CHARTING THE FUTURE
FOR A PROSPEROUS MINNESOTA

Implementation Team Report
Cover Sheet

Implementation Team: Education Technology
Which Charting the Future Report Recommendation(s) did your team address? Charting the Future Recommendation #4: Expand the innovative use of technology to deliver high quality online courses, strengthen classroom instruction and student services, and provide more individualized learning and advising.

Recommended Initiatives
1) Enhance professional development and support for students, faculty, and staff.
2) Develop a comprehensive strategy to increase awareness and development of e-textbooks and open educational resources (OERs).
3) Develop a strategy for quality online education that provides an array of options to serve more students.
4) Ensure all students have a computing device, either provided by the institution and owned by the student or owned by the student and supported by the institution.
5) Increase opportunities for exploration of emerging technologies and their uses for teaching, learning, and educational support.

Initiative #1: *Brief description*
Enhance professional development and support for students, faculty, and staff.

What is the Current State?
There is considerable disparity in the professional development opportunities and support resources available to campuses and users. The level of local expertise and available resources varies widely across campuses.

What is the Desired Future State?
Technology users share best practices more widely across the system. Faculty and staff have the necessary resources and professional development to extend their reach to students. Instructional design expertise is shared among campuses. Technology support is available 24/7.

Risk analysis
Change is a process, not an event.
Student Retention, Lack of enrollment – lack of funds, retrenchment
Strength and Longevity of MnSCU as an unified system weakened
Jeopardizing quality – consistency for students, especially for transfer students
Employee morale can be deeply affected, negatively or positively.
Funding: The threat towards the financial individual school sustainability. Providing access and affordability is a continuing challenging.

Type of Initiative and Suggested Timeframe(check all that apply):	Suggested Timeframe for Completion:	Ease of Implementation
X Institution - Start now. Early Window of less than 6 months. *Conversations should already be happening on campuses. There is an Early Window for dialogue of six months or less. Conversations need to be continued through the process and beyond. Change management and Change leadership options should be considered and discussed. Transparency is vital. Gather what professional development is presently happening on campuses, and how it aligns with the school's mission.* Deans/senior management will need to support their colleges, departments or area.	_ Early Win (< 6 months) _ Medium Term (6-18 months) _ Long Term (> 18 months)	_ Easy _ Moderate _ Difficult *Consider elements such as consultation, policy changes, resource commitment, and general feasibility.*
X Inter-institutional - Start now. Conversations may range from easy to difficult. *Conversations should already be happening on campuses. A venue to talk with other campuses is needed. There is an early window for dialogue of six months. Conversations need to be continued through the process, beyond 18 months.*		
X Systemwide - *Conversations will be long term, 6 months and ongoing, but should begin asap and finish before 6 months to implement Phase 1. Ease of*		

implementations will be moderate depending upon the culture at each school. This is an on-going and a constantly evolving process. Conversations with other institutions are needed. The atmosphere for employee-led Special interest groups should be encouraged and supported. On-going and ever evolving conversation. Cultural change to sharing. Cultural change: concerns need to be addressed.			

Action Steps:
See below for detailed action steps

Policy barriers, interdependencies, or other concerns: *Identify, as specifically as possible, the policies and practices that may pose a barrier to implementation and one possible means to deal with each issue; connection to other work.*	*1) Intellectual Property. Fearful, vulnerability. Identify and address concerns. Threatens jobs.* *New Republic: Politics, Culture, Magazine, June 9, 2015 by Nancy Kendall* *Scott Walker Is Underminding Academic Freedom at the University of Wisconsin,* http://www.newrepublic.com/article/121999/gov-scott-walker-weakens-tenure-university-wisconsin	*2) Need to establish pride in Community. Invite community stakeholders as well all others on campus to a kick-off event.*	*3) Too generic of environment and loosing autonomy. Ask, "What is best for each unique institution."*
Resources: *Identify, as specifically as possible, the top three resources required to move forward implementation and associated opportunities for reallocation. Examples include approximate budget, extra personnel, special technology, etc.*	1) Good Will, Trust, and Transparency among employees, administration, students and MnSCU along the process. Good change management needs to be a campus effort.	2) Additional resources to coordinate professional development, allocations for any additional personnel or re-assignment of personnel, like instructional designers. Additional resources for personnel for 24/7 services.	3) Funding: MnSCU, School Leadership providing Professional Development Funds, Donations, and Grants. Encouraging or incenting for participating is missing or not equivalent amongst the MnSCU schools.

Other Suggestions:
Please share any additional ideas from the team on initiative implementation.
Please note: Education Technology team information is mainly talking about in-house professional development.

Action Steps

Institutions - Phase 1: Research, document, and communicate information for professional development opportunities. System can provide one spot to access all trainings, along with target audience. The supporting documents listed in the second column are for your reading or consideration.

