

School Nominee Presentation Form

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

Name of Principal:

(Specify: Ms., Miss, Mrs., Mr., etc.) (as it should appear in the official record)

DR. CHRISTOPHER STORCLILL

Official School Name:

Gerald Otte Blair Middle School

(As it should appear on an award)

**Private Schools: If the information requested is not applicable, write NIA in the space*

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


(Principal's Signature)

Date: 1/20/21

Name of Superintendent:

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

DR. RANDALL GILSON, SUPERINTENDENT

District Name:



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

Date: 1/20/21



(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: Nebraska Department of Education

Name of Nominating Authority: Ms. Audrey Webb

(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.

----- *Audrey Webb* ----- Date:3/1/21
(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: December 31, 2023

Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDOcketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

Otte-Blair Middle School

Summary

Otte-Blair Middle School (OBMS) partners with Washington County Recycling to place a single-stream recycling bin on school property. The school district partnered with a local sanitation company to provide on-site recycling bins at each building. Sixth grade classrooms collect recycled materials from all the classrooms in the school and transport them to Washington County Recycling center. OBMS participates in the Trex Challenge for the recycling of plastic bags and has taken home accolades in this challenge.

In August 2019, OBMS began composting all cafeteria food scraps using the vermiculture method and composting bins built by Environmental Science students. OBMS composted over 1,700 pounds of food scraps over the course of the year. During compost lessons, students learn about what composting is and how to do it, as well as why it is an important way for us to provide quality soil for plants to grow in.

The school garden lets teachers and students incorporate hands-on activities in a diversity of interdisciplinary, standards-based lessons. The garden engages students by providing a dynamic environment in which to observe, discover, experiment, nurture, and learn. Through the garden, students gain an understanding of ecosystems, an appreciation for food origins and nutrition, and knowledge of plant and animal life cycles. At the same time, they learn practical horticulture skills that last a lifetime.

Blair Community Schools, its school district, has engaged in a utility incentive rebate program for several years. This incentive has funded many energy-saving projects in Otte Blair Middle School. One project included the replacement of all of the T-12 fluorescent, metal halide, and incandescent lighting with energy-efficient LED lighting and occupancy sensors.

Where landscaping is present, the school uses drought-resistant plants and trees and mulches the areas to conserve the use of water. The school has received multiple tree planting grant awards from Papio-Missouri River Natural Resources District. Inside the building, Otte-Blair has installed automated sensors on all toilets, faucets, and water fountains. Three of four water fountains at Otte-Blair Middle School have been upgraded to include water bottle refilling stations.

To improve bus efficiency, Otte-Blair has participated in the Nebraska Diesel Emission Mitigation Program to decommission older school buses and replace them with more efficient buses. OBMS has installed bike racks at each building and has partnered with the City of Blair to provide safe routes to and from school.

OBMS uses traps and eliminates food sources as its first lines of defense to reduce pest populations and prevent pest infiltration. The school is monitored bi-annually for asbestos by an independent contractor and participated in the Nebraska School Radon Testing Program. Blair Schools' HVAC

equipment receives regular maintenance, servicing, and air filter changes. The school uses Green Seal certified cleaning products at a mixing station distribution system that reduces the impact of shipping diluted product and plastic waste. OBMS is equipped with professional cordless electrostatic handheld and backpack sprayer with US EPA registered broad-spectrum disinfectants. Whenever possible, cleaning is done with water and microfiber rags to minimize volatile organic compounds (VOCs) introduced into the environment.

The school nurse promotes participation in the Educator's Health Alliance (EHA) "Elevate" wellness program. OBMS partners with outside entities to provide training, screening, and clinics pertaining to First-Aid/CPR, diabetes, blood pressure, stress-reduction, and flu shots. Three days a week, students at OBMS walk for 15 minutes after lunch. Nutrition Services provides an app that students and parents can use on their phones that provides menus, nutrition facts, and allergy information for all food that is served in the cafeteria. OBMS provides a "grab and go" breakfast in the mornings and a salad bar during lunch. Blair Community School district established a Food advisory committee that meets quarterly.

Focusing on the health and wellbeing of staff and students is a priority at Blair Community Schools. Staff members have the opportunity to utilize the weight rooms at Otte-Blair Middle School and Blair High school, the district's track and gym, and walking workstations at their convenience and free of charge. Reusable water tumblers were given to all district employees and Otte-Blair Middle School has a water cooler that is free of charge to all personnel. Three of four water fountains at Otte-Blair Middle School have been upgraded to include water bottle fill stations. These stations save hundreds of thousands of otherwise-disposed-of plastic bottles.

