



Heads of Teaching and Learning

CIOs

Provosts

Faculty

Engaging Faculty in the Technology Selection Process

Findings from the Teaching and Learning Functional Collaborative

Study in Brief

This report identifies the key barriers that inhibit faculty adoption of instructional technologies. It profiles strategies that innovative institutions use to engage faculty in the technology selection process. These tactics increase the number of faculty with whom teaching and learning staff interact and encourage faculty to clearly articulate use cases for technology prior to procurement.

5 Ways to Use This Research

- 1. Educate campus leaders about barriers that prevent instructional tool adoption
- 2. Encourage teaching and learning staff to include faculty in the procurement process
- 3. Align IT with the institution's teaching and learning mission
- 4. Ensure that instructional technology demonstrates high ROI
- 5. Assess faculty technology needs more systematically and accurately

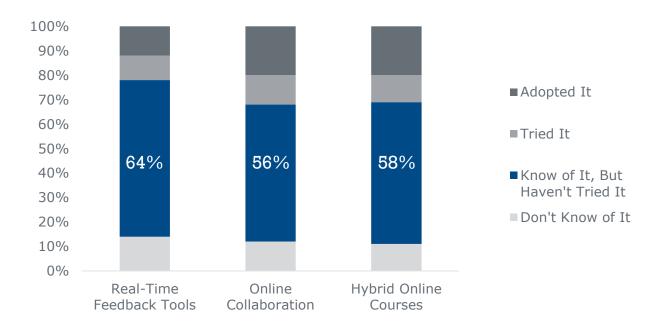
Despite Growing Familiarity with Tools, Adoption Lags

Knowledge of Innovative Technologies Does Not Necessarily Lead to Adoption

There is no shortage of new teaching and learning technologies in higher education. But despite faculty familiarity with and access to these new tools, a significant percentage of faculty have not begun using – or testing – frequently mentioned instructional technologies.

Given the extensive resources that teaching and learning units invest into the plethora of new technologies that promise to improve learning outcomes for students and facilitate instruction for faculty, this low rate of faculty uptake is cause for concern. If not adopted, these new tools do not impact student outcomes and therefore fail to support the institution's teaching and learning mission.

"Professors Know About High-Tech Teaching Methods, but Few Use Them"



We've built several new active learning spaces, but we haven't seen the shift in pedagogy that we expected. There is no faculty buy-in. In our most recently renovated space, the instructor moved the active learning tables back into a traditional lecture setup within four days!"

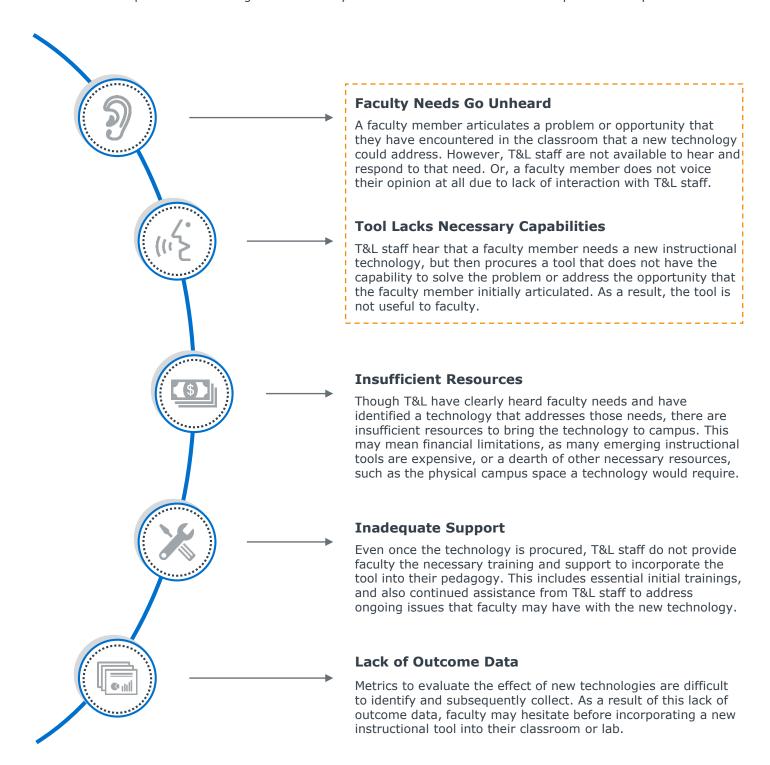
Classroom Technology Engineer Public Research University

Source: The Chronicle. "Professors Know About High Tech Teaching Methods But Few Use Them." 2015. https://www.chronicle.com/blogs/wiredcampus/professors-know-about-high-tech-teaching-methods-but-few-use-them/55777.

