

## STEM Initiative

In order to provide quality STEM (Science, Technology, Engineering, and Math) programming, a remodeling and expansion of the existing facility is needed to meet the teaching and learning needs of today's students. NIACC's science wing was added to McAllister Hall in 1979, and the used equipment installed in that area was donated to NIACC by Mason City High School. Today, 36 years later, our students still use that donated equipment in those antiquated classrooms and labs while they learn about the latest technology and information available in the 21st Century. It's time to align the level of innovation in our facilities and equipment with the level of innovation provided for students by our instructors and course content.

In fact, one of the greatest needs at NIACC is to remodel the science wing which in turn entices students to attend the College by creating better student-faculty collaboration, maintaining the excellent reputation NIACC has for students transferring to a four-year institution, and supporting STEM courses that serve as the framework for a multitude of academic majors and programs across the campus. To be a leader in STEM education, we need to have the best facility we possibly can.

Replacing the aging infrastructure with modern facilities and technology in a flexible space would provide an opportunity for students to experience more applied sciences. Students in math and science courses will have the opportunity to apply their education in real world settings to develop things like 3D printing models or enhance skills on CAD (Computer-Aided Design). Transfer students working with career program students on joint projects would simulate workforce situations to help students acquire more skills and experience with teams.

STEM courses are woven through areas such as agricultural science and technology, which is growing across the nation, and the College is ideally located for students preparing for dynamic careers in the agriculture industry. Other STEM-based programs, such as mechanical engineering and design, robotics, cybersecurity, tool and die, and health career programs, are also seeing great demand.

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Graduates are getting jobs in Iowa and across the United States. We are proud to report that 97% of NIACC career and technical graduates get jobs. We need to give them the best and most flexible learning facilities available.

An updated STEM wing will allow NIACC to continue to support STEM initiatives through the North Central STEM Hub both at the collegiate and secondary levels. A new facility will help support the community through NIACC's Lifelong Learning Institute, expanding scientific literacy in North Iowa. A new facility will support STEM business and industry to train employees and develop new programs to support the needs of current and future STEM businesses.

## Did You Know?

- NIACC has long enjoyed strong transfer relations with Iowa's three Regent institutions (University of Iowa, Iowa State University, and University of Northern Iowa) in the areas of math and science. The remodeling and expansion of our current facility will strengthen and enhance our ability to prepare students to successfully transfer to our Regent partners in the fields of science, technology, engineering, and mathematics.
- Employment opportunities in the STEM fields are exploding! The Iowa Workforce Development STEM Jobs microsite reported in May 2015 that there are 6,771 STEM job openings in Iowa, and North Iowa boasts many great opportunities in the STEM fields. The biosciences and biofuels companies in North Iowa continue to struggle to find the highly skilled employees necessary to support and grow their businesses. This project will enhance NIACC's ability to provide training and education for the rapidly changing bioscience industry.
- STEM education has been identified at the national and state levels as a critical component to the future success of our region and our country. Changes in the delivery and use of technology in the classroom require remodeling and renovation of NIACC's outdated space to accommodate modern teaching methods and a changing learning environment.

## Healthcare Simulation Initiative

The demand for skilled healthcare workers is high and expected to grow in North Iowa. Now more than ever, the call to care for our loved ones and neighbors can be heard throughout the country, especially in areas with aging populations such as North Iowa. NIACC graduates are often the skilled healthcare workers who help answer that call. With quality faculty and programs, NIACC is the leading provider for training healthcare professionals in North Iowa. However, healthcare simulation for improved training of the future and current workforce is critical and is now expected within educational programs. The construction of a state-of-the-art Healthcare Simulation Center is necessary to continue to meet the needs of NIACC students pursuing a career in the healthcare industry.

Plans for strengthening this area within the College include the addition of a Healthcare Simulation Center to provide students with real-world learning opportunities and experiences. The Simulation Center will be a facility that provides real-world experience for health examinations, medical techniques, and emergency simulations. Whether simulating working with a young child in the emergency room or checking the vitals of an elderly resident at a nursing home, students will feel as if they are in a real medical facility during these important learning years.

NIACC is the leading area provider for training, offering career programs in nursing, physical therapy assistant, medical assistant, and radiology technology. **At NIACC, we typically see a 100% placement rate for graduates from our medical programs.** Our graduates are in high demand at Mercy Medical Center – North Iowa. In addition, Mayo Clinic in Rochester, MN, expects to hire thousands of new healthcare employees, including those with a specialty in medical records, over the next several years and has made their hiring needs known to NIACC staff.

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A new Healthcare Simulation Center will tie together a solution for healthcare workers of the future while also updating the skills of today's healthcare workers. The project will provide for all those needs by not only supporting NIACC students, but also serving local health professionals and volunteer emergency medical personnel who must meet professional development and state licensing requirements. As part of this effort, NIACC will recapture and renovate space on campus to create this facility.

## Did You Know?

- Currently, the healthcare industry is experiencing a serious shortage of healthcare practitioners and support personnel. The Iowa Workforce Development Middle Skills Job Report indicates there is a shortage of 350 Registered Nurses, 100 Licensed Practical Nurses, and 200 Certified Nurse Aides in North Iowa with an estimated 1,470 openings annually in these three professions.
- In addition to nursing, the Simulation Center will meet training needs of individuals and communities providing emergency medical services. From 2012-2015, NIACC provided EMS, EMR, and AEMT training to 249 individuals representing 50 communities in North Central Iowa. The Simulation Center will expand NIACC's ability to increase and enhance training.