The district's curriculum, in alignment with the Nebraska College and Career Ready Standards, includes instruction on weather, climate, and human impacts. This includes topics that range from climate change, renewable versus nonrenewable resources, alternative energy, overpopulation, deforestation, pollution, biodiversity, and land management. OBMS partners with DeSoto Bend national Wildlife Reserve to provide Outdoor Environmental Science Class at the refuge. A STEM class at Otte-Blair Middle School allows students to learn the theory behind several renewable energy and energy efficiency technologies. Learning this theory, plus hands-on skills prepare students for several entry-level positions in the renewable energy and energy efficiency fields.

Pillar I: Reduce Environmental Impact and Costs 35%

Element 1A- Improved Water Quality, Efficiency, and Conservation

Blair Community Schools engaged in a utility incentive rebate program for several years. This incentive has funded many energy-saving projects throughout Otte-Blair Middle School. One project included the replacement of all of the T-12 fluorescent, metal halide, and incandescent lighting with more energy-efficient LED lighting and occupancy sensors throughout our building as well as the district's other five buildings. Our district also ensures that lights, air conditioning, and heating units are off when our building is not in use. Replacing old appliances with Energy Star rated appliances in our kitchens is another example

of our energy saving procedures. The district also engages in energy conservation practices, such as building temperature standardization, energy use benchmarking, and efficient HVAC and appliance upgrades. Blinds have also been added in all rooms to help reduce energy consumption. During summer breaks, all computer lab and classroom computers and other electronic devices are unplugged to reduce “phantom energy” loss. The next step in our energy saving plan is to put LED “night-sky” compliant lighting on our school grounds and in our parking lots. This project alone has an estimated \$122,047 annual savings in energy, maintenance, and HVAC. The estimated payback time is 4.19 years.

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

Otte-Blair Middle School has limited areas designated for landscaping. However, where landscaping is present, the school utilizes drought-resistant plants and trees and mulches the areas to conserve the use of water. The school has received multiple tree grant awards from Pappio-Missouri River Natural Resources District. These grants have allowed for the planting of trees that reduce its carbon footprint and help limit global warming which in turn provides for a cleaner, healthier climate. The grants have also provided for several diverse species of trees to be planted on our campus.

Water conservation efforts are also seen inside of the building as automated sensors have been installed on all toilets, faucets, and water fountains to minimize water use.

Blair has a rich horticultural heritage that is unmatched in most other Nebraska communities. Ralph Steyer, a former city parks employee, planted a wide variety of trees and shrubs within Blair’s park system. The park named in Mr. Steyer’s honor contains a wide variety of plant species and is one of three recognized sites of the Blair Community Arboretum. The Blair Community Arboretum is unique because it is comprised of five sites owned by three different organizations. Black Elk - Neihardt Park, Ralph Steyer Park, and Rhoades Park are owned by the city of Blair. Arbor Park Middle School is owned by Blair Community Schools. The former Dana Campus is owned privately.

Element 1C - Reduced Waste Production

Otte-Blair Middle School partners with Washington County Recycling, to place a single-stream recycling bin on our school property. A large container was placed at the back of the building to accommodate the cardboard boxes and other containers utilized by our kitchen staff. Also, to reduce waste, the school district partnered with a local sanitation company to provide on-site recycling bins at each building. Washington County Recycling then gathers the recyclables from our bins which reduces the amount of solid waste being sent to area landfills. One of the most exciting waste production endeavours has been our sixth grade classrooms leading a recycling project where they collect the recycled paper and other materials from all the classrooms in the school and transport them to Washington County Recycling center. Over the past several years the school has routinely recycled obsolete electronics equipment. During the first stage of the process in 2012, a district storage facility was emptied of computers, monitors, printers, and other miscellaneous equipment. Our school has participated in the Trex Challenge for the recycling of

plastic bags. Every year hundreds of schools across the nation compete against each other to recycle the most plastic film. The challenge begins each year on November 15 and lasts until April 15. Trex provides schools with promotional materials, magnets listing the types of plastic films accepted, and three recycling bins which are placed in each academic wing of our school. Every day students weigh and report about the collected materials. Each month the plastic film is delivered to Family Fare, a grocery store, in town. Winners are announced on Earth Day. In 2020, Otte-Blair Middle school finished 1st in Nebraska with a total weight of 276 pounds of recycled plastic bags and twelfth out of thirty eight

states. Our school has made many significant changes in the day to day reduction of waste production. Individual printers have been removed from all classrooms and replaced with more efficient copy machines in the office and teacher workspace in an effort to reduce printing and paper usage at the school. The school has also reduced the use of workbooks and the printing of paper homework assignments through the use of Google Classroom. All teachers now have the training and availability to upload all assignments to Google Classroom for students to complete and submit electronically. Additionally, to reduce paper use, the school incorporates family text messages, emails, and accessible social media/websites. All school communications, lesson plans, and evaluation elements and report cards are all online.

