



MINNESOTA STATE
Engineering Center of Excellence

Annual Report

FISCAL YEAR 2021

PREPARED BY

Melissa Huppert, Ph.D.
STEM Outreach Director

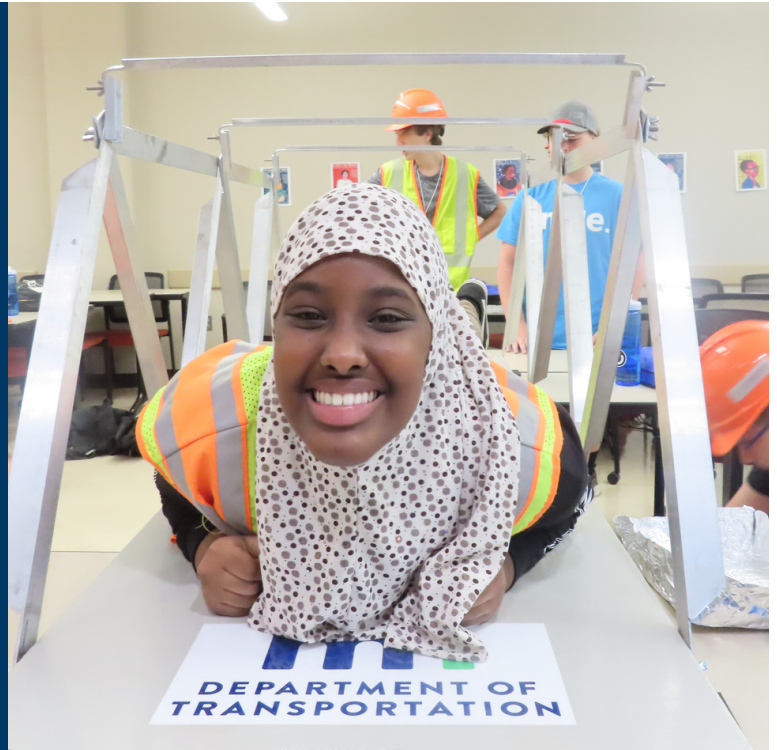
Jason Bruns
Center Director





WHAT WE DO

The Minnesota State Engineering Center of Excellence facilitates relationships by engaging academic institutions with industry and provides educational outreach by inspiring interest in science, technology, engineering, and math (STEM). These efforts shape the next generation of engineers who will solve real-world problems. The Engineering Center of Excellence fosters accessibility to the latest technologies, workforce programs, and post-secondary education. Collectively, advancing Minnesota's engineering innovation and competitiveness by enhancing education, engaging industry and inspiring students.



01

ENGAGE.

[CULTIVATE + ENHANCE + LEVERAGE]

We cultivate relationships and enhance existing partnerships to leverage new resources.

02

EDUCATE.

[THEORY + PRACTICE + REAL WORLD]

We bring together theory, practice and real-world solutions through innovative educational programs.

03

EXPERIENCE.

[LEARN + INSPIRE + LEAD]

We create opportunities to inspire the future workforce and provide thought leadership to industry professionals.

Director's Overview

The year has been challenging for all of us. We go from not being able to interact in-person to finally being able to meet face to face. The Minnesota State Engineering Center of Excellence has looked upon this year as a year of opportunity for growth and planning. Sounds odd, but when faced with challenges, innovation is the key to success. These new processes that we have tried can now be part of our repertoire towards expansion and supporting many more learners across the state.

During the summer of 2020, the Engineering Center was not provided the opportunity to deliver grades 6-9 camps in person. Through the support of the Schmidt Foundation, we were able to supply virtual summer camps for free to campers. This virtual camp arena was an area we were unfamiliar with, "like many of us", but we were able to support campers from across the country. These new tools will allow us to support underrepresented and rural campers that would like to participate in some of our programming but do not have a chance.

The industry-led Advisory Council meeting was also held during the summer of 2020. This was a virtual meeting and we continued utilizing our Open Space Technology meeting process. We blended the utilization of Zoom with Google Sheets. To be honest, there was concern that this would be too confusing but to our excitement, it was tremendously successful. The council continues to provide great direction and support for the Engineering Center. They have a vision and are willing to contribute where they can. We are lucky to have individuals like this connected with our organization. Even in times of a pandemic, we need to continue to seek important guidance from our advisory council.

In the fall of 2020, the Engineering Center participated in a couple of virtual conferences. Now, if you have not been to one, they take a little to get used to. Participation in those events can be sporadic but that is one of the ways to continue to

share opportunities provided by the Engineering Center. We participated at Minnesota Independent School Forum, CTE Works! Summit, Minnesota Conference in Science Education and STEM Meets the Challenge of the Pandemic.

When the pandemic hit, there were many educators needing resources. These resources ranged from a need for a sense of community to virtual resources. The Engineering Center supported multiple educator listening sessions, ideas, and support sharing, throughout the year. We also worked with the Minnesota State System office and other Centers of Excellence to create and provide an Online Learning Resource Center (OLRC) for both secondary and post-secondary educators. Finally, the need for Science, Technology, Engineering, and Math (STEM) mentors continues to be a need for both secondary and post-secondary learners. The Engineering Center created a STEM Professionals Database to allow educators to connect with professionals from across the state, providing them the opportunity to share their professional experiences virtually or in person.