1) Research present situation of individual campus opportunities for Professional Development for Faculty/Instructors, Staff and Students. (Look to Human Resources, Centers for Teaching & Learning, Special Interests Groups, Student Associations, IT Departments, etc., as well as to individual academic departments.)	*Lion F. Gardiner, 2000, The National Academy for Academic Leadership Leading Today for Tomorrow. Faculty Development in Higher Education,* *http://www.thenationalacademy.org/readings/facdev.html* *Online training: http://starlinktraining.org* *Lynda.com, Microsoft IT Academy* *Other schools websites:* Educause http://www.educause.edu/ero/article/changing-landscape-higher-education The Changing Landscape of Higher Education, 2011, by David J. Staley and Dennis A. Trinkle *The ESProfessionals: An Action Guide to Help You in Your Professional Development, 2003, (The information is more towards K-12, but much may apply to Higher Ed.)* *http://www.nea.org/assets/img/content/espaction.pdf*
2) Best Practices: identify which best practices will achieve our campus goals. Determine needs: survey, assessment, trends. What	**2015 Horizon Report** Wednesday, February 11, 2015 Source(s) Horizon Report, EDUCAUSE Learning Initiative (ELI)

current practices are in place that support responding to these trends? *Do we have expertise on planning this training? Campus – level – are there current Journals, publications or research being done or recently done for your own campus' faculty? Consider looking at your campus' experts and research being done.*	Type [Articles, Briefs, Papers, and Reports](#) http://www.educause.edu/library/resources/2015-horizon-report **Book Resources** 21 Trends for the 21st Century: Out of the Trenches and into the Future, by Gary Marx, 2014 The Courage to Teach: Exploring the Inner Landscape of a Teacher's Life, by Parker J. Palmer, 2007 What the Best College Teachers Do, Ken Bain, 2004 As referred to by: Missouri State https://www.missouristate.edu/fctl/89072.htm Above website also talks about Designing Instruction, Enhancing Teaching, and Integrating Technology High-Impact Educational Practices **A Brief Overview** *Excerpt from [High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter](#), by George D. Kuh (AAC&U, 2008*) Association of American Colleges & Universities https://www.aacu.org/leap/hips Best Practices in Graduate Education Discusses Professional Development for Graduate Students https://www.higheredjobs.com/higheredcareers/interviews.cfm?ID=362

	Best and Innovative Practices in Higher Education Assessment, April 2013, Hanover Research

http://www.grip.umn.edu/assets/best-and-innovative-practices-in-higher-education-assessment-%284%29.pdf

Discusses: Trends and Future Directions, Best Practice Institutions

Best Practices for Teaching and Learning |
| 4) Form a professional development campus committee with agreed representation of Faculty, Staff and Students if it doesn't already exist. Do the current PD opportunities align with the institution/college/department PD priorities? PD Programs should provide equal opportunities for employees to gain and improve the knowledge and skills important to their position and job performance. Ie, Flipped Instruction for Faculty/Instructors, Culturally responsive education technology training for all. Talk to faculty/instructors, staff and students and ask them what training they want and what training they need in order to be successful. Talk to Union Leadership and Union Memberships. | The ESProfessionals: An Action Guide to Help You in Your Professional Development, 2003, (The information is more towards K-12, but much may apply to Higher Ed.)

http://www.nea.org/assets/img/content/espaction.pdf

Lion F. Gardiner, 2000, The National Academy for Academic Leadership Leading Today for Tomorrow. Faculty Development in Higher Education,

http://www.thenationalacademy.org/readings/facdev.html

Association of Governing Boards of Universities and Colleges (AGB), High-Performing Committees: What Makes Them Work?, 2012, by Stephen G. Pelletier, http://agb.org/trusteeship/2012/5/high-performing-committees-what-makes-them-work

Resource guide for Establishing & Maintaining Local Professional Development Committees (LPDCs), Ohio Department of Education, 2014

http://education.ohio.gov/getattachment/Topics/Teaching/Professional-Development/LPDC-s/Resource-Guide-for-Establishing-an-LPDC/Resource-Guide-for-Establishing-Maintaining-Local-Professional-Development-Committees_Updated-October-2014.pdf.aspx

Educause, Strategic Directions, 2015,

http://www.educause.edu/about/mission-and-organization/strategic-directions |
| 5) Consider sharing: Are there PD opportunities which could | National Association of Independent Colleges and Universities (NAICU), Higher Education Resources |

