

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.
- 8. The school or its district has in place and is willing to provide a link to or a copy of a non-discrimination policy, upon request. The U.S. Department of Education reserves the right to disqualify a nomination and/or rescind an award if unlawful discrimination is later discovered.

U.S. Department of Education Green Ribbon Schools

Name of Principal: Dr. Taji Gibson (Specify: Ms., Mrs., Dr., Mr., etc.) (As it should app	near in the official records)
(opecity: wis., wits., bi., wit., cic.) (his it should app	car in the official records)
Official School Name: Tri-North Middle School	
(As it should appear on an av	ward)
*Private Schools: If the information requested is not applicate	
I have reviewed the information in this application and certification and certificat	fy that to the best of my knowledge all information is accurate.
DocuSigned by:	
Taylianglia Gibson	Data 12/15/2023
(Principal's Signature)	_ Date:
Name of Superintendent:	

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



District Name: Monroe County Community School Dist	rict
I have reviewed the information in this application and certif	y that to the best of my knowledge all information is accurate.
Jeff Hawwald (Feb. 2, 2024 13:12 EST)	Date: 12/12/2023
(Superintendent's Signature)	
Nominating Authority's Certifications	
The signature by the Nominating Authority on this page cert	ifies that each of the statements below concerning the school's
eligibility and compliance with the following requirements is	
1. The school has some configuration that includes	grades Pre-K-12.
	nating Authority which is highest achieving in the three ED-GRS
Pillars: 1) reduced environmental impact and cos environmental and sustainability education.	sts; 2) improved health and wellness; and 3) effective
	ts and federal, state, local and tribal health, environmental and y and is willing to undergo EPA on-site verification.
Name of Nominating Agency: Indiana Department of Ed	ucation
Name of Nominating Authority: Ms. Felicia Harrison	
(Specify: Ms., Mrs., Dr., Mr.,	, Other)
I have reviewed the information in this application and certif provisions above.	y to the best of my knowledge that the school meets the
Felicia Harrison	Date: 2/7/2023
(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: October 31, 2026

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.

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Tri-North Middle School Summary Narrative

Established in 1984, Tri-North Middle School in Bloomington, Indiana serves 554 seventh and eighth grade students representing the economically, linguistically, and culturally diverse north side of our city. Our mission at Tri-North is to engage, empower, and educate every student, so that they may realize their talents and positively impact the future they create for themselves. Our school is located adjacent to the largest public housing development in Bloomington; 39.3% of our students are economically disadvantaged, and 1.8% are homeless. Our student population is 6.9% Asian, 7.9% Black and African American, 7.4% Hispanic, 7.2% multiracial, and 70.6% white. 15% of our students are identified as English language learners; at least 25 different languages are spoken at home by Tri-North students and their families. Tri-North has a tradition of celebrating the diversity of our school community, valuing academic excellence, and promoting responsible stewardship of our school and environment.

In 2021, our school was moved from an inefficient and crowded building constructed in 1959 to a new school that was constructed with three primary goals: to ensure the safety and health of our students and staff; to provide an optimal environment for teaching and learning; and to create a building and grounds that are energy-efficient and environmentally responsible. The Monroe County Community School Corporation has made a commitment to minimizing our impact on the environment through investments such as our growing fleet of EV buses, and a megawatt solar array on our transportation and support buildings, so sustainability was also a primary focus for the design of our new building.

The school building we now occupy is heated and cooled through a geothermal heat pump, and LED lighting, low-E windows, and water-saving fixtures are used throughout the building to further reduce energy use. In just over two years of operation, our rooftop solar array has saved over \$80,000 by generating over 660 megawatt-hours of power; this equates to more than 350 tons of CO₂ kept out of our atmosphere. An analysis of the new building's utility usage concluded that efficient heating, cooling, and operation of our building has allowed us to achieve a site Energy Use Intensity (EUI) that is over 30% lower than the median site EUI of American K-12 schools. The 21 acre grounds of our building has also been restructured with a focus on environmental awareness. The steep hill on which our school sits - once an erosion-prone expanse of mowed lawn - has been converted to a meadow of cattails, grasses, flowering plants, and trees. Mowing and pesticide use on the site are not permitted, and in consultation with a restoration ecologist we have introduced native grasses and wildflowers to the area. This naturalistic landscape effectively controls erosion on the hill and provides a welcoming habitat for a growing number of native bird, insect, and mammal species. Other building initiatives include reducing cafeteria waste, keeping trash out of the landfill through recycling and composting, using repurposed materials for student projects, and eliminating disposable tableware from our staff room.