Key Barriers Prevent Faculty Experimentation

Why is Teaching and Learning Tool Adoption Low?

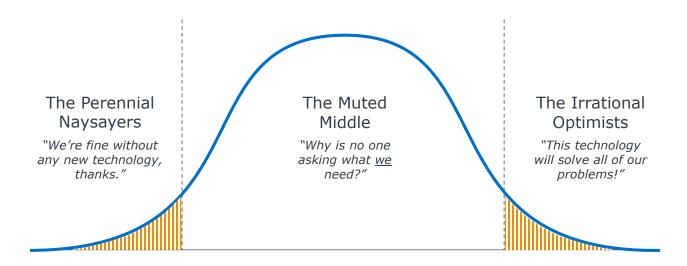
Eighty-five percent of teaching and learning leaders identify "Faculty Needs Go Unheard" and "Tool Lacks Necessary Capabilities" as the two most frequent barriers to faculty adoption of instructional technology. As such, teaching and learning staff must expand the number of faculty from whom they solicit feedback and ensure that procured technologies meet faculty needs in order to increase tool adoption on campus.



When Faculty Needs are Ignored or Misheard

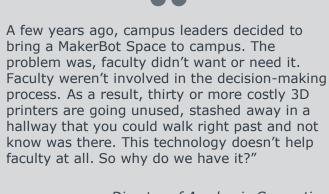
1 Teaching and Learning Staff Do Not Hear All Faculty Needs

Heads of Teaching and Learning report that they often only hear from a small number of faculty on campus, most of whom fall into the two categories: the "Perennial Naysayers," who tend to reflexively reject technology in the classroom, and "Irrational Optimists," who wholeheartedly embrace technology as a silver bullet to pedagogical challenges. The middle segment of faculty, who comprise the majority of instructors, are often left out of the conversation and, as a result, T&L staff are unaware of their technology needs.



2 New Tools May Fail to Meet Faculty Requirements

Procured technology must have the features required by the faculty members that originally requested the tool. This means that faculty must be active participants in assessing a new technology's capabilities prior to procurement. Without faculty input in the tool's evaluation, the technology that teaching and learning staff bring to campus may not meet faculty requirements, and ultimately go unused.



Director of Academic Computing
Public Research University

Looking for Frontier Practices

Best Practices Sourced From Across Higher Education

This study is based on understanding gained from diverse higher education leaders in the teaching and learning space. We are grateful to interviewees for sharing institutional insights and practices. We have abstracted their institutional insights to make them more generalizable to apply to colleges and universities with different missions and budgets, but the IT Forum's work is as ever grounded in the proven innovations of progressive practitioners.

Featured Institutions—With Sincere Appreciation



Kelly Reimer

Director of Teaching and Learning Technologies



Matthew Gardzina

Director of Digital Pedagogy & Scholarship



John Fritz

AVP of Instructional Technology



Renee Pfeifer-Luckett

Director of Learning Technology Development



Susan Lamparter

AVP of Technology Solutions

Donna Keil

Director of Innovative Learning



Lisa Keohane

Senior Instructional & Research Technologist

Selected Research Participants

University of Cincinnati

Pat Reid

Director of Instructional Innovation

Central Michigan University

Ben Andera

Executive Director of Academic and Research Computing

University of Iowa

Anna Flaming

Teaching & Learning Specialist

Maggie Jesse

Senior IT Director

Indiana University

Stacy Morrone

AVP for Learning Technologies

Michigan State University

Brendan Guenther

Director of Academic Information Technology

University of Oklahoma

Kevin Buck

Associate Director of Learning Spaces

The College of New Jersey

Ryan Gladysiewicz

Associate Director for the Office of Instructional Design

University of New Mexico

Elisha Allen

Director of Academic Learning Technologies & Innovation

Becky Adams

Online Course Development

Colorado School of Mines

Corey Parham

Classroom Technology Engineer

What the Best Are Doing

The IT Forum has identified two key barriers that prevent faculty from adopting teaching and learning technologies at higher rates:

- Their technology needs go unheard, because teaching and learning staff typically only hear from a vocal subset of faculty members.
- The procured technology does not have the capabilities that faculty require to address the problem or opportunity that the faculty member initially identified.

The strategies below seek to remedy both of these issues, facilitating widespread adoption of instructional technologies on campus.

Increasing the Breadth of Faculty Interactions



Low-Lift Technology Grant Applications

Streamlining the Grant Process to Encourage Experimentation

Offer small, one-time grants to faculty who want to bring a specific instructional technology into their classroom. Simplifying the grant application process results in more applications and more opportunities for innovation. This encourages more faculty to experiment with instructional technologies, increasing the number of faculty with which teaching and learning staff interact.



