," to us it embodies the idea that businesses are responsible for creating more sustainable products, services, and systems that are driven by the three pillars of sustainability - social equity, environmental health, and economic stability. Wasatch Academy's faculty and staff continually look for ways to embrace this idea in their teaching and other work. This idea has changed the way our teachers teach and prepare our students to solve real-world issues.

Below are just a few examples of how students, faculty, and staff have embraced project-based learning and sustainable innovation to help create a more sustainable future on local, regional, and global levels.

#### **Global Sustainability Education Partnerships**

In 2017, Wasatch Academy began the Global Sustainability Education Partnerships. This initiative aims to develop project-based learning opportunities focused on the challenges of sustainability as they appear in different parts of the world. These real-world challenges serve as both context and content to compel students to explore the commonalities and differences between their cultures and countries and to work together to explore sustainability challenges, generate innovative solutions for a more sustainable future, and gain firsthand insights into our "global village." Currently the school works regularly with two schools in India, the G.D. Goenka World School (GDGWS) in Delhi and the Kasiga School in Dehradun.

Students from both schools focus on water conservation and sustainability, and share their research, conclusions, and innovative proposals for a more sustainable future. Selected students and faculty from each school are invited to India or the United States to collaborate and be immersed in cultural activities.

Sense of place studies (also known as Place-Based Education) is another important theme in these Global Sustainability Education Partnerships. Every sustainability issue (even the ubiquitous challenge of global climate change) has specific, place-based effects that must be understood from multiple perspectives. Ultimately, students who choose to participate in the program develop a deeper sense of place (of both countries) as a fundamental component of sustainability education. These two themes are both complementary and transdisciplinary, which means they can be integrated into just about any academic discipline and the full spectrum of student interests and class projects.

In February of last year, Wasatch Academy students had an exciting online exchange with GDGWS students; Wasatch Academy students shared what they learned from their Experiential Immersions and the GDGWS students shared their research into urban gardening and composting. In November, students shared highlights of their learning from two Experiential Immersions, Astrophotography and Geology & Rock Climbing, and the GDGWS students shared their findings from two recent research projects on rainwater harvesting and paper waste recycling.

Our collaborations with GDGWS and Kasiga over the past several years have revealed how incredibly valuable cross-cultural exchanges are in the quest to envision and create a more sustainable future. These exchanges compel our students to explore the connections between place-based education and sustainability education and to examine the commonalities and differences between our two countries and cultures. This sets the stage for our students to address the urgent need to generate innovative solutions to the immense challenges of the new millennium.

#### **Stopping Food Waste**

A statistics project was designed and implemented in consultation with Chef Joe, Executive Chef in the Wasatch Academy Kitchen. Students were asked to ponder why the issue of predicting how much food to provide the Wasatch community would be important to Chef Joe. Students hoped to portray the story with data and mathematics.

Working with Chef Joe was crucial to the project. Students were engaged and dedicated because they could attach real people and benefits to the outcomes of their work. Planning with Chef Joe taught them how to be thoughtful in how their results should be presented, and it gave personal relevance to their work. They knew that their analysis could be viewed as critical to Chef Joe, the administrators, and the student body at large.

In the Statistics class, the data provided for the food waste project was not enough to make the types of definitive conclusions students wanted. Students hoped that the "food satisfaction" data they collected could be used to help reduce food waste. Students built a food satisfaction kiosk and collected data from their peers, faculty, and staff during every meal. Students also observed that many students were going off campus for meals. The project's findings helped to improve the food preparation in the kitchen, encouraged healthier food choices, and reduced food waste by 57%.

#### **Evaluating New Energy Sources for Campus**

The Discrete Math course created a project to evaluate different energy sources that could greatly reduce electricity usage on campus. It was originally believed that a single meter was the best solution for the campus. The students kicked off their project by meeting with Paul Applegarth, Assistant Head of School for Finances and Facilities. Applegarth explained the data on energy consumption that the school has collected, and described the financial challenges involved in making decisions about electricity usage on campus.

During the project, students met with an electrical company and representatives from the town of Mount Pleasant. Students described how these differing perspectives changed their understanding throughout the project. After students had engaged and interviewed industry professionals and scored through several data sets, they realized that maybe the originally proposed single meter wasn't the best option.

Following their research, students wrote an energy plan proposal for Wasatch Academy. Their detailed paper was submitted and presented to the Wasatch Academy administrative team, and their plan is being explored by the Board of Directors to be implemented with future construction projects.

