

Good Decision Making and Framework

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Decision-Making Charge

The Decision-Making and Framework affinity group was charged to create a sustainable and transparent process that involves the UMN community for making good decisions about the implementation and use of academic technology.

In scope are decisions involving University of MN lifecycle technology changes system wide, including but not limited to: technology pilots, evaluations, upgrades, prioritization of enhancements, changes of scope or scale and sunset.

Input used for recommendations

Our group used input from the AT FCoP faculty survey, our research into the processes of peer institutions (see **Appendix A**), and our knowledge of existing processes.

Recommendations are intended to assist faculty with the barriers they specified, specifically lack of time to learn about and use technology, lack of models/examples of effective uses of technology, and lack of money to fund educational technology development.

Process Values

The committee considered the input from the initial fCOP meeting and additional surveys to identify five key values that should drive the decision-making process for academic technology.

Transparency

O Stakeholders are able to find and access their desired level of information regarding the flow of the process and the status of items of interest.

Inclusiveness

O All stakeholders can give input into the decision-making process either directly or through representation.

Nimbleness

O Process can accommodate technology initiatives across the full range of scales, formality and stages of lifecycle.

Multiple drivers of process

O Both technological and pedagogical needs can independently or jointly initiate the process, but both shall drive the process to a final resolution.

Sustainability

O Process is supported in terms of time, effort, and funding in a way that can continue as long as it is needed.

Proposed Decision Making Model

To meet the values and charge, we propose a two tiered decision-making model (see the figure below). One tier, ULTA (University Learning Technology Advisors), will evaluate and make recommendations for

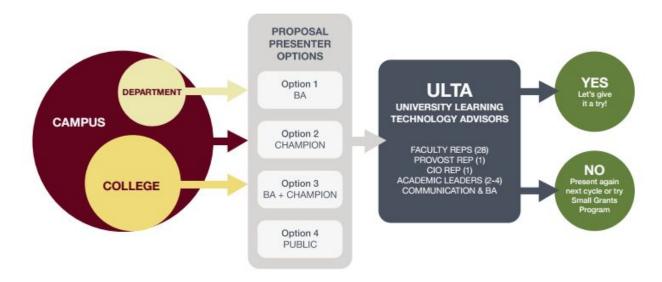


academic technology lifecycle decisions at a large scale, up to University-wide implementations. A second tier, ATIRA (Academic Technology Innovations Resource Assistance), would encourage small scale innovation by providing funding and connections to the UMN academic technology community.

First Tier: ULTA (University Learning Technology Advisors) Primary Committee

ULTA evaluates and makes recommendations on Academic Technology life-cycle decisions. It may also recommend approaches to funding initiatives and the project management of large scale technology implementation pilots. ULTA would serve the entire University community, receiving proposals for large academic technology implementations that occur across colleges or across departments within colleges.

Proposals would be accepted from multiple sources, including existing committees/processes in the colleges or system campuses as well as ATIRA. Final recommendations would be provided to the Provost's office. ULTA work would also be supported by a communications specialist to increase transparency and build community around academic technology.



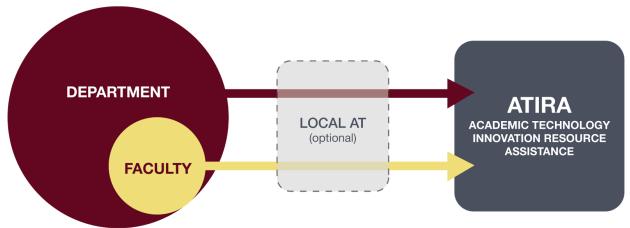
ULTA Recommendation Details

- ULTA would facilitate decision-making on all phases of the academic technology lifecycle (see Appendix B).
- Applicants to be connected to CEI to assist with evaluation
- The committee would be composed primarily of faculty members, as well as representatives from the provost's office, and the Office of Technology.
- More detail on how the ULTA committee would function can be found in Appendix C.



Second Tier: ATIRA (Academic Technology Innovations Resource Assistance) Small Grants Program

Peer institutions confirm that seed funding is important to fuel innovation in teaching and learning using technology. ATIRA ((Academic Technology Innovation Resource Assistance) would small scale technology implementations to support teaching and learning.



Centrally-provided funding would be disseminated through a central committee or similar groups that currently exist in local units could be used to evaluate proposals. Instructors or departments would make proposals to the small grants program to implement technology in one or a few courses or in one department. The purpose of the small-scale implementations would be to increase innovation, remain current with technology, and encourage engaging courses.

Successful technology implementations at this level may be proposed to ULTA if a University-wide implementation is determined to be valuable. Winning proposals would receive funding and referrals to central support services.

