

# Learning Spaces Task Force

#### Research and Report Prepared by

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# **Executive Summary**

The *Learning Spaces Task Force* was formed to examine contemporary needs and desires of library learners and teachers within the context of the Heathcote Classroom. Through mixed-methods research, we identified three key themes relating to library learning spaces. These themes inform recommendations for improving the Heathcote Classroom and the Library spaces ecosystem.

## Key Themes

### Enjoyability

Improving the aesthetic appeal of the space to be more conducive to learning.

### Moveability

Improve ease of use of the space to enable more dynamic teacher-learner interaction.

### Removeability

Integrate learner technology that's there when you need it and not when you don't.

## **Key Recommendations**

### For the Heathcote Classroom

- Moveability and technology
  - Rearrange existing furniture and room orientation to accommodate more direct and dynamic teacher-learner interactions. The room



would retain a new set of desktop computers, with a more open, accessible layout (see Schematic B within Appendix B for space layout).

- Install at least one additional whiteboard and one additional digital screen
- Enjoyability
  - Art beautification: coordinate with College of Art and Architecture to commission an art mural, possibly produced by an Indigenous artist.
  - Refresh carpet paneling
  - Refresh ceiling paneling
  - Purchase new chairs
  - Install plants and other signs of life in the room, possibly on a ledge along the top of the wall(s)
  - Install a glass door that—if possible—opens outward
- Inclusive Student Service Model
  - To maximize the use of the room and bring students into the space, we recommend that the Heathcote Classroom be made available to students as a computer lab or schedulable group study room when not in use by Library faculty and staff.
- Implementation Task Force
  - We recommend the formation of a follow-up "Implementation Task Force" charged with carrying forward our recommendation. For continuity, members of the *Learning Spaces Task Force* would join the "Implementation Task Force."

## For the Library Learning Ecosystem

- To capture a fuller view of our interconnected spaces, we recommend forming a "Learning Ecosystems Task Force."
- This group could function as a successor to the Learning Spaces Task Force and to the "Library Spaces and Technology Renovation Committee." Combining the work of these two committees, the "Learning Ecosystems Task Force" would be charged with holistically examining current and future learning spaces throughout the building, with the goal of delivering recommendations for designing new learning spaces that will continue to serve future generations of users.

Details of our process, evidence, findings, and recommendations are available below.



# Overview

This report contains a summary of data and a description of findings and recommendations produced by the *Learning Spaces Task Force* from April-August 2018. The findings focus on the use and aesthetics of a library learning space. We ultimately present a set of options for redesigning and improving the Heathcote Classroom in the context of our entire learning spaces ecosystem.

On April 11, 2018 a group was convened to discuss a potential User Experience study of the Heathcote Classroom, intended to inform the the next-generation design of the space. The impetus for this meeting was primarily budgetary: Heathcote's technology was due for a regularly-scheduled, every-five-years refresh. The initial planning meeting was called by Scott Young and consisted of Matthew Regan, Brian Rossmann, and Justin Shanks. That group outlined broad questions:

- Who uses this space?
- What tools and techniques can we use to generate evidence of their experience?
- How can we translate that evidence into actionable recommendations for space design?
- What is our timeline and budget?

The outcome of this meeting was to form a *Learning Spaces Task Force*, with the specific goals of: 1) redesigning the Heathcote learning space for contemporary needs and desires; and 2) amplifying and aligning with the Master Plan and Strategic Plan to emphasize the learning spaces ecosystem of MSU Library.

The group, initially consisting of Scott Young, Matthew Regan, and David Swedman, was expanded to include Jacqueline Frank and Mary Anne Hansen. From April 24, 2018 to August 29, 2018, the group held 8 in-person meetings to conduct the work of taking stock of the current learning spaces landscape, determining the best way to collect evidence on usage and desired changes, and ways to analyze data to make practical recommendations for moving forward. We conducted mixed-method research that included an analysis of calendar bookings, an environmental scan, a staff survey, and a design research workshop with library faculty, staff, and students.



From our work, our key findings are as follows:

- **1.** Heathcote is used primarily for library instruction and workshops.
- **2.** Broad sentiments expressed about the space are that it is "good for what it does," but that it is also "restrictive," "boxed in," and "rigid."
- **3.** The three most important classroom features (excluding time/day availability) to our library staff are, in order of importance:
  - a. Instructor classroom technology;
  - b. Ability to move around the classroom; and
  - c. Access to electrical outlets for students.
- **4.** The three instructional techniques (not mutually exclusive) our library staff most frequently employ when teaching are:
  - a. Class discussion;
  - b. Hands-on activities; and
  - c. Lecture/presentation.
- **5.** Based on these employed instructional techniques, the following three technologies are most important to our library staff:
  - a. Projectors;
  - b. Desktop computers; and
  - c. Laptop computers.
- **6.** The following three desires for the Heathcote space are most important to our library staff:
  - a. Aesthetic improvements;
  - b. Interactive, participatory, and flexible arrangement; and
  - c. Instructional Technologies & Reliability of Technology.