Faculty Engagement Tracker

Leveraging Data to Identify Opportunities for Innovation

Track teaching and learning staff consultations with individual faculty members to identify faculty interest and recognize which areas of campus are least engaged. Also, find potential faculty innovators through data stored in campus systems, such as the LMS. Both tactics record faculty involvement with teaching and learning initiatives and provide staff members the data they need to strategically promote greater faculty engagement.

Appropriately Evaluating Tool Capabilities



Preliminary Stakeholder Use Cases

Prioritizing Constituent Needs Prior to Procurement

Provide campus stakeholders the opportunity to articulate use cases for a technology prior to evaluating vendor options. If possible, require vendors to demonstrate how their product addresses specific stakeholder needs prior to procurement. This ensures that acquired technology aligns with the requirements of faculty, students, and staff, prior to deciding on a specific vendor's product.



Faculty-Led Tool Assessment

Empowering Faculty to Drive the Technology Adoption Process

Give faculty the deciding voice in the instructional technology selection process. The process should begin with a clearly articulated faculty need and faculty should be involved throughout the procurement process to assess whether the proposed technology has the capabilities to meet their needs. This way, teaching and learning staff are held accountable for evaluating potential technologies to ensure that they meet stakeholder requirements.

Low-Lift Technology Grant Applications



Streamlining the Grant Process to Encourage Experimentation

Practice in Brief

Offer small, one-time grants to faculty who want to bring a specific instructional technology into their classroom. Simplifying the grant application process results in more applications and more opportunities for innovation. This encourages more faculty to experiment with instructional technologies, increasing the number of faculty with which teaching and learning staff interact.

Implementation Steps

- Collaborate with the CIO and academic technologists to set aside a pool of money to fund small-scale technology projects for innovative faculty members. The amount of funding awarded per grant should be less than \$2000, with the intention of financing many smaller initiatives rather than a few large projects. For example, to fully fund 25 projects it is necessary to set aside \$50,000.
- Establish grant evaluation criteria and communicate this to faculty. This will ensure that faculty are
 aware of the type of project the grant is meant to fund. In turn, this facilitates the application
 process by increasing the quality of grant proposals and supporting committee consensus during
 the evaluation process.
- Create a low-lift grant application that asks for only the most pertinent information, encourages the
 applicant to share hyperlinks, notifies applicants when an answer is optional, and provides
 examples to guide applicants' responses. A faculty member should be able to complete the
 application in a single sitting.
- Advertise the grant to faculty members across campus through faculty senate meetings, departmental listservs, and other channels. This will encourage faculty members who may not otherwise engage with teaching and learning staff to apply for a technology grant.

Benefits to Institution

- More technology grant applicants and recipients
- Increased opportunities for innovative pedagogy across disciplines



We want the application to be low-stakes. If we required a faculty member to write a long proposal, they wouldn't apply for it. We've had 30 faculty apply in the past year through the shorter application, demonstrating stronger faculty engagement in teaching and learning than before."

Kelly Reimer
Director of Teaching and Learning Technologies
Elon University



Elon's Criteria for Grants Establish Clear Guidelines

(W)

Purpose: Must use funding to test a new technology, not one already in use on campus



Use: Funded technology must be integrated into pedagogy; may not be used only for research



Fit: Must reflect the goals of a department and serve as a model to other faculty members



Timeline: Must use new tool between 3 and 12 months from the date of application



Cost: Must specify a grant amount of no more than \$2,000



Hardware: Must not require upgraded standard hardware, such as a high-powered computer



Follow Up: Must submit half-page report describing how the technology was used

 \leq \$2,000

Amount awarded to grant recipients

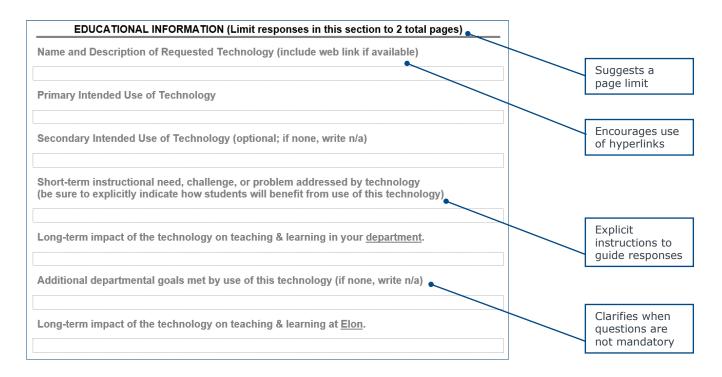
20 to 30

grant applicants in the 2016-17 academic year

67%

of applicants received a grant

Low-Lift Application Expands Number of Applicants



Faculty Engagement Tracker

Leveraging Data to Identify Opportunities for Innovation



Practice in Brief

Track teaching and learning staff consultations with individual faculty members to identify faculty interest and recognize which areas of campus are least engaged. Also, find potential faculty innovators through data stored in campus systems, such as the LMS. Both tactics record faculty involvement with teaching and learning initiatives and provide staff members the data they need to strategically promote greater faculty engagement.