We have a great team. Come be part of it. Help us shape the future and open more doors of opportunity.

All of the best,

Jason Bruns





Target Audiences

College Presidents, Chief Academic Officers, and Deans

Provide strategic communication to increase awareness and perceived value of the Center and encourage administrative support for educator collaboration.

Industry Employers and Associations

Provide thought-leadership and develop partnerships to expand opportunities for students, improve curriculum, and develop pathways into the workforce.

Post-Secondary Educators

Foster collaborations to strategically transform existing curriculum, programs and provide professional development to better meet industry, students and societal needs.

Secondary Administrators, Counselors, and Educators

Identify and develop curriculum, provide educator training and facilitate collaborations to inspire students and increase awareness of career opportunities in Minnesota.

Post-Secondary Students

Create ties between students and perspective employers through internships, capstone opportunities, job shadowing, research and other programs.

Secondary Students

Offer career exploration and skill development programs to increase awareness and interest in engineering, engineering technology, and related career pathways.

Marketing Channels

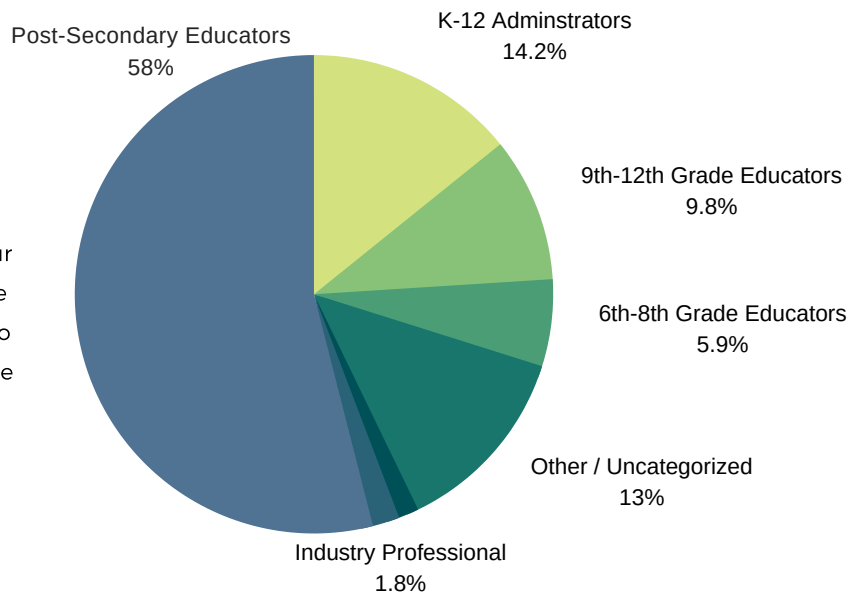
During Fiscal Year 2021, the Minnesota State Engineering Center of Excellence continued the development and updating of marketing material. Efforts were focused on:

- Website resource development,
- Maintaining the quarterly newsletter,
- Developing email marketing campaigns for the Engineering Center's programs, and
- Revisiting and revising our approach to social media channels with a focus on Facebook.

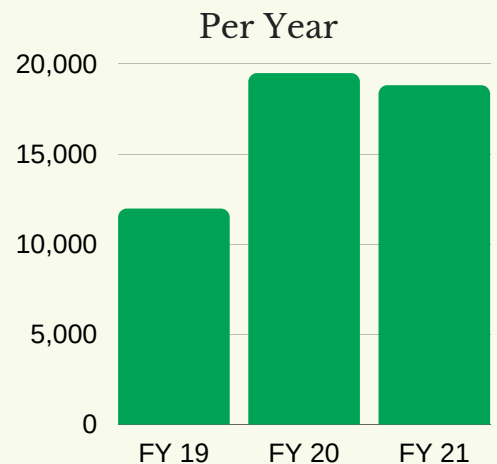
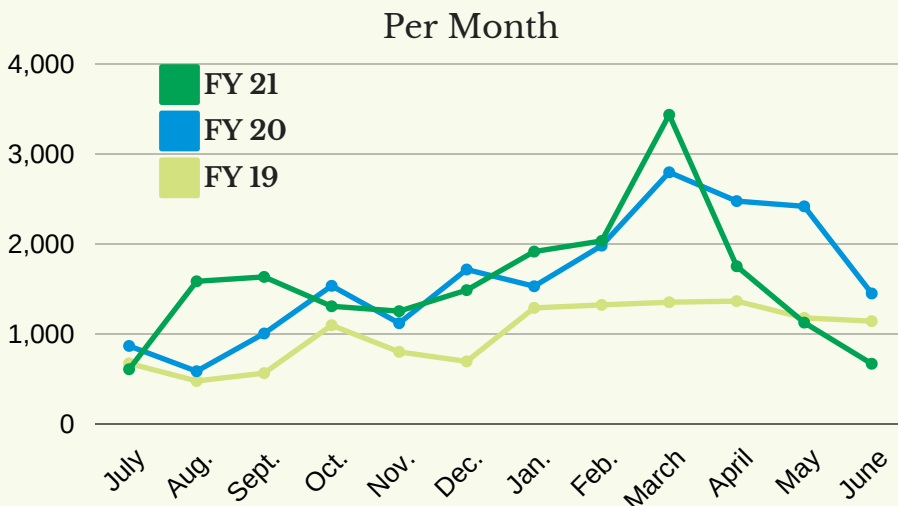
The Engineering Center's website continues to be a key resource for target audiences to connect with us and our programs. The website had an overall increase in unique visitors from July 2020 to March 2021 when compared to the previous year. There was a notable decline in website visits from April to June which may be attributed to moving the Explore STEM Day Camp information and registration to the host university website.