Our school was planned not only to minimize environmental impact, but also to create a healthy and safe environment for students and staff. High ceilings promote air circulation; water bottle fillers keep staff and students hydrated; and large windows allow sunlight to stream into the building. Restrooms, lockers, and other public areas of the building are purposefully designed to allow teachers to easily supervise students and ensure safe conduct and interactions. Students receive breakfast and lunch in our cafeteria, and our Backpack Buddies program sends groceries home with students whose families are experiencing food insecurity. Students in need can also receive free school and personal hygiene supplies, dental care, eyeglasses, and mental health care. All students take a semester-long health class and at least two semesters of physical education class during their two years at Tri-North, and our well-appointed fitness center is used regularly by staff as well as students. We also focus on behavioral health and wellness through weekly social-emotional learning sessions for all students, supervised by our staff of three full-time student services professionals.

Tri-North interdisciplinary academic teams engage in regular project-based learning experiences, and many of these feature nature, environmental science, health and wellness, or climate change as a central focus. At any given time, our students might be immersed in a multi-faceted study of the advantages and limitations of wind power; the effects of climate change in our national parks, or charting the impact of sleep hygiene and exercise on their own health and fitness. Working in teams, students create projects that integrate different areas of the curriculum, and then present their work to visitors from our community. Project-based learning helps students achieve curricular goals and develop 21st century collaboration, communication, and analytical skills, while strengthening connections with their school and community. Tri-North students are also often exposed to topics related to Earth's environment and sustainability in other areas of our curriculum and activity schedule. During their two years at Tri-North, virtually all students practice hands-on problem-solving in one or more of our STEM courses, such as video production, robotics, digital fabrication, coding, and medical detectives. Whether creating collages of endangered animals in writing class; modeling innovative ways to deploy solar panels in science; using recycled or repurposed materials to create art; or studying the impact of social media on teens' health and safety in family and consumer science, sustainability, wellness, and environmental education are an integral part of our classroom activities across the curriculum.

Pillar 1: Efforts to Reduce Environmental Impacts and Costs

Tri-North Middle School is located in the city of Bloomington in Monroe County, Indiana, and serves a diverse population of 554 seventh and eighth grade students. Until recently, our school was housed in a structure built in 1959, adjacent to the Bloomington Housing Authority's largest public housing development. This aging, cramped, and leaky school building created issues that impacted staff and student health, safety, efficiency, and academic performance; so in 2017 the Monroe County Community School Corporation (MCCSC) committed to the construction of a new school building. The decision to locate a new state-of-the-art building on the same site as the old one reflects the MCCSC's commitment to providing a safe and welcoming learning environment for all students.

Among our primary criteria for the design of our new building were to minimize environmental impacts, and to reduce building operating costs through sustainable design and practices. Our new building uses efficient geothermal heating and cooling; limited-range thermostat controls in each room allow staff and students to stay comfortable, while also saving energy. Efficient lighting throughout the building further reduces our carbon emissions. All light fixtures in the building are efficient, dimmable LEDs, and abundant natural light streams into the building through Low-E windows. Even fully interior rooms receive passive illumination through clerestory windows. The natural sunlight is relaxing for students and staff and allows us to "green up" our indoor spaces with shade-tolerant plants, while reducing our dependence on electricity. Our building also conserves fresh water through the use of low-flow fixtures in every restroom.

Our new school building harnesses the power of the sun with a large solar array that covers the entire gymnasium roof. On all but the stormiest days, solar power provides a significant portion of the electricity used in the building, and we export thousands of kilowatt-hours of carbon-neutral power to the grid each year. This not only reduces our emissions - it also saves money. In just over two years since the installation of our photovoltaic panels, we have saved over \$80,000 by generating over 660 megawatt-hours of power; this equates to more than 350 tons of CO₂ kept out of our atmosphere. An MEP engineering firm's analysis of the new building's utility usage concluded that the efficient heating, cooling, and operation of our building has allowed us to achieve a site Energy Use Intensity (EUI) of 32.6 kBtu/ft²/year. This is over 30% lower than the EPA's cited median site EUI of 48.5 kBtu/ft²/year for American K-12 schools.

