



# Increasing and Improving Exemplary Use

April 2016



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## Exemplary Use Charge

The Exemplary Use Affinity Group was charged with exploring the issues impacting faculty use of academic technologies and making recommendations based on these findings. Specifically, we were charged to:

1. Identify common barriers that prevent faculty and instructors from using academic technologies both effectively and creatively;
2. Identify incentives, reward structures, and engagement opportunities that promote effective and creative use of academic technologies; and
3. Research themes and conditions of effective and creative use of academic technology.

Toward this end, subgroups were organized to engage faculty at the University of Minnesota, find out what our peer institutions are doing, and survey published literature. This report documents and aggregates their findings.

## Exemplary Use Executive Summary

Three subgroups of the Exemplary Use Affinity group sought to identify barriers and discover the conditions that bring about the effective and creative use of academic technology at the University of Minnesota, our peer institutions, and in published literature. Full summaries of the findings of the three subgroups and recommendations to address these barriers and needs can be found below.

While each subgroup employed a different strategy to survey the issues impacting faculty use of academic technology, their findings converged around a common set of themes. Faculty are clear about the barriers that negatively impact their effective or innovative use of technology in their teaching practice: they cite the lack of time, lack of motivating examples, the lack of rewards and incentives. Faculty indicated a need for diverse learning and engagement opportunities, from sustained engagement to targeted workshops and online resources. They want to know what their colleagues are doing across campus.

A clear consensus emerged: faculty aspire to be part of a University culture that values, rewards, and shares effective and creative teaching methods that result in greater student learning. The barriers that exist are systemic insofar as Universities traditionally value research over teaching and this is reflected in the tenure and promotion process. Bold strategies are needed to assert teaching practice as a priority and to advance the scholarship of teaching and learning with academic technology.

The recommendations below attempt to address these issues. They include recognizing the effective or innovative use of academic technology in the tenure and promotion process, the development of a



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University-wide program that recognizes and incentivizes the use of academic technologies, a network of engagement opportunities founded on a coherent curriculum to expand awareness, knowledge, and use of academic technologies in support of learning, and the need for a communication strategy that highlights exemplary use and increases awareness of the possibilities.

The University of Minnesota is fortunate to have many centralized and departmental services and resources to assist with the implementation of these strategies. Careful consideration will need to be given to how centralized resources such as Academic Technology Support Resources (ATSS), the Center for Educational Innovation (CEI), the Disability Resource Center (DRC), and the University Libraries can coordinate and work with key stakeholders to move these recommendations forward while utilizing and taking into account the unique services departmental support units provide. It will take a team effort not unlike the one utilized to create this report to make the bold decisions necessary to move us forward regarding effective and exemplary use of academic technologies at the University of Minnesota.

## Exemplary Use Recommendations

### Systemic

1. Expect and reward learner-centered teaching practices, especially effective and creative use of academic technologies. Integrate the recognition and scholarship of teaching with technology into the annual review as well as the Promotion and Tenure processes.
2. Develop a University-wide initiative that provides incentives and recognizes faculty for exemplary and innovative use of academic technology in support of active learning. The program could consist of honorary awards (such as ADT) or monetary awards for the use of professional development, reduced teaching loads, etc.

### Engagement / Perception

3. Engage faculty in decision making regarding the selection and use of academic technology as well as provide leadership opportunities to advance emerging technologies.
4. Create a communication strategy that provides consistent outreach to increase visibility/awareness of available resources, support staff, and training opportunities.
5. Create a communication strategy that recognizes and celebrates innovative teaching with technology to internal and external audiences.



## Support

6. Create a comprehensive curriculum representing 21st century academic technology skills aligned to faculty development opportunities that offer both breadth (awareness) and depth (expertise) that are delivered with a variety of modalities (online resources, targeted workshops, opportunities for sustained engagement).
7. Create a centralized, digital, and searchable repository (website) of academic technology practices that have been utilized effectively in the classroom and related resources.

## AT fCoP Exemplary Use Appendix

[AT fCoP Exemplary Use: Themes and Conditions](#)

[AT fCoP Exemplary Use: Recommendations Summary](#)

## What Does the Research Say?

### Group 1: Overview

The “What Does the Research Say” subgroup of the Academic Technology (AT) fCoP Increasing and Improving Exemplary Use Affinity Group was charged with identifying published literature covering three areas dealing with faculty adoption of academic technology:

- What are the barriers to faculty adoption of academic technologies?
- What are incentives, reward structures, and engagement opportunities for adoption of academic technology?
- What impacts the creative and effective use of academic technologies with students?