Constant Contact has continued to be a very valuable contact management tool for the Engineering Center in reaching educators and administrators. Future efforts will be placed on growing industry connections.

Active Contacts (N=10,120)



Comparison of Unique Website Visits Per Fiscal Year

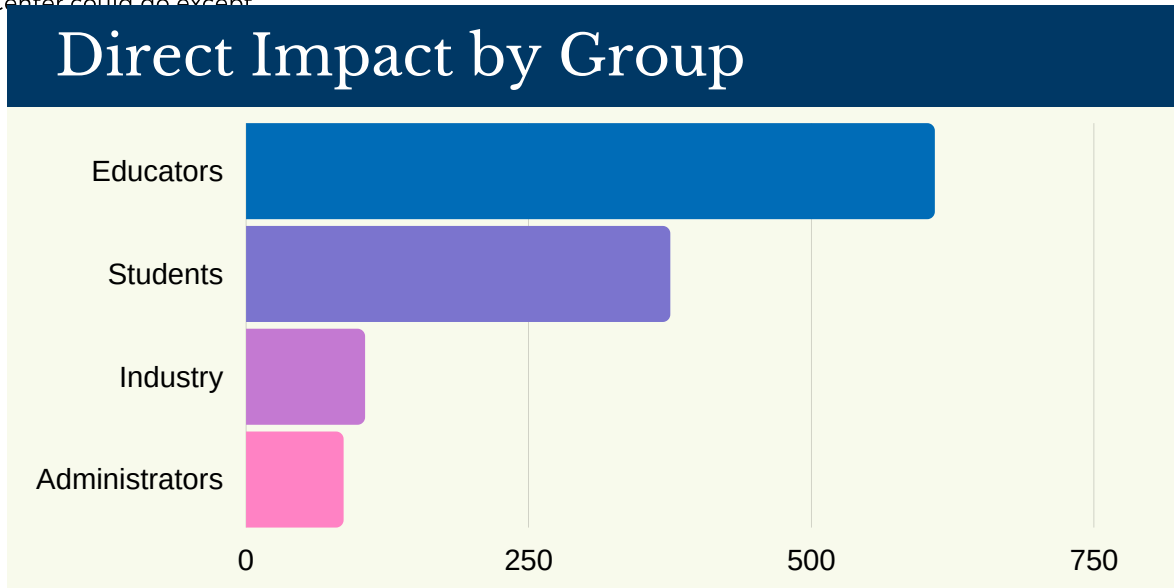


Direct Impact

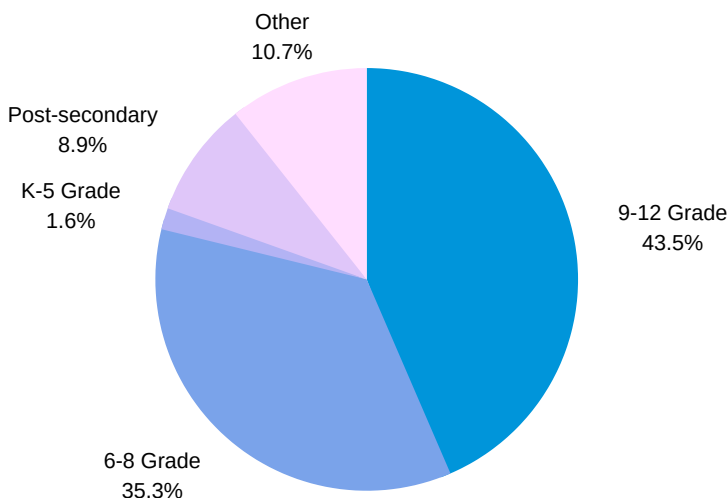
The next several pages of this report outline the impact and direction of each of the Minnesota State Engineering Center of Excellence's key programming areas. During the past year, the COVID-19 pandemic had a significant negative impact on the number of individuals the Engineering Center was able to engage with. By far the target audience that was impacted most greatly was secondary and post-secondary students. With nearly all student engagement opportunities canceled, and a small number transitioned to virtual, there was little the Engineering Center could do except

work to support the educators. In the long run, this may be a beneficial shift in focus as we work with educators to inspire students.