#### Student Studies Ecology through a Utah Lens

To understand Mt. Pleasant's unique ecosystems, Chinese international student Arthur Zheng created an independent project in his ecology class that immersed him in central Utah's high desert and mountain landscapes. He approached his research by utilizing photography to investigate the natural history and ecology of local birds and wildlife. Using a professional quality camera and lens, Arthur captures multi-angle photos to assist him with identifying different species of birds. He then records the location and time of the observations into a data set.

By the end of this ecology project, Arthur hopes to have a prototype of a guide to the common birds and wildlife on the Wasatch Academy campus for use by students, staff and visitors. This project strengthens his knowledge of the ecology and natural history of local wildlife, and deepens his sense of place in the Basin and Range landscapes of central Utah.

#### **Chinese Partner School Eyeglass Project**

In 1998, Hurricane Mitch laid waste to Honduras, inflicting billions of dollars worth of damage and killing nearly 5,600 people. Ever since then, the country has recovered very gradually. The government has diversified the goods it exports, but such decisions have brought incrementally slow changes. To this day, there is a huge disparity in incomes, and the unemployment rate is one of the highest in Central America. For people in the impoverished parts of Honduras, access to medicines and medical help is often beyond their reach.

Wasatch Academy's partner school, Beijing National Day School, learned of an opportunity to raise much needed funds for Doctors Without Borders for eyeglasses for families in Honduras. A Wasatch Academy teacher created a challenge among her students in her business and economics classes. She asked students to develop a product, build a micro-business plan to support the product, find ways to make a profit, account

for their income and expenses, and create a final report. Profits from each of the micro-businesses would support the purchase of glasses for the needy families in Honduras. The venture of combining a service project with a direct classroom experience and the creation of a micro-business is exemplary of the Project-Based Learning (PBL) that is a hallmark of the Wasatch Academy style of education.

Within the first year, students raised approximately \$900 to purchase over 250 pairs of eyeglasses. They were delivered to Honduras by the Amigos de San Carlos team and distributed in January of 2019. With the heated political climate both in China and Central America, students were not able to personally deliver the product that they worked relentlessly to procure. This Project-Based Learning is aligned with Wasatch Academy's mission because it helped to educate our partner school students; it also embraces several of our Graduate Learner Outcomes - Initiative and Entrepreneurship, Global Responsibility, and Environmental Stewardship. This project is a strong representation of our efforts to engage students in the social justice dimension of sustainability. After an exciting kick off in April 2019, students have eagerly begun building business models and products. To date, the students have raised \$1,300 to support the 2020 medical mission.

#### **Experiential Immersions**

Experiential Immersions (EIs) are 5-day mini-courses offered to all Wasatch Academy students each fall. They provide Wasatch Academy students with new opportunities to learn outside of a typical classroom setting and structure. Students are encouraged to explore beyond their comfort zones (familiar topics and teachers) to explore new areas, embrace new experiences, and have fun. They are taught by faculty teams from different departments and are designed to create small learning communities made up of students with diverse academic interests and personal backgrounds. They also emphasize interdisciplinary, experiential learning focused on real-world topics and projects, and valuable life skills. Students can receive Outdoor Rec credits, Cultural credits, and Community Service hours. The EIs comprise five full days of fun, immersive, experiential learning and culminate in a community-wide Exhibition of Learning. Here are three stellar examples of these EIs...

Rainwater Harvesting - Students design and build two water catchment tanks to supply rainwater irrigation to the new gardens and constructed wetland area near the engineering building. They will repurpose steel culverts set in concrete with plumbing run through the ground. They will also calculate water volumes as well as concrete volumes. Skills developed in this El will include plumbing, metal fabrication, concrete work, and landscape design; students receive Community Service hours for completing this El.

<u>Community Garden</u> - A functional community garden is a key component of a sustainable future. In this academic intensive, we will design, construct, and sow the seeds of a long-term Wasatch Academy community garden. Day to day tasks will include resurrecting a deer fence, installing drip-line irrigation systems, mixing soils, and planting seedlings and starters. While we will mostly be engaged in physical labor, we will also visit local sustainable organic gardens and discuss our vision with experienced experts. After working hard for five days in this EI, you will be rewarded with a harvest when you come back to Wasatch in September 2018.

<u>Utah Heritage Quilting Project</u> - Students will have the opportunity to make sustainable shopping bags out of recycled fabric, learn how to tie baby quilts, and cut out and put together quilt blocks for a twin sized quilt! Some of these items will be donated to local families in need, others will be used as auction items in fundraisers. Students receive Outdoor Rec and Cultural credits for completing this EI.

## **Community Service and Service Learning Projects**

We compel our students, faculty and staff to play an active role in improving the communities to which they belong; community-based health and wellness is considered an essential piece of sustainability.