The “What Does the Research Say” subgroup membership consisted of Shane Nackerud - University Libraries (lead); Christiane Reilly - CCE; Susan Spanovich - OIT; Irene Duranczyk - Associate Professor, CEHD

### Group 1: Summary

The literature agrees that the issues associated with technology adoption in higher education “are not one-dimensional but multidimensional factors influenced by different barriers” (Abrahams, 2010). In particular, the lack of rewards for exemplary teaching was termed by the New Media Consortium as a “wicked problem, requiring visionary leadership” (Horizon Report, 2015). Moreover, the topic of optimizing the use of technology in teaching and learning was declared among the TOP 10 issues by Educause in 2015 with the recommendation that “when it comes to bridging the gap between faculty and IT...it truly



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takes a village to address this considerable challenge - multiple individuals, departments, and divisions working together to promote a consistent message of technology adoption, use, and innovation” (Clemmons, 2015).

### Group 1: Methods

A variety of search strategies and tools were used to identify documents and materials relating to these subjects. These include library databases (Education Source, ERIC, Academic Search Premier, etc.), Google Scholar, and educational organizations and reports such as EDUCAUSE, the Horizon Report from the New Media Consortium, and a report by the Education Advisory Board. Please see the References section for a complete list of articles and documents gathered.

One of the challenges of this subgroup is the sheer number of articles and documents dealing with the subject of faculty adoption of academic technologies and the difficulties they may encounter. The following sections really only scratch the surface of this issue. However, reading and synthesizing the published literature found reveals a number of common themes in each of the areas this group was charged to research.

### Group 1: Findings

#### *What Impacts the Creative and Effective Use of Academic Technologies with Students?*

The research on the creative and effective use of academic technology in teaching in learning says that a paradigm shift from teaching to learning is needed to make effective use of academic technology. It asserts that teaching with technology requires sound pedagogical integration of technology in support of learning and that it is imperative that pedagogy drives the use of technology (Laurillard, 2002; Laurillard, 2013), so far so that academic technology initiatives without pedagogy act as barriers of adoption (Bates, 2003). It names technology integration into higher education as the single most important factor to remain relevant in the knowledge age and for the development of 21st Century Skills.

- ***Pedagogy guides the use of technology:*** The integration of technology, pedagogy, and content knowledge, widely known as TPACK, marks the successful integration of technology into teaching and learning. “The TPACK framework emphasizes the importance of teacher creativity in repurposing technology tools for make them fit pedagogical and disciplinary-learning goals” (Mishra, 2012). This means that units on campus supporting the teaching and learning mission (CEI, University Training, libraries, as well as IT staff merge and/or jointly support the development of TPACK pedagogical, technological, and content knowledge (Georgina & Hosford, 2009).
- ***A paradigm shift from teaching to learning is needed:*** “The use of technology to support in-class learning has changed over the decades. Most faculty today utilize technology in their instruction as mechanisms for course content delivery, grade delivery, and basic communication. However, an effective learning environment fosters collaboration amongst students and faculty,



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allows the student to create and share new knowledge, as well as support the connections of different pieces of information” (Ajjan & Hartshorne, 2008). Therefore, “the effective use of technology in the classroom, whether it be in cyberspace or a traditional setting, will require a paradigm shift from “teaching” to “learning”, with adequate training in technology and learning styles, as well as adequate technical support (Rogers, 2000).

- **Effective and creative use of academic technology support the development of 21st Century Skills:** “Creating a 21st century education system requires broad and intensive use of technology--and a strong technology infrastructure. Schools cannot possibly prepare students to participate in a global economy without making intensive use of technology” (Vockley, 2007). Thus, “universities will need graduates capable of contributing to the more fluid kind of knowledge creation that is needed by the professional practitioner, who is not confined to the well-trodden paths of expert consensus knowledge of the traditional university curriculum. Students’ long term cognitive needs go well beyond the acquisition of consensus knowledge” (Laurillard, 2002). “It is an emphasis on what students can do with the knowledge rather than what units of knowledge they have that best describes the essence of 21st Century Skills” (Beetham, 2013).
- **The importance of curriculum redesign:** The infusion of information technology into the teaching and learning domain creates shifts in the skill requirements of faculty from instructional delivery to instructional design – with faculty being responsible for course content and information technologists being responsible for applying information technology to the content (Anson, 1999). The most important step from teaching to learning, is moving "from a teaching culture that ignores what is known about human learning to one that applies relevant knowledge to improve practice"(Angelo, 1996).