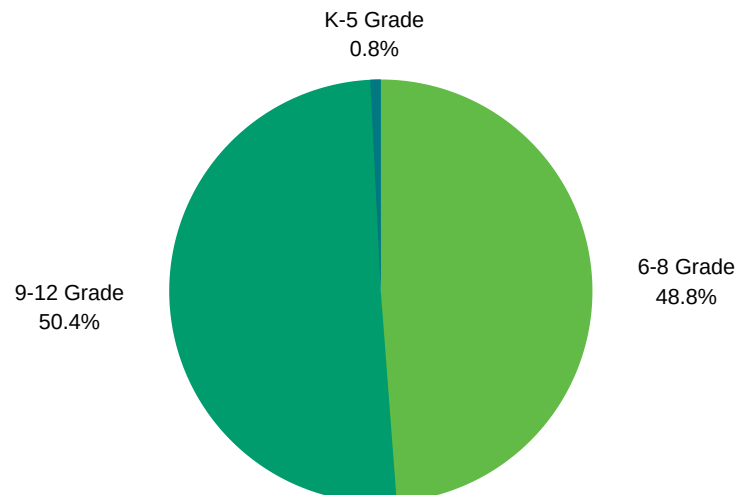
As we look toward Fiscal Year 2022, we are excited by the opportunity to re-engage in person with educators, students, and industry partners. As you read through this report, you will note the resilience and ability of the Engineering Center to pivot and take on new challenges during a year of uncertainty.



Educators



Students





Key Program Areas

Advanced Career

Advanced Career and Middle Grades STEM are Career and Technical Education Curriculum that contain secondary hands-on team projects allowing teens to test-drive careers in high-tech fields while they deepen their understanding of the engineering design process and master essential literacy, math, science, and workplace skills that employers' value.

Fiscal year 2021 was a real challenge for promoting a hands-on curriculum in a COVID environment. It is hard to promote project-based, team learning when learners are not allowed to gather. Added to that, educational institutions were not looking at expansion when they already had a difficult time with virtual programming.

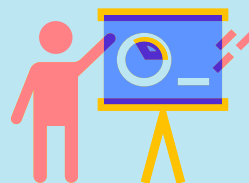
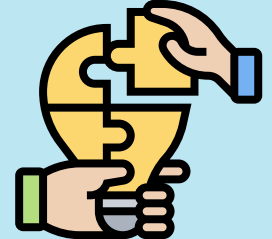


Highlights



Eighty-three percent of training participants agreed the training content connected the dots and enhanced the quality of engineering and engineering technology learning and real-world application.

Working on potential collaboration for U.S. Department of Health and Human Services funding opportunity to leverage the AC Health Informatics Curriculum to assist in the further development of health informatics and the recruitment of minority students.



Planning for Advanced Career training site in summer 2022.

The Minnesota State Engineering Center of Excellence was able to organize a Middle Grades STEM teacher training in the winter of 2021. The training content focused on material that could be delivered virtually. There were approximately 20 teachers from over five school districts that participated. This was a huge accomplishment especially with how difficult it is to arrange schedules for participants virtually, not to mention trainers.

Moving into the new fiscal year, the Engineering Center plans to continue visiting with schools to support adopting the Advanced Career and Middle Grades STEM programming. These are great programs to facilitate opportunities for doing real-world, project-based learning, and a pathway for industry to connect with local high school students.

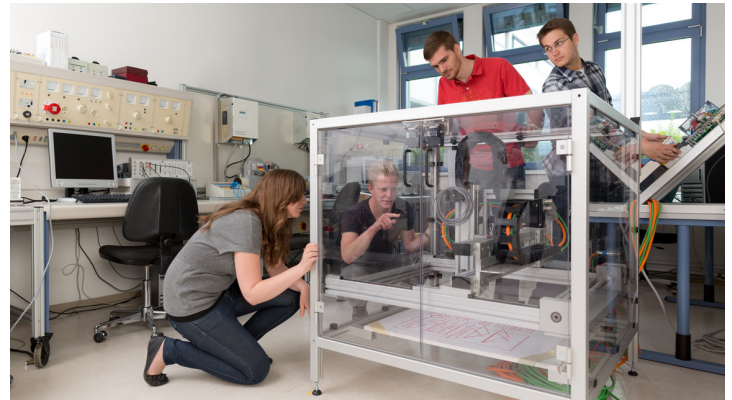
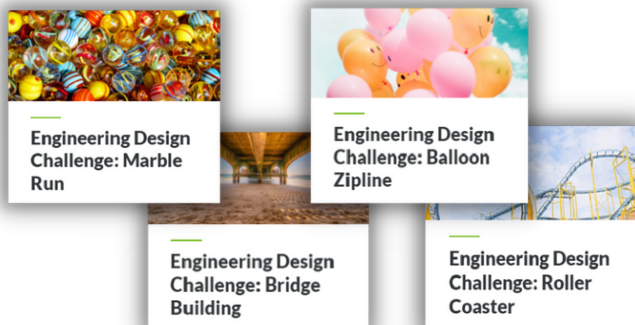
Explore Engineering

The Explore Engineering program includes various resources that support educators as they work to inspire interest in engineering and engineering-related careers with 3rd - 12th grade students, especially those from under-served populations. The program currently has three developing areas of focus: (1) kits and curriculum, (2) day camp resources, and (3) engineering design challenges.