Students are involved in our sustainable practices in several ways, starting first thing in the morning when they get on the school bus. Of the 435 children who ride the bus to Tri-North, 150 (34.8%) currently ride fully electric school buses, and that number will continue to increase as we transition to a fully electric fleet over the next five years. Our transportation department has completed the second of three phases of a megawatt solar panel installation, and soon our buses

will charge on emissions-free power as they sit parked through the sunniest part of the day. When students arrive at school, many eat breakfast in our cafeteria, where they have learned to regularly use our Share Table. Students who have unopened, pre-packaged food or whole leftover pieces of fruit can simply leave these items out on the Share Table, and those who are hungry are free to take whatever they want. Students use the Share Table enthusiastically, and there is no stigma associated with leaving or taking food. The Share Table helps to keep usable food out of the landfill, and provides a valued resource for students who are hungry. Students also help in keeping organic waste and recyclables out of the waste stream. Organic cafeteria waste is separated from trash and recyclables and is sent for composting. Recycling containers are provided and used in every classroom of the building, and students regularly use recycled and repurposed materials for projects and enrichment activities. Students are also encouraged to carry a reusable water bottle; water bottle fillers located in every zone of the building have led to a significant decrease in student and staff use of disposable plastic bottles. Our Parent Teacher Organization is fully on board with our sustainability initiatives, and has purchased reusable plates, bowls, and cutlery for use in our faculty lounge and for PTO-sponsored staff appreciation events, allowing us to phase out the use of disposable tableware among faculty and staff.

Innovations outside the building are also a highlight of our commitment to responsible stewardship of the environment. Our campus occupies 21 acres that are dominated by green space, with impermeable surfaces kept to a minimum. Only the athletic field and areas immediately adjacent to the school are mowed; the remainder of the site is maintained using a natural approach. On an expansive hill in front of the school building, a mowed and erosion-prone lawn has been replaced by a no-mow/no-spray zone covered in perennial grasses. forbs, and trees. Seeds of native Indiana wildflowers and grasses have been sown in the field, and we are currently consulting with an environmental educator and restoration ecologist to develop a long-term plan that will best combat invasive species and support natives. Indiana limestone barriers placed in erosion-prone runoff areas control stormwater flow through the site, and what was once a muddy drainage area has been converted to a small-scale cattail marsh. This landscape management strategy has reduced the carbon emissions associated with mowing, stabilized the hillside to virtually eliminate erosion, and generated a welcoming habitat for a variety of native animals. Since the creation of our naturalistic landscape, species observed utilizing this urban site have included the monarch butterfly, bald eagle, red-shouldered hawk, Eastern bluebird, Eastern kingbird, red-winged blackbird, field sparrow, American woodcock, whitetail deer, red fox, and coyote.

While we are proud of the strides our school has made in our commitment to sustainable practices, we recognize that there is more we can do. Teacher-led student projects currently in development include building bluebird nest boxes in our makerspace, identifying invasive species on our campus in science classes, and propagating some of our many indoor plants as a service project. Through our continued focus on reducing our environmental impact and

also contributing to a healthier planet for future generations.

modeling ecologically responsible choices, we are not only benefiting our school community, but

<u>Tri-North Middle School - Pillar 2: Efforts to Improve the Health and Wellness of Students and Staff</u>

Wellness depends on a balance between physical, mental, and emotional health. Recognizing the importance of this balance, our school has implemented a number of initiatives to support the physical health and safety, mental health, and social/emotional well-being of our students and staff. Through a combination of school programs and community partnerships, we are able to ensure that everyone in our school community has access to the care and resources they need.

Our students need to stay healthy to stay in school and learn, so we take steps to reduce the spread of illnesses, support students with chronic health conditions, and ensure that all students have access to high-quality preventive health care. Our full-time health aide has the support of a registered nurse who is on call at all times, and in the building for three half-days each week. This team manages routine trips to the nurse's office, monitors restrictions on students and staff who have been quarantined, and provides staff training. When children with chronic health conditions reach middle school, they are often ready to begin managing their conditions more independently; our health office team schedules regular check-ins up to three times a day with these students, to support them as they learn the skills they need to stay healthy and safe. Our students have access to vision, hearing, and dental screenings at school, and through our partnerships with local service organizations, needy students can get free or reduced-cost eyeglasses, dental care, and COVID and influenza vaccines. Maintaining personal hygiene is vital to good health; we provide a Care Closet where students in need can discreetly access free personal care items such as toothbrushes, hair care products, soap, deodorant, and feminine hygiene products. Five automated external defibrillators are placed in locations around the building to ensure quick access in an emergency.

