



Iowa Department of Education Post-Secondary Nominee Presentation Form

ELIGIBILITY CERTIFICATIONS

College or University Certifications

The signature of college or university President (or equivalent) on the next page certifies that each of the statements below concerning the institution's eligibility and compliance with the following requirements is true and correct to the best of their knowledge.

1. The college or university has been evaluated and selected from among institutions 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.
2. The college or university is providing 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 compliance review.
3. OCR has not issued a violation letter of findings to the college or university concluding that the nominated college or university 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.
4. The U.S. Department of Justice does not have a pending suit alleging that the college or university has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
5. There are no findings by Federal Student Aid of violations in respect to the administration of Title IV student aid funds.
6. The college or university is in good standing with its regional or national accreditor.
7. The college or university 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 Postsecondary 2017

☐ Public 4-Year ☒ Public 2-Year ☐ Private Non-Profit

Name of President/Chancellor: Mrs. Valerie Newhouse

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

Official College or University Name: Iowa Lakes Community College

(As it should appear on an award)

College or University Street

Mailing Address: 19 South 7th Street, Estherville, IA 51334

(If address is P.O. Box, also include street address.)

County: Emmet IPEDS Number*: 153533

Telephone: (712) 362-0435 Fax: (712) 362-0480

Web site/URL: <http://www.iowalakes.edu/> E-mail: vnewhouse@iowalakes.edu

*Integrated Postsecondary Education Data System

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

Valerie Newhouse

Date: 1-27-17

(President's/Chancellor's Signature)

Nominating Authority's Certifications

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

1. The college or university has been evaluated and selected from among institutions 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.
2. The college or university 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.

Name of Nominating Agency: Iowa Department of Education

Name of Nominating Authority: Mr. Thomas Cooley

(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: February 1, 2017

(Nominating Authority's Signature)

SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent summary that describes how your college or university is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars and their underlying Elements. Then, include concrete examples for work in every Pillar and Element. Only institutions that document progress in every Pillar and Element can be considered for this award.

SUBMISSION

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to green.ribbon.schools@ed.gov according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509

Expiration Date: March 31, 2018

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.

Iowa Department of Education

Green Ribbon Schools Application for Colleges and Universities

Through the postsecondary award, U.S. Department of Education Green Ribbon Schools (ED-GRS) recognizes two- and four-year colleges and universities taking a comprehensive approach to greening. A comprehensive approach incorporates environmental learning with improving environmental and health impacts. Becoming a U.S. Department of Education Green Ribbon School is a two-step process. The first step is to complete and submit this form to be selected as a nominee by an eligible nominating authority. Once selected as a nominee by your state or eligible nominating authority, the second step of the process requires signatures for the Nomination Presentation Form that will be sent to the U.S. Department of Education (ED) along with your application.

The ED-GRS selects honorees from those presented by eligible nominating authorities nationwide. Selection will be based on documentation of the applicant's high achievement in the three ED-GRS Pillars:

Pillar I: Reduce environmental impact and costs.

Pillar II: Improve the health and wellness of students and staff.

Pillar III: Provide effective environmental and sustainability education, incorporating STEM, civic skills and green career pathways.

Colleges and universities demonstrating progress in all three Pillars will receive highest rankings. It is important to document concrete achievement. The basic approach is to make claims about achievements and provide evidence to support them.

It will help you to assemble a team to complete the application. This team might include: a facilities manager, physical education director, food services director, curriculum director, finance department representatives, faculty, and students. You should consult the Green Strides [Resources Page](#) and [Webinar Series](#) for standards, programs and grants related to each Pillar, Element and question. This is an excellent clearinghouse of information for all institutions of higher education, not just those who apply.

Applications are due by January 11, 2017. The Iowa Department of Education will then send nominations to the U.S. Department of Education by February 1, 2017.

Note that if selected for nomination to ED-GRS, the college president/chancellor must be prepared to certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true.