The kits and curriculum are standards-based, designed for 3rd - 8th grade, and suitable for formal and non-formal settings. The curriculum is currently in the final stage of development in partnership with Minnesota 4-H. The first educator training is scheduled for the fall of 2021. Through the support of grants, 30 educators will receive the curriculum, kit, and training at no cost. This project is funded in part by the Boston Scientific Foundation and the Perrigo Foundation STEM grants.

The day camp resources provide the framework for a college to implement their own Explore Engineering Day Camp with the Minnesota State Engineering Center of Excellence providing advisory support. During the summer of 2020, three programs were modified and implemented in a virtual setting due to COVID-19. Three in-person programs are being implemented in the summer of 2021. As interest grows, the resources developed for these programs will be used as templates for colleges to use in 2022.

Four engineering design challenge modules were developed in partnership with Minnesota 4-H. Each challenge was designed as an interactive e-learning resource that can be utilized by an individual student or in a group.



Related programming initiatives also included the development of the STEM Professionals Database and the Teacher Training Institute. The STEM Professionals Database serves as a way to connect Educators to STEM Professionals that are interested in speaking to students about their experiences. This creates an opportunity for K-12 and college students to experience and hear first-hand from professionals working in STEM fields. The Teacher Training Institute was a webinar series implemented as a response to educators' need for ready-to-use resources suitable for distance or virtual classroom settings. This was a collaboration among the Centers of Excellence and led by the Engineering Center of Excellence.

Grants and sponsorships to support and further grow the Explore Engineering programs are continually being pursued. Future initiatives include educator training and development of educational and learning resources for industry partners to effectively connect with 6th - 12th grade audiences.

Engineering Machine Design Contest

The Engineering Machine Design Contest is an opportunity for teams of 5th - 12th grade students to design and build a complex machine using everyday objects with the guidance of a coach. The completed machine will use multiple steps to complete a simple task. Students are able to explore science, technology, engineering, and mathematic (STEM) principles while having fun in a collaborative environment. Each year a competition theme is chosen to guide the machine build and allow for whimsical creativity to flourish. This past year the theme was Making Change through Transportation.

The pandemic caused significant challenges for teams, schools, and regional contests. The vast majority of teams had to navigate building their machine in socially distanced or distance learning settings. Regional contests had to find ways to adapt to operating in a social distance setting or facilitate the contest virtually. Despite these challenges, the program grew to six regional sites. The Minnesota State Engineering Center of Excellence organized a Virtual Open Regional Contest and the program was excited to partner with STEM Forward out of Milwaukee, Wisconsin to expand the program eastward.

On Saturday, May 8th, 2021 the Engineering Center of Excellence hosted the first annual Engineering Machine Design Championship. Due to extenuating circumstances from the COVID-19 pandemic, the Championship took place virtually. Teams earned their place in the Championship by advancing from Regional Contests that took place in March and April. In total, 37 teams participated in the Regional Contests with 12 advancing and competing in the Championship.

In the fourth year of the program's existence, the Engineering Center staff worked to strengthen the programming, as well as resources available to regional sites. These improvements have included alignment to the Next Generation Science Standards and the National Academy of Engineering's Grand Challenges for Engineering. Resources were expanded to include a pilot

judge training module, a virtual contest template, and more. In the works for the 2022 season is the development of a custom tabulation system at the request of regional contest organizers and judges.

Interest in this program continues to grow as more students, educators, and industry partners learn about this opportunity for students to explore science, technology, engineering, and mathematic (STEM) principles while having fun in a collaborative environment. Moving into the new fiscal year, the Engineering Center has set a goal to recruit at least two additional regional contest sites for the 2022 season.

Impact

100% of Coaches Agree...

This program connects the dots of engineering and engineering technology learning and real-world application.



Students increase their knowledge and acquire new and/or advanced skills.

This program contributes to students achieving their professional / career interests / goals.



Students gain knowledge upon which to base their decisions/actions related to engineering design.

This program equips students with skills that will help prepare them for future careers.



They would recommend this program to others!

Continuous Improvement Initiatives

Our Continuous Improvement Engineering programming continues to roll out amid the pandemic. Continuous Improvement Engineering, sometimes referred to as Lean, is a method for creating a more effective business by eliminating wasteful practices and improving efficiency, organically. It focuses on improving products and services based on what customers value and want.

As part of a capstone project, the Iron Range Engineering students continue to work on an industry handbook to facilitate work cell assessment. This assessment is intended to help the industry upskill developmentally disabled individuals into work cells which would be considered too sophisticated. This innovative approach will assist in increasing the workforce and earning opportunities for this underrepresented population, utilizing an organic business growth model.

Not only that, what we are finding is that the engineering students are having to become much more cognizant of their design considerations. They are researching information supplied from the American Disabilities Act (ADA), selecting Lean tools which are much more conducive to people with disabilities, and understanding the impact of effective



Testimonial

"A general need for Lean training and/or topics, such as continuous improvement, have been widely indicated..."