be shared within your own campus inter-departmentally? Are there PD opportunities which can be shared with other institutions, either on a regional level or strictly by need? In order to consider sharing training information, consider documenting: Training Title, Description, Recommended Meeting Schedule (like five consecutive weeks, every three weeks, or monthly etc.), Topic/Theme per Session along with the essential learner outcomes along with expertise and resources. Include contact information (name, email and telephone number) of person to contact if questions.	http://www.naicu.edu/about/page/higher-education-resources *University Business (UB), Implementing shared services in higher education. How universities can benefit from a concept frequently and successfully implemented in the corporate world, 2014, by Ricardo Azziz* http://www.universitybusiness.com/article/shared-services *Educause, Shared Services and Partnerships: The Keys to the Future of Higher Educaiton, 2011,by Luis M. Proenza and Roy A. Church,* http://www.educause.edu/ero/article/shared-services-and-partnerships-keys-future-higher-education *Open Source.com: Discover an Open Source World, The sharing ecoomy blooms on campus, saves Higher Ed? 2013 by Sonia Marcus* http://opensource.com/education/13/5/sharing-higher-ed *NBC Learn Higher Ed, Videos* http://www.nbclearn.com/portal/site/HigherEd *Features:* http://www.nbclearn.com/highered *Acrobatiq, powered by Carnegie Mellon, Costs in Online Higher Education: A Starter List of Resources* *Experts: Evolution of higher education inevitable, 2014, by Debra Erdley* http://triblive.com/mobile/6035965-96/online-governors-percent http://www.nbclearn.com/highered
6) Funding – secure funding by campus resource commitment, donations, system allocations, etc. Cost analysis associated with each of the trainings. Schools apply for grants or consider	*National Conference of State Legislatures, Performance-Based Funding for Higher Education, 2015* http://www.ncsl.org/research/education/performance-funding.aspx

potential business or industry partnerships.	American Council on Education (ACE) http://www.acenet.edu/Pages/default.aspx Inside Higher Ed, State Budgeters' View of Higher Ed, 2013, by Doug Lederman https://www.insidehighered.com/news/2013/03/27/state-state-funding-higher-education The ESProfessionals: An Action Guide to Help You in Your Professional Development, 2003, (The information is more towards K-12, but much may apply to Higher Ed.) http://www.nea.org/assets/img/content/espaction.pdf A Lack of Resources Equals a Lack of Opportunities. P. 11
8) Think about assessment of value/proof that Professional Development is meeting the needs – short-term and long-term.	Taylor Frances Group, Assessment & Evaluation in Higher Education, 2014 http://www.tandfonline.com/toc/caeh20/current The National Academy for Academic Leadership: Leading Today for Tomorrow, 1999, 2000 http://www.thenationalacademy.org/readings/assessandeval.html
9) Ongoing evolution of trainings and programs to meet the ever-changing needs as a result of short-term assessment.	Higher Learning Commission (HLC) https://www.ncahlc.org/ The HLC recognizes that change at institutions of higher learning is constant, and it supports change to improve educational quality. Evaluating Professional Development, by Thomas R. Guskey, University of Kentucky, Increasing the Effectiveness of Professional Development in Schools and Districts, http://education.vermont.gov/documents/EDU-Guide_for_Increasing_the_Effectiveness_of_Professional_Development.pdf
10) Self-evaluation done by individuals to seek what is needed in their teaching, with guidance from peer faculty	Setting the standard for faculty professional development in higher education, http://www.aabri.com/manuscripts/111041.pdf

review, a student consulting on teaching or other professional.	*The ESProfessionals: An Action Guide to Help You in Your Professional Development, 2003, (The information is more towards K-12, but much may apply to Higher Ed.)* *http://www.nea.org/assets/img/content/espaction.pdf* The National Academy for Academic Leadership – Leading Today for Tomorrow http://www.thenationalacademy.org/readings/facdev.html Faculty Development in Higher Education

MnSCU – Phase 1

Action Steps: *Identify the action steps that the team recommends for moving this initiative forward. Teams may specify action steps for institutions, inter-institutional, and/or system. Examples include communication, consultation, engagement, policy, training, and other issues that the team feels should be addressed in implementation.*

1) Create a robust website at the system level for Professional Development (PD) which will include Best Practices, Teaching Strategies, etc. and would include links to each of the MnSCU schools and institutions as well as sources that support excellence.	*Examples: Missouri State University, http://education.missouristate.edu/rpdc/*
2) MnSCU would showcase great PD at each of the schools, and celebrate and share the victories.	*Showcasing (possibly rotating schedule) notable trainings (MnSCU-endorsed) done at an individual campus. Identify and celebrate collaborations publicly on MnSCU website. Site opportunities for collaboration: needs and willing to share.*
3) System office would gather and provide a coordinated system for individuals at MnSCU	*Purpose is to provide access and be able to connect and contact others with similar interests, so Special Interest Groups will be coordinated to provide opportunities sharing ideas and best practices on a regular basis. Potentially, each individual school/institution could gather the information from their faculty and staff through Human Resources*

schools to be invited and directed to complete.	
4) System-led coordinated services for all MnSCU schools to submit all professional opportunities into one system/one portal. The opportunities should align with campus/department vision/mission. This could be the starting point for assessment. This information could be useful for faculty/staff/students looking for a particular training.	*Purpose is to provide an initial point of entry for all faculty, student and staff professional development questions and support.*
5) System office would provide potential Allocation Models, which schools could choose from when working with or collaborating with another MnSCU school or institution. Provide incentives to faculty/instructors to review and redesign curriculum.	*Look to other higher education systems for possible starting point.*
6) Provide incentives to individuals, and/or campus departments to compete to have the best trained faculty/instructors on campus.	*Look to other higher education systems for possible starting point.*
7) Create highly interactive online trainings commissioned/contracted and funded by MnSCU to be accessed by any MnSCU faculty/instructor, staff or student. Branded with a MnSCU look. Badging would be included after	Educause, The Changing Landscape of Higher Education, 2011, by David J. Staley and Dennis A. Trinkle http://www.educause.edu/ero/article/changing-landscape-higher-education