Contact Information

College/University Name: Iowa Lakes Community College

Street Address: 19 South 7th Street

City: Estherville State: IA Zip: 51334

Website: <http://www.iowalakes.edu/>

Facebook page: <https://www.facebook.com/IowaLakesCommunityCollege>

President/Chancellor Name: Valerie Newhouse

President/Chancellor Email Address: vnewhouse@iowalakes.edu Phone Number: (712) 362-0435

Lead Applicant Name (if different): Jennie Knudson

Lead Applicant Email: jknudson@iowalakes.edu Phone Number: (712) 362-0448

Basic Carnegie Classification

Asian American and Native American Pacific Islander-serving Institution (AANAPISI)	No
Alaska Native-serving institution or a Native Hawaiian-serving institution (ANNH)	No
Historically Black college or university (HBCU)	No
Hispanic-serving institution (HSI)	No
Native American-serving nontribal institution (NASNTI)	No
Predominantly Black Institution (PBI)	No
Tribal College or University (TCU)	No

College/University Enrollment Profile:

Undergraduate Enrollment:	2,340 (Fall 2014, FT PT; IPEDS)
Graduate Enrollment:	NA
Percent of Undergraduates Receiving Pell Grants:	43.0%
Graduation rate (150% of normal time):	40.0%
Average Institutional Net Price:	\$10,992 (171.75/Credit Hour (Fall 2014))

Scoring Rubric

ED-GRS Pillars and Elements	Points
HIGHLIGHTS REPORT: Summary of participation in green school programs – 10%	10 points
Pillar I: Reduce environmental impact and costs: 30%	
Element 1A: Reduced or eliminated greenhouse gas (GHG) emissions, a) Energy b) Buildings	15 points
Element 1B: Improved water quality, efficiency, and conservation a) Water b) Grounds	5 points
Element 1C: Reduced waste production a) Waste b) Hazardous waste	5 points
Element 1D: Use of alternative transportation	5 points
Pillar II: Improve the health and wellness of students and staff: 30%	
Element 2A: Integrated campus environmental health program a) Integrated Pest Management b) Contaminant controls and Ventilation c) Asthma control d) Indoor air quality e) Moisture control f) Chemical management	15 points
Element 2B: Health and Wellness a) Coordinated Campus Health b) Fitness and outdoor time c) Food and Nutrition	15 points
Pillar III: Provide effective environmental and sustainability education, incorporating STEM, civic skills and green career pathways: 30%	
Element 3A: Interdisciplinary learning about the key relationships between dynamic environmental, energy and human systems	20 points
Element 3B: Use of the environment and sustainability to develop STEM content, knowledge, and thinking skills	5 points
Element 3C: Development and application of civic knowledge and skills	5 points
Total	100 points

Highlights Report – Summary Narrative:

Provide a narrative describing your institution's efforts to reduce environmental impact and costs; improve student and staff health; and provide effective environmental and sustainability education. Focus on unique and innovative, yet replicable, practices and partnerships. Be sure to cover every ED-GRS Pillar and Element.

Iowa Lakes Community College mission to provide quality lifelong learning for students, staff, faculty and members of our communities within a five county area is enhanced through our energy-efficiency and STEM efforts.

Iowa Lakes Community College incorporates sustainable education into numerous college programs, designs learning centers for maximum energy efficiency, and enhances each college campus with updated products that reduce environmental impact.

Iowa Lakes was practicing green initiatives prior to 2006, but in October 2011 our Board adopted the Healthy School Program. At that time, Iowa Lakes was already 98% compliant. Iowa Lakes was the first Iowa community college to sign the American College and University President's Climate Commitment (ACUPCC) and strives to align decision making with our commitment to the College Climate Action Plan and desires to achieve climate neutrality, with no net greenhouse gas emissions. The College has instituted many changes in order to achieve this goal and continues to make changes and improve efficiency usage throughout each of the five campuses. For example, all new construction meets or exceeds LEED silver standards for energy efficiency. The Sustainable Energy Resources and Technologies (SERT) Center was constructed with geothermal renewable energy systems, controlled lighting and heating systems, 10% recycled content and recyclable building materials.