"We were able to address these needs by creating classes, training the instructors, and even working collaboratively on creating lessons to implement hands-on projects and activities in the classroom..."

"Introducing these concepts at an earlier level will provide an instant impact to the workforce."

Randy Jasken
Program Director of Additive & Digital Manufacturing
Century College

ergonomics. This research process will assist these young engineers in understanding who their customers are and what are their real needs.

The Minnesota State Engineering Center of Excellence is also planning to provide Lean education at the secondary level. We are currently building a secondary curriculum that will give the basics of Lean and real-world applications. This idea came out of a secondary manufacturing pathway industrial advisory council meeting. As of now, we are unaware of many schools in Minnesota, let alone the nation, providing Lean educational content at a secondary level. The Engineering Center plans to provide the seed and pilot this secondary Lean programming in 2022 with plans for expansion.

Workforce Partnership Seminars

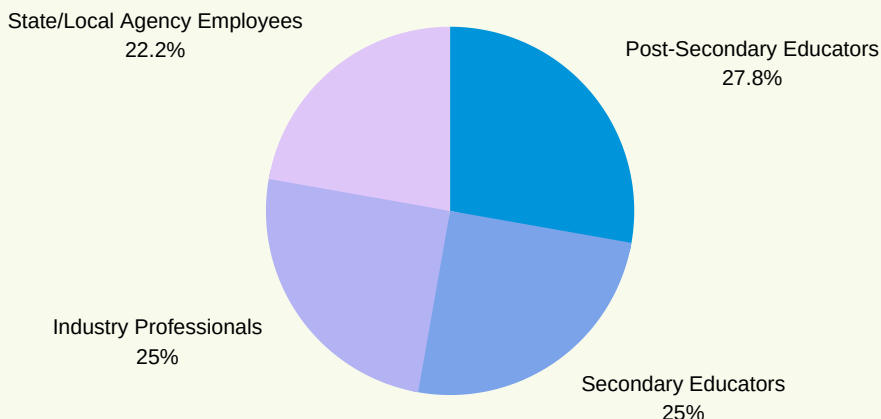
The Engineering and Manufacturing Workforce Partnership Seminars take place twice a year and are an assembly of industry, academia, and state employees taking an active approach to solving workforce and industry challenges. The vision of this program is to build partnerships that restructure and accelerate the Minnesota workforce education system, meeting workforce demands in manufacturing, engineering, and engineering technology.

In the Fall of 2020, Andrew Dahlen with Northland Community and Technical College shared his research, design, and implementation of Competency-Based Education (CBE) into a Mechatronics Program. This presentation highlighted the details of this project and provided insight for learners looking for a flexible alternative including open entry – open exit, self-paced coursework, and open classroom/lab hours. Anoka-Ramsey Community college then shared their Industrial Manufacturing Technician (IMT) apprenticeship which was developed to meet manufacturing firms' needs to upgrade the skills of the frontline production workers. Upon completion of training, workers earn nationally recognized manufacturing journey worker credentials.

Winter 2021's topic title was Tools to Connect Industries and Schools. In this virtual event, there was industry representation from Design Ready Controls and Die Technologies to share some of their successful school connection tools in helping them meet many of their workforce needs. A Johnson High School educator talked about what they have done to connect with industry in the creation of their career pathways program, leading to student success in and out of the classroom. Finally, there was a panel discussion sharing some best practices and provided some ideas to help solve workforce challenges and/or student opportunities.

The Minnesota State Engineering Center of Excellence plans to continue to grow this collaborative effort with the Minnesota State Advanced Manufacturing Center of Excellence. We will work towards continuing to offer free professional development, in a hybrid delivery, providing relevant topics for the workforce and industry challenges.

Participants



85% (or more) Agreed this Program...

- Connected the dots of engineering and engineering technology learning through real-world application.
- Bridged gaps between industry, education, and workforce.
- The information presented could be applied to practice.

90% of participants would recommend this program to others.

Engineering Teacher Workshop

The Engineering and Engineering Technology STEM Educator Workshop is a professional development opportunity for secondary and post-secondary educators to learn about pedagogically supported foundations for teaching engineering and technology-related techniques. These skills apply to all Science, Technology, Engineering, and Mathematics (STEM) educators and help with student retention and success, as well as increasing the workforce in STEM careers.

During the fall of the 2020 pandemic, many educators expressed the need for virtual pedagogy professional development. In response, the Minnesota State Engineering Center of Excellence recruited faculty from the University of Minnesota, Duluth, Minnesota State University - Mankato, St. Cloud State, and an industry professional to deliver a seminar to support secondary and post-secondary educators on the topic of course objectives, testing, ethics & cheating.

In the spring of 2021, the topic was 3D Printing for STEM Educator Pedagogy and Workforce preparation. This event brought faculty from both a two-year and four-year campus to deliver professional development around the area of 3D Printing. They shared information about the 3D printing process, equipment available, STEM applications, and current

technical research. They collaborated after their talk by sharing the current MN State educational pathways available and finished with an open question and answer opportunity for the participants.