Element 1D - Use of Alternative Transportation

To improve the efficiency of our buses and to reduce the emission of greenhouse gases, our school has participated in the Nebraska Diesel Emission Mitigation Program to decommission two older school buses and replace them with more efficient buses. Our district's operational capital forecast has a schedule that continually replaces older diesel buses with the more efficient propane models. To encourage utilization of biking Otte-Blair Middle School has installed bike racks at each building and has partnered with the City of Blair to provide safe routes to and from school. Our school provides crossing guards at busy intersections to assist in promoting safe routes for students walking and biking to school.

Pillar II: Improve the Health and Wellness of Students and Staff- 25%

Element 2A: Integrated School Environmental Health Program

Otte-Blair Middle School uses traps and practices regular waste management as our first lines of defense to reduce pest populations and prevent pest infiltration. We also implement a pest management plan and contract with two pest control companies that assess all of our building and grounds. Our school is monitored bi-annually for asbestos by an independent contractor. Blair schools participated in the Nebraska School Radon Testing Program. Blair Schools' HVAC equipment receives regular maintenance and servicing. Through that arrangement, air filters are routinely inspected and replaced to help ensure air quality remains appropriate for students and staff. Custodial and maintenance staff conduct regular cleaning and disinfecting in accordance with CDC to include Pandemic Disinfection prevention guidelines and are trained in chemical management to ensure the safety of our staff and students when their use is required. In 2020, Custodians completed ten

different CleanCheck Training modules to demonstrate knowledge and safety precautions from Spartan Chemical Company, Inc. Blair Community Schools uses Green Seal certified products in a mixing station distribution system that will reduce the impact of shipping diluted product and plastic waste. Otte-Blair Middle School is equipped with professional cordless electrostatic handheld and backpack sprayers that are NSF Registered (D2) Sanitizers from Victory Innovations. The surface disinfectant used is Bioesque Botanical Disinfectant Solution and BNC-15 that are US EPA registered broad-spectrum disinfectants. Custodians use the Green Cleaning strategy of designing entire custodial operations based upon an assessment of spaces, products, and work practices to maximize cleanliness both in terms of dirt and germs. At the same time, this is reducing consumption of natural resources and unnecessary hazardous cleaning chemical exposures to students, staff and visitors. Otte-Blair Middle School uses microfiber cloths everyday to clean hard surfaces between classes which reduces waste of paper towels. All chemicals at the school are tracked by a material Safety Data Sheet (MSDS) that contains information on the potential hazards (health, fire, reactivity and environmental) and how to work safely with the chemical product. Whenever possible, cleaning is done with water and microfiber rags to minimize volatile organic compounds (VOCs) introduced into the environment. The district's Executive Director of Operations and building custodians oversee the maintenance and care of facilities and grounds, including regular cleaning and maintenance to manage dust, bacteria, and mold, as well as regular inspections of doors, windows, and other physical structures.

Element 2B: Health and Wellness

Focusing on the health and wellbeing of our staff and students is a priority at Blair Community Schools. While there is a 24-hour fitness facility in our community, our schools' staff members also have the opportunity to utilize the weight rooms at Otte-Blair Middle School and Blair High school, the district's track and gym, and walking workstations at their convenience and free of charge. Reusable water tumblers were given to all district employees and Otte-Blair Middle School has a water cooler that is free of charge to all personnel. Three of four water fountains at Otte-Blair Middle School have been upgraded to include water bottle fill stations. These stations save hundreds of thousands of otherwise-disposed-of plastic bottles. To further assist the staff with their health and wellness, the school nurse promotes participation in the Educator's Health Alliance (EHA) "Elevate" wellness program. More than 243 staff engaged in free wellness programs offered by the District and incentivized by the health insurance company. Our school also partners with outside entities to provide training pertaining to First-Aid/CPR, diabetes, and blood pressure. These individuals organize stress-reduction training, health screening events, and an annual flu shot clinic. The school system also offers all staff access to an Employee Assistance Program (EAP), providing mental health services to anyone who may need their support. Because we understand that students may also need additional support pertaining to their health and well-being, elementary students participate in 30 minutes of physical education two to three times per week. Three days each week, students at Otte-Blair Middle School walk for 15 minutes after lunch.