The Wasatch Academy mission, Core Values and Graduate Learner Outcomes all advocate for the health and wellness of *communities* as well as the *individual*.

#### Our Mission

Wasatch Academy provides a nurturing community that empowers young men and young women to develop academically, socially, emotionally, physically, and morally, preparing them for college and for the challenges of living in the global society.

#### **Our Core Values**

- Respect for the individual We strive to make sure each student is challenged appropriately while preserving personal dignity and a culture of kindness.
- Ownership Ownership means accountability. We strive for faculty, staff, and students to feel responsible for developing a climate of joyful learning, inspiring instruction, ethical commitment, and individual creativity.
- <u>Community</u> Wasatch Academy community prizes its status as a diverse, dynamic, global community.
- <u>Innovation</u> Wasatch Academy strives to lead the way in innovations that strengthen the educational/residential approach to preparing students for higher education and good citizenship.
- Health and Safety We provide a safe and healthy environment and embed a lifelong safety and health ethic in faculty and students.

#### **Our Graduate Learner Outcomes**

- <u>Critical thinking and problem solving</u> the process of finding solutions to complex problems. Requires critical thinking and creativity in the analysis of problems and synthesis of solutions.
- <u>Collaboration across networks and leading by example</u>. The process of cooperating with others to produce or create something and the appreciation of the value of working on a team.
- <u>Agility and adaptability</u>. Agility and Adaptability is the ability to react to the changing world with grace and flexibility. With demands on skills changing so quickly, this requires students to develop a wide array of skills and collaborative techniques.
- <u>Initiative and entrepreneurship</u>. The ability to judge what needs to be done and to take action, especially without suggestions from other people. Imagining new ways to solve problems and initiating action.
- <u>Accessing and analyzing information</u>. The ability to collect and assess the quality of information for the purpose of drawing informed conclusions.
- <u>Effective oral and written multimedia communication</u>. The ability to express oneself in a variety of wavs.
- <u>Curiosity and imagination</u>. The desire and resourcefulness to learn about things, often using the creative power of the mind.
- <u>Global Responsibility</u>. The intentional engagement of oneself in the surrounding physical, social, and emotional environment.
- <u>Environmental Stewardship</u>. Protection of and responsible engagement with the environment while practicing sustainability and conservation of natural resources.

#### Community Service

Students accrue Community Service hours to fulfill graduation requirements by giving their time to meaningful, prearranged activities that answer the needs of a community. Typically, these activities are identified and

organized by adults in the community and offered to the students as options to choose from. Students participate in these activities on weekends, during spring break trips, and around campus throughout the school year on an as-needed basis. While these activities are occurring outside of the academic context, they are educational, even transformative.

All Wasatch Academy students are required to complete 20 hours of community service each year, and many students complete more than this. Nearly every weekend when school is in session, community service projects and activities are offered. Also, twice each year (in the fall and spring semesters) we offer a "Community Service Day" event that coincides with standardized testing. After a morning of testing, all students engage in an afternoon of community service projects with their Advisory group, supervised by their WA Advisor. There are local, regional, national and global projects that empower students to make personal contributions to ecological and social issues. A few examples are:

- Making sleeping mats for the homeless from repurposed plastic shopping bags.
- Volunteering at the Sanpete Pantry to provide non-perishable foods and firewood to local families in need
- Trash pickups along local highways and forest service trails.
- Invasive plant species removal from forest service lands.
- Helping local elderly families with yardwork and other chores.
- Planting trees on campus to help counter the effects of climate change, and for aesthetics.

#### Service Learning

Students engage in Service Learning throughout their entire learning process to fulfill the expectation of the graduate profile required of all students at Wasatch Academy. Service Learning activities are the result of collaboration between teachers and students. Within and across disciplines, students work with their teachers to identify current, unsolved issues in their community. They use the skills, content, and techniques from their classes to pitch and implement applicable solutions. This, too, is a transformative opportunity for students. A complete Service Learning experience incorporates a thorough reflection process for each student where they demonstrate their ability to connect the content from their classes to the real world. Students take these transferable skills with them as they venture out into their greater communities. It taps into the benefits of experiential learning - teachers use pre-planned learning outcomes to help guide the students' experience. The broader context and intentions of both the project and the learners are identified beforehand, and toward the end, time and energy is dedicated for reflective learning. Wasatch Academy uses the following process for developing these Service Learning Experiences:

- 1. Pre-project framing.
  - a. Why are we doing this?
  - b. How does this connect with the courses and learning I'm engaged in?
  - c. What types of services are we providing and for whom/what?
- 2. Post-project reflective learning.
  - a. What did we actually do?
  - b. What we experience?
  - c. What did we learn?