



2017 - 2020 Innovation Grant Summaries

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2017 Open Textbook Grants			
Institution	Grant Type	Title	Grant Amount
Bemidji State University - summary	2017 Open Textbook	BSU Campus Open Textbook Project	\$22,768
Central Lake College - summary	2017 Open Textbook	Open Education Resource Accelerator	\$25,000
Minneapolis Community and Technical College - summary	2017 Open Textbook	MCTC Open Textbook Project 2016	\$25,000
Minnesota State Community and Technical College - summary	2017 Open Textbook	Open Source Book for Business	\$10,000
Riverland Community College - summary	2017 Open Textbook	Creating Customized Open Educational Resources for Astronomy	\$25,000
South Central College - summary	2017 Open Textbook	Open Textbook Institute	\$24,500
Southwest Minnesota State University - summary	2017 Open Textbook	Understanding Writing and Research in the Disciplines	\$24,868
Total			\$157,136

2017 Shark Tank Grants			
Institution	Grant Type	Title	Grant Amount
Winona State University - summary	2017 Shark Tank	Mobile Computing Laboratory	\$12,500
Winona State University - summary	2017 Shark Tank	Making the Case for OpenCase – An Open Role Play Management Tool	\$25,000
Minnesota State University, Mankato - summary	2017 Shark Tank	Apple of My Eye: Clinical Instruction with Enhanced "Bug-in-the-Eye" Technology	\$12,500
Minnesota State University, Mankato - summary	2017 Shark Tank	Online Lessons to Help Engineering Students Transition	\$25,000
Minneapolis Community and Technical College - summary	2017 Shark Tank	Welcome to the Agency, Again: Watering the Seed of Game-based Learning with Technological Know-How	\$25,000
Normandale Community College - summary	2017 Shark Tank	Learn to Dose™ (L2D) Medication Administration System	\$25,000
Vermillion Community College - summary	2017 Shark Tank	QR4U	\$24,880
Lake Superior College - summary	2017 Shark Tank	The Burn Box	\$25,000
St. Cloud State University - summary	2017 Shark Tank	Mobile Platform that Uses Analytics to Support Interventions	\$25,000
Anoka Ramsey Community College - summary	2017 Shark Tank	Developing a Model for Institutional Collaboration that Promotes High Impact Teaching and Learning Practices for Community College Students	\$24,960
Riverland Community College - summary	2017 Shark Tank	Competency-based Business Certificate Program	\$25,000
Total			\$249,840

2018 Open Textbook Grants			
Institution	Grant Type	Title	Grant Amount
Anoka Technical College / St. Paul College - summary	2018 Open Textbook	Implementation and Evaluation of Open Source Textbooks in General Biology courses	\$23,050
Northland Community and Technical College - summary	2018 Open Textbook	Building of the Base: OER Development at NCTC	\$23,748
Minnesota State University, Mankato - summary	2018 Open Textbook	Mankato OER Professional Development Certificate Program	\$25,000
Minneapolis Community and Technical College - summary	2018 Open Textbook	Out of the Shadows of Minneapolis: The Underrepresented at a Northern Community College	\$24,900
Winona State University - summary	2018 Open Textbook	Workshops to Increase Awareness and Deployment of Software Carpentry and Data Carpentry Open Educational Materials	\$25,000
Mesabi Range College - summary	2018 Open Textbook	Open Textbooks: A Path to Explore	\$25,000
Anoka Ramsey Community College - summary	2018 Open Textbook	Taking Open Educational Resources to Scale	\$23,725
Ridgewater College - summary	2018 Open Textbook	Open Textbook Project: An Online, Responsive, Multi-Media Textbook	\$20,480
Central Lakes College - summary	2018 Open Textbook	OER Accelerator 2017	\$25,000
Hibbing Community College - summary	2018 Open Textbook	Open History Textbook	\$25,000
Total			\$240,903

2018 Shark Tank Grants			
Institution	Grant Type	Title	Grant Amount
Rochester Community and Technical College - summary	2018 Shark Tank	Virtual Reality Laboratory	\$22,700
Riverland Community College - summary	2018 Shark Tank	Phase II: Toward a Mastery-based Business AS Degree	\$25,000
Minneapolis Community and Technical College - summary	2018 Shark Tank	A Mindful Path to Inclusion	\$24,900
St. Cloud Technical and Community College - summary	2018 Shark Tank	eOrientation for “Flipped Advising”	\$25,000
Winona State University - summary	2018 Shark Tank	The Mobile Computing Laboratory (McLAB)	\$15,530
South Central College - summary	2018 Shark Tank	The Project for Expanding & Expediting Credit for Prior Learning (CPL) at South Central College	\$25,000
Century College - summary	2018 Shark Tank	Welcome to the Conversational economy - Let’s Build a Chatbot for Minnesota State	\$25,000
Lake Superior College - summary	2018 Shark Tank	Airtame (http://www.airtame.com) “Wireless Classrooms and Beyond Made Easy”	\$25,000
Minnesota State Community and Technical College - summary	2018 Shark Tank	Keepin’ it Cool! Utilizing state-of-the-art technology in Commercial Refrigeration.	\$22,700
Total			\$210,830