Implementation Steps

- Begin tracking teaching and learning staff interactions with faculty members. Include the following information about instructors in a Faculty Interaction Log, and house this data in a central location such as a service management system:
 - · Name, department, and courses taught
 - Details surrounding their technology request
 - Name of the teaching and learning staff member with whom they interacted
- Assign one teaching and learning staff member to support a specific faculty member with
 multiple requests over the course of the academic year, or longer. This allows for the faculty
 member to build a relationship with this individual over time, and permits the teaching and
 learning staff member to gain a more holistic understanding of the faculty member's needs.
- Reflect on this data to recognize which departments, disciplines, and faculty members are most
 and least likely to visit and engage with teaching and learning staff and resources. Then,
 convene a group of relevant stakeholders to create strategies to increase the breadth of faculty
 with whom teaching and learning staff collaborate.
- As teaching and learning staff members build this database of specific innovators and engagement gaps, pinpoint campus systems (such as the LMS) that T&L staff can leverage to proactively identify faculty with innovative pedagogical techniques, whose input would be valuable in campus-wide teaching and learning initiatives.

Benefits to Institution

- Teaching and learning staff hear from a broader subset of faculty members
- Sustained faculty relationships with teaching and learning staff



We use this data to receive a high-level view of faculty engagement. Then, I strategize with my staff how to better market our services to less engaged departments."

Matt Gardzina Director of Digital Pedagogy & Scholarship Bucknell University

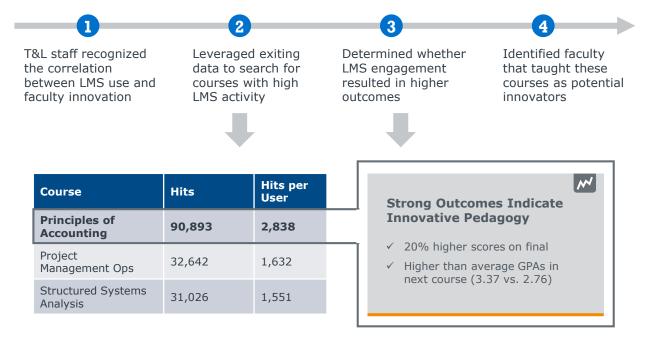


Track T&L Staff Interactions to Surface Opportunities

To better understand the breadth and depth of their relationships with faculty, teaching and learning staff at Bucknell University track each of their faculty interactions using this log:

Faculty Interaction Log Name: One T&L staff member is Department: assigned to a particular faculty member, to facilitate Course: relationship building Technology Request: Provides qualitative data on the type of interaction with the faculty member so that T&L staff can understand Assigned T&L Specialist: the quality - as well as quantity - of interactions Prior Interactions: Description of Interaction Semester

Proactively Identifying "Stealth Innovators" Using Existing Data



Preliminary Stakeholder Use Cases

Prioritizing Constituent Needs Prior to Procurement



Practice in Brief

Provide campus stakeholders the opportunity to articulate use cases for a technology prior to evaluating vendor options. If possible, require vendors to demonstrate how their product addresses specific stakeholder needs prior to procurement. This ensures that acquired technology aligns with the requirements of faculty, students, and staff, prior to deciding on a specific vendor's product.

Implementation Steps

- Convene a diverse group of stakeholders, including faculty, staff, students, and administrators in
 person or virtually. Source product requirements from each stakeholder for the technology at
 hand. Ask them to be as specific and exhaustive as possible with regard to the various ways that
 they would use the product and how they need the tool to function in their context.
- Do not discuss specific vendors when sourcing end user requirements for the product's use case and feature set. This avoids teaching and learning staff deferring to the most well-known and persistent vendors without carefully considering constituent needs.
- Evaluate specific vendors against the use cases and feature set that stakeholders have articulated, taking into consideration the existing technology ecosystem, integration with existing tools, security, and enterprise architecture requirements.
 - If issuing an RFP, include specific use case scenarios (sourced from campus stakeholders) in the RFP and require vendors to explain how their product best addresses user needs.
 - If there is no RFP, list all possible vendors for the tool and systematically eliminate those that do not have capacities that end users have articulated.
- If there are multiple vendors that meet stakeholder requirements and are equally feasible within existing enterprise architecture, offer opportunities for end users to engage with the product to experiment with its features and uses. Ask for feedback related to how well the product functions in the context of their needs.