completion of program or training.	National Association of Independent Colleges and Universities (NAICU), Higher Education Resources http://www.naicu.edu/about/page/higher-education-resources
9) Contract with an IT Department to cover 24-7 service desk for students, faculty and staff.	Interdependency with Information Technology System Designs, System Incentives & Rewards and Student Success. Communication is key. Past History: What has MnSCU done in the past to share people resources or services? Document source of calls/emails. Additional cost to all students or other potential funding allocations need to be addressed. Consider bumping up part-time staffing hours to full time as necessary as a potential resources for 24/7 support. Inside Higher Ed, Locus of Authority by Colleen Flaherty, 2015 https://www.insidehighered.com/news/2015/01/05/new-book-argues-more-effective-collaborative-methods-shared-governance National Association of Independent Colleges and Universities (NAICU), Higher Education Resources http://www.naicu.edu/about/page/higher-education-resources

Important things to consider:

- Transparent communication is needed at all levels. Conversations on campuses: departments, organizations and administration. Consider Change Leadership to lead initiatives, and Shared Management. Recognize Deep or Cultural changes needed.
- More conversations. Share. **Respect and value others work.** Supplement what is needed. Talk about an Allocation Framework. Consider bartering of services, equitable funding solutions, sharing at no cost when there are no added expenses of sharing, etc.
- IT Shared Services: effective? Cost and Resource efficient? (Like Image Now). There is a cost to come together & do informally, as well as formally.

Phase 2:

How to incentive collaboration and assess professional development initiatives.

1) Measure knowledge, skills and attitude participant gained. This phase will need to give sufficient time as needed to allow participants to adapt the new ideas and practices to their own teaching.	*To be done at the institutional level. Look for previous assessment sources earlier in this document.*
2) Communication is key. Who on your campus has a success story?	*Consider showcasing these people. Create small videos to show at convocation to get the entire faculty and staff on board. Display on campus monitors either slides or videos.*

Interdependencies: *Interdependency with System Incentives & Rewards Committee, especially Initiatives 1, 3 and 4. Support is needed to allow faculty, staff and students time and/or funding for professional development.*

Interdependency with Student Success Committee as is this is all about excellence in teaching and learning.

Supporting Documentation

Research and References

Professional Development

As per Learning Forward: The Professional Learning Association

[Learning Forward's Definition of Professional Development: The Second Dimension (PDF)](), Remarks to Learning Forward Affiliate Leaders at their meeting in Orlando, Fla., July 2008.

http://edglossary.org/professional-development/

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http://www.ncrel.org/sdrs/areas/issues/educatrs/profdevl/pd2prof.htm

Best Practices

http://www.thenationalacademy.org/readings/facdev.html

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― Lion F. Gardiner, Rutgers University, gardiner@andromeda.rutgers.edu

Journal of Academic and Business Ethics

Setting the standard, Page 1

Setting the standard for faculty professional development in higher

http://www.aabri.com/manuscripts/111041.pdf

Best practice

From Wikipedia, the free encyclopedia

http://en.wikipedia.org/wiki/Best_practice

MnSCU Identity

DEED and Higher Education

http://mn.gov/deed/business/locating-minnesota/education-workforce/higher-ed.jsp

Gallery Walk Feedback

Key Findings about Professional Development: Adequate funding and staff is important to support the training. Needs sustainability.

We wish to clarify that technology is only a tool and isn't meant to be a one-size fits all.

Of all the recommendations within Education Technology, training had the least number of concerns at 1.5% of the sampled population. Faculty was most concerned about the time to develop training and to provide adequate training and support and that it is in place before they need to use technology. There are costs concerns to fund, support and train faculty, staff and students in an effective, efficient and timely manner.

Because of the concerns, we hope individual institutions will prioritize funds for faculty, staff and student professional development. We propose sharing training whenever possible. In-house training would be the most cost-effective.

Initiative #2: *Brief description*
Develop a comprehensive strategy to increase awareness and development of e-textbooks and open educational resources (OERs).

What is the Current State?

MnSCU institutions are at a competitive disadvantage in developing and offering programs that rely on OERs, which are less expensive and can save students money. Textbook costs are rising dramatically, reducing access and success (College Board, Senack). E-textbooks created in multiple formats have limitations unless students, faculty, and staff have devices that support them.

What is the Desired Future State?

Faculty would be able to more easily select quality OERs through an expanded inventory of optional resources which are more affordable and useful to students. E-textbooks offer greater accessibility for students.