## Diesel Initiative

Business growth, changing skill requirements, and the aging of the current workforce continue to challenge the region's employers to find and retain a quality workforce. Many businesses turn to NIACC for help. Labor market studies show there is a need in our area for a Diesel Technology program.

In recent years, the rapid growth of the diesel trucking and agriculture diesel fields has created a shortage of skilled diesel technicians. Employers, such as those in the commercial trucking industry, are in desperate need of quality workers. They need skilled diesel technicians to serve the expanding trucking and agricultural equipment service industries. NIACC is committed to filling the void of that worker shortage by expanding its delivery of diesel education. However, in order to properly meet the needs of this challenge, NIACC must expand and upgrade training facilities.

In response to industry needs and interest from potential students, NIACC is building an 8,000-square-foot diesel repair facility. The Diesel Technology program is designed to provide training in the diagnosis, repair, and maintenance of heavy-duty agricultural equipment, over-the-road diesel trucks, and other heavy-duty diesel systems. With some early industry commitments, construction on this facility is already nearing completion. However, in order for the facility to be financially solvent, we need your help.

Our rural economy relies heavily upon transportation to deliver the goods and services provided by business and industry in North Iowa. NIACC is committed to building a Diesel Technology Center to provide training for the transportation, maintenance, and repair industry.

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## Did You Know?

- Discussions with employers in the transportation industry were held as part of the Capital Campaign Feasibility Study. These individuals identified a shortage of workers throughout the industry. These needs are supported by the current and projected job openings in the Iowa Workforce Development Agency's Middle Skills Job Report. There are currently 170 job openings in North Central Iowa for auto repair, diesel repair, and industrial mechanics. This report anticipates 790 openings from 2010 to 2020 in the field of installation, maintenance, and repair occupations.

## Music Initiative

The soundtrack for NIACC's music programs and cultural offerings flows in harmony with the outstanding musical heritage North Iowa is known for. The region has a long tradition of producing successful performers, educators, and composers, including Meredith Willson who made Mason City famous as River City in the Broadway musical and film *The Music Man*. In order to keep NIACC's superior musical reputation on key, we need to secure new pianos and make enhancements to our music programs. As part of our commitment to excellence in music and performance, we must take steps to improve the quality of the pianos, which are critical instruments for instruction and performance for both students and professional performers scheduled at the North Iowa Community Auditorium.

The music programs and facilities at NIACC have made significant and lasting contributions to this heritage. Here, students can enjoy a variety of instrumental and vocal music opportunities whether they choose to major in music or participate in music as an elective. Students who major in music fields of study consistently experience success when they transfer to four-year institutions to earn their Bachelor's degree.

In addition to the quality education students receive through NIACC's music programs, the Performing Arts and Leadership Series has called the College home for more than 20 years. The NIACC Performing Arts and Leadership Series offers Tony award winning shows, Grammy Award winning artists, comedy, and internationally acclaimed speakers.

NIACC's fleet of nine pianos has served the College for decades; the oldest piano is 48 years old, and the average age of a piano in the fleet is 32 years old. These pianos are presently nearing the end of useful life with several of the pianos suffering from cracked keyboards, making replacement a better option than attempting repairs. In order to care for the pianos, enhancements to maintain humidity and temperature controls and monitors must be structurally included to protect the investment in the future so the pianos last long-term and do not see stresses as in the past. The

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wooden sound board on a piano likes temperature and humidity to remain relatively constant for a long, healthy life. The added humidity control equipment will ensure our piano upgrade will be protected and give the new instruments a long and productive life. Upgrading the pianos and providing for enhancements in the music area will help to preserve and strengthen NIACC, which benefit all of North Iowa.

As part of this effort, NIACC will make needed upgrades and improvements to develop cultural opportunities for our students and the North Iowa region.

## Did You Know?

- The College's pianos are critical for individual student development, ensemble rehearsals, and bringing so many great performances to the North Iowa community.
- NIACC provides vocal music performance opportunities for both majors and non-majors through two ensembles. The Concert Choir is a non-auditioned ensemble which performs a Winter Concert in the fall semester and the annual variety show Quodlibet in the spring. In Spring 2015, Quodlibet celebrated its 40th anniversary. The NIACC Singers, our auditioned show choir, performs choreographed pop music and contemporary acappella numbers. The NIACC Singers have international tours every other year and perform on and off campus around the region. Upgraded pianos and music enhancements will help continue to make these magnificent learning opportunities available to students.
- Students can join up to three instrumental music ensembles at NIACC – the North Iowa Concert Band, the North Iowa Symphony Orchestra, and NIACC Jazz Ensemble. The North Iowa Concert Band presents at least one major performance each semester. The North Iowa Symphony Orchestra generally performs three times a year, with one concert being for the children of the area elementary schools. The NIACC Jazz Ensemble concentrates on improvisation, swing interpretation, and jazz repertoire from 1930 to the present and performs one or two major concerts each year, as well as hosting the NIACC Jazz Festival. The Concert Band and Symphony Orchestra are composed of NIACC students and community members from North Iowa, and membership in the Orchestra and Jazz Ensemble are by auditions only. Providing students with needed music enhancements and upgraded pianos will improve the music education experience for our students.