Students and staff at Tri-North are fortunate to teach and learn in a newly constructed building that was designed with a conscious focus on environmental health and safety. The structure of our building helps protect students and staff from respiratory illnesses, with high ceilings in common areas that maximize airflow and wide hallways to reduce crowding. The occupancy schedule of our building has been increased by three hours per day to allow for additional fresh air changes, and we have upgraded to MERV 13 air filters. Since we have no pre-existing problems with mold, insects, or rodent pests in the building, we can focus on preventing these problems instead of remediating them. Strategies such as keeping shrubs trimmed back away from exterior walls, promptly removing trash to dumpsters located in a closed bay more than 10 meters from the building, and regularly inspecting the building for signs of mold, mildew, and leaks help ensure that pests stay out of our environment. Our custodial staff arrives when students have left the building, so students and teachers do not come into contact with cleaning supplies. All cleaning supplies are purchased in concentrate form to reduce plastic waste, and are sourced from a company with an EcoVadis sustainability rating in the 80th percentile.

School violence is another environmental safety concern that is often on the minds of parents, students, and school staff. Shatterproof glass and RFID card access to the main building entrance ensure building security. All volunteers and other visitors to our building must be admitted through the school office; they register and check in through our Visitor Aware system, which uses face recognition to identify the visitor, and prints a badge with information about their role in the building. Our full-time security officer and resource officer monitor our 110 security camera feeds and move around the building interacting with teachers and students. Regular drills of our building lockdown procedures ensure that students and staff are ready to act in case of an emergency.

While providing security against external threats is important to school safety, data collected by the National Center for Education Statistics shows that a far greater risk to school children comes from other students. We have a number of programs in place to prevent and address bullying and other forms of aggression between students. To promote appropriate student interactions, our facility has been designed to ensure that students can be directly supervised by school staff at all times. Student lockers are located in open hallways, not in isolated locker bays, allowing teachers to interact with children and promote appropriate interactions during unstructured time. Our restrooms are designed to give students privacy without providing areas where students can congregate out of sight of adults. Our SmartPass system allows us to monitor students who are out of class; if two students are having a personal conflict, this system also allows us to ensure they don't accidentally encounter each other when teachers are not present. Students who feel unsafe for any reason (e.g. a loose handrail or a bully on the school bus) can report the issue anonymously through the STOPit Solutions system app on their school iPads.

Our student services team of an on-call school psychologist, one full-time social worker, and two full-time school counselors provides psychological services, social services, and counseling to our students who struggle with social relationships and externalizing behaviors, and those who experience trauma outside of school due to factors such as homelessness or domestic violence. Restorative conferences are used to mediate peer conflicts, address problem behaviors, and support effective communication between teachers and students. Dialectical Behavioral Therapy sessions allow our student services team to work closely with small groups of students, focusing on issues such as emotional regulation, mindfulness, and resiliency. At-risk students are closely monitored through a check-in/check-out procedure that is implemented in every class period, every day; they may also receive therapy sessions during the school day from behavioral health professionals through our partnership with Centerstone Behavioral Health of Bloomington. Our student services team also works closely with the Monroe County Youth Services Bureau to coordinate care outside of school for students in need of individual or family counseling or emergency shelter. By providing a broad range of services for troubled and at-risk students, we create an environment that is safer for everyone.

In addition to our intensive intervention and prevention strategies for at-risk youth, we have a number of programs and partnerships in place at Tri-North to support the mental health and emotional well-being of our student body as a whole. We prioritize social-emotional learning (SEL) by implementing weekly lessons from the Second Step SEL program during our Trojan Time advisory period. SEL time allows students to ask questions and talk about the high-pressure topics that today's adolescents face, from bullying and conflict resolution to goal-setting and positive self-talk, and the small Trojan Time groups provide a safe space for students to explore these topics with their peers. We also partner with the Bloomington High School North Equity Team to provide all students with presentations on topics such as mental health and microaggressions. Tri-North also supports positive choices through our Positive Behavioral Interventions and Supports (PBIS) program. Our school's PBIS Matrix, known as our ARMOR Code, is a set of actions our students are encouraged to live by. At the start of each school day, via school-wide announcements, we remind students that as Tri-North Trojans, we value choosing a positive Attitude, demonstrating Respect, displaying Maturity, embracing Opportunity, and claiming Responsibility. Students who demonstrate the ARMOR code can earn incentives such as gift cards and school spirit wear. Promoting the ARMOR code, and referring to the code in our conversations with students, helps to create a supportive social and emotional climate that fosters positive behaviors and helps our students to thrive and feel safe.