Risk analysis

Students taking fewer classes, students avoiding classes with high textbook costs, students taking classes and not buying textbooks (2012 Florida Student Textbook Survey)

Type of Initiative (check all that apply): X Institution X Inter-institutional X Systemwide	Suggested Timeframe for Completion: X Early Win (< 6 months) X Medium Term (6-18 months) X Long Term (> 18 months) **Progressive adoption eventually enhanced by devices (long-term)**	Ease of Implementation _ Easy X Moderate _ Difficult *Consider elements such as consultation, policy changes, resource commitment, and general feasibility.*

Action Steps:

Early Win
1. Engage library, bookstore, faculty, early adopter, engaging students
2. For the early adopters, calculate savings and success rates–communicate as story
3. Leverage faculty and students champions for discipline or grassroot efforts
4. Establish a partnership between ASA and CIO communities to complete a readiness evaluation (both for OER adoption and 1:1 device, infrastructure, preparedness)
5. Secure funding source to promote adoption, customization, and creation of open resources

Medium Term
1. Realize mainstream adoption of OERs and devices that support them
   a. Course adoption at many colleges and universities
   b. Program-level adoption at many colleges and universities, e.g. Music, IT, and EMS
   c. Disciplinary adoption across many colleges and universities, e.g. MANE Nursing
2. As OERs mature, the tools that complement them get better, and the mountain of resistance reduces

Long –Term
- Full adoption of OERs for key programs, disciplines, and many colleges and universities
- Access to devices that support OER

Policy barriers, interdependencies, or other concerns:	1) infrastructure demand	2) security awareness	3) Bookstore revenue
		Wireless can be more secure	Purpose and portfolio shift to

		Redistribution of technology fees (from lab cost to wireless)		alternative rev streams
Resources:		1) infrastructure investment; this would be a prime opportunity for shared services, if multiple institutions were to approach upgrades collaboratively	2) Training and development for faculty, staff, and students	3)

Other Suggestions:
- Evaluation and Shared Understanding funding models (IT, bookstore)
- Strong communication lines among stakeholders throughout implementation
- Early adopter trial runs
- Priority of ASA Technology Council
- Student and faculty support
- Attention throughout to access, specifically for the poor
- Attention to faculty access and use of resources (common repository, sophisticated search capabilities)

Supporting Documentation

Research and References

Horizon Report 2015, *Mid-Term Trends,* http://cdn.nmc.org/media/2015-nmc-horizon-report-HE-EN.pdf

Trends in Higher Education (College Board), cost of textbooks, http://trends.collegeboard.org/college-pricing/figures-tables/average-estimated-undergraduate-budgets-2014-15

2012 Florida Textbook Survey, http://www.openaccesstextbooks.org/pdf/2012_Florida_Student_Textbook_Survey.pdf

Opening the Curriculum (Babson Survey), lack of awareness, http://www.onlinelearningsurvey.com/reports/openingthecurriculum2014.pdf

Best Practices

- Raise Faculty Awareness:
  - MnSCU Open Education Resources and Textbook Affordability, http://asa.mnscu.edu/educationalinnovation/open/index.html
  - U of MN—David Ernst (TedTalk: https://www.youtube.com/watch?v=DqHImIi8v5o)
- Engage librarians (*Ecologies of Knowledge: The Role of Libraries and Librarians in the OER Movement*, http://blog.coerll.utexas.edu/ecologies-of-knowledge-the-role-of-libraries-and-librarians-in-the-oer-movement/)

- Chad Kjorlien, Teaching, Learning & Technology Services (TLT), Faculty Professional Support Coordinator, Winona State Campus, Maxwell Hall 130. CKjorlien@winona.edu (507) 457-5240; Preferred: (507) 457-5167

<u>Gallery Walk Feedback</u>

- 51% approval overall is high p.365, especially in today's divisive world
- Concern about cost: It led us to recommend looking at an open educational resource initiative in tandem with ensuring all students have a computing device. Some cost shifts that could happen when doing so:
  - One-time device expense equal to textbook cost for 1-3 classes; if free or low-cost OERs are used in 1-3 classes, a student would gain the device for all classes and for other necessary access
  - Providing or supporting devices for OERs would also mean a shift from wired lab support to wireless/BYOD support
- Faculty Concerns about loss of flexibility and ancillary materials
  - Improved education about gains in flexibility, customization, and cc licensing
  - Ongoing attention to OER improvements and resources with strong ancillary materials
- Concern about losing print version
  - Explore print options as part of OER review process
  - Work with bookstores for print options

Initiative #3: *Brief description*
Develop a strategy for quality online education that provides an array of options to serve more students.

What is the Current State?

While it is recognized online delivery is not appropriate for all classes or programs, there is currently no systematic approach to offering courses or programs online.

What is the Desired Future State?

There is a strategy to identify and develop high quality programs and courses appropriate for online delivery. Students have an increased ability to complete more degrees fully online. New programs help serve statewide educational needs. Ongoing professional development ensures high-quality course offerings. Students are prepared to learn in an online environment.

Risk analysis

If we continue in the current state, we will lose students to online programs offered by non-MnSCU institutions. We will not be able to serve adult learners and completion degree seekers. We will need this audience in order to maintain current enrollments. We will continue to be inefficient by offering disconnected and duplicated courses at various institutions without having an overall plan to create new programs. In addition, we compete for the same students with similar courses and programs. Students who are not ready for online courses are at increased risk for not being successful.