Benefits to Institution

- Greater ROI from procured technologies due to higher rate of faculty adoption
- Stakeholder-specific requirements are prioritized during the procurement process



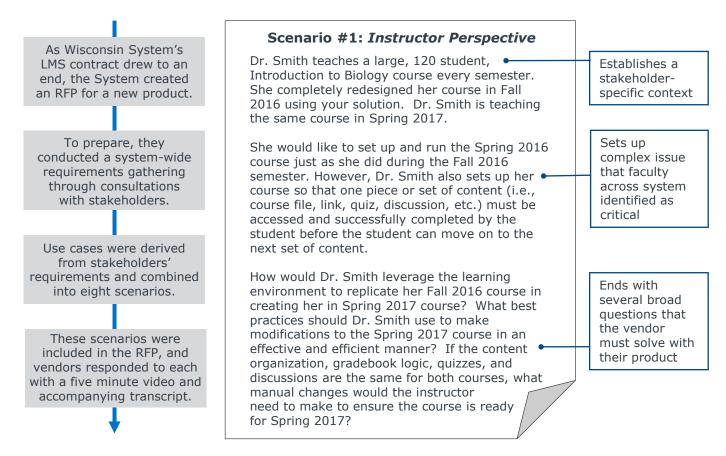
Since we prioritized end user use cases when deciding which new web-conferencing software to adopt, engagement has skyrocketed. Meeting minutes and participants have doubled since bringing the new platform to campus."

Susan Lamparter AVP of Academic Technology Solutions Roosevelt University

eab.com

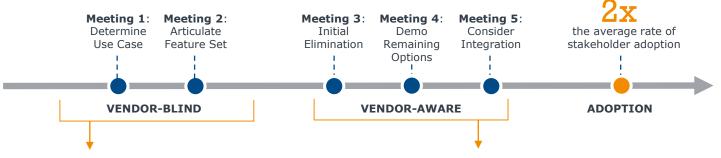


Leveraging Use Case Scenarios in the RFP Process



Vendor-Blind Tool Selection Emphasizes Use Case

Faculty at Roosevelt University sought a new webconferencing software. Prior to deciding on a specific product, teaching and learning staff convened a group of stakeholders (including faculty, students, and administrators) for a series of meetings.



First, Determine Use Case & Feature Set

- In the first meeting, stakeholders agree on specific use cases for the new tool
- In the second, the group articulates a feature set they expect the tool to have
- Specific vendors are not mentioned in either of these two meetings



Then, Systematically Eliminate Vendors

- In the third meeting, staff eliminate vendors that do not match preferences
- Group members then demo the remaining vendor options and provide feedback
- Finally, consider which product integrates best with existing systems

Faculty-Led Tool Assessment

Empowering Faculty to Drive the Technology Adoption Process



Practice in Brief

Give faculty the deciding voice in the instructional technology selection process. The process should begin with a clearly articulated faculty need and faculty should be involved throughout the procurement process to assess whether the proposed technology has the capabilities to meet their needs. This way, teaching and learning staff are held accountable for evaluating potential technologies to ensure that they meet stakeholder requirements.

Implementation Steps

- Form a committee of faculty from across departments, the CIO, and one or more teaching and learning staff members. This committee will meet quarterly (see step four below) and act as the final approving body of all faculty technology requests. Collectively, the committee should have a strong grasp of whether a specific tool would be useful for faculty, the available budget for new technology acquisition, and the likelihood of faculty adoption of the technology.
- Establish a clear, multi-stage technology selection procedure. The next page illustrates Babson's four-stage process that assesses a technology's capabilities prior to procurement, which:
 - 1. Begins with a need articulated by one or more faculty members;
 - 2. Permits faculty to veto technology recommendations made by teaching and learning staff;
 - 3. Includes an opportunity for faculty to pilot the tool prior to procurement;
 - 4. Requires the committee of faculty, mentioned above, to approve the tool prior to procurement, based on its number of use cases among other factors.
- Advertise this process in faculty senate meetings, campus listservs, and other channels. This will let
 faculty know that teaching and learning staff welcome their technology requests and input, and
 ensure that they understand the new technology selection process.

Benefits to Institution

- Puts a streamlined process in place to address faculty technology needs
- Ensures that a new tool has enough use cases across disciplines prior to its procurement



Faculty needed an easy-to-use group peer review tool, and through the Innovation Pipeline we developed an in-house tool that integrated with groups created in Blackboard. It caught on in one division and spread; now, 97 groups use it."