Good nutrition is an important part of a healthy lifestyle, and at Tri-North we do our best to ensure that every child has a healthy diet. All students have access to breakfast and lunch in our cafeteria, and our Backpack Buddies program sends additional food home with students whose families may be experiencing food insecurity. Approximately 60% of our students enroll in our Family and Consumer Sciences elective, in which they receive instruction and complete projects on food preparation basics, healthy meal options, and the importance of good nutrition to physical and mental health. Students use MyPlate, a USDA resource with helpful visuals that remind them to make varied, healthy food choices from all food groups. Helping our young adolescent students learn to make good dietary choices can benefit their health for years to come.

Educating students about physical health and wellness is also important. All students at Tri-North Middle School take physical education classes for at least one semester each year, and adaptive PE classes are provided for students with disabilities. When the weather permits, our PE teachers take their classes outdoors, and when outdoor activity is not possible, they use our large gymnasium and fitness center to provide a broad range of exercise options. In addition, all eighth graders take a semester-long health class, and an average of 50% of our students take our Project Lead the Way Medical Detectives elective course, which offers more in-depth exposure to health and medical topics. These courses ensure that our students have a foundational understanding of how to maintain their physical health and fitness, and help prepare them to make healthy decisions for themselves.

In addition to these initiatives that we follow every day, we offer active indoor and outdoor options during our biweekly enrichment periods. Popular activities offered during enrichment time include sports such as volleyball, basketball, and pickleball; walking outside on the track; planting seedlings around the school grounds; yoga; and flying drones on the football field. In any given enrichment period, up to 50% of the student body may participate in activities like these that encourage youth to step away from their screens, get some exercise, and interact positively with their peers.

Our school community is further strengthened through regular family nights, which provide opportunities for connections between students, staff, families, and nearby community members. Parents and other community members always join us at our Project-Based Learning presentations, which typically take the form of a poster session or gallery walk of student projects. We also invite the public to attend our athletic events and fine arts performances at the school. By nurturing connections with our families and neighbors, and promoting a sense of belonging and pride, we further support the well-being of our students and the wider community.

At Tri-North, we believe that athletics are an important part of promoting physical health and teamwork outside of school hours. Not only do sports provide a way to stay active and healthy, but they also help to build connections and foster a sense of community. That's why we encourage our students to participate in sports and offer a range of competitive and intramural athletic opportunities throughout the year. Several of our competitive sports teams, including football, wrestling, track, and cross-country, welcome all interested students to participate, and nearly half of our students join a team each year. We protect our athletes by requiring that all coaches complete sudden cardiac arrest, concussion, and heat illness prevention training through the National Federation of State High School Associations. Indiana University Health provides professional athletic trainers at all of our sporting events, and one of our AEDs is a mobile unit that is immediately available for emergencies at every game, match, and meet.

Wellness is not only for our students, but also for our staff. To that end, we have a staff wellness coordinator who provides resources, and coordinates staff wellness challenges each month. Past wellness challenges have supported staff in maintaining a healthy weight, managing stress, improving sleep hygiene, and achieving exercise goals. Staff also have access to a corporation-run health clinic, mental health care services, and our well-equipped building fitness center. By prioritizing the wellness of our staff, we are able to create a positive work environment that ultimately benefits our students.

Promoting health and wellness is a continuous process, and we are always looking for ways to improve and expand our initiatives. Whether it's through our environmental health program, academic initiatives like physical education and social-emotional learning, social and medical services, extracurricular activities like sports and outdoor clubs, or community events like family

nights, we are committed to providing an environment that values and promotes safety, wellness, and learning for each member of our school community.		

<u>Tri-North Middle School - Pillar 3: Efforts to Ensure Effective Environmental and</u> Sustainability Education

At Tri-North Middle School, environmental and sustainability education is an essential part of our curriculum that is integrated into various subjects and activities. It is necessary for us to facilitate opportunities for students to learn about the environment, to understand its impact on human health, and to promote sustainable practices in environmental conservation. We also need to teach our students 21st century skills such as collaboration, creative problem solving, technological literacy, and communication, to equip them to be part of positive environmental change in the future.