Type of Initiative (check all that apply): _ Institution X Inter-institutional X Systemwide	Suggested Timeframe for Completion: _ Early Win (< 6 months) _ Medium Term (6-18 months) X Long Term (> 18 months) X Continuous	Ease of Implementation _ Easy _ Moderate X Difficult *Consider elements such as consultation, policy changes, resource commitment, and general feasibility.*

Action Steps:

1. Continue to utilize Quality Matters for professional development opportunities and course improvement. The more we adopt this System-wide, the more opportunities we'll have to develop quality courses and programs. Feedback from Gallery Walks indicated support for the Quality Matters initiatives.
2. Provide System-level leadership for addressing ADA and UDL compliant issues. By leveraging the knowledge and resources for addressing these concerns at the System level, faculty and campuses can be more efficient and effective in developing responses to meet these requirements.
3. Encourage and support regional discussions that will develop collaborative online programs. These programs can maximize limited resources while providing programs that meet statewide employment needs. These programs can use online or Telepresence technology to deliver new programs to widespread and diverse student populations.
4. Develop a student readiness assessment tool that could be used to help students determine if they are ready for online instruction.
5. Develop and implement courses that teach students how to take online courses.

Policy barriers, interdependencies, or other concerns:	1) Constraints around teaching online courses: flexibility in hiring faculty to do so, concerns about intellectual property, questions about	2) The workload for faculty to develop and teach online courses.	3) Existing incentives and rewards do not always encourage collaboration.

	assigning faculty to teach online or face-to-face.		
Resources:	1) Professional development to design online courses. We need to provide equal access to instructional designers.	2) Licensing for programs (e.g. Softchalk) needs to be funded and supported.	3) Potential students may not have access to the technology they need to complete online courses.

Other Suggestions:
- Identify top online programs—both those that are currently offered and those that students wish we offered or take elsewhere; for an online strategy to be developed, we need to understand both met and unmet needs.
- We should consider how to provide regional and shared support. For instance, institutions with instructional designers can find ways of creating mutually beneficial relationships with those that don't in order to share knowledge and expertise.
- Look at ways of developing competency-based courses to provide additional flexibility to students while still ensuring that course outcomes are achieved.

Supporting Documentation

Research and References

- *Qualitymatters.org*
- Johnson, L., Adams, S., Cummins, M., Estrada, V., Freeman, A. & Ludgate, H. (2013). *The NMC Horizon Report: 2013 Higher Education Edition*. New Media Consortium.
- Johnson, L., Becker, S., Estrada, V. & Freeman, A. (2014). *Horizon Report: 2014 Higher Education*. Austin, TX: New Media Consortium.

Best Practices

1. Winona State is partnering with SE Tech to provide support for online course design.
2. Minnesota Online Quality Initiative (MOQI), which uses Quality Matters, is a way to coordinate dissemination of course qualities principles across many institutions.

Gallery Walk Feedback

What did you hear from stakeholders? How did it help the team inform and refine this initiative?

- There was strong support for developing online courses and programs.
- There were concerns about professional development for faculty and staff.
- There were concerns about student readiness for online learning.
- There were concerns that online instruction is not suitable for all courses, programs or students.

Initiative #4:

Ensure all students have a computing device, either provided by the institution and owned by the student or owned by the student and supported by the institution.

What is the Current State?

Students face challenges obtaining access to computers and finding resources to support their devices. New incoming students expect IT support for personal computing devices. Campus infrastructures vary in their ability to support additional student device usage and the current diverse array of student-owned devices.

Students without access, wanting to improve their marketability and usage of technology, preparedness. This is important regardless of student major or program of study. Technology should be integrated across the curriculum.

What is the Desired Future State?

Students have their own device, which meets specified institutional standards. The system leverages its size to purchase computing devices or other equipment at a bulk rate, where possible. A fee structure provides a widespread support system. There is flexibility in accommodating diverse academic programs where students use more specialized software or hardware and other specialized equipment. Institutions have an infrastructure to support increased device usage.

- Cost savings across the socioeconomic spectrum by leveraging access to financial aid
- Cost redistribution by increasing access to OERs
- Cost re-direction by transitioning from general purpose labs to wireless infrastructure and collaborative learning spaces; technical support models would need to change as well

Risk analysis

- Students left behind as technology environments in K12, business, and industry advance
- Students completing an education, yet not feeling marketable
- Reduced access to technologies and learning materials; step back from high schools—expect an equally tech rich experience
- Student loss of competitive edge for enrollment and in the job market
- MnSCU is lowest cost higher education in the state. We could raise costs to invest in this and would still be lowest cost in the state. What are we losing by not investing in technology?