2019 Innovation Grants			
Institution	Grant Type	Title	Grant Amount
Anoka-Ramsey Community College - summary	Track 1 Innovation	Minnesota State REFLECT: Research Experiences For Learning, Engaging, Connecting, and Teaching	\$24,952
Bemidji State University - summary	Track 2 Innovation	Performance-Enhanced Biology	\$9,966
Century College - summary	Track 1 Innovation	Developing 2D and 3D Virtual Activity Based Learning Approaches Using OER Integration with an Online Adaptive Learning Pedagogy-Based Platform	\$25,000
Century College - summary	Track 1 Innovation	Experiential and Cross-Cultural Learning through a Simulated Columbian Coffee Exchange	\$22,200
Central Lakes College - summary	Track 2 Innovation	OER Accelerator: Z Degree	\$10,000
Inver Hills Community College - summary	Track 1 Innovation	An Open Invitation to Biological Anthropology	\$24,900
Lake Superior College - summary	Track 2 Innovation	Professional Fluency in Online Courses	\$7,600
Lake Superior College - summary	Track 2 Innovation	Burn Box 2.0, Making the Metropolis	\$10,000
Mesabi Range College - summary	Track 2 Innovation	Expanding the Impact: Moving Toward a Complete OER AA Degree	\$10,000
Metropolitan State University - summary	Track 1 Innovation	Building Entrepreneurial Mindset Competency: An Innovative and Inclusive Strategy for Diverse Student Success, Well-Being, and Career Readiness	\$25,000
Minneapolis Community and Technical College - summary	Track 2 Innovation	Value of Using Multiple Assessments to Effectively Help Urban Community College Students Explore their Interests, Talents,	\$10,000

		and Values to Declare an Accurate Major/Career	
Minnesota State College Southeast - summary	Track 2 Innovation	Novel Application Based Program for Traditional Manufacturing Competencies	\$10,000
Minnesota State College Southeast - summary	Track 1 Innovation	Student Learner Hub	\$25,000
Minnesota State Community and Technical College - summary	Pay it Forward	M State's FlexPace	\$10,000
Minnesota State University, Mankato - summary	Track 1 Innovation	Dreaming by Degrees - An Open Source Podcast for First-Year Students	\$22,220
Minnesota State University, Mankato - summary	Track 2 Innovation	Flourish: Addressing Mental Health Needs in the Classroom	\$9,546
Minnesota State University, Moorhead - summary	Track 2 Innovation	New Rivers PodLab	\$865
Northland Community and Technical College - summary	Track 2 Innovation	Expanding the Base: OER Growth at Northland	\$10,000
Ridgewater College - summary	Track 2 Innovation	Cross-Curricular Online Graphic Organizers	\$7,410
Rochester Community and Technical College - summary	Pay it Forward	Creating a Compassionate Campus: A Mindful Path to Equity at RCTC	\$10,000
St. Cloud State University - summary	Pay it Forward	Unleashing Credit for Prior Learning at St. Cloud State University	\$10,000
St. Cloud Technical and Community College - summary	Track 2 Innovation	Orientacion, Janeera, or Orientation	\$10,000
St. Paul College - summary	Track 2 Innovation	Removing Hurdles for OER: Creation, Dissemination and Evaluation of Open Source Online Assessments in Biology Courses	\$10,000
Total			\$314,659

2020 Innovation Grants			
Institution	Grant Type	Title	Grant Amount
Anoka-Ramsey Community College - summary	Small Seed	Learning Calculus Concepts via a Video Game	\$3,593
Century College - summary	Small Seed	Preparing Tomorrow's Professionals to Work with Culturally and Linguistically Diverse Populations	\$9,929
Dakota County Technical College - summary	Pay It Forward	FlexTrack for Working Adults	\$9,996
Hennepin Technical College - summary	Small Seed	Interactive Design Technology Curriculum Development	\$10,000
Hibbing Community College - summary	Large Seed	OER Learning Circles in Northeast MN	\$24,970
Lake Superior College - summary	Pay If Forward	A Mindful Path Towards Becoming 'Our Community's College'	\$10,000
Lake Superior College - summary	Large Seed	"SMILE" your Health Depends on It	\$25,000
Minnesota State University – Mankato - summary	Small Seed	I'm First: A Campaign to Build a Community of First-Generation Students and Scholars at Minnesota State University, Mankato	\$10,000
Metropolitan State University - summary	Sustaining	Entrepreneurial Mindset and Competitive Professional Readiness: Preparing Students for the Workforce of the Future	\$10,000
Minneapolis College - summary	Large Seed	Culturally Responsive Pedagogy at Minneapolis College: An Intensive, Cohort Training	\$25,000
Minneapolis College - summary	Sustaining	A Mindful Path Toward Equity: Continuing the Journey, Widening the Reach	\$10,000

2020 Innovation Grants			
Institution	Grant Type	Title	Grant Amount
Minneapolis College - summary	Sustaining	Out from the Shadows of Minneapolis: Power, Pride, and Perseverance at a Northern Community College	\$10,000
Northwest Technical College - summary	Pay It Forward	Engaging Trades Faculty in Classroom-Based Research to Improve Student Success	\$10,000
Ridgewater College - summary	Sustaining	Cross-curricular Online Graphic Organizers	\$10,000
South Central College - summary	Sustaining	Expanding and Expediting Credit for Prior Learning	\$10,000
St. Cloud State University - summary	Large Seed	MN NICE - The Minnesota (State) Networked Immersive Collaborative Experience	\$24,886
St. Cloud State University - summary	Small Seed	Making the Digital Physical	\$6,554
St. Cloud State University - summary	Small Seed	SCSU Assistive Technology Lab	\$10,000
St. Cloud State University - summary	Small Seed	Development of competency-based digital badges/micro credentials system: A pilot project	\$10,000
Southwest Minnesota State University - summary	Sustaining	Understanding Writing and Research in the Disciplines: Phase 2	\$10,000
Southwest Minnesota State University - summary	Large Seed	Bringing the Farm to the Classroom with Virtual Reality	\$25,000
Southwest Minnesota State University - summary	Pay It Forward	Graphic Organizers for Reading and Writing in the Disciplines	\$6,395