Lisa Koehane Senior Instructional & Research Technologist Babson College



A Four-Stage, Faculty-Driven Tool Assessment Process



Stage 1: Need Articulation

A faculty member, group of faculty, or other stakeholder identifies a problem that could be solved with a new technology



Stage 2: Tool Identification

T&L staff conduct research, read reviews, compare costs, and ultimately identify a technology to solve the problem



Stage 3: Pilot Projects

Faculty and T&L staff meet to experiment with the chosen technology and provide feedback on its application



Stage 4: Approval and Rollout

Pilot findings are presented to the committee, who determine whether enough faculty will have use for the technology and may approve rollout

100% Projects

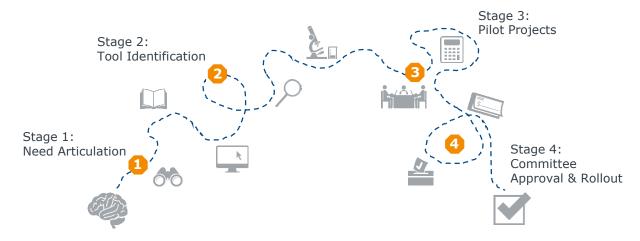
65% Projects

30% Projects

80/0 Projects

Number of Projects Decreases Throughout the Process as Faculty Veto

Questions Faculty Pose to Pause, Halt, or Reroute Technology Adoption



"Are you clear on the need that I have articulated?" "Do I prefer this specific technology compared to the alternatives?" "Do I think this technology works well for me in practice?" "Will enough of my peers also benefit from this new technology?"





Discussion Guide Engaging Faculty in the Technology Selection Process

Using this Report to Speed Consensus for Change

Many IT Forum members use our research as an occasion to convene IT and campus leaders to review best-practice lessons from innovative higher education institutions, deliberate about the need to revisit policies, implement new processes, reallocate staff and budget dollars, or advance task force and strategic plan goals.

To that end, IT Forum reports feature self-evaluation diagnostics and discussion guides that IT leaders can use as a backbone for focused working sessions at staff and task force meetings. We recommend that members distribute the report to the relevant stakeholders as pre-reading to establish a common vocabulary and fact base, then spending time going through the diagnostics and discussion questions to decide whether policy course-correction or resource re-allocations make sense. IT Forum staff would be happy to facilitate such discussions live on your campus or on a private web conference as helpful.

Creating an IT Team Working Session

- · Send report to teaching and learning leadership for pre-reading
- Convene group to discuss diagnostic questions and assess need for adopting profiled practices
- Contact IT Forum for implementation support:
 - · Unmetered consultation with Forum researchers
 - Networking contact with profiled institutions
 - · Model policy and process templates

Tool Selection Often Driven By Loudest Minorities



1) What percent of faculty actively engage with teaching and learning initiatives?



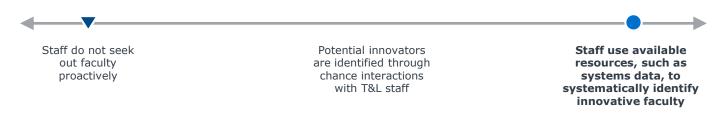
2) Do teaching and learning staff know which faculty are most and least engaged?



3) Do faculty from a range of disciplines interact with teaching and learning staff?



4) How do teaching and learning staff proactively seek out potential faculty innovators?





New Tool Capabilities Fail to Meet Faculty Needs



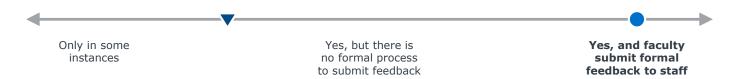
1) What percent of procured technologies go unused or underused after being brought to campus?



2) To what extent are faculty and other stakeholders encouraged to articulate their specific needs during the tool selection process?



3) Are faculty able to test out a new technology and provide feedback prior to its procurement?



4) Are prospective vendors required to prove that their product meets stakeholder needs?





Low-Lift Technology Grant Applications

Offer small, one-time grants to faculty who want to bring a specific instructional technology into their classroom. Simplifying the grant application process results in more applications and more opportunities for innovation. This encourages more faculty to experiment with instructional technologies, increasing the number of faculty with which teaching and learning staff interact.



1) What funding is available for faculty to experiment with classroom technology?



2) How long does it take a faculty member to complete the application for this funding?



3) How many faculty members receive this funding opportunity?

