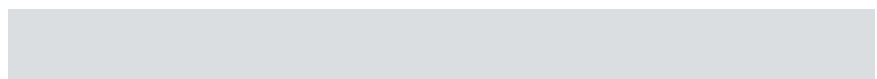# Increasing Faculty Adoption
# of Instructional Technology

Case Study of Eastern Michigan University's Collaboratory Model

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Exclusive Rooms Dedicated to Instructional Technology Exploration

Typical University Problems

Faculty non-use or misuse of instructional technology often underserves student success goals. Root causes include:

- Faculty not involved in instructional technology selection process, leading to dissatisfaction with technology options that were chosen by IT

- Insufficient training and learning support opportunities for faculty

Innovative Approach

- Eastern Michigan University

- *Location: Ypsilanti, Michigan; Student Enrollment: ≈23,500; Faculty: ≈1,300*

To promote faculty pedagogical development and participation in collaborative projects, Eastern Michigan University's Library envisioned and created the "Collaboratory." The Library partnered with the Faculty Development Center and IT to create a multifunctional room for faculty teaching and learning development.

This brief focuses on only one aspect of the Collaboratory's mission: technology evaluation and self-testing by faculty to improve University investment in instructional technology. The University's IT, Library, and Faculty Development Center provide technical and instructional assistance to faculty when requested. The Collaboratory is designated for individual development of teaching skills, including exploration of technologies; another classroom in the library allowed faculty to test technologies with students for one-off classes.

Key Animating Principle

- 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.

In This Case Study, You Will Learn How One Institution:

- Built faculty consensus for instructional technology purchases

- Increased faculty adoption of instructional technology

- Prioritized emotional security (versus simply technical expertise) during instructional technology training to drive adoption

Faculty Feedback Key Adoption Driver

When evaluating new technology options, Eastern Michigan University IT may test them by rotating one technology tool at a time or providing two options side-by-side (e.g., an HDTV and a projector in the same room).

Faculty complete paper surveys with their preferences and any suggestions they have. Surveys ask: what did you use, what did you like, and what should we change? IT staff prefer paper surveys over electronic surveys because of higher response rates and shorter lag time between testing and survey completion.

Faculty Provide Point-of-Testing Feedback

Decisions Impacted by Faculty Member Feedback

Vendor Selection	Platform Selection	Vendor Negotiation
Document Camera	*TV vs. Projector*	*Control Console*
Faculty gave strong positive feedback for a document camera. IT selected a model capable of communicating with a central diagnostic tool for prompt remote troubleshooting.	College of Business faculty preferred projectors over HDTVs because spreadsheets were easier to view on projection screens (i.e., size was more important than picture vibrancy). Without this feedback, IT would have likely installed HDTVs in business classrooms.	Faculty preferred the user interface of the more expensive of two control console options. The provider of the more economical option adjusted its console's configuration to reflect faculty preferences

Interviewees note that key faculty members' engagement in technology decisions engenders broader trust within the teaching community. A committee created to standardize instructional technology requested feedback from respected faculty and technology "super users." Their inclusion leads to easier rollout of new technologies across the faculty community.

Further, faculty members trust that IT listens to their feedback rather than just purchasing the least expensive option. EMU has unionized faculty, who particularly desire the ability to provide input.

Ability to Give Feedback Leads to Trust in IT Decisions

Illustrative Faculty Targeted for Feedback

- Popular Engineering faculty member
- Philosophy department chair
- Biology faculty member at forefront of technology usage

> **Quality More Important than Numbers**
>
> "My impression is it was a relatively small number of faculty who gave feedback, but we got feedback from the key people – those who care a lot, those who have a lot of say around how courses are organized and made available to students, and those who carry voice and weight among colleagues."
>
> *Lisa Klopfer*
> *Associate Professor and Librarian*
> *Eastern Michigan University*

Source: Education Advisory Board interviews and analysis.

Supportive Training on Standard Equipment

Lisa Klopfer, Associate Professor and Librarian at Eastern Michigan University notes that "the 'we are the experts and we will help you' position might fill in gaps in knowledge or get a project done, but I found that it was difficult to draw anyone in unless they had a specific immediate need, and it left them unempowered and still dependent on the perceived experts" for technology guidance. Lack of confidence in technology typically leads to avoidance of technology adoption. EMU's model empowers faculty through self-exploration of technologies, and experts are present only when faculty request assistance.