2020 Innovation Grants			
Institution	Grant Type	Title	Grant Amount
Southwest Minnesota State University - summary	Pay It Forward	Rural Excellence in Education Droid (REED): Using Telepresence for Modeling Student Centered Best Practice In Education	\$10,000
Saint Paul College - summary	Large Seed	Co-Curricular Assessment – Partnerships Centered on Student Learning	\$10,000
Saint Paul College - summary	Small Seed	Expanding Opendora Awareness and Adoption on Minnesota State Campuses	\$9,379
Saint Paul College - summary	Small Seed	Gamification of Fundamentals of Writing I	\$9,541
Winona State University - summary	Small Seed	Real Learning through Virtual Reality	\$6,921
Winona State University - summary	Large Seed	Networked Education: Bringing education to you through robotics	\$14,800
Total			\$341,964

Project Summaries

Anoka-Ramsey Community College

Integrating Undergraduate Research Experiences for Nurses: an Expansion of the Wolf Project

Biology faculty at Anoka-Ramsey Community College noted that many students studying for the health professions were not receiving adequate training in laboratory techniques and research, a critical component of modern healthcare practice and immunology. To address this need, external partnerships were created to bake a full-fledged research program into the Anatomy & Physiology II courses focused on wolf blood sampling and analysis. Students studying for the healthcare professions now gain professional research experience, providing them a broader understanding of how laboratories work and the important role they play in healthcare. [\[return to table\]](#)

Anoka-Ramsey Community College

Taking Open Educational Resources to Scale

Anoka Ramsey is implementing a four phase approach to encouraging faculty adoption of open textbooks in their courses. In the first phase the college is launching a promotional campaign to raise awareness of open textbooks among faculty and staff. In the second phase, participating faculty will attend workshops that prepare them to undertake their own open textbook project. In phase three participating faculty will receive seed grants to support the creation of open textbooks. Finally, in phase four faculty will showcase their open textbook project before the college community. [\[return to table\]](#)

Anoka-Ramsey Community College

Minnesota State REFLECT: Research Experiences For Learning, Engaging, Connecting, and Teaching

Starting in the 2016-2017 school year, Anoka-Ramsey Community College launched a Scholarship of Teaching and Learning initiative to encourage and support community college faculty in conducting research on effective teaching strategies in the community college classroom. With newly acquired innovation funding, Anoka-Ramsey will now welcome faculty from other institutions to join the program, broadening the impact of the program throughout Minnesota State. [\[return to table\]](#)

Anoka-Ramsey Community College

Learning Calculus Concepts via a Video Game

Calculus is challenging for many students, but what if there was a way to make Calculus less intimidating and more fun, while also improving overall achievement? Faculty at Anoka-Ramsey are testing the use of game-based learning (GBL) to do just this by focusing on the calculus concept of *limits*. In this GBL experience, students play the Variant: Limits game to attain mastery, while faculty analyze the results. Let the adventures begin! [\[return to table\]](#)

Bemidji State University

BSU Campus Open Textbook Project

Bemidji State University embarked upon a three phase program to increase faculty awareness and adoption of open textbooks on their campus. In phase one administrative staff explored open textbook repositories and options for faculty adoption. In phase two, information gathered in phase one was shared with faculty across the Bemidji campus, and exploration was further encouraged. In phase three faculty interested in adopting an open textbook were provided staff support and resources to make implementation possible. [\[return to table\]](#)

Bemidji State University

Performance-Enhanced Biology

This interdisciplinary collaboration between Bemidji State University and North Hennepin Community College will use the power of performance to enhance the teaching and learning of genetics. In addition to bringing science and theater students together for an interdisciplinary learning experience, this project will also feature participation from members of The Expression Lab, a team of professional actors and educators who coach scientists of all levels in communication skills. [\[return to table\]](#)

Central Lakes College

Open Education Resource Accelerator

Central Lakes College (CLC) developed a unique program known as the OER Accelerator. Within this program faculty were offered three different on ramps for engaging open educational resources based on their past experience. Beginning faculty could choose an OER review program focused on exploration. More experienced faculty had the option to either engage support staff in course redesign using OERs, or if so inclined, embark upon a project authoring their own OERs for use and sharing. [\[return to table\]](#)

Century College

Welcome to the Conversational economy - Let's Build a Chatbot for Minnesota State

Century's ambitious chatbot project intends to bring the power of algorithmic learning to online student services across the system. The project is coupled with the information technology program at Century College, where students gain real-life experience programming the chatbot in preparation for entry into the job market. [\[return to table\]](#)

Century College

Developing 2D and 3D Virtual Activity Based Learning Approaches Using OER Integration with an Online Adaptive Learning Pedagogy-Based Platform

Through a collaborative partnership with a company called LRNR, Century faculty will create one of the most interactive and fully online laboratory-based courses in Anatomy and Physiology. As an added value, the course will be created using open educational resources. [\[return to table\]](#)

Century College

Experiential and Cross-Cultural Learning through a Simulated Colombian Coffee Exchange