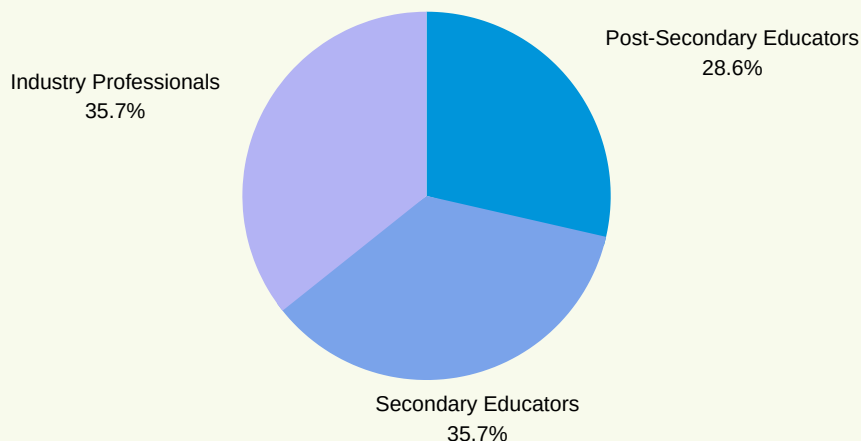
The Engineering Center has plans to continue this free professional development opportunity into fiscal year 22. Our Engineering Center finds great value in supporting engineering and engineering technology educators in various aspects of engineering pedagogy.

Testimonial

"This presentation provided "real world" applications of content that could foster meaningful relationships and interactions between K-16 institutions and external industry. Lots of great ideas were shared by panelists, participants, and hosts alike."

Participant (Anonymous)

Participants



96% Agreed this Program...

- Built awareness and/or connections between education and industry.
- Connected the dots and enhanced the quality of engineering and engineering technology education and real-world application.

92% of participants would recommend this program to others.



Supplemental Information

ENGINEERING & ENGINEERING TECHNOLOGY PROGRAM LOCATIONS

BIOMEDICAL EQUIPMENT TECHNOLOGY

Anoka Tech
Anoka, MN

Anoka-Ramsey
Cambridge, MN

Anoka-Ramsey
Coon Rapids, MN

DCTC
Rosemount, MN

HTC
Brooklyn Park, MN

HTC
Eden Prairie, MN

MSC Southeast
Winona, MN

SCTCC
St.Cloud, MN

COMMUNICATION SYSTEM INSTALLATION/ REPAIR

LSC
Duluth, MN

Mesabi Range
Eveleth, MN

DRAFTING - ELECTRICAL AND MECHANICAL

ATCC
Alexandria, MN

Anoka Tech
Anoka, MN

Century
White Bear Lake, MN

HTC
Brooklyn Park, MN

HTC
Eden Prairie, MN

LSC Duluth
Duluth, MN

MSC Southeast
Red wing, MN

MSC Southeast
Winona, MN

M State
Moorhead, MN

NCTC
East Grand Forks, MN

NCTC
Thief River Falls, MN

Ridgewater
Hutchinson, MN

Ridgewater
Willmar, MN

RCTC
Rochester, MN

SCTCC
St.Cloud, MN

MinnState.edu/online

ENGINEERING - CHEMICAL

NHCC
Brooklyn Park, MN

ENGINEERING - CIVIL AND SURVEYING

DCTC
Rosemount, MN

LSC Duluth
Duluth, MN

M State
Detroit Lakes, MN

SCTCC
St.Cloud, MN

SCC
North Mankato, MN

Vermilion
Ely, MN

ENGINEERING - GENERAL

Anoka-Ramsey
Cambridge, MN

Anoka-Ramsey
Coon Rapids, MN

CLC
Brainerd, MN

Century
White Bear Lake, MN

HCC
Hibbing, MN

ICC
Grand Rapids, MN

Inver Hills
Inver Grove Heights, MN

M State
Moorhead, MN

Normandale
Bloomington, MN

NHCC
Brooklyn Park, MN

RCTC
Rochester, MN

Saint Paul College
Saint Paul, MN

SCTCC
St.Cloud, MN

ENGINEERING MANAGEMENT

HTC
Eden Prairie, MN

ENGINEERING TECHNOLOGY - ELECTRONIC

Anoka Tech
Anoka, MN

HTC
Brooklyn Park, MN

HTC
Eden Prairie, MN

LSC
Duluth, MN

MSC Southeast
Winona, MN

ENGINEERING TECHNOLOGY - GENERAL

Century
White Bear Lake, MN

ICC
Grand Rapids, MN

Normandale
Bloomington, MN

ENG. TECH MANU. NONDESTRUCTIVE TESTING

CLC
Staples, MN

HTC
Brooklyn Park, MN

HTC
Eden Prairie, MN

ICC
Grand Rapids, MN

LSC
Duluth, MN

MSC Southeast
Winona, MN

Mesabi Range
Eveleth, MN

Mesabi Range
Virginia, MN

Normandale
Bloomington, MN

NCTC
East Grand Forks, MN

NCTC
Thief River Falls, MN

NTC
Bemiji, MN

PTCC
Pine City, MN

Ridgewater
Hutchinson, MN

Riverland
Albert Lea, MN

Riverland
Austin, MN

Riverland
Owatonna MN

SCTCC
St.Cloud, MN

SCC
Fairbault, MN

SCC
North Mankato, MN

MinnState.edu/online

ENGINEERING TECHNOLOGY - MECHANICAL

MSC Southeast
Red wing, MN

FLUID POWER (HYDRAULIC/ PNEUMATICS)