Taher is committed to serving only the healthiest dishes. Taher purchases as many products as possible from local farms and organic producers. Their experienced dietitians shape Blair Community Schools' menus according to the most progressive nutritional knowledge. Taher also publishes Food4Life® flyers, including tips on healthy lifestyles, environmental issues, and food trends. Since

lifelong habits are formed at the K-12 and college levels, Taher employees work with school staff to incorporate nutrition into the curriculum. The chef collaborates with staff and presents on nutrition and healthy choices in the classroom. One of the most popular days in middle school is when the chef makes to order items for individual students.

Taher Nutrition Services provides an app that students and parents can use on their phones that provides menus, nutrition facts, and allergy information for all food that is served in the cafeteria. To assist in the nutritional needs of the staff and students, Otte-Blair Middle School provides a “grab and go” breakfast in the mornings and a salad bar during lunch. Blair Community School district established a Food advisory committee that meets quarterly. The food advisory committee is composed of students, staff, and parents. Because 27% of our student population qualifies for free and reduced lunch, our school is dedicated to providing nutritional food multiple times a day to ensure students have what they need to be successful. The district also participates in a food backpack program that helps with the dedication to the health and well-being of Blair Otte Middle School students. OBMS participates in the annual food drive to support the local food pantry.

In early 2015, the Blair City Council adopted the Blair Parks Master Plan & Trails Update. This plan introduces specific improvements to each trail section as well as recommendations for linking local trails to a regional network. Trails were identified throughout the Envision process as a viable, yet under-utilized transportation option. Blair finds itself well connected with existing and planned trails. All Blair Community Schools and most employment centers are connected with trails. Based on public input, the city embraces the trails system as a transportation alternative to alleviate traffic congestion and promote public health. Trails provide a dual-service as both an amenity for recreation as well as a viable transportation option. Trails can be best-served when well connected with residential subdivisions, employment centers, and other community facilities.

The following is a summary of the existing trail system components:

The Deerfield Lions Park Trail begins in the southeast corner of Lions Park and extends northwest, connecting Lions Park to Arbor Park Middle School, the new city library site, Deerfield Elementary, and two trailheads within the Deerfield Subdivision.

The Cauble Creek Trail begins at Nebraska and North 23rd Streets and extends west to Hansen Drive, before turning to follow Cauble Creek to US Highway 75. The trail crosses the highway and joins the Deerfield Lions Park Trail. It provides students attending Deerfield Elementary an option to walk or ride their bicycles to school. Currently, trail visitors cross US 75 at the marked pedestrian crossing.

The Steyer Trail begins at Rhoades Park on South 19th Street, extends east to Veteran’s Memorial Ball Field and ends at South 13th Street. This trail passes along the northern edge of Ralph Steyer Park, between 18th and 16th Streets.

The next major trail project, which is unnamed, includes portions of several of the proposed trails, to

create a continuous trail that begins at South Street and South 13th Street and runs south to Wilbur Street. The trail

turns east and runs along Wilbur, passes the YMCA, and turns north then follows South 10th Street to Grant Street. The Grant Street portion of the trail extends west to 11th and extends east ending at about 6th Street

Jackson Street Trail is an incomplete trail that extends east from North 10th next to Blair High school and Jackson Streets to the eastern edge of Otte-Blair Middle school. This trail runs along the southern edges of Stemmermann Park and the Youth Sports Complex. A portion of the trail was completed along 10th Street between Washington and Nebraska Streets, leaving two two-block segments required to connect the Jackson Street Trail to the South 10th Street segment of trail that begins at Grant Street.

Additionally, a Safe Routes to School project has improved the safety of trail visitors crossing US 75 on the Cauble Creek Trail. A section of trail will be added, allowing people to cross US 75 at the traffic signal at Deerfield Boulevard. This will enhance the trail's attractiveness for both students and recreational trail visitors.

Every year the Blair Optimist Club, in cooperation with Otte-Blair Middle school, Three Rivers Public Health, and the Blair Police Department hold a bicycle safety event. The event is held in the parking lot of Otte-Blair Middle school with an "obstacle course" as part of the event. The Blair Police Department and the Blair Volunteer Fire department bring in their vehicles to have on display as well. The Blair Optimist Club and Three Rivers Public Health give out free bike helmets, to each student who attends. Fun activities such as face painting and bike decorating are also part of the safety program.