### *Barriers to Faculty Adoption of Academic Technologies*

The literature reports on a multitude of barriers related to the adoption of academic technologies for teaching and learning. To summarise the factors, these have been grouped into three categories: systemic (the way higher education is currently structured and operating), i.e. stakeholders, policies, processes, etc.; issues of support; and perception.

#### Systemic: Stakeholders, Policy, Process

- **Lack of time:** Faculty often report that they do not have time to learn new technologies and that their institutions do not do enough to make time available. Research shows that instructors are generally comfortable introducing technology to the classroom particularly after exposure to a training resource (Abrahams, 2010; Butler & Sellbom, 2002; Donaldson, 2014; Moser, 2007; Georgina & Hosford, 2009).
- **Lack of financial support:** Often times learning a new technology means that faculty need external training, software, or hardware related to the technology. In addition, due to lack of time or



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lack of support, some faculty may feel there is no financial incentive to adjust their teaching practices (Butler & Sellbom, 2002).

- **Teaching not valued as highly as research:** Teaching is often valued lower than research in academia. In the global education marketplace, a university's status is largely determined on the quantity and quality of its research. There is an overarching sense in the academic world that research credentials are a more valuable asset than talent and skill as an instructor (Martin, 2016; Horizon Report, 2015).
- **Tenure and promotion process:** Despite the majority of universities having highly visible goals around faculty instructional integration of academic technology, very few, if any, have expanded tenure and promotion criteria to include the role academic technology may play in that process. An expansive view of scholarship that values technology and innovation in teaching as a part of the tenure and promotion process is needed (Green, 2016; Martin, 2016).
- **Faculty autonomy and dispersed academic perspectives/priorities:** In large universities such as ours, faculty often have different departmental expectations for the use of academic technologies, as well as a wide variety of different technologies to choose from (Abrahams, 2010; King & Boyatt, 2014; Schneckenberg, 2009).

## Perception

- **Reliability of technology:** Some faculty have the perception that technology is unreliable, especially new technology. If at any time faculty unsuccessfully use technology due to it being down, the network being down, or the technology just plain buggy, that can have detrimental effects on technology use later on (Butler & Sellbom, 2002; Moser, 2007).
- **Technology-driven approach acts as a barrier to adoption:** A lack of pedagogic consideration or direction in regards to academic technology can be a concern to faculty (O'Neill, Singh, O'Donoghue & Cope, 2004) and result in a tension between faculty and the institution (King & Boyatt, 2014). Furthermore, "instructional designers found that it made a difference in terms of trust and respect accorded them when they sat on the academic side of the house" (Miller & Stein, 2016).
- **Concern that technology may not be critical for learning:** An additional barrier to faculty adoption of technology "is the concern that technology might not really be critical for learning. Many faculty wonder whether it is worth their efforts to learn many of the available technologies" (Butler & Sellbom, 2002). To counter this perception it is important to evidence the impact of technology on learning through research and to encourage faculty to share what they learn with each other and with technology staff" (Butler & Sellbom, 2002).





## Support Issues

- **Lack of institutional support, or support is underutilized:** Beyond not being provided the time or opportunity to learn new technologies, faculty often complain that training is not sufficient, or that support for existing technologies is not adequate, or that support opportunities are unknown (Butler & Sellbom, 2002; Martin, 2016).
- **Student lack of computer skills:** Students sometimes lack computer skills in various applications that are necessary to support and enhance their learning experiences. Therefore, it can be suggested that students need to have direct instruction to efficiently use computer technology applications such as authoring and sophisticated hypermedia (Keengwe, 2007)

## *Incentives, Reward Structures, and Engagement Opportunities for Adoption of Academic Technology*

According to recent research, one of the main reasons faculty decide to use technology in courses is that it may improve student learning. However, a large number of faculty also report that they hesitate to learn new technology due to questions around adequate support or if their work will be rewarded (Roberts, et. al., 2007). The following are common incentives / reward structures, and engagement opportunities found throughout higher education literature that may give faculty the impetus to move forward with the adoption of academic technology.