Based on our findings, we offer three general tiers of action. Each tier takes into account budgetary costs, time costs, and political costs. Tier 1 is more achievable to implement; Tier 3 is more difficult to implement.

## Tier 1: Aesthetics and Arrangements

Improve the aesthetic appeal of Heathcote so that the space is more conducive to learning.



### **Tier 2: Technology and Furniture**

Improve ease-of-use of the space to enable more dynamic instructor-learner interaction, and to implement new learner technology that's there when you need it and not when you don't.

### Tier 3: Spaces Ecosystem

This tier expands the scope of this study to account for other current and future learning spaces in the Library via a follow-up task force that would explore creating new flexible, multi-use spaces in the library.

We propose three specific paths forward, with tiers according to cost. Each path satisfies thematic elements from the *Learning Spaces Task Force Report*—moveability, removeability, and enjoyability.

Theme	Tier 1	Cost	Tier 2	Cost	Tier 3	Cost
Moveabili ty	Reconfigure Existing Furniture <sup>1</sup>	Labor	Reconfigure Existing Furniture	Labor	New flexible tables <sup>2</sup>	\$7,800
	Additional data ports for new configuration	\$3,600	Additional HDMI video transmission	\$3,600	Additional HDMI video transmission	\$3,600
			New Chairs (\$500x28)	\$14,00 0	New Chairs (\$500x28)	\$14,000
Removea bility	1 New Projector+Scr een	\$2,700	1 New Projector+Screen	\$2,700	Digital Screens (\$1860x8) + Labor (TBD)	\$14,880
	Additional HDMI video transmission	\$1,000	Additional HDMI video transmission	\$1,000	Additional HDMI video transmission	\$1,000
	Purchase desktop computers with smaller displays (\$750x28)	\$21,000	Purchase laptops (\$1000x28)	\$28,00 0	Purchase laptops (\$1000x28)	\$28,000

<sup>1</sup> - Reorient tables according to Schematic B in the Task Force report

- Move whiteboards so that they appear on the North and South walls

<sup>2</sup> For example:

- <u>Bivi Table For Two</u>, \$1200 (x3)

<sup>-</sup> Move existing projector/screen so that it appears in the West or East wall

<sup>&</sup>lt;u>Verb Team Table</u>, \$600 ( x7)



			North wall art mural	\$1,000	North wall art mural commission	\$1,000
Enjoyabili ty	North wall art mural commission	\$1,000	commission		Replace carpeting	\$7,200
			Replace carpeting	\$7,200	Replace ceiling tiles	\$2,700
					Replace door	\$3,800
Total costs:	\$29,300		\$57,500		\$83,980	

# Strategic Planning and Analysis

This study supports MSU Library Strategic Plan Objective 1.1, which states that users will "interact with a welcoming and responsive physical and digital library environment."

This study also supports MSU Library Strategic Plan Objective 2.1, "Create useful, dynamic, and accessible digital and physical spaces."

Recommendations from this study will help produce a more welcoming, responsive, useful, dynamic, and accessible physical library environment for our users. Progress towards improvement will be measured by the UX & Assessment Librarian in collaboration with appropriate measures coordinators through follow-up studies based on the measure identified for each strategic objective.

# Library Values

Through an inclusive, participatory process in pursuit of new recommendations for the Heathcote Classroom, we aimed to realize the Library values of *Inquiry and Innovation*, *Empathy*, *People*, and *Transparency and Communication* 



# Findings and Recommendations

# I. Findings

Across our mixed-methods research and data collection, we identified a set of thematic findings and spaces usage insights.

# Space Usage

The Heathcote space is mainly used for the following activities, based on data collected from the Calendar Analysis and the Learning Spaces Survey:

- 1. Instructional activities; and
- 2. Workshops.

According to the Learning Spaces Survey:

The most common instructional techniques include:

- Class discussion;
- Hands-on activities; and
- Lecture.

The most important classroom features include:

- Instructor technologies, technology (smart podium, computer,document camera, projection);
- Ability to move around the classroom to interact with students where they are sitting;
- Room availability, according to time of day and week; and
- Access to electrical outlets for students.

The most important technologies include:

- Projectors;
- Desktop computers; and
- Laptop computers.

The most important desires include:

• Aesthetic improvements;



- Interactive, participatory, and flexible arrangement; and
- Technology & reliability of technology.

# **Space Needs and Desires**

# Enjoyability

The top most cited desire