One important effort that Tri-North has made to ensure effective environmental and sustainability education is the direct integration of these topics into the curriculum. We are painfully aware of the fact that for the majority of students, eighth grade will be the last time they study any aspect of Earth science in a classroom, so we strive to make an impact during our students' two years at Tri-North. Environmental education is directly incorporated into our science courses, particularly in the eighth grade, where standards relating to humans' use of natural resources, our impacts on the environment, and climate change are central to the curriculum. In the seventh grade, students study the origins of coal and the environmental costs of its use from mine to power plant. Our eighth graders spend most of a semester studying the causes and effects of climate change; the ways humans use renewable and nonrenewable resources to power vehicles, generate electricity, and synthesize products; and the costs and benefits of alternative power. Students also study topics related to environmental awareness and sustainability in other courses. In our required seventh grade writing course, for example, students read, write, and create documentary videos about animals; one of the essential elements of this unit is a focus on the animal's habitat and how it is being affected by climate change. In Art class, students create pieces for the City of Bloomington Environmental Commission's Eco-Heroes art contest. In Family and Consumer Science, students participate in a unit on "slow food", investigating the health and ecological benefits of sourcing food locally and preparing it at home, rather than eating out. Experiences like these, across different courses and throughout their seventh and eighth grade years, allow all students at Tri-North to learn about sustainability in a comprehensive way, and to see how each new idea relates to other subjects they are studying.

In every seventh and eighth grade interdisciplinary team at Tri-North, students participate in project-based learning experiences (PBL). PBL requires students to work both individually and collaboratively to learn about a real-world problem, propose a solution, and then build, test, and present a model depicting their idea. The skills students develop through PBL include teamwork, problem solving, creativity, time management, and communication. By helping our youth acquire these skills, along with a perception of themselves as capable of solving real-world

problems, we give them the tools they will need to solve problems regarding sustainability and humans' environmental impact. Our school was designed to facilitate project-based learning, with small-group study rooms adjacent to most classrooms; work areas in our hallways with tables, seating, and whiteboards; and a large makerspace for building projects. In several of the teams, students' PBL projects are focused specifically on topics related to the ways humans impact Earth's climate and ecology. In one eighth grade team, for example, students studied the impact of climate change on national parks, and researched, proposed, and modeled geo-engineered solutions. An eighth grade inclusion team learned about the benefits and risks of genetically modified organisms, studied the way biotechnology has changed agriculture and natural ecosystems, and modeled their own ideas for genetically modified plants and animals. In an advanced seventh grade PBL, students read The Boy Who Harnessed the Wind by William Kamkwamba, built and tested their own model wind turbines, and created documentary videos about the way technology impacts our lives. These immersive experiences raise students' awareness while teaching them valuable skills.

Environmental awareness and sustainability are also taught by example at Tri-North. When possible, teachers employ reusable building materials like Lego bricks or K'nex for students to model their project ideas. Students also regularly use repurposed materials like scrap paper, fabric, and cardboard shipping boxes for prototyping, modeling, and finished products. Whether they are making earrings from scrap wood or using old blue jeans to sew a pencil pouch in an Entrepreneurship and Innovation class, creating shopping bags and baby accessories out of old shirts in Family and Consumer Science, or using cardboard boxes to make props for a presentation in Social Studies, teachers and students are constantly reusing and recycling. Our library media specialist is a champion of repurposing materials that others would discard. She engages seventh and eighth grade students in activities such as making sensory bottles from recycled materials; making art projects from discarded bubble wrap; creating watercolor art on newspapers; and building bird feeders from old plastic bottles. She uses outdated audio-visual equipment in escape rooms that engage our students in problem-solving challenges, and helps students create themed displays in the media center using the pages of old library books that have fallen apart and can't be saved. This spring, in our Introduction to Digital Fabrication STEM class, seventh and eighth grade students are learning to use the CNC router by digitally designing and building bluebird nest boxes to be placed in the natural landscape around the school building. Directly involving students in sustainable practices helps get them personally invested in our efforts to be responsible stewards of our environment.

Integrating environmental and sustainability education in schools is crucial in educating students about the environment, helping them understand its impact on human health, and promoting sustainable practices and environmental conservation. We have found it important to give students many different ways to learn about and champion renewable energy sources like wind and solar power innovations, climate change, and preservation of our nation's natural areas. Whether through cross-curricular project-based learning units, STEM applications, reading

books, making documentaries, or creating art, Tri-North Middle School students learn about sustainability, and understand how they can personally contribute to a greener future.