One-on-One Expert Teaching Model Not Working

Typical Technology Teaching Model

One-on-one teaching of faculty by technology experts

- *Drawbacks:*
  - Challenging to obtain faculty volunteers for one-on-one sessions
  - Faculty consider themselves judged, not empowered
  - Faculty dependent on experts for technology guidance

Collaboratory Model

Faculty test new technologies independently; experts provide guidance only when requested

- *Benefits:*
  - Faculty comfortable with experimenting, learning, and failing without judgment
  - Limited staffing needs for ongoing personal technology training

EMU's Educational Environment and Facilities Committee surveyed faculty to determine the technologies and services of interest.   At the same time, EMU transitioned to standardized instructional technology. The provost and president secured funding from the board for a new technology equipment and services model based on survey results.

IT used the Collaboratory to collect faculty feedback on potential technology options for larger roll-outs. The model also increases faculty members' comfort with technology found in classrooms. Both of these have driven adoption of instructional technology by faculty.

Capital Funding Allowed for Increased Technology Options

Decentralized Technology Decisions

- *Drawbacks:*
  - Variety and age discrepancies of technologies across classrooms
  - Unused technologies
  - More complex instructional technology training and support

EMU's Standardized Classroom Technology Model

- *Benefits:*
  - Reasonably current technologies across classrooms
  - Consistent technologies, allowing for minimal faculty adjustments when teaching in different classrooms

Collaboratory Included in the Technology Refresh Program

EMU included the Collaboratory in the IT budget's technology refresh program. This ensures funding so that the Collaboratory will continue to have the same basic technologies that classrooms have.

Source: Education Advisory Board interviews and analysis.

Self-Exploration Partnered with Expert Assistance

Eastern Michigan University's Academic Project Center model inspired the design of the Collaboratory. The Center enables students to receive help from start to finish (exploration and research to writing and presentation) on a project. Library and Faculty Development Center staff designed the Collaboratory to collect the components that faculty members may need for using technology in the classroom (e.g., instructional technology, library resources, pedagogy) into one place. IT was exploring how to test faculty members' technology preferences, and the three units determined that the Collaboratory could serve both interests.

One-Stop Shop Academic Project Center Model an Inspiration

The Academic Project Center

Co-locates functions to support students during a project, from start to finish:
- IT help desk
- Library reference desk
- Writing center

Location: Library (first floor)

The Collaboratory

Co-locates similarly related capabilities to support faculty for technology use in the classroom:
- Instructional technology and support
- Faculty development seminars
- Faculty-led research and writing groups

Location: Library (accessed through the Faculty Development Center)

EMU's Academic IT Advisory Committee determined they needed classroom technology that is current, consistent, and maintained. This, along with support for faculty readily available, would help increase adoption and satisfaction with technology. Regular classrooms could not suffice, as faculty may be unwilling to test new technologies in front of students.

Two Rooms Allow for Individual and Student-Facing Testing

Purposes of Two Learning Spaces

Collaboratory: "Ego-Safe" Testing Room

- Faculty members explore technologies alone or request assistance for guidance from an instructional technologist
- Room connected to the Faculty Development Center
- Also used for new classroom technology trainings

Classroom Simulation Room

- Faculty members schedule individual class sessions in the room to explore how technologies work in a real-world classroom
- General classroom located in the library, temporarily used to complement the Collaboratory space

Source: Education Advisory Board interviews and analysis.

Consideration of Emotional Security Integral

Peggy Liggit, the Interim Director of Eastern Michigan University's Faculty Development Center, says "learning something new takes a person into a space of the unknown and unfamiliar which can generate feelings of vulnerability and frustration. These emotions can stop a person long before their cognitive ability to master the new skill or knowledge, such as learning how to use new technology for teaching."

The Collaboratory allows for faculty members to experiment with new technologies in a non-judgmental environment, as experts are only present upon request. Faculty may also invite colleagues to the Collaboratory for joint exploration of instructional technology and peer-to-peer learning.