Iowa Lakes constructed a Vestas Wind turbine for training purposes, and sells all of the electricity from the turbine to the City of Estherville. Just short of \$130,000 worth of electricity is generated each year. That covers more than 70 percent of what is used in electricity in the educational buildings on the Estherville campus.

Each time an item; piece of equipment or technology is replaced, the facilities team replaces it with environmentally friendly products or technology. Paperless communication is encouraged and any copies printed are set to automatically print dual-sided. Recycle bins are located at all five campuses for plastic, paper, and cans. Iowa Lakes helps to further the recycling of plastic bags by handing out reusable cloth bags for grocery shopping and cloth back packs for carrying books and other items at events, such as the Clay County Fair, Career Day and Student Orientation. End-of-year rummage sales allow for less waste and provide the opportunity for students to purchase gently used items for their dormitories or other needs. All restrooms are paperless, water fountains are featured with a dispenser to refill bottles, reducing plastic bottled water usage. The food service grease is recycled for bio-diesel, and used oil from equipment is also recycled. In addition, Iowa Lakes incorporates climate change education as well as renewable measures into the curriculum of several new sustainable energy programs.

Iowa Lakes Community College established a 66,000 square-foot garden to grow vegetables, herbs, and fruit for the college and community organizations throughout Palo Alto County. The garden serves as a living classroom and provides a model for local garden projects throughout Northwest Iowa.

The Iowa Lakes' effort on positively impacting the environment is global. In March 2015, Iowa Lakes sent nearly 100 cloth backpacks to Kitale, Kenya, replacing the plastic sacks many were using to carry their books on their several mile trek to and from school. Moreover, students are involved in cleaning up the beauty of the five-county area by helping to assist in cleaning up area lakes, roadsides and our communities. In Clay County,

Iowa Lakes soccer players have volunteered at the Spencer Transfer Station in an effort to improve the public's education on recyclables; what can be recycled and how.

Participation Summary:

Is your school, district, or college participating in a local, state or national school program, such as EPA ENERGY STAR Portfolio Manager, EcoSchools, Project Learning Tree, or others, which asks you to benchmark progress in some fashion in any or all of the Pillars?

Yes

Program(s) and level(s) achieved:

Iowa Lakes has been a member of the American College and University President's Climate Commitment since 2006. The action plan was filed in 2009 with a commitment to build green and to educate our students, staff and communities. In addition, the college participates in EPA Energy Star Portfolio Manager and B3 Benchmarking.

Awards Summary:

Has your school, district, college, staff or student body received any awards for facilities, health or environment?

Yes

Award(s) and year(s):

Iowa Lakes received a \$1,500 award (December, 2014) to expand the Local Produce Project and educate more residents about the health and financial benefits of locally produced food. The award was provided through Farm Credit Services of America's Working Here Fund (Pillar 2).

College Pillar 1: Reduced Environmental Impact and Costs

Describe how your college or university is reducing environmental impact and costs by reducing or eliminating greenhouse gas emissions; improving water quality, efficiency, and conservation; reducing waste production; and using alternative transportation.

College-wide, low odor paints are used to reduce greenhouse gas emissions, green cleaning supplies and low or no-odor products are used to enhance indoor air quality for students and staff. Processes have been altered to produce minimal air contaminants or provide adequate ventilation. An outside entity monitors mold levels in areas with minimal air exchanges.

In order to improve water quality at Emmetsburg campus, a detention pond was created in 2016 to contain storm water runoff. A second detention pond has been started to retain water from the north side of the same campus. At Emmetsburg Campus farm, a wetlands area contains approximately 16 acres of water. Manure and chemicals are applied using GPS and nitrogen studies are used to improve crop productivity comparative to costs of input vs output. Conservation or mulch till leaves 20-30% top residue and grass buffer strips are in place to control drainage and manure run-off. Soy diesel (4-6%) and gasohol is used in equipment and a general reduction in mowing and maintenance reduces environmental impact.