ATIRA Recommendation Details

- Funding would be provided by the Provost and allotted in amounts of less than \$1000.
- Applicants to be connected to CEI to assist with evaluation
- A small central committee, heavily weighted with faculty members in 2-year terms, would focus on evaluating and approving proposals.
- More detail on how the ATIRA committee would function can be found in Appendix D.



Exploration of the 2-Tier Model

A myriad of different-sized and differently-originated academic technologies could be proposed at a large institution like UMN. **Appendix E** provides a table of potential project types that could be proposed, and how those might play out in our 2-tier model.

However, there are criteria that would inform, standardize, and provide the most responsible stewardship of academic technology at our institution; these would be used by both tiers of the model and may be found in **Appendix F**.

Proposal Development and Presentation

The affinity group discussed three possible options for how proposals would be developed and presented to the each committee.

Given the complexity of academic technology, especially larger systems, we recommend that a specially designated business analyst be responsible for developing proposals and presentations for ULTA's consideration. The business analyst could work with individuals or groups that bring proposal ideas to the group.

Other options would be to allow a self-selected "champion" or the public at large to create and present proposals on their own. While more "democratic," lack of technology knowledge would hamper the process were they unaided by a knowledgeable technologist, such as a business analyst.

Keys for Success

Every attempt has been made to stay steadily focused on the process values (transparency, inclusiveness, nimbleness, multiple drivers, sustainability) when developing the 2-tier model.

For the success of the program, these must be tied to a strong communication strategy, which is described in more detail in **Appendix G**.



Appendix A: Summary of peer institutions' processes

Question #1: Key Takeaways

The Ohio State University

- New CIO, former faculty.
- Focus on fewer technologies and a smaller catalog.
- CIO moved the academic technology unit (and budget) to the Provost's office, about 50 people.
- Focus on finding systemwide solutions, focus on "catching up" to peer institutions in finding system-supported solutions.
- Academic Affairs leads efforts, at CIO and AA's request.
- Share a common goal with OIT Bring the best technologies to our campus for our faculty.
 - Use ServiceNow to score issues (problems with current technologies, needs for new technologies) based on number of tickets. Informs discussion of what to put time and energy into.

Michigan

- Focus on funding innovation that faculty come up with. Teaching for the 3rd Century transformation grants provided \$1M to "homegrown" (i.e. faculty) projects. View innovation projects.
- Anyone can propose new technologies, "many flowers blooming" approach. Focus on innovation.
- Faculty creating new tools Home grown
- Academic innovation fund
- A faculty advisory committee called DIAG has four subcommittees:
 - Digital Courses, Innovations and Platforms (Canvas pilot)
 - Personalized Learning and Analytics
 - Residential Programs, Innovations, and Tools
 - Digital Infrastructure at Scale (MOOCs Coursera, EdX, NovoEd)
- Don't try to create a any given product that will do everything. We create something that
 does what it's supposed to do really, really, well. So it has a minimal feature set and then
 hopefully we'll be able to plug and play with other tools. Needs LTI interoperability so
 that it can plug into Canvas, or Sakai or other LMS. A minimal feature set and making
 sure you're doing those features really well for the user, instead of trying to create a
 Swiss Army knife that does everything.



• maybe what we need in an LMS is actually something that really just manages the other tools that do different things.

Question #2: What people need to be at the table?

The Ohio State University

• The people at the table are different for each technology. Want to have all key stakeholders (SMEs, faculty, students). Security and ADA are key considerations, and they are at the table to ensure needs are met.

Michigan

- CIO has an executive council with leaders with sub segments. One segment is the
 teaching and learning group. The group works really closely with the Library, Center
 for Research on Learning and Teaching (CRLT), and Digital Education & Innovation
 (DEI) to rapidly move teaching innovation from creation to scale.
- There's the ITS teaching learning group and then there's a group of faculty and the Digital Innovation Advisory Group the DIAG. <u>Link to DIAG charter</u>.

University of Maryland University College

- Subject matter experts (instructors)
- Instructional support staff
- Technical experts (IT)

Question #3: How formal is the process?

The Ohio State University

- Formalized process for bringing people together to evaluate a technology.
- Have a recommendation board. Put call out to academic deans, dean will ask someone to be on committee. Provide pizza to get student participation.
- Fairly formal; adjusted by technology, depending on how complicated it is, impact, etc.