## Incentives / Reward Structures

- **Recognition of use of technology and innovative teaching within tenure and promotion:** Obviously, a reward for adopting academic technology and innovative teaching can be consideration of these practices within tenure and promotion decisions (Dobbin, et. al., 2014; Green, 2016).
- **Release time, reduced advising loads, reduced committee assignments, and reduced course loads:** While faculty are implementing new pedagogical strategies more time to learn new technologies and teaching methodologies can be important and warranted (Georgina & Hosford, 2009; Gillard & Bailey, 2007).
- **Incentive programs:** Research suggests that incentives are essential to help remove barriers, assist faculty to locate available resources, encourage experimentation, or even attend workshops. Incentives can take the form of monetary reward, project grants, nonmonetary support, technology resources, or some kind of recognition. (Lei, 2010; Powell, 2008; Education Advisory Board, 2016).
- **Reporting and celebrating achievements to both internal and external audiences:** Recognition of achievements can be a powerful incentive, but it can also provide concrete examples for other faculty to follow, as well as provide interested faculty with the names of their



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colleagues who may have experience with certain technologies or strategies (Owen, 2004; Powell, 2008).

### Faculty Engagement Opportunities

- ***A safe space for faculty exploration:*** Create an “ego-safe” environment for faculty exploration of new instructional technologies, away from student eyes and peer observation; this not only allows for more informed input into IT technology selection, but also increases faculty comfort with the chosen technologies, leading to greater and more effective use in the classroom (Education Advisory Board, 2016).
- ***Faculty communities of practice:*** Faculty supporting each other is a model that has worked at several institutions. Whether through ambassadors, faculty fellows, mentors, peer groups, or cohorts of faculty in a development program, there are many options and ways to build community (Dobbin, et. al., 2014; Schneckenberg, 2010). Faculty seem to prefer peer support along with expected technology support from the institution. In addition, administrative support is essential to provide the atmosphere, time, and leadership for these communities (Nicolle & Lou, 2008; Education Advisory Board, 2016; Schneckenberg, 2010).
- ***Cohort of instructors dedicated to teaching as opposed to research, reward innovative instruction:*** We are in a higher education system in which funding and prestige are derived from an institution’s scholarly imprint. Some people think this focus has created an inhospitable environment for educators who like to teach and innovate (Horizon Report, 2014). By hiring or shifting instructors dedicated to innovative teaching, new practices can emerge and a cohort can be developed that other instructors can learn from and utilize.
- ***Faculty input and leadership opportunities:*** Eliciting faculty feedback on the use of academic technologies has proven to be a key technology adoption driver at some institutions (Education Advisory Board, 2016)

### Faculty Development Efforts

- ***Faculty development tied to specific, measurable goals as well as key institutional initiatives and priorities:*** “Just as students arrive at college with different levels of readiness, instructors don’t all have the same aptitudes or prior experiences teaching (or teaching online) (Educause, 2014). A growing recognition that one size does not fit all has led some institutions to tailor faculty development to specific, measurable goals as well as key institutional initiatives and priorities (Georgina & Hosford, 2009).
- ***The importance of one-on-one support:*** “The importance of one-to-one training sessions that can be tailored to personal learning styles has become apparent as central to the design of effective programs” to help faculty integrate technology into teaching (Owen & Demb, 2004).



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- **Digital literacy programs:** The traditional view of literacy as the ability to read and write has expanded to include understanding digital tools and information. Some institutions are developing competency programs that help faculty gain a baseline understanding of digital and mobile technologies (Schneckenberg, 2010; Horizon, 2015). This type of program could be part of a tiered approach of training opportunities for faculty at different levels of digital fluency.
- **Digital badges programs:** Digital badges are a technology-enabled way of recognizing learning achievements. Institutions such as [Granite State College](#), [University of Alaska - Anchorage](#), and [University of Colorado Denver](#) have all implemented badging programs to engage faculty and encourage them to pursue academic technology learning opportunities (Dobbin, et. al., 2014; Horizon, 2015).
- **Online resources illustrating exemplary uses of academic technology:** These examples should be timely, practical, and offer immediate, obvious benefits to instructors hoping to make use of new educational technologies (Donaldson, 2014).
- **Supported by research:** Faculty attitude towards the adoption of technologies will improve with their perceived usefulness, ease of use, and compatibility with current practices (Ajjan & Hartshorne, 2008). Thus faculty development should be guided by the wealth of research from the learning sciences fields: educational psychology, learning technologies, etc.