HTC
Brooklyn Park, MN

HTC
Eden Prairie, MN

Minnesota West
Granite Falls, MN

Minnesota West
Worthington, MN

GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

FDLTCC
Cloquet, MN

ICC
Grand Rapids, MN

Saint Paul College
Saint Paul, MN

SCC
North Mankato, MN

MinnState.edu/online

GEOSPATIAL INTELLIGENCE AND IMAGERY ANALYSIS

NCTC
East Grand Forks, MN

NCTC
Thief River Falls, MN

MinnState.edu/online

ROBOTICS/ INSTRUMENTATION TECHNOLOGY

ATCC
Alexandria, MN

Anoka Tech
Anoka, MN

CLC
Staples, MN

HTC
Brooklyn Park, MN

HTC
Eden Prairie, MN

LSC
Duluth, MN

MSC Southeast
Winona, MN

Minnesota West
Granite Falls, MN

Minnesota West
Worthington, MN

NCTC
Thief River Falls, MN

PTCC
Pine City, MN

SCTCC
St.Cloud, MN

SCC
Fairbault, MN

SCC
North Mankato, MN

MinnState.edu/online



Industry and Academic Advisory Council

INDUSTRY ADVISORY MEMBERS

Cathleen Krier, *President, Minnesota Federation of Engineering, Science and Technology Societies*

Dawn Lubahn, *Youth Program Manager, Minnesota Department of Employment and Economic Development (DEED) - CareerForce*

Fletcher McNair, *Productive Maintenance Coordinator, Coldspring USA*

John Froehlich, *Director of Process & Technology, El Microcircuits, Inc.*

Kurt Korkowski, *Senior Systems Engineering Manager, Seagate Technology*

Kwaku Ofei-Budu, Jr., *Senior Supervisor of Warehousing & Inventory, Abbott*

Les Engel, *President, Engel Metallurgical Ltd.*

Nathaniel Smith, *Process Control Engineer, Cambria*

Steve Kalina, *Executive Director, Minnesota Precision Manufacturing Association*

Tom Jamar, *Retired President, Jasper Engineering & Equipment*

ACADEMIC ADVISORY MEMBERS

Aaron Budge, *Acting Dean, College of Science, Engineering and Technology, Minnesota State University, Mankato*

Cary Komoto, *Dean, Science, Technology, Engineering, Math & Education Division, Normandale Community College*

Debbie Belfry, *Director of Career and Technical Education, Bloomington Public Schools*

Elaina Bleifield, *Vice President for Academic and Student Affairs, Anoka Technical College*

Joan Carter, *Department Chair of Physical Sciences, Engineering, and Technology, Inver Hills College*

Matthew Feuerborn, *Dean of Instruction (Technical Programs), Ridgewater College*

Molly Schaefer, *Director of Polytech Operations, Minnesota State University, Mankato*

Meet the Team



JASON BRUNS, BSME, MBA

Center Director



MELISSA HUPPERT, PH.D.

STEM Outreach Director



MOLLY ENGBRETSON

Administrative Assistant



MARY SIKULU

Undergraduate Office Assistant

Degree Program: B.S. in Science in Aviation, MSU - Mankato

Engagement Opportunities

TOP 10 REASONS TO ENGAGE

- 1 Invest into the Future Workforce.
- 2 Prepare Students for Careers in Industry.
- 3 Inspire Student Interest in Engineering-related Careers.
- 4 Increase Employability Skills in Students.
- 5 Increase Number of Underrepresented Students Interested in Engineering-related Careers.
- 6 Increase Exposure to Engineering Firm, Manufacturing Facility or Campus.
- 7 Support Educators Preparing the Future Workforce.
- 8 Cultivate Relationships and Opportunities for Collaboration.
- 9 Increase College Program Enrollment, Retention, and Student Success.
- 10 Equip Students with Innovative and Entrepreneurial Mindset.

WAYS TO ENGAGE!

	Advanced Career Curriculum	Engineering Machine Design Contest	Engineering and Engineering Technology Teacher Workshop	Engineering and Manufacturing Workforce Partnership Seminars	Explore Engineering Programming
Provide Sponsorship or In-kind Support	✓	✓	✓	✓	✓
Provide Expertise, Mentorship or Present to Secondary Students or Educators	✓	✓	✓	✓	✓
Host or Organize an Event	✓	✓	✓	✓	✓
Provide Facility, Lab or Campus Tours to Secondary Students, Educators, and Others	✓	✓	✓		✓
Promote Pathway and Recruitment into Careers or Post-secondary Programs	✓	✓			✓
Promote STEM Careers to Underserved and Underrepresented Populations		✓			✓
Volunteer as Judge, Coach, or in Other Capacities		✓			✓
Network with Industry Members and Educators			✓	✓	