Closed Room Decreases Faculty Inhibitions about Technology

Old Model

- Seminars on new technology in a room open to outside noises (e.g., printers, passersby)
- Focus on where to "point and click" (mechanical learning)

New Model

- Collaboratory in a closed room, accessed through Faculty Development Center
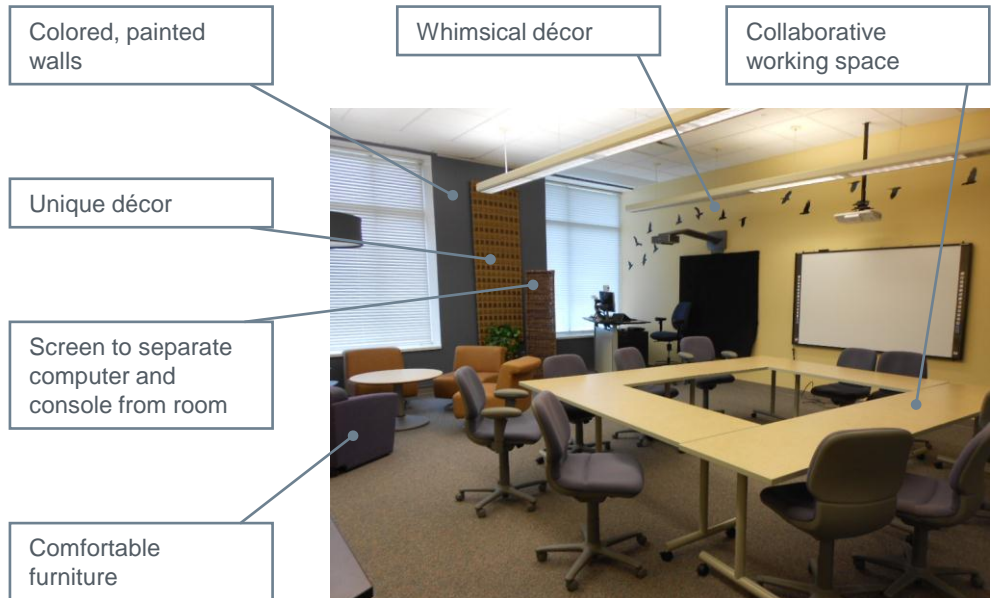- Focus on points of frustration and pedagogical opportunities

> **"**
>
> **Don't Forget the Emotional Aspect of Learning**
>
> "People might think: what in the world does a comforting space and a closed door have to do with new technology? It has a huge amount to do with it, because you're not even going to get [faculty] in there to try unless they feel that security."
>
> *Peggy Liggit*
> *Interim Director of the Faculty Development Center*
> *Eastern Michigan University*

The Collaboratory was designed to set itself apart from university classrooms to ensure an inspirational environment for faculty members. Collaboratory decorations include colored walls, stencils of flying birds, and wall art. A bamboo screen is also set up that can close off the computer and console section from the rest of the room. IT, the Faculty Development Center, and the Library spent a total of $2,500 on decorations for the room.

Room Decorations Set Collaboratory Apart from Regular Classrooms

Collaboratory Design

Colored, painted walls

Whimsical décor

Collaborative working space

Unique décor

Screen to separate computer and console from room

Comfortable furniture

Inspiring Use of and Buy-in for the Collaboratory

Once faculty attend seminars in the Collaboratory, they often proactively schedule individual time in the room at a later date. The Faculty Development Center holds several seminars (e.g., global learning) in the Collaboratory, and past seminar attendees often request to use the room individually or for related meetings. The FDC also conducts presentations on active learning twice per year (pre-fall term and in February); these presentations often demonstrate teaching technologies.

The Library also held an open house when the Collaboratory first opened. Collaboratory leaders invited principal Faculty Senate members and deans, among others, to the event.

Seminars in Collaboratory the Primary Active Marketing Effort

Presence in Group Collaboratory Settings Inspires Future Individual Use

Faculty Seminar Held in Collaboratory

Library-Led Open House

Interest in Trying New Classroom Technology

New Empowered Instructional Technology User

A primary benefit from the Collaboratory has been improved communications between faculty members and administrators regarding technology decisions.

The CIO, Director of IT Business Operations, purchasing, and physical plant teams incorporate faculty feedback into evaluation of technology purchases to find potential monetary savings.

Through testing new technologies, faculty members realize the benefits of the technologies and are able to use them correctly in their classrooms more often, leading to better student experiences.

Collaboratory Preventing Misguided Decisions

Sample Assumption from Faculty: *The six ceiling speakers in classrooms would be disruptive to other classes because of loud noise*

- *Potential Action*: Faculty use laptop speakers rather than ceiling speakers
- *Insight from Collaboratory*: While more speakers are used in the ceiling, the volume is lower than when laptop speakers are used
- ☑ *Collaboratory Benefit*: Faculty understand benefit of overhead speaker system and use these speakers instead of louder laptop speakers

Sample Assumption from Administration: *Faculty will want to use interactive whiteboards in their classes more than standard whiteboards*

- *Potential Action*: IT purchases interactive whiteboards for classrooms
- *Insight from Collaboratory*: Only a few faculty in one or two disciplines have interest in using interactive whiteboards, so most whiteboards would remain unused in classrooms
- ☑ *Collaboratory Benefit*: Administrators acknowledge likely non-adoption of interactive whiteboards; forego expensive investment

Source: Education Advisory Board interviews and analysis.