### Group 1: Appendix

[Group 1: Recommendations](#)

[Group 1: References](#)

## What are Other Universities Doing?

### Group 2: Overview

The “What Are Other Schools Doing” subgroup of the Academic Technology (AT) fCoP *Increasing and Improving Exemplary Use* Affinity Group was charged with identifying exemplary use training and activities at other colleges and universities. Our four goals were as follows:

- Investigate what peer institutions are doing to remove barriers that faculty face with academic technology
- Investigate models that are being used at other universities in support of effective and creative use of academic technology



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- Articulate themes between conditions at other universities and effective and creative use of academic technology use at UMN
- Provide scenarios / models of what can we do as an institution to create the right conditions

*The “What Are Other Universities Doing” subgroup membership consisted of Katie Brink, Amanda Evans, Jennifer Englund, Shawn Haag, Sarah Maxwell, Peg Sherven (co-lead), and Greg Steinke (co-lead).*

### **Group 2: Summary**

Our subgroup initiated interview requests with over 30 peer institutions and at the completion of this study, 20 participants from 19 peer institutions provided responses to our interview questions, which focused on:

- How peer institutions systematically identified barriers faculty faced with academic technology and what solutions were in place to resolve the aforementioned barriers.
- How peer institutions encouraged exemplary use of academic technology by providing examples of successful and unsuccessful efforts. Additionally, we asked if peer institutions offered incentive programs for faculty to further support the pursuit of teaching with academic technology.
- How students impacted the development, implementation, and sustainability of academic technology.

Responses from peer institutions were recorded and analyzed. Of all the peer institutions that we interviewed, none of them had a systematic process for identifying barriers faculty face with academic technology. Instead, a lot of the universities offer a number of resources and avenues for support in the exploration of teaching with technology as a way to head off any perceived barriers with academic technology. A handful of institutions made reference to following the Educause Center for Analysis and Research (ECAR) studies. Several recurring categories emerged from participant responses in the areas of time/efficiency, incentives/rewards, and support.

#### *Time and Efficiency*

It should come as no surprise that time emerged as a reoccurring theme when speaking with our peers. Interestingly, though few participants explicitly mentioned time as a barrier, this theme emerged based on a review of responses that offered solutions to bolster participation and increase faculty participation in training efforts. These efforts included offering workshops and training during non-peak times during the academic year and over break times, offering on-demand assistance through walk-in hours, among others.

#### *Incentives and Rewards*

Offering incentives and rewards to engage faculty to utilize academic technology tools was another prevalent theme among our peers. Examples ranged from awards for exemplary use of academic technology, monetary grants that could be used for professional development (distributed upon completion



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of implementing effective use of academic technology) and celebrating and reporting achievements with academic technology via the web.

### *Support*

Respondents also stressed the need of support in order for academic technology programs to be successful. Peer institutions explained their efforts to provide one-on-one, in-depth, consultations with faculty, the availability of academic technology and course design consultants, and receiving guidance from upper-level administration regarding institutional initiatives, to name a few.

### **Group 2: Method**

The purpose of the subgroup was to determine how peer institutions discover, encourage, sustain, modify, and evaluate the use of exemplary academic technology on their campuses. To address this purpose, the following questions were posed by the subgroup:

1. How are potential barriers that prevent faculty from using academic technology identified on your campus?
2. What types of models or programs are in place that encourage creative and effective use of academic technologies? Are faculty rewarded for their participation? What has been tried in the past but may have been unsuccessful?
3. To what extent does student input affect faculty adoption of academic technology? Do course evaluations include questions related to student's perception on the use of academic technology? Does your campus gather student feedback related to academic technology? If so, in what ways and how is that data used?
4. Does your school/college charge student technology fees? Do students have a voice on how these technology fees are spent?

After finalizing the research questions, peer institutions of each the University of Minnesota system campuses were identified). An initial email invitation was sent to staff members from peer institutions (N=33) to participate in a 20-30 minute interview. Interview responses were collected and noted from participants either via email response or by interview (see Appendix: [List of participating institutions](#)). In addition, subgroup members also researched peer institutions' websites for further insight and themes. Finally, after responses via interview, email and website research were recorded, we analyzed the data to determine common categories (For a more detailed method and results section, please see Appendix: [Detailed method and results](#)).