Type of Initiative (check all that apply):	Suggested Timeframe for Completion:	Ease of Implementation
X Institution _ Inter-institutional X Systemwide Local investment but some support from system—lay out program that works for you Leveraging the system as part of those efforts—use system as support, possibly even for the "10%" who don't have access	X Early Win (< 6 months) X Medium Term (6-18 months) X Long Term (> 18 months) Early—evaluations initiated Medium –infrastructure for "all at once" transition identified Long term for close to full implementation	_ Easy _ Moderate X Difficult *Consider elements such as consultation, policy changes, resource commitment, and general feasibility.*

Action Steps:

1. System-wide readiness evaluation for each college or university's ability to support BYOD or 1:1
2. Gradual redistribution of resources from lab to wireless –can't underestimate the drain
3. Fine tuning infrastructure to meet demand. Build capacity.
4.

Policy barriers, interdependencies, or other concerns:	*1)* infrastructure demand	*2)* technology adoption/integration	*3)* Fear of distraction from "real learning"
	Redistribution of technology fees (from lab cost to wireless)	Inform implementation with resources such as the RED Report	Understand and approach this work as a cultural shift
Resources:	1)Technology infrastructure	2) Financial aid. If required, can be factored into cost of attendance.	3) National baseline data on technology use, such as Educause Core data, Educause survey for faculty, Educause survey for students

Supporting Documentation

Research and References

- Project RED: The Research, benefits of properly implemented technology (focus is on K12), http://www.projectred.org/about/research-overview.html
- EDUCAUSE 2013–2014 IT Issues Panel. Top-Ten IT Issues, 2014: Be the Change You See, *EDUCAUSE Review*, vol. 49, no. 2 (March/April 2014)
- Dahlstrom, E., Walker, J.D., Dziuban, C. (2013) ECAR Study of Undergraduate students and Information Technology. http://www.educause.edu/library/resources/ecar-study-undergraduate-students-and-information-technology-2013
- Dahlstrom, E., diFilipo, S. (2013) BYOD and Consumerization of IT in Higher Education. http://www.educause.edu/library/resources/byod-and-consumerization-it-higher-education-research-2013
- diFilipo, S. (2012). BYOD Program. EDUCAUSE Live! http://www.educause.edu/library/resources/rolling-out-byod-bring-your-own-device-program
- Adopting New Technologies for Student Success: A Readiness Framework, Community College Research Center, http://ccrc.tc.columbia.edu/media/k2/attachments/adopting-new-technologies-for-student-success.pdf
- 125 Online Learning Innovations: http://teachonline.ca/sites/default/files/pdfs/pockets_of_innovation_themes-june_2015.pdf

- *Learning for Life: The Opportunity for Technology to Transform Adult Education*, Tyton Partners
- *BYOD Strategy,* The University of Scranton, 2015
- *Campus Technology Feedback Survey,* St. Cloud State University, 2014

Best Practices

e-Warrior: Digital Life & Learning Program, http://www.winona.edu/it/media/e-warrior_faq_v5_fall2014_final.pdf

Gallery Walk Feedback

Infrastructure will be a major obstacle; this made us recognize the importance of cost re-direction as noted above. It also led to a discussion of whether or not implementation of this initiative and the OER initiative need to be considered concurrently.

Initiative #5:

Increase opportunities for exploration of emerging technologies and their uses for teaching, learning, and educational support.

What is the Current State?

There is a lack of funding and professional development to acquire and use new technologies such as 3D printing, gaming, and simulations. Learning analytics and adaptive learning technologies are not widely used. We don't effectively leverage the knowledge, expertise, and technologies that exist in these areas.

What is the Desired Future State?

Create intentional communities within the system to increase collaboration and sharing of best practices such as innovation/ideation centers, or collaborative work groups. Institutions develop relationships with partner businesses and organizations to acquire and use emerging technologies. Faculty and staff leverage the power of learning analytics and adaptive technologies. The system showcases its use of by emerging technologies.

Risk analysis

Technology continues to change rapidly. Our students will need to be educated with and on the technology that they will be using in the rest of their lives. Failure to explore and adopt relevant technology will increase our obsolescence and decrease the employability of our graduates. Failure to provide education using relevant emerging technologies will limit our attractiveness to new students. Failure to explore emerging technologies will limit the ability of our faculty to remain current in their fields of expertise and lower the quality of the education they are able to provide to our students. Could also lead to less fulfilling work for faculty who are not able to explore these professional development opportunities. Failure to create and maintain relationships with our peers and relevant business and community partners limits us.

Type of Initiative (check all that apply): X Institution X Inter-institutional X Systemwide	**Suggested Timeframe for Completion:** _ Early Win (< 6 months) X Medium Term (6-18 months) X Long Term (> 18 months)	**Ease of Implementation** _ Easy _ Moderate X Difficult *Consider elements such as consultation, policy changes, resource commitment, and general feasibility.*

Action Steps:
- Identify physical locations for centers or likeminded individuals to form intentional communities.
- Provide structure to allow innovation and exploration regardless of immediate applicability
- Identify 3-4 technologies to be pursued during the initial 2-3 years of implementation. Technologies can be campus, regional collaborative groups, and/or system wide, depending upon broadness of utility.
- Support smaller System-level technologies with system-level resources and reserve campus resources for local priorities.
- Create a sustaining model to continue the identification of emerging technologies after the current researched technologies' adoption has begun to plateau
- Ensure broad scope to emerging technologies – include Career and Technical Education fields, like Central Lakes is doing with the machine simulations.
- Determine and engage relevant external partners as equal partners and collaborators. These partnerships could also provide internships or service learning opportunities for our students