Michigan

Digital Greenhouse is Michigan's way of right-sizing process

Miscellaneous Resources

- University of MD University College Learning Tool Pilot Checklist
- St. Thomas University's online innovation scorecard/rubric



- St. Thomas University presentation re. evaluation of new learning technologies and innovation scorecard
- University of British Columbia's Center for Teaching & Learning
- Executive Summary of UBC's Learning Technology Ecosystem



Appendix B: Scope of decision-making: the Academic Technology life cycle

ULTA would be empowered to provide input and facilitate decision-making on all aspects of the life cycle of a given academic technology. These include the following:

- Pilot: Initial testing
 - O Testing for suitability
- Pilot: Pre-Enterprise
 - O Testing for scale, utility
- Roll-out/Deployment
 - O Support
 - O Training
- Changes to ongoing operations
 - O Prioritization of discretionary enhancements
 - O Upgrades
 - O Changes of scope/scale
 - O Re-evaluation of in-use technology
- Sunset/Phase-out
 - O Migration plans to new system, if any



Appendix C: ULTA Committee Details

Composition of the ULTA

Recognizing that this process needs to serve the academic needs of the institution, ULTA should be primarily faculty with teaching responsibility. Academic and technology leadership (Deans, Provost and CIO representative) bring a strategic, longer-term view of how to develop academic technology at UMN. Technology and other service (e.g. CEI, DRC) staff provide information to help inform the body in order to make good decisions, but do not carry a vote.

A business analyst would receive requests, work with champions, and do necessary research to create the proposals.

ULTA processes

17	71000330	
	Busines	ss analyst
	0	Receive requests
	0	Funnel out of scope projects to other areas
	0	Work with champions to develop proposals that meet preliminary criteria
	0	Research needs, demand, options
	0	Fully investigate
		Gets feedback and concerns from all potential stakeholders
		■ infrastructure, OIT, local AT, libraries, DRC, and others
	0	
	Commi	unication Specialist
	0	Monthly updates from feeder committees
	0	Meeting updates from Primary committee
	0	Maintain searchable archive

Faculty Representatives or School/College Designees (28 members, Voting)

One from each college and campus (28 total).

Rationale:

Broad representation of campuses and disciplines.

Funding for 2-3 large scale technology pilots

O Expansion of Support services

O Project management

- Faculty prefer to be represented by other faculty.
- Majority of decision-making body should be actively involved in teaching.
- School/College Designees do not necessarily need to be a faculty members.
- In the case of absences, a proxy can be appointed.

Academic Leadership Representatives (2-4 members, non-voting)

Deans, Directors, and Department heads

Rationale:

- Strategic, longer-term view of how to develop academic technology at UMN with an academic perspective.
- Non-voting to avoid over-representing a particular college/dept (who also has a faculty rep)
- In the case of absences, a proxy can be appointed.

Provost or Representative (1 member, voting only in ties)

Recruited by the Provost to represent the Provost's interests in votes.

Rationale:

- System wide, strategic, longer-term view of how to develop academic technology at UMN with an academic perspective.
- Breaks ties among votes
- In the case of absences, a proxy can be appointed.

CIO or Representative (1 member, non-voting except at University-wide level)

Recruited by the CIO to represent the CIO's interests in academic technology.

Rationale:

- System wide, strategic, longer-term view of how to develop academic technology at UMN with a technology perspective.
- Informs based on technological capabilities and resource allocation.
- In the case of absences, a proxy can be appointed.

Option: Academic Technology Representation (Non-voting)

The affinity group recognizes that the primary committee is primarily faculty. Given that faculty may have varying levels of understanding of academic technology, we feel one option is to include a small number of academic technology representatives to explain or provide opinion as needed.

Pros:

Experts are ready and available during committee meetings to answer questions and advise

Cons:

• Committee members could defer to the experts, instead of engaging in the decision themselves

Administrative/Communications Role (non-voting)

Reports out on applications and decisions. Maintains searchable group knowledge base. Could be a self-nominated role for limited terms (similar to a committee secretary). The affinity group views this position as critical to the success of the model as sustainability of the model is going to hinge on members of the University community being able to enter the process from several angles and having up to date, searchable information as to what has already been considered will be essential to self help participation.

Rationale:

- Transparency requires regular communication about committee (and subcommittee) work.
- Establishing a community can be encouraged by establishing and maintaining a knowledge base and through establishing regular contact with local groups.
- Keeps up on status of projects in process.

Business Analyst Role (non-voting, QTY TBD)

Provide information on possible usage, technical considerations, other decision-making criteria (e.g. accessibility).

Rationale:

- Provides a single point of contact expert in the process for incoming requests. Requests out of scope can be referred to other services.
- Position has expertise to research functional needs and options.
- Avoids potential bias and political influence of champions.

Recommendations:

- Faculty voice is important and should comprise the majority of the voting from the decision-making body
- Administrative/Communications could be part of an existing university position in OIT or provost's
 office, but may need to be its own role if the number of projects grows.

ULTA Proposal/Meeting Timeline

- Thrice-yearly (Dec, May, Aug) cycle
- One semester from decision to action (longer lead time than small-scale due to larger resource and project coordination demands)

Processes that handle cases at different scales

ULTA (College-wide to System-wide)

- Full ULTA meeting
- Information sent to ULTA members 2 week prior to meeting



- Maximum 20 minutes for presentation + Q&A
- Quorum of 20 voting members needed
- Majority vote wins

Case submission

An online input form will be created to gather pertinent information about what is being requested.