Onsite renewable energy includes two wind turbines; a Vestas V-82 1.65 MW machine, and a Vertical Axis Wind Turbine (VAWT) constructed as a pilot for the small wind energy industry. This turbine is one of two prototypes in the world.

In an effort to reduce environmental impact from our fleet vehicles, a 2011 Toyota Prius was purchased and plans are in place to continue to purchase energy efficient transportation as vehicles need to be replaced.

College-wide meetings utilize the TV system or teleconferencing to minimize travel throughout our five-county region. Career and Technical programs run a four-day student week, minimizing the need for students to travel.

Iowa Lakes Community College Greenhouse Gas Emissions Profile

Metric tons CO₂/year

Activity	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Electricity	3,566	4,598	4,559	4,906	4,614	4,247	4,472	4,805	4,751	3,927	3,774	3,700
Natural Gas	1,220	1,435	1,430	1,636	1,739	1,614	1,365	1,491	1,255	1,611	1,595	1,412
Air Travel*	166	166	166	153	67	80	48	100	48	49	34	49
Fleet Fuel	101	126	135	151	139	128	129	129	166	131	128	139
Farm	138	138	138	140	208	196	169	226	226	178	39	45
Aviation School	156	102	114	87	85	79	50	92	87	71	65	69
Business Cars	234	198	211	211	193	65	83	72	93	127	137	121
Commuting*	768	768	768	627	422	408	414	391	441	391	374	385
Total	6,348	7,531	7,521	7,911	7,466	6,818	6,731	7,308	7,066	6,485	6,146	5,920
Wind Credits	0	-2,825	-3,871	0	0	0	0	0	0	0	0	0
Net Total	6,348	4,706	3,650	7,911	7,466	6,818	6,731	7,308	7,066	6,485	6,146	5,920

*values from survey of 2006 used for each year

Sold green tags 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019

Identify your institution's energy-efficient facilities and practices, ecologically beneficial uses of grounds, and methods of disposal for solid and hazardous wastes.

All new construction at Iowa Lakes meets LEED requirements, are constructed using geothermal systems, photovoltaic and steam controls for heating and cooling college-wide. The SERT Center, Construction Technology building, Wind Energy building and three of the housing facilities were constructed with geothermal systems. Materials with recycled content or are recyclable are used in construction and remodeling (metal, brick, flooring, rr stall dividers). New construction utilizes waterless urinals and automatic faucets and hand dryers in restrooms. Additional cost-effective energy efficient improvements include replacing forty-year old HVAC units with energy efficient multi-zone units, retrofitting original T12 lighting with LED lighting, daylighting where possible and motion sensors for lighting in restrooms, offices and classrooms.

Old outdoor furniture is replaced with recycled high density polyethylene (HDPE) tables and benches. Made with 100% recycled plastic, it is non-toxic and sustainable. Indoor furniture is purchased from companies that practice green initiatives.

In order to minimize the impact on landfills, Iowa Lakes recycles as much as possible; including computers, papers, cardboard that isn't being reused, light bulbs, TV's and furniture. Solid and hazardous wastes are disposed in the proper manner through certified companies. Used oil and chemicals from the shops are recycled. To reduce dining waste, dining trays have been eliminated from the serving line of campus Dining Services, resulting in an immediate and steady decline in waste of 35-40% (garbage weight) in addition to the saved energy cost of cleaning. The additional serving products are reusable rather than plastic. The one-time use plastics and Styrofoam products that were used have been replaced with corn or soy based plates, silverware, cups and bags. Food products are bought local when possible or utilized from the college garden. A grassroots effort to minimize Dining Service waste resulted in fruit and vegetable clippings being recycled as chicken feed resulting in additional decline in garbage weight.