- Invest funds and develop processes to explore revenue streams to sustain this activity.
- Develop a portion of the MnSCU budget to support the research and implementation of emerging technologies. The money would be applied for on the assumption that successful rollouts of the technologies would have best practices shared with other institutions to speed adoption.
- Dedicated professional development funding and opportunities for all employees (faculty, staff, and administrators) to identify emerging technologies and how to adapt them to higher education and instruction.
- Build on already established best practices and communication methods and networks, such as Special Interest Group (SIG): Instructional Technologies and Learning Spaces and Educational Innovations unit at the System Office to facilitate sharing around emerging technologies.
- Incentivize work to encourage participation and reward/acknowledge work and time spent.
- Identify faculty and staff across our system who are already engaged in these types of activities and who are (or can) serve as leaders.
- Encourage and support exploration by students in uses of emerging technologies, such as student research, innovation contests, and individual exploration of ideas.

Policy barriers, interdependencies, or other concerns:	1) Funding is based upon enrollment and not exploration. Funds may need to come from grants which have strings attached and are often limited in duration and needing to be renewed. Dedicating a % of funding for innovation, exploration 2) Structures, processes and incentives to encourage collaboration are lacking. System still operates on a competitive model.	3) Intellectual property rights issues. Who owns what is developed and produced? 4) Culture of competition within the system can inhibit sharing of ideas and limit our ability to adequately leverage our influence in this area both for students and other stakeholders	5) Dependent on successful adoption of other Ed Tech and Information Technology System Design teams' suggestions, such as OER, 1:1 device. Adoption of these platforms will speed adoption and innovation. 6) Funding priorities that lead to discrepancies between institutions around technology and related infrastructure

Resources:	1) Infrastructure to support ideation centers and/or collaborative workgroups will have to be created and maintained.	2) Secure funding to support emerging technologies including professional development opportunities for a long time, regardless of existence of short term success.	3) Dedicated faculty and staff to support, promote and encourage innovation and exploration around emerging technologies. 4) networks with external partners focused on emerging technologies and its practical applications

Other Suggestions:
Please share any additional ideas from the team on initiative implementation.
Make sure that faculty from a broad array of disciplines and institutional types are encouraged to participate.
Make sure it isn't just 4 year or 2 year institution initiative; Participation should ideally be equitable across institutional type, mission, region, and system. It is understood that not all institutions will want to do this and others may already have this well developed. This isn't to detract from those, but rather to encourage and facilitate this work more broadly and evenly across our system.

Supporting Documentation

Research and References

Coffman, T. & Klinger, M.B. (2014). 21st Century Pedagogy: Utilizing Simulations for Innovative Teaching. In M. Searson & M. Ochoa (Eds.), Proceedings of Society for Information Technology & Teacher Education International Conference 2014 (pp. 1838-1841). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE). Retrieved February 7, 2015 from http://www.editlib.org/p/131048.

Johnson, L., Adams, S., Cummins, M., Estrada, V., Freeman, A. & Ludgate, H. (2013). *The NMC Horizon Report: 2013 Higher Education Edition*. New Media Consortium.

Johnson, L., Becker, S., Estrada, V. & Freeman, A. (2014). *Horizon Report: 2014 Higher Education*. Austin, TX: New Media Consortium.

https://my.mnscu.edu/personal/ur8440ig/Blog/Lists/Posts/Post.aspx?ID=10

Gallery Walk Feedback

Gallery Walk participants were overall positive about the concept, however, they had concerns about cost, subject matter experts, tension between security and access, and keeping up with the pace of technological change. These concerns were also raised by the team and we hope have been addressed in the barriers and resources sections above. Additional positive feedback received was that exploring emerging technologies will help us graduate students with current, marketable skills.

Additional Ideas and Initiatives

Optional: Please provide a list of additional ideas and initiatives that the team considered and believes should merit further discussion.

- **Student Services Support**: Enhance student support services by infusing high quality, meaningful and relevant technologies into student service platforms, broadly defined (e.g. tutoring, advising, enrollment, registration, degree planning, and bookstore). We have not defined a core set of services that impact student success. Each institution is pursuing its own solution to this issue. We encourage there to be a consensus around common service needs and infrastructure to support services. As a result, a wide range of resources would be available 24/7/365 for students.

- **Software Access**: A comprehensive suite of software applications would be available for all System users (e.g. WebEx, Microsoft 365, Lynda.com, AutoCAD, Adobe, SPSS). Currently, users do not have access to the same software resources. A lack of knowledge about what is available means that some institutions do not take full advantage of available resources. Use the campus service cooperative to reduce pricing for System-wide licensing. Shared knowledge and communication about software availability would save time and promote efficiency. As a result, student access to important software would be enhanced.