Through a partnership with faculty members at the Universidad de Mendellin in Colombia, Century College faculty are setting out to build a culturally immersive business experience for business students in both countries. Leveraging web technology and their own ingenuity, students at both institutions will perform business functions in the sale and purchase of coffee. This pilot will provide insights for future learning collaborations that can cross virtual borders. [\[return to table\]](#)

Century College

Preparing Tomorrow's Professionals to Work with Culturally and Linguistically Diverse Populations

Minnesota has a proud tradition of welcoming immigrants and refugees, many of whom do not speak English fluently. At Century College the translating and interpreting (TRIN) faculty are helping prepare their colleagues to provide better guidance to students who will provide services in the future to culturally and linguistically diverse populations. The TRIN program is collaborating with faculty from programs such as Dental Assisting, Dental Hygiene, Emergency Medical Services, Law Enforcement, Nursing, and more. [\[return to table\]](#)

Dakota County Technical College / Inver Hills Community College

FlexPace is a mastery-based online learning program founded at Riverland Community College in 2016. Dakota County Technical College is adapting its own FlexPace program to help support underserved working adults, helping them achieve a credential that for the benefit of both

their careers and the businesses they work for. Areas of focus include English, Business, Business Management, and Administrative Assisting. [\[return to table\]](#)

Hennepin Technical College

Interactive Design Technology Curriculum Development

The Interactive Design and Video Production (IDVP) program at Hennepin Technical College is forming partnerships with local high schools, businesses, and history non-profits to create community programming focused on storytelling through the use of multi-touch tables and interactive content. Students from HTCs IDVP program are teaming up with students from Wayzata High School, and through consultation with an area business and a local historical society, they are creating interactive content and games for delivery through multi-touch tables positioned out in the community. This content communicates cultural and historical information meaningful to the local population. [\[return to table\]](#)

Hibbing Community College

Open History Textbook

Hibbing Community College is creating an open textbook to complement their American History survey courses. The college hopes to inspire faculty to emulate the successes of the project, while also making the course more accessible to students by lowering textbook costs. [\[return to table\]](#)

Hibbing Community College

OER Learning Circles in Northeast MN

Open Educational Resources (OER) are both helping to lower the cost of a college education and inspire faculty to think differently about curriculum design and creation. At Hibbing Community College faculty are moving full steam ahead, and they want to share their excitement and momentum with colleagues across the Iron Range. Through the development of system inspired OER learning circles, Hibbing Community College is helping foster a culture of OER use across the Northeast Higher Education District (NHED). [\[return to table\]](#)

Inver Hills Community College

An Open Invitation to Biological Anthropology

Inver Hills Community College faculty, in partnership with faculty from California State University, the University of Hawaii, and Grossmont College, are collaboratively authoring an open textbook to support student learning in the field of biological anthropology. This textbook will be a first-of-its-kind creation for the discipline. [\[return to table\]](#)

Lake Superior College

The Burn Box

Locating appropriate burn structures and attending to the costs associated with them were ongoing challenges for the faculty of the firefighting program at Lake Superior College (LSC). In an effort to provide students a more consistent and affordable fire training experience, LSC created multiple burn boxes from large steel containers using innovation funding. Now firefighting students at Lake Superior College are able to go directly from the classroom to the field, providing a more seamless and applied learning experience. [\[return to table\]](#)

- [Watch the Video](#)

Lake Superior College

Airtame (<http://www.airtame.com>) “Wireless Classrooms and Beyond Made Easy”

Cutting the cord to make collaboration easy! Airtame is a wireless device that plugs into the HDMI port of any screen or projector and streams your content to the screen from a computer or mobile device. This solution provides a secure and collaborative learning experience for students at an affordable and sustainable cost. [\[return to table\]](#)

Lake Superior College

Professional Fluency in Online Courses

Lake Superior College has developed a system focused on “professional fluency” that helps students learn professional skills within their academic programs. However, currently the system is only adapted for a face-to-face setting. Innovation Funding will help LSC create an online version of the system so students can learn professional fluency in online courses AND face-to-face courses. [\[return to table\]](#)

Lake Superior College

A Mindful Path Towards Becoming ‘Our Community’s College’

Lakes Superior College is pursuing a program focused on improving *Real Happiness at Work*. Through a campus wide effort, employees will engage in coordinated book groups, personal projects, and community podcasting all dedicated to improving the climate in the workplace and creating a culture of mindfulness. [\[return to table\]](#)

Lake Superior College

"SMILE" your Health Depends on It

Lake Superior College is purchasing two Bionic Hybrid Simulator Suits to help power simulation training across the allied health disciplines. Using this new technology, students can now experience the highest levels of fidelity and realism not currently achievable through any other simulation technology. [\[return to table\]](#)

Mesabi Range College

Open Textbooks: A Path to Explore

Mesabi Range College wants to expand their D2L/Brightspace-based Faculty Resource Room by creating a training module to assist faculty adoption of open textbooks. Ten faculty will participate in summer workshops that help them better understand how to leverage the Resource Room to identify and review open textbook alternatives for their courses. [\[return to table\]](#)

Metropolitan State University

Building Entrepreneurial Mindset Competency: An Innovative and Inclusive Strategy for Diverse Student Success, Well-Being, and Career Readiness

Encouraging employees to “think like entrepreneurs” with the capacity to embrace change, display resilience, think creatively, and self-motivate are critical to inspiring performance and future success in this competitive marketplace. Faculty at Metropolitan State University are setting out to encourage all students to “think like entrepreneurs” in an effort to make everyone more competitive in their careers paths. [\[return to table\]](#)

Minneapolis College

MCTC Open Textbook Project 2016

At Minneapolis Community and Technical College (MCTC) 55% of students meet a designation of low-income. This adds urgency to efforts at lowering the cost of a higher education. MCTC created a website to help educate faculty on open textbooks and open educational resources.