### **Group 2: Findings**



## *What Peers Are Doing to Remove Barriers*

Barriers to faculty adoption of academic technologies are systemic across colleges and universities. In addition, when comparing responses from peer institutions, many similar categories emerged in the areas of time/efficiency, incentives/rewards, and support. Some examples from each of these three categories as well as solutions are listed below:

- **Time:** The institutions we spoke with acknowledged that time is precious. Learning new software or systems can take a considerable time investment. The sheer quantity of applications and academic technology solutions grows everyday, so keeping up with technology is exacerbating. In some cases, there can be steep learning curves. Above all, faculty wish to devote time learning proven techniques which engage and benefit student learning.
- **Financial constraints:** Several of the institutions we connected with mentioned dwindling budgets and cutbacks related to technology expenditures. Colleges and universities are finding creative means of ensuring faculty are represented, have a voice, and are honored appropriately. Unfortunately, many institutions stated that former successful programs had to be discontinued due to lack of financial support or lack of administrative support.
- **Need for expert-level support:** Several schools described their attempts at providing just-in-time support in the classroom and 1:1 faculty appointments. Most of the schools have implemented collegiate or departmental-level instructional design teams to aid and help design courses. These solutions reduce workload/stress for faculty while simultaneously improving the overall quality of courses.
- **Faculty engagement:** Institutions are doing what they can on a personalized level to increase faculty engagement and satisfaction. Nearly all the institutions we interviewed outlined numerous faculty-related training programs, some more formal than others. Examples: one-on-one meetings with collegiate deans, ad hoc user groups or steering committees, workshops focused on academic technology, faculty use of academic technology highlighted in University publications or other public means, or involve faculty with assessment and research opportunities.

## *Models Used at Other Universities to Support Effective and Creative Use of Academic Technology*

When comparing responses from peer institutions, especially with regard to our second question that specifically focused on increasing faculty engagement, our participants from peer institutions provided many exciting and creative examples to stimulate the use of academic technology on their campuses. Again, many similar categories emerged in the areas of time/efficiency, incentives/rewards, and support. Some examples from each of these three categories as well as programs are listed below (please review Appendix: [Detailed Method and Results](#) for specific examples from several peer institutions):



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- **Faculty appointment in academic technology leadership roles:** Several institutions indicated they have created formal faculty appointments. These appointments have resulted in greater reach and input from the rest of the faculty members.
- **Collaborative structure:** Several institutions indicated they are creating collaborations between their academic units, teaching and learning centers, centralized information technology departments, and libraries.
- **Incentive programs:** As faculty and staff engagement is noted as a barrier, a few peer institutions developed incentives for participation. These incentives include awards for faculty and staff use of exemplary technology in the classroom, monetary compensation for completing fellowship programs, and even small incentives like holding workshops over a lunch hour with refreshments provided.
- **Centralized repository of academic technology exemplary use:** A few of the institutions provided an easy means via website for faculty and staff to learn how academic technology was used effectively on their campuses. Websites provides descriptions of courses and how a faculty member incorporated an existing tool to improve their students' learning experience.
- **Pilot programs:** A number of peer institutions developed pilot programs with faculty, where faculty could fully explore an area of academic technology with the support of instructional designers, media developers, or academic technologists.
- **Faculty academic technology committee involvement:** Many of the institutions we contacted described formal avenues for faculty to be involved in academic technology decisions and formal governance.

### *Themes Consistent between UMN and Other Institutions and Effective and Creative Use of Academic Technology*

One of the positive implications of interviewing peer institutions included affirmation for some of the pre-existing programs within the University of Minnesota system that sustain the use of academic technology. While comparing the University of Minnesota system and peer institutions, commonalities were discovered in the following areas:

- Collaborative structure with centralized information technology and academic units
- Use of local academic technology support units
- Formal faculty engagement programs
- Internal work groups that explore and share on topics related to academic technology for teaching and learning (ex. AT Tools iCoP)
- Utilizing multiple avenues to triage and discover areas of need



## *Scenarios/Models to Promote the Right Conditions for Exemplary Use of Academic Technology*

The final goal of the “What are Other Schools Doing” subgroup was to provide scenarios/models of what can we do as an institution to create the right conditions to promote the use of academic technology. Subgroup members felt that this goal was best achieved by focusing on the recommendations (see Group 2: [Recommendations](#)) that were derived from studying the themes that emerged from our findings.