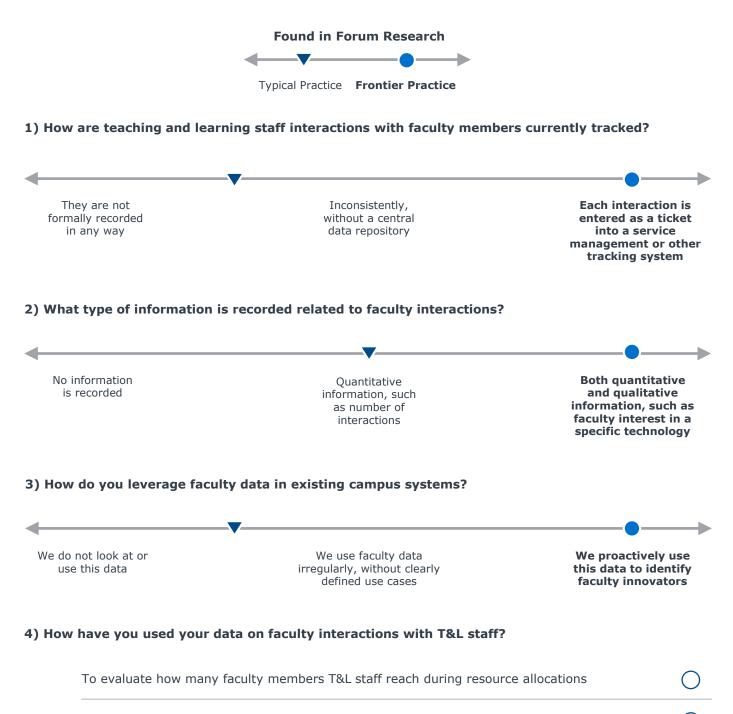


4) How many faculty members are aware that this funding is available?



Faculty Engagement Tracker

Track teaching and learning staff consultations with individual faculty members to identify faculty interest and recognize which areas of campus are least engaged. Also, find potential faculty innovators through data stored in campus systems, such as the LMS. Both tactics record faculty involvement with teaching and learning initiatives and provide staff members the data they need to strategically promote greater faculty engagement.

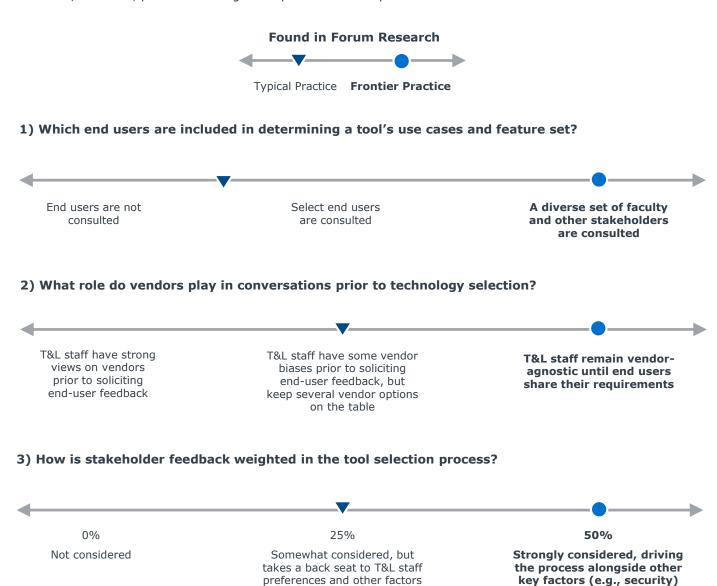


To inform future T&L procurements, based on faculty members' historical rate of adoption

To recognize the faculty members that are least engaged in T&L initiatives

Preliminary Stakeholder Use Cases

Provide campus stakeholders the opportunity to articulate use cases for a technology prior to evaluating vendor options. If possible, require vendors to demonstrate how their product addresses specific stakeholder needs prior to procurement. This ensures that acquired technology aligns with the requirements of faculty, students, and staff, prior to deciding on a specific vendor's product.



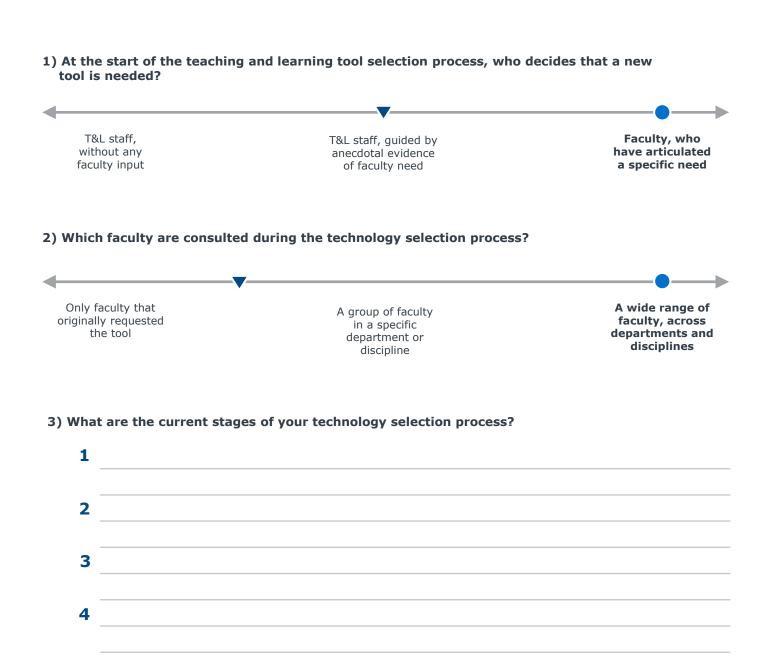
4) If your unit includes use cases in the RFP, do you...