They then followed this up with a call out to faculty, inviting them to join a grant supported program focused on implementing open textbooks in existing courses. Faculty were asked to make a “\$0 course materials pledge.” [\[return to table\]](#)

Minneapolis College

Welcome to the Agency, Again: Watering the Seed of Game-based Learning w/Technological Know-How

Composition faculty at Minneapolis Technical and Community College were concerned about the low course completion rates they were seeing in online courses. To confront this problem, they envisioned a gamified online learning course based on role-playing dynamics. Employing the services of a programmer and graphic designer, they set out to create a more immersive and enticing online learning environment. [\[return to table\]](#)

Minneapolis College

Out of the Shadows of Minneapolis: The Underrepresented at a Northern Community College

Minneapolis Community and Technical College is authoring an anthology named Out of the Shadows of Minneapolis: the Underrepresented at a Northern Community College. This open text features the stories of students from diverse backgrounds, and the anthology will help faculty throughout Minnesota State teach cultural literacy in the classroom. [\[return to table\]](#)

[Watch the Video](#)

Minneapolis College

A Mindful Path to Inclusion

MCTC’s Mindful Path to Inclusion is innovative in that it combines established mindfulness practices with the cultural awareness piece of equity work. This is accomplished through training those who do the work, promoting self-awareness (a key component of awareness), and offering it as a resource in equity support groups. [\[return to table\]](#)

Minneapolis College

Value of Using Multiple Assessments to Effectively Help Urban Community College Students Explore their Interests, Talents, and Values to Declare an Accurate Major/Career

Minneapolis Community and Technical College (MCTC) observed an increase in the number of student who were entering college undecided. This was accompanied by an uptick in the number of students changing majors multiple times. In an effort to better assist students in identifying a right-fit career path, a new innovative program at MCTC will combine a multi-assessment approach to career advising. [\[return to table\]](#)

Minneapolis College

Culturally Responsive Pedagogy at Minneapolis College: An Intensive, Cohort Training

Minneapolis College is embedding equity and inclusion throughout its institutional policies, practices, and procedures. A key component to this broad approach is ensuring faculty can access opportunities to weave inclusion and mindfulness into their teaching and learning practices. The Culturally Responsive Pedagogy (CRP) Training Program will provide faculty the foundation to implement CRP practices in their classrooms and help every student succeed. [\[return to table\]](#)

Minnesota State College Southeast

Novel Application Based Program for Traditional Manufacturing Competencies

Enrollments in traditional manufacturing programs are in decline, but in southeastern Minnesota, the need for skilled workers in manufacturing remains. Through the use of innovation funding, Minnesota State College Southeast is building a collaborative bicycle project that brings together students from computer aided design (CAD), computer numerical control (CNC) machining, welding, and fabrication. [\[return to table\]](#)

Minnesota State College Southeast

Student Learner Hub

Under current Minnesota regulations, 16 and 17 year old students are prohibited from working in many areas of advanced manufacturing. Through the creation of a Student Learner Hub, Minnesota State College Southeast will act as *the* hub, allowing students to enter into a bona fide written school-work training program and eventually get paired with employers around the region. [\[return to table\]](#)

Minnesota State Community and Technical College

Open Source Book for Business

Minnesota State Community and Technical College (MSCTC) had already been exploring the implementation of open educational resources into their business program, but they wanted to take their work to a new level for faculty and students. By leveraging affordable tablet technology for their students, MSCTC was able to expand the use of open educational resources in their business courses. [\[return to table\]](#)

Minnesota State Community and Technical College

Keepin' it Cool! Utilizing state-of-the-art technology in Commercial Refrigeration.

Keepin' It Cool! supplied state-of-the-art equipment and advanced refrigeration training in a program that prepare students for the world of enterprise level heating and refrigeration. [[return to table](#)]

- [Watch the Video](#)

Minnesota State Community and Technical College

M State's FlexPace

Minnesota State Community and Technical College (M State) is a distant **admirer** of Riverland's FlexPace program. Using innovation funding, M State will now launch their own FlexPace pilot with the helpful guidance of experts from Riverland. Through this collaborative effort, M State will build a vibrant mastery-based learning program in the northern part of the state to match Riverland's in the south. Once complete, working adults in northwest Minnesota will have a new flexible path to achieving a technical degree or certificate. [[return to table](#)]

Minnesota State University, Mankato

Online Lessons to Help Engineering Students Transition

Engineering faculty at Minnesota State University, Mankato set out to create a series of online learning modules to help at-risk students transition successfully into upper division courses. These modules focus on integral calculus, differential equations, statics, dynamics, and computer programming. [[return to table](#)]

Minnesota State University, Mankato

Apple of My Eye - Clinical Instruction w/enhanced "Bug-in-the-Eye" Technology

Counseling faculty at Minnesota State University, Mankato needed a less obtrusive means of providing feedback to counseling students during clinical exercises. The counseling program had been using "bug in the ear" audio technology to enable faculty feedback during simulations and live counseling sessions, but students indicated that the audio was too distracting both for their learning and for their patients. Through the use of Apple watches (aka "bug in the eye" technology), faculty discovered a way to provide students immediate feedback on their counseling performance while also remaining unobtrusive. [[return to table](#)]