Promoting Ease of Collaboratory Use

Interviewees at Eastern Michigan University explain that one challenge is that, because there's always a demand for space, campus members may see the room as available spill-over space when needed. To prevent this, Faculty Development Center staff review all room requests for mission alignment and deny unrelated requests. If administrators and faculty use the Collaboratory for non-mission-focused meetings, the room may lose its appeal to faculty members as unique.

Faculty Reserve Collaboratory through Zimbra Calendar

Process for Collaboratory Reservations

New Appointment Creation	**Information Requested for Reservations**	**Approval Process**
▪ Faculty open Zimbra calendar and create a new appointment with the location as the Collaboratory ▪ Calendar shows whether room is free at requested time	▪ Date and time ▪ Contact information ▪ Technology equipment needs ▪ Purpose for using the Collaboratory	▪ Faculty Development Center staff review reservation requests for approval

To ensure that faculty continue to use technology successfully, IT has set up a direct line to the front of the Help Desk. This provides faculty with the security that, if something goes wrong in the classroom, they will have assistance immediately.

Availability of Instant Classroom Tech Support Eases Stress

One-Button Call for Instant Technology Support from IT Help Desk

Both the Collaboratory and Eastern Michigan University classrooms include VoIP phones. IT created a button on these phones to let faculty move to the front of the line for the IT Help Desk for instant support if they need help with classroom technology. Interviewees note that faculty use this button one to two times per day and attribute the low use to faculty technical knowledge gained through the Collaboratory and to faculty feedback for IT support staff during Collaboratory use.

Contributing Where They Can

Library leaders envisioned the concept of the Collaboratory and partnered with IT and the Faculty Development Center to realize that vision. Each of the three sponsor units provides a different service for Collaboratory operations based on expertise: IT provides technology support, the Faculty Development Center provides operational and pedagogical support, and the Library provides additional operational and research support.

Responsibilities Split Based on Ability to Contribute

Logistical Responsibilities of Collaboratory Owners

IT

- Set-up new equipment
- Provide instructional technologists when requested
- Provide IT staff for technical trouble-shooting

Faculty Development Center

- Assist faculty with pedagogical support
- Oversee day-to-day operations of the Collaboratory rooms
- Control calendar for the Collaboratory

Library

- Host events to promote awareness of the Collaboratory
- Provide library support staff for research-related questions
- Supervise maintenance of rooms (heating and cooling)

The Collaboratory lacks a central budget, so it relies on the unit owners to trust each other to contribute what they can. If needed, Collaboratory leaders can request extra funding or guidance for funding priorities from the provost.

Interviewees note that the Collaboratory operates on a "shoestring budget," but this has not affected the success of the Collaboratory.

Collaboratory Owners Contribute Funding Piecemeal

Financial Responsibilities of Collaboratory Owners

IT

- Provide new technologies for testing (technologies self-funded or loaned for free by vendors)

Faculty Development Center

- Fund new webinars and seminars to get faculty into the Collaboratory

Library

- Contribute donor money for various items (e.g., furniture, decorations)

Source: Education Advisory Board interviews and analysis.

Potential Replication of the Collaboratory

Interviewees cite the trusting relationship across IT, the Library, and the Faculty Development Center as a key driver for the Collaboratory's success at Eastern Michigan University. If similar departments at another higher education institution seeking to replicate this model are territorial, the model may fail.

Interviewees recommend forming a common vision across the units and keeping a "humanized approach – if you make the *why* clear, the *what* and *how* will follow."

Trust Among Collaboratory Owners Integral for Success

Must-Haves for Replication

Provide:

☑ Laboratories dedicated to instructional technology exploration and testing in a supportive, "ego-safe" environment

☑ Standard, simple technology survey open to all faculty

Trust that:

☑ Each unit will contribute equally, or as much as they can

☑ IT will listen to faculty concerns; not just buy the cheapest option

Issues to Avoid

Avoid:

⊘ Territoriality across Collaboratory owners

⊘ Focus on bottom line at expense of faculty feedback

⊘ Assessment of technology exploration rooms by usage rate instead of usage breadth

⊘ Allowing Collaboratory to become "just another meeting space"

Source: Education Advisory Board interviews and analysis.