Conduct a needs assessment of all stakeholders to understand their requirements?	\bigcirc
Ensure all end user perspectives are represented in the use case portfolio?	0
Ask vendors specific questions within each use case to prove their product's functionality?	\bigcirc
Request stakeholder feedback on vendors' responses to use cases prior to procurement?	0

Faculty-Led Technology Assessment

Give faculty the deciding voice in the instructional technology selection process. The process should begin with a clearly articulated faculty need and faculty should be involved throughout the procurement process to assess whether the proposed technology has the capabilities to meet their needs. This way, teaching and learning staff are held accountable for evaluating potential technologies to ensure that they meet stakeholder requirements.





IT Forum

Project Manager

Scott Winslow

Research Consultant

Anna Krenkel

Research Analyst

Shaun Devlin Shepard

LEGAL CAVEAT

EAB Global, Inc. ("EAB") has made efforts to verify the accuracy of the information it provides to members. This report relies on data obtained from many sources, however, and EAB cannot guarantee the accuracy of the information provided or any analysis based thereon. In addition, neither EAB nor any of its affiliates (each, an "EAB Organization") is in the business of giving legal, accounting, or other professional advice, and its reports should not be construed as professional advice. In particular, members should not rely on any legal commentary in this report as a basis for action, or assume that any tactics described herein would be permitted by applicable law or appropriate for a given member's situation. Members are advised to consult with appropriate professionals concerning legal, tax, or accounting issues, before implementing any of these tactics. No EAB Organization or any of its respective officers, directors, employees, or agents shall be liable for any claims, liabilities, or expenses relating to (a) any errors or omissions in this report, whether caused by any EAB organization, or any of their respective employees or agents, or sources or other third parties, (b) any recommendation by any EAB Organization, or (c) failure of member and its employees and agents to abide by the terms set forth herein.

EAB is a registered trademark of EAB Global, Inc. in the United States and other countries. Members are not permitted to use these trademarks, or any other trademark, product name, service name, trade name, and logo of any EAB Organization without prior written consent of EAB. Other trademarks, product names, service names, trade names, and logos used within these pages are the property of their respective holders. Use of other company trademarks, product names, service names, trade names, and logos or images of the same does not necessarily constitute (a) an endorsement by such company of an EAB Organization and its products and services, or (b) an endorsement of the company or its products or services by an EAB Organization. No EAB Organization is affiliated with any such company.

IMPORTANT: Please read the following.

EAB has prepared this report for the exclusive use of its members. Each member acknowledges and agrees that this report and the information contained herein (collectively, the "Report") are confidential and proprietary to EAB. By accepting delivery of this Report, each member agrees to abide by the terms as stated herein, including the following:

- All right, title, and interest in and to this Report is owned by an EAB Organization. Except as stated herein, no right, license, permission, or interest of any kind in this Report is intended to be given, transferred to, or acquired by a member. Each member is authorized to use this Report only to the extent expressly authorized herein.
- Each member shall not sell, license, republish, distribute, or post online or otherwise this Report, in part or in whole. Each member shall not disseminate or permit the use of, and shall take reasonable precautions to prevent such dissemination or use of, this Report by (a) any of its employees and agents (except as stated below), or (b) any third party.
- 3. Each member may make this Report available solely to those of its employees and agents who (a) are registered for the workshop or membership program of which this Report is a part, (b) require access to this Report in order to learn from the information described herein, and (c) agree not to disclose this Report to other employees or agents or any third party. Each member shall use, and shall ensure that its employees and agents use, this Report for its internal use only. Each member may make a limited number of copies, solely as adequate for use by its employees and agents in accordance with the terms herein.
- Each member shall not remove from this Report any confidential markings, copyright notices, and/or other similar indicia herein.
- Each member is responsible for any breach of its obligations as stated herein by any of its employees or agents.
- If a member is unwilling to abide by any of the foregoing obligations, then such member shall promptly return this Report and all copies thereof to EAB.