The 66,000 square foot garden grows vegetables, herbs and fruit for the college and community organizations throughout Palo Alto county.

College-wide, in order to improve water conservation, native plantings are used to minimize the need to water and new trees and mulch are planted to enhance the low-maintenance care. When feasible, Iowa Lakes uses natural processes to maintain landscaping, lawns and apple orchard.

College Pillar 2: Improve the Health and Wellness of Students and Staff

Describe how your college or university improves the health and wellness of students, faculty and staff by integrating a campus-wide environmental health program and promoting sound health and wellness practices.

Discuss integrated pest management, contaminant controls and ventilation, asthma controls, indoor air quality, moisture control, and chemical management. Address the amount and type of outdoor time that your students and staff have, as well as the types of fresh, local, and organic food that they eat. Other components you may want to include are: health education, health services, counseling, psychological and social services, staff health promotion and family and community involvement.

Iowa Lakes addresses faculty and staff wellness through health and wellness events, online financial awareness sessions, money towards fitness club memberships, paid family sick leave and personal sick leave upon hire and annual health screenings.

Health screenings are a partnership between Iowa Lakes and area hospitals to offer all full-time, regular part-time and retired employees an annual blood screening opportunity; which includes a full blood panel, immunizations, and optional other tests including thyroid, prostate, bone density, A1C for diabetes and others.

Wellness Fairs are held tri-annually during mandatory employee inservice and provides mini-sessions in health and wellness that covers a wide range of topics; including fitness, recreation and office ergonomics. In addition, as office equipment needs replaced, standing or elevated desk options are being considered.

Iowa Lakes provides \$175 towards a membership at a wellness facility that offers comprehensive cardiovascular and weight training equipment.

Iowa Lakes Wellness Committee, in existence for over twenty-five years, continually works to promote wellness. The committee surveyed employees Fall 2016 regarding preferences for receiving wellness information.

Students, faculty and staff enjoy fresh vegetables, herbs and fruits from the college garden. On average, the garden produces almost 11,000 pounds of food yearly, much of which is eaten fresh or stored for later use.

Iowa Lakes utilizes natural or green rated chemicals when available during campus and housing cleaning. Mechanical or natural means are used for pest management. All paint, carpet, glues and other construction materials are low VOC's to minimize air contaminants and maintain a healthy indoor air quality. Mold testing is done on a regular basis and new HVAC systems are being put in place to enhance air quality. Fresh air exchangers or exhaust systems are put in place to maintain a healthy learning environment.

College Pillar 3: Effective Environmental and Sustainability Education

Describe how your college or university provides effective environmental and sustainability education by incorporating STEM, civic skills, and green career pathways.

Provide examples of interdisciplinary learning about the key relationships between dynamic environmental, energy, and human systems. Demonstrate how your institution uses the environment and sustainability to develop STEM content, knowledge, and thinking skills. You should also discuss how your institution develops and applies civic knowledge and skills to environmental and sustainability education.

Sustainability education is incorporated through numerous college programs: Agribusiness Technology, Agriculture Production, Construction Technology, Environmental Studies (Water Quality and Sustainable Aquatic Resources, Environmental Science), Electrical Technology, Heating, Ventilation and Air Conditioning (HVAC), Engineering Technology and Wind Energy and Turbine Technology.

Construction Technology programming revolves around green building processes. Energy Star and national energy code is taught. Students learn the importance of recycling reclaimed items such as lighting fixtures, wood and architectural items. The idea of one time forever building process that have no maintenance are introduced, as well as recycled road construction materials and building processes that save energy. On-site, students use as much of the building supplies as possible until there is minimal waste for the landfill. Useable waste lumbar is used to build birdhouses with area preschool students.

Environmental Science and Water Quality and Sustainable Aquatic Resources address environmental stewardship through education on water ways, preservation, restoration and management of clean water systems and the technologies that store, distribute, treat, and restore water quality through waste water treatment.