Once submitted, the business analyst analyst would review the request and contact the requestor about next steps and any preparations needed.



Appendix D: ATIRA Committee Details

Proposal/Meeting Timeline

ATIRA (Individual - Several Departments)

- Monthly cycle (coincides with large-scale meetings when applicable)
- One month from decision to action (e.g. one month from approval of trying a moodle plugin to start of work to integrate plugin - not necessarily completion)

Processes that handle cases at different scales

ATIRA (Individual - Several Departments)

- ATIRA discusses and evaluates proposals
- Information sent to ATIRA members 2 week prior to meeting
- Maximum 10 minutes for presentation + Q&A
- Quorum of voting members needed
- Majority vote wins

Case submission

- An online input form will be created to gather pertinent information about what is being requested.
- Once submitted, the business analyst analyst would review the request and contact the requestor about next steps and any preparations needed.



Appendix E: Academic Technology Pipeline for 2-Tier Model

Scale	Quantity	Timing	Funding	Resources	Communicate out	Proce ss to be used
Several people	Lots	Whenever	Small awards made to project seekers	Assessment Evaluation Funding Proj. Mgmt. CEI	If funded, yes. If not, optional	ATIRA
Several departments	Many	Whenever	Small awards made to project seekers	Assessment Evaluation Funding Proj. Mgmt. CEI	Yes	ATIRA
College-wide	Few	1 semester ahead (Dec, May, Aug)	Yes, decisions drive adoption process by OIT services. Multiple funding sources.	TRB Rep. RFP assist Assessment Evaluation Funding Proj. Mgmt. CEI	Yes	ULTA
Several colleges	1	1 semester ahead (Dec, May, Aug)	Yes, decisions drive adoption process by OIT services. Multiple funding sources.	TRB Rep. RFP assist Assessment Evaluation Funding Proj. Mgmt. CEI	Yes	ULTA
Several campuses	1	1 semester ahead (Dec, May, Aug)	Yes, decisions drive	TRB Rep. RFP assist Assessment	Yes	ULTA



			adoption process by OIT services. Multiple funding sources.	Evaluation Funding Proj. Mgmt. CEI		
System-wide	1 (standardiz ed)	1 AY ahead	Yes, decisions drive adoption process by OIT services. Multiple funding sources.	TRB Rep. RFP assist Assessment Evaluation Funding Proj. Mgmt. CEI	Yes	ULTA



Appendix F: Evaluation Criteria

Below is a brief selection of important criteria that would be used by ULTA and ATIRA to evaluate academic technology.

Accessibility

- O Can the technology be used by students, staff, and instructors of all abilities?
- O What contingency plans can be put in place to ensure people with disabilities will be able to do what the technology enables people to do?

Sustainability

- O Are the costs one-time or recurring?
- O Can the project become self-sustaining?
- O Are there external dependencies (e.g. service providers) whose support/lack-thereof limit the continuation of use?

Usability

O Is the technology developed enough to be usable?

Scope of use

O How many in the university system would use the technology?

● FERPA/IRB/Human subjects testing concerns

- O How does the technology handle FERPA/privacy concerns?
- O Are there concerns that the use of the technology will damage student learning or success?

Pedagogical value

O Does the technology and its use show promise for enhanced teaching and learning?

Cost vs. Student impact (benefit)

O Is the cost reasonable for the number of students impacted and the magnitude/type of impact?

Differentiation

O Is the project significantly different from existing projects that it should be independent, or can it become an expansion of existing projects? (

Resources

O Do we have the hardware, software, and institutional knowledge (e.g. training and helpdesk support varies with scope of adoption) to carry this out?



Appendix G: Communication and Transparency

A repeated theme throughout the FCoP process was that many in the UMN community don't know what resources are available or what is possible to do with academic technology. For this reason, a strong communication strategy is needed. Transparency in the process is also needed to help the model be successful.

As part of the communication and growth strategy, we recommend communication of the following incentives for using the process:

- Project management expertise/oversight
- Assessment and evaluation expertise
- Request for Proposal (RFP) expertise (large scale)
- Funding load sharing (e.g. among Colleges/depts)
- Integration/Security expertise
- Accessibility expertise
- Technology resources and expertise
- Grant funding option
- Visibility and recognition of initiatives

Communication channels needed

- Applications status
- Project status
- What the decision-making process is
- Decisions
- Archive (searchable)
- Best practices
- Connecting requestors with expertise when request is out of scope
- Technology Review Board (TRB)
- Request for Proposals (RFP) to public/vendors when needed
- Connection to exemplary use and continuum of support efforts
- A searchable permanent repository of past decisions and information needs to be publicly available