### **Group 2: Appendix**

[Group 2: Detailed Methods and Results](#)

[Group 2: List of Institutions](#)

[Group 2: Recommendations](#)

## **What is happening at the University of Minnesota?**

### **Group 3: Overview**

This subgroup of the Academic Technology (AT) fCoP Increasing and Improving Exemplary Use Affinity Group worked to

- articulate the barriers faculty face with academic technology; and
- discover the conditions that bring about the effective and creative use of academic technology at the University of Minnesota.

*Subgroup membership consisted of Lauren Marsh -OIT (Lead); Rebecca George-Burrs -OIT; Scott Spicer-Libraries; Mark Kayser -CCE; Jill Zimmerman -CCE; Kay Nelson -Carlson School; Richard Matson-Daley -OIT; Douglas Ernie -CSE; and Ron Fitch -CSE.*

### **Group 3: Summary**

Across their responses in a survey and focus groups, faculty tended not to talk about academic tools, but about our University culture. They aspire to be part of a University culture that supports and rewards excellence and innovation in teaching with technology and the scholarship of teaching and learning. They converged on a number of themes put forward in this report. Overall, faculty feel strongly that professional development and classroom innovation with technology should be recognized and incentivized. They need time and opportunity to learn and apply skills in order to develop learning experiences they can use in their





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courses and share with the University community. Faculty expressed the need for awareness and transparency of resources along with convenient, close proximity to support.

### Group 3: Method

In February 2016 we conducted a survey across the institution to gather input from instructors on the use of academic technologies in support of student learning. Over 550 faculty responded, and 100 offered to further contribute through individual interviews. In March, we held 7 focus groups, connecting with 25 faculty from across the institution. These sessions were offered on the East Bank, the West Bank, the St. Paul campus, and Duluth via WebEx.

The goal of the faculty focus groups was to discover the conditions that bring about the effective and creative use of academic technology at the University of Minnesota. Faculty were asked to share successful experiences, inspirations, motivations, and were asked to collaborate on a set of recommendations that they would like the University to consider for supporting teaching and learning with technology. This report puts forward those recommendations; the faculty and staff surveys provide complementary data.

### Group 3: Findings

#### *Incentives and Reward Structures*

- **Recognition and rewards:** Faculty feel strongly that professional development and classroom innovation with technology should be recognized and incentivized, and that the absence of a reward structure results in failure to leverage academic technology to improve teaching and learning. Faculty suggest rewards take the form of sponsorship from departments, course release, salary compensation and grants.
- **Tenure and promotion process:** Faculty would like the scholarship of teaching and learning and learner-centered teaching with technology to be part of the tenure review process.

#### *Professional Development and Engagement*

- **Professional development opportunities:** Faculty want the time and opportunity to learn and apply skills and to develop something for their classes. Their emphasis is on learning that is outcomes based and context driven. To meet these needs, faculty expressed interest in programs, workshops or seminars that provide sustained engagement in addition to opportunities for short, focused training. They feel that they and their colleagues would benefit from a common skill set focused on a few key technologies with proven benefits. Finally, faculty want to help set the agenda.
- **Faculty communities of practice:** Faculty value input from their colleagues, both departmental and across the university, and want to know what their colleagues are doing with academic technology. They feel practices should be shared with the University community.



## *Support and Resources*

- **Communication:** Faculty expressed frustration with the University's disjointed approach to faculty support. Faculty expressed a lack of awareness of existing services and resources and often suggested that the University should develop services that already exist (ie., "IT should have a service that helps people learn about and apply academic technologies." Many faculty were unaware that Academic Technology Support Services is available to support them). Consistent communication is needed to promote current resources and support and to introduce new opportunities and technologies.
- **One-stop online resource:** Faculty suggest the development of a one-stop resource to help people find out about technologies and practices. This resource would be organized by topic, indicating what technologies are currently University-supported and not supported. A related feature might be a recommender system to help direct the viewer to related resources.
- **Convenience of support:** Faculty prefer the convenience of support staff in close proximity.
- **Teaching assistants trained in the use of academic technology:** Faculty would like to be able to turn to Teaching Assistants skilled with academic technology for support in teaching with technology, and they feel these TAs should be trained to have a common skill set.

## **Group 3: Appendix**

[Group 3: Faculty Focus Group Questions](#)

[Group 3: Faculty Focus Group Recommendations](#)

[Group 3: Support Staff Survey Analysis](#)