Engineering Technology coursework introduces students to the concept of utilizing excess energy from equipment coming off-line to route excess power to areas that can use it, rather than losing that energy as waste, illustrating that manufacturing processes have become energy harvesting processes.

Wind Energy and Turbine Technology courses provide study in wind power generation, distribution and operations and maintenance, utilizing two college-owned wind turbines. The primary turbine trainer, a Vestas V-82 1.65 MW machine, serves as a working training and education platform that produces energy sold to the City of Estherville. Proceeds from the sale of energy pay down the utilities at the Estherville campus. The newly constructed 25 KW Chava Wind vertical axis prototype has been installed at the college farm as the beginnings of a sustainability model. Set to undergo certification testing over the next six months, the prototype turbine will provide the college farm with electricity and feed the power grid with excess electrical power. In conjunction with Chava, training and education materials are being developed that will serve as an educational platform for schools, colleges and for workforce development.

Students take interdisciplinary courses as well. Energy, Sustainability and the Environment, which illustrates for Environmental, Electrical and HVAC students how systems are linked together, from the environment to building efficiency.

Our Sustainable Energy Resources and Technologies (SERT) Center is designed as a working laboratory so that students can see sustainable practices they study in action. Reduction, reuse and recycling processes illustrated by the LEED Compliant processes that went into its construction; photovoltaic systems that power the roof top air handlers; geothermal and de-stratification system that regulates facility temperature; light tubes which bring natural light into the high bay to minimize artificial light sources during the day; and building performance instrumentation that regulates climate, energy and airflow to reduce energy consumption and regulate air quality.

Iowa Lakes regularly hosts energy and career exploration days for K-12 students, continuing education for post-secondary educators and workforce volunteers, along with community open houses and forums to promote STEM development in close collaboration with the University of Northern Iowa and Iowa Lakes Community College Secondary Education Programs. Faculty have presented educational topics at the national level through participation with AWEA and at the state level through IWEA, and regularly attend open forums and town hall meetings to provide educational information and outreach to communities where renewable energy development is taking place.

General education classes incorporate sustainable practices as well. Chemistry labs have begun utilizing micro-experiments, which use less chemical and create less hazardous waste. Some lab experiments went from using L to mL, and others went from mL to nL; so in some cases a million-fold reduction in waste. Using less chemical has a positive impact on the environment as well as allows students the opportunity for increased lab activities due to reduced cost and time associated with micro-experiments. Biology classes use specimens that do not contain formaldehyde, allowing incineration of the specimen versus waste disposal and enhancing the air quality in the labs.

The specialty crop garden at Iowa Lakes Community College serves as a living classroom to illustrate the process of growing, storing, processing, and preparing locally-grown foods within the five-county region of Northwest Iowa. Community patrons, Head Start children, K-12 school children, and college students benefit from the nutritional, social, and economic benefits of the garden. Garden success relies on volunteers and non-profit partnerships throughout the area. The Local Produce Project educates community youth, adults with disabilities, college students, and community patrons on specialty crop gardening, the nutritional benefits of

locally-grown food, the physical benefits of gardening, and the economic resourcefulness of local produce programs.

Supporting Photos:



Vestas wind turbine is used for training students, staff and wind personnel as well as producing energy sold to the City of Estherville (Pillars 1 and 3).