Pillar III: Provide Effective Environmental and Sustainability Education, Incorporating STEM, Civic Skills and Green Career Pathways- 35%

Element 3A: Interdisciplinary Learning about the Key Relationships between Dynamic Environmental, Energy and Human Systems

The district's curriculum, in alignment with the Nebraska College and Career Ready Standards, includes instruction on weather, climate, and human impacts. This includes topics that range from climate change, renewable vs nonrenewable resources, alternative energy, over-population, deforestation, pollution, biodiversity, land management, etc. Most of this is incorporated in learning about the regions of the world and how they are connected either in domestic or foreign affairs. Otte-Blair Middle School partners with DeSoto Bend national Wildlife Reserve to provide Outdoor Environmental Science Class at the refuge. This partnership's mission statement is: Creating a sense

of wonder through environmental education in an outdoor classroom, a partnership with Blair Community Schools, "Where All Students Learn", and DeSoto National Wildlife Refuge, "Where Wildlife Comes First". Otte-Blair Middle School achieves this mission by: Empowering students and teachers to learn "real-time" in nature's outdoor classroom, connecting students with the environment and environmental issues, making education challenging and fun, and creating a partnership for environmental education that meets Blair Community Schools and Nebraska State Standards and is recognized for its accomplishments. This partnership would not be possible without The Friends of Boyer Chute and DeSoto National Wildlife Refuge. Their contributions of countless volunteer hours and financial support allow us to give these amazing learning opportunities to our students. Funding is secured through diversified revenue streams. This unique partnership provides every student with the opportunity to experience environmental education in an outdoor classroom. It provides an inquiry-based diversity of education. It creates an infrastructure to achieve quality and sustainability. Students develop a process to evaluate and to quantify a results based program. These programs are then promoted to families and the community.

A Composting program was developed at Otte-Blair Middle School. During the compost lessons, students learn about what composting is and how to do it, as well as why it is an important way for us to provide quality soil for plants to grow in. Using media and grade level appropriate texts, students learn the information together and then create a compost diagram. Students then use the diagram at school to try composting for themselves! Students learn essential practices and summarize ways that humans protect their environment and/or improve conditions for the growth of the plants and animals that live there (e.g., reuse or recycle products to avoid littering). Students are learning how to improve conditions for the growth of plants as well as worms and other insects that may live in the compost pile. Also, these lessons support Science and Engineering practices, such as, developing and using models as students create a diagram of a compost pile and analyzing and interpreting data. Students then record information including their own observations. Students obtain and communicate information through grade level texts and media.

Students began vermicomposting in the classroom in order to divert hundreds of pounds of food scrap from landfills from our school's cafeteria yearly. Vermiculture also teaches how to create healthy plants and vegetables, and return biology to depleted soils. The heaviest waste a school produces is food waste from the cafeteria, due to its high water content. Using earthworms to compost cafeteria waste reduces the need for fossil fuel-burning trucks to remove this waste and send it to the landfills where it will produce. By turning our classrooms and cafeteria waste into organic fertilizer, students are not only helping the Earth, but also helping reduce the costs of fertilizing our school garden. An in-class worm bin also helps teach our students about environmental stewardship with a hands on year-long project.

A school garden is an innovative teaching tool and strategy that lets teachers and students incorporate hands-on activities in a diversity of interdisciplinary, standards-based lessons. The garden engages students by providing a dynamic environment in which to observe, discover, experiment, nurture, and learn. It is a living laboratory where lessons are drawn from real-life experiences rather than textbook examples, allowing students to become active participants in the learning process. Through the garden, students gain an understanding of ecosystems, an appreciation for food origins and nutrition, and knowledge of plant and animal life cycles. At the same time, they learn practical horticulture skills that last a lifetime.

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

A STEM class at Otte-Blair Middle School allows students to learn the theory behind several renewable energy technologies as well as energy efficiency. Learning this theory, plus hands-on skills prepares students for several entry level positions in the renewable energy and energy efficiency fields. This course introduces career opportunities in green collar fields of employment. Students in this class study two major fields: Renewable energy and energy efficiency. Students learn three types of renewable energy in detail. They are solar energy, wind energy, and fuel cell energy. After learning about these three major categories of renewable energy, students may engage in solar and wind energy careers in their future.

Element 3C: Civic Skills and Green Career Pathways

A STEM class at Otte-Blair Middle School allows students to learn the theory behind several renewable energy technologies as well as energy efficiency. Learning this theory, plus hands-on skills prepare students for several entry-level positions in the renewable energy and energy efficiency fields. This course introduces career opportunities in green-collar fields of employment.