- [Watch the Video](#)

Minnesota State University, Mankato

Mankato OER Professional Development Certificate Program

Mankato State University is creating an internal certificate program for faculty that will equip them the skills needed to implement open source materials into their courses. This cohort-based program features both information and hands-on learning sessions for participating faculty. A dedicated graduate assistant mentor is provided to both manage the program and provide one-on-one assistance. [\[return to table\]](#)

Minnesota State University, Mankato

Dreaming by Degrees - An Open Source Podcast for First-Year Students

In an effort to improve the retention and success of first-year college students, a team of diverse college students will be trained in the art of audio storytelling and will co-produce podcast episodes designed to make visible the hidden dimensions and potential barriers of college. Episodes will be designed to connect directly to the experiences of students who may initially feel disoriented or out-of-place: first-generation students, working-class students, students of color, LGBTQ students, and non-traditional students. [\[return to table\]](#)

Minnesota State University, Mankato

Flourish: Addressing Mental Health Needs in the Classroom

Taking inspiration from Boston University's Niteo program, Minnesota State University, Mankato will launch a pilot program dedicated to assisting students grappling with significant mental health challenges. Through a combination of instructional techniques and support, this new course at Minnesota State University, Mankato will be a significant step toward better serving an underserved sector of the student population. [\[return to table\]](#)

Minnesota State University, Mankato

I'm First: A Campaign to Build a Community of First-Generation Students and Scholars at Minnesota State University, Mankato

The *I'm First* project is the first program of its kind at MSU Mankato that means to engage the 43% of students who are first generation college students. An interdisciplinary team of faculty and staff are organized around the effort, delivering a series of events, communications, and engagement opportunities to first-generation students across campus. Through these efforts first generation students are building relationships, connection, and persisting. [\[return to table\]](#)

Minnesota State University - Moorhead

New Rivers PodLab

New Rivers Press (NRP) is unique. NRP integrates the work of undergraduate students into the process of publishing quality books of poetry, creative nonfiction, and literary fiction. With newly acquired innovation funding, students who work with NRP will create literature and book-themed podcasts to connect with readers and market books that they, the students, have worked to edit, market, and design. [\[return to table\]](#)

Normandale Community College

Learn to Dose (L2D) Medication Administration System

The Learn2Dose (L2D) program at Normandale Community College teaches nursing students how to accurately administer medication in a simulated environment. Each year 160 nursing students are training using L2D. After three years of use, critical updates and improvements to the system were needed, and through an innovation funding grant, L2D became an even more effective training tool. [\[return to table\]](#)

Northland College

Building of the Base: OER Development at NCTC

Northland College is pursuing open textbook implementation across the college. In addition to researching use of and barriers to open textbooks at the college, Northland is also training two faculty members to be OER leaders on campus. These leaders will provide in depth training to 20 faculty members and assist them with implementing open textbooks in their courses. [\[return to table\]](#)

Northwest Technical College

Engaging Trades Faculty in Classroom-Based Research to Improve Student Success

The MN REFLECT Program at Anoka-Ramsey Community College has gained momentum, inspiring faculty research in teaching & learning across colleges in Minnesota State. Although the program has successfully drawn faculty from many disciplines, incorporating trades faculty into the research work has remained aspirational. Faculty from Northwest Technical College will be the first cohort of technical faculty to participate in the MN REFLECT program, lending additional focus and perspective. [\[return to table\]](#)

Ridgewater College

Open Textbook Project: An Online, Responsive, Multi-Media Textbook

Four Ridgewater Communications faculty are creating an open textbook for Ridgewater’s introductory CMST course. The open textbook will be supplemented online material, teaching aids, and a test bank. Out of the gate this open textbook will create savings for approximately 437 students enrolled in introductory communications courses at Ridgewater College. [\[return to table\]](#)

Ridgewater College

Cross-Curricular Online Graphic Organizers

In an effort to tackle the reading challenges faculty witness in the classroom, Ridgewater College proposes to design and share both content-area and discipline-specific graphic organizers that faculty can alter to suit their needs. These graphic organizers help faculty teach all students to be better readers. [\[return to table\]](#)

Riverland Community College

Creating Customized Open Educational Resources for Astronomy

Riverland Community College created a collection of astronomy materials to act as a full replacement for a traditional astronomy textbook. This collection of documents, modules, and interactive web tools was built within Riverland’s learning management system Brightspace. This design provides easy portability and flexibility, allowing the curriculum to be easily modified, remixed, and copied forward each semester. [\[return to table\]](#)

Riverland Community College

Competency-based Business Certificate Program

Mastery-based education is tailored to the needs of the underemployed adult workforce. Riverland Community College identified a need in their surrounding communities for a business certificate program that was online, flexible, and did not carry the restrictions of the traditional seat-time model. Enter FlexPace – a mastery-based program that allows learners to learn at their own pace. In FlexPace, learners who master concepts on the first attempt continue on. Those who don’t receive supplemental help to achieve mastery, and then they, too, move to the next concept. [\[return to table\]](#)

Rochester Community and Technical College

Virtual Reality Laboratory

The Virtual Reality Laboratory takes the latest in hardware and software innovations and immerses the learner in an engaging learning experience that cannot otherwise be obtained in the classroom. Faculty and students are exploring VR learning and subject matter in biology, art, earth science, and more! [\[return to table\]](#)