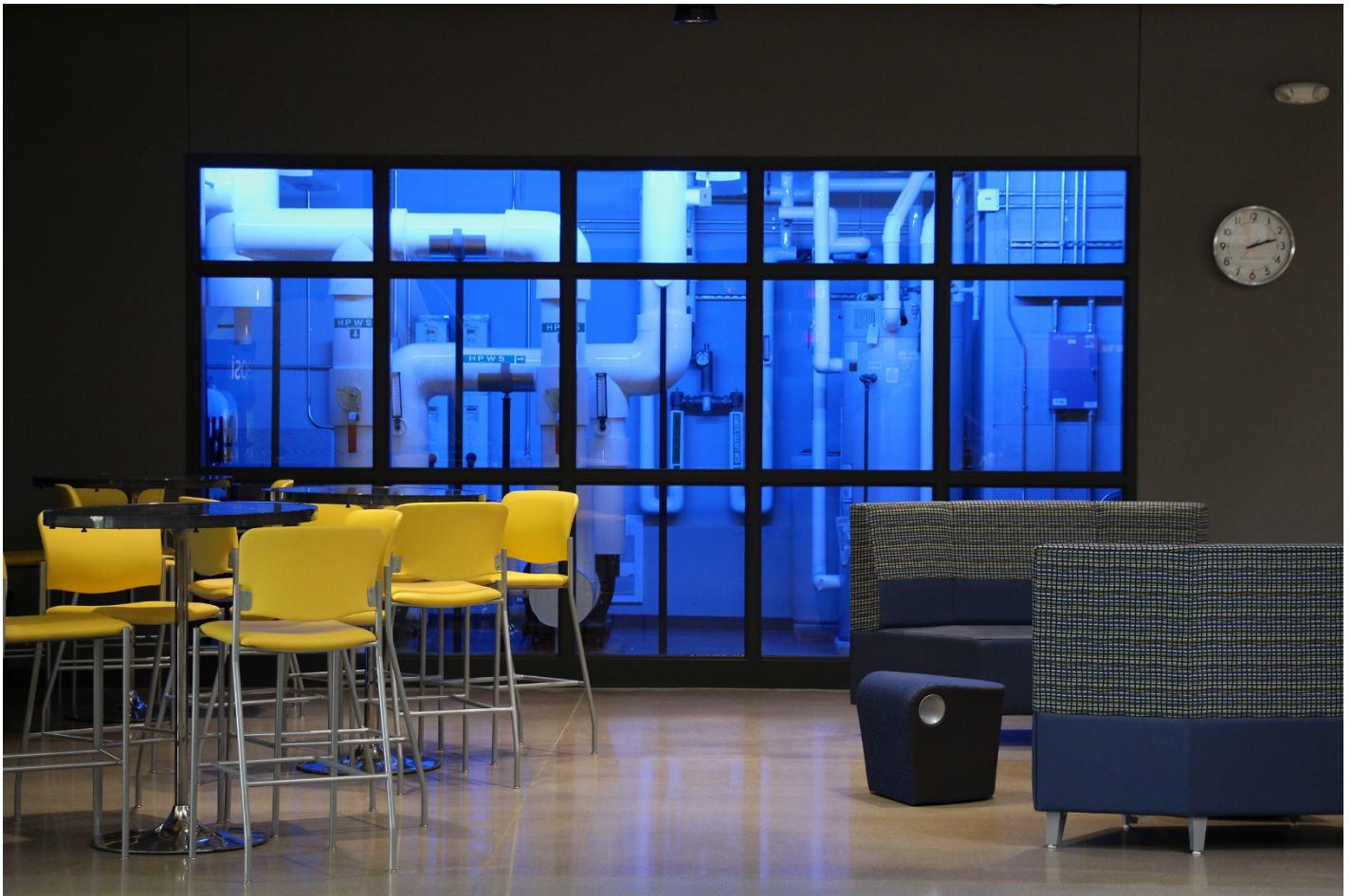
25 KW Chava Wind vertical axis prototype to be used for training and energy for the farm (Pillars 1 and 3).



Iowa Lakes garden serves as a living classroom; helping to educate students about the nutritional, physical and economic benefits of locally-grown food. In this picture, Head Start students are ready to help harvest potatoes (Pillars 1, 2, and 3).



Sustainable Energy Resources and Technologies (SERT) Center is designed as a working laboratory for students to see sustainable practices in action (Pillar 3).



SERT Center mechanical room is showcased as a teaching tool for students, showcasing sustainable practices (Pillar 3).