- [Watch the Video](#)

Rochester Community and Technical College

Creating a Compassionate Campus: A Mindful Path to Equity at RCTC

Rochester Community and Technical College (RCTC) intends to become a full member of the Charter for Compassion, an organization that works with cities to identify issues of concern that make their communities uncomfortable places in which to live. To support this work, RCTC will undertake mindfulness in equity work pioneered by Minneapolis Community and Technical College. Through the course of academic year 2019, students and employees on the RCTC campus will be offered trainings and events around mindfulness practices. These trainings and events will help them learn how to apply mindfulness practices within an equity and compassion framework. [\[return to table\]](#)

St. Cloud State University

Mobile platform that uses analytics to support intervention

St. Cloud State University were troubled by a noticeable decline in third semester retention and were determined to address it. Using innovation funding, the university endeavored to build mobile platform software to provide support and remediation to at-risk students early and often. This software would be combined with intrusive advising approaches to increase student resilience and preparedness. [\[return to table\]](#)

St. Cloud State University

Unleashing Credit for Prior Learning at St. Cloud State University

Students at St. Cloud State University need more credit for prior learning (CPL) opportunities, and through South Central College's groundbreaking work, faculty and administrators see a path to expansion of CPL. Using innovation funding, St. Cloud State will provide comprehensive training to several "CPL champions" who will help lead the college to a more comprehensive use of CPL. Best practices from South Central College and other national leaders will be included. [\[return to table\]](#)

St. Cloud State University

MN NICE - The Minnesota (State) Networked Immersive Collaborative Experience

Virtual Reality technology present challenges for classroom based learning since most experiences are designed for the individual and not groups of students. The MN NICE project can accommodate many collaborative use cases, supporting multiple disciplines and subject matters. For the first time, entire classrooms of students are now collectively experiencing virtual reality in an educational setting. [\[return to table\]](#)

St. Cloud State University

Making the Digital Physical

Faculty at St. Cloud State University are merging modern engineering with art through the use of 3D printing. Through the use of specialized software and 3D printers, graphic design students are learning to rapid prototype package designs and custom graphics in 3D, preparing them for opportunities in a wide variety of more advanced interdisciplinary projects both on and off campus. [\[return to table\]](#)

St. Cloud State University

SCSU Assistive Technology Lab

St. Cloud State University's Assistive Technology Lab educates students, staff, faculty, members of the community, and international visitors about the resources available to help remove barriers people with disabilities face in education, employment and daily life. As a center for disability education, the Lab is helping people better understand how they can create more inclusive environments. [\[return to table\]](#)

St. Cloud State University

Development of competency-based digital badges/micro credentials system: A pilot project

Digital badges can be helpful for communicating skills and competencies that a person successfully acquires or demonstrates. St. Cloud State University is exploring ways that digital badges can complement existing credentials, and help bridge the communication gap between the skills students have and the skills employers are looking for. [\[return to table\]](#)

St. Cloud Technical and Community College

eOrientation for "Flipped Advising"

eOrientation leverages technology for increased interpersonal connectedness in the advising and orientation process with new students. Students now access preparatory worksheets and learning modules online prior to scheduling advising sessions, allowing advisors to spend more time working on the most important aspects of academic planning. [\[return to table\]](#)

St. Cloud Technical and Community College

Orientacion, Janeera, or Orientation

St. Cloud Technical and Community College created an eOrientation program to help better serve its diverse students. This program created greater orientation access for students on the whole, but also proved challenging for some English speakers of other languages. With sustainability funding from Educational Innovations, St. Cloud Technical intends to remedy this by translating its eOrientation program into both Spanish and Somali. [\[return to table\]](#)

St. Paul College / Anoka Technical College

Implementation and Evaluation of Open Source Textbooks in General Biology courses

Anoka Technical College is focusing on the use of open textbooks in Biology courses. Building on the successes that their own faculty have had implementing open texts in the biology classroom, they are now endeavoring to help other Minnesota State institutions achieve similar results. Working in partnership with other Minnesota State Biology departments, Anoka Technical will be assisting with the implementation of Biology open textbooks. [\[return to table\]](#)

St. Paul College

Removing Hurdles for OER: Creation, Dissemination and Evaluation of Open Source Online Assessments in Biology Courses

The lack of ancillary materials to accompany an open textbook is one of the greatest obstacles to faculty adoption of OER. To help assist health science faculty, St. Paul College aims to create and disseminate D2L-based open source assignments for use in general biology and anatomy and physiology courses. [\[return to table\]](#)

St. Paul College

Co-Curricular Assessment – Partnerships Centered on Student Learning

Co-Curricular assessment has become increasingly important as colleges evaluate how they provide a holistic educational experience to students. St. Paul College is establishing best practices to help better student affairs staff better examine how they teach students, what they are teaching, and assess the extent of what students are learning outside the classroom. [\[return to table\]](#)

St. Paul College

Expanding Opendora Awareness and Adoption on Minnesota State Campuses

Opendora is an open educational resource (OER) repository from Minnesota State. Using Opendora, faculty throughout the system can upload curricular materials to share with colleagues everywhere. A team from St. Paul College is creating a series of training materials and workshops to help faculty better understand how they can better leverage this new tool and spread their OERs across the system. [\[return to table\]](#)

St. Paul College

Gamification of Fundamentals of Writing I

Fundamentals of Writing I is a required course for many students at St. Paul College, including students entering the trades who take it as a sole writing course. For students who struggle with writing, the course can be a particularly challenging. To assist all students, Fundamentals of Writing I will be gamified as a means to channel extrinsic motivation and help more students succeed. [\[return to table\]](#)

South Central College

Open Textbook Institute

South Central College (SCC) started upon a two phase program to encourage faculty adoption of open textbooks. The first phase provided face to face and online overviews of OERs to groups of faculty members. The second phase consisted of two summer institutes: one for exploring open textbooks, and another for actually implementing them into the curriculum. In the latter, faculty were provided support from knowledgeable SCC staff who were dedicated to the project. [\[return to table\]](#)

South Central College

The Project for Expanding & Expediting Credit for Prior Learning (CPL) at South Central College

South Central College embarked upon a dedicated program to develop CPL assessment templates across academic programs on their campus. This campus-wide effort was combined with the creation and launch of a website that helps guide students and faculty through the ins-and-outs of CPL. [\[return to table\]](#)

Southwest Minnesota State University

Understanding Writing and Research in the Disciplines

The English faculty at Southwest Minnesota State University (SMSU) envisioned a website of free online resources that could replace the need for textbooks in their English 251: Writing in the Professions course. Through a collaborative effort between 18 faculty members, the group authored original materials that crosscut disciplines and programs across the campus. They then provided these materials to students via the web using a content management system. [\[return to table\]](#)

[Watch the Video](#)

Southwest Minnesota State University

Bringing the Farm to the Classroom with Virtual Reality

At Southwest Minnesota State University (SMSU), students must travel to farms many miles from the university to gain valuable farm experience. Unfortunately, sometimes weather hazards or other challenges make these visits impossible, leading to missed learning opportunities that cannot be rescheduled. Through the use of virtual reality technology, SMSU is bringing the farm to the classroom, offering an alternative way to engage the farm experience. These experiences either compliment or act as an incidental replacement for farm-based learning opportunities. [\[return to table\]](#)

Southwest Minnesota State University

Graphic Organizers for Reading and Writing in the Disciplines

The English faculty at Southwest Minnesota State University created an online open textbook for their Reading and Writing in the Disciplines course. Inspired by colleagues from Ridgewater College, they are creating reading graphic organizers as ancillary materials for the open textbook. [\[return to table\]](#)

Southwest Minnesota State University

Rural Excellence in Education Droid (REED): Using Telepresence for Modeling Student Centered Best Practice In Education

Many states are confronting K-12 teacher shortages, and Minnesota is no exception. Problems are especially acute in rural areas where populations are smaller and greater distances separate students and teachers. Leveraging an innovation pioneered at Winona State University,

telepresence robots will allow SMSU faculty to reach students at partnered schools and over great distances, overcoming one of the more troublesome challenges of this work. [\[return to table\]](#)

Vermillion Community College

QR4U

Vermillion Community College's QR4U project explored the potential of QR codes within active learning environments. The QR code activities were woven into three sections ENGL 1511 and students were then required to use a mobile device to engage the learning content. Tablets were provided for use. Through the use of active learning and mobile technology, student engagement and motivation was increased. [\[return to table\]](#)

Winona State University

Making the Case for OpenCase-An Open Role Play Management Tool

OpenCase is a free resource for building, sharing, and integrating complex role play simulations into your courses, reducing your workload and engaging your students in the active learning of valuable professional skills. [\[return to table\]](#)

Winona State University

Mobile Computing

At Winona State University every student has a tablet, but there was no created space where faculty could explore new mobile-computing ideas before taking them into the classroom. With the support of innovation funding, the Mobile Computing Laboratory (McLab) was born. The McLab provides a place both virtual and physical where faculty and staff can experiment with technology on campus. Faculty at all Minnesota State institutions are able to check out the technology for testing on their campus. [\[return to table\]](#)

- [Watch the Video](#)

Winona State University

Workshops to Increase Awareness and Deployment of Software Carpentry and Data Carpentry Open Educational Materials

Winona State is leveraging open source materials from Software Carpentry to supplement lessons in their scientific and mathematic courses. Software-carpentry provides on-site workshops that help teachers better understand how to properly leverage open source materials from

Software Carpentry. In addition to providing these workshops on their own campus, Winona is facilitating the delivery of these workshops elsewhere in Minnesota so that faculty from multiple colleges and universities can learn to use Software Carpentry materials in their courses.

[\[return to table\]](#)

Winona State University

The Mobile Computing Laboratory (McLAB)

The Mobile Computing Laboratory transforms learning through innovative use of technology while minimizing the time and money invested in testing by any one school. Through this program, Minnesota State campuses can “check-out” technology for testing purposes, like robots and tablet computers. If the technology turns out to be a right-fit for the campus, they can then proceed with a full purchase from a vendor. [\[return to table\]](#)

Winona State University

Real Learning through Virtual Reality

Life happens, and sometimes that means missing important classes or events. In recent decades video has been used as a means to make-up these absences, but what if there is a better way? Winona State University is exploring the potential to use virtual reality and 360 degree photography to recreate learning experiences so every student can learn interactively, even if they miss the big event. [\[return to table\]](#)

Winona State University

Networked Education: Bringing education to you through robotics

It can be difficult for students to complete a four year degree when they do not live near a university. Through the use of telepresence robots, Winona State University is exploring the potential for delivering a more intimate learning experience from afar. In this modality, faculty teach students in a classroom hundreds of miles away, interacting with them through the use of a mobile robot in the classroom. [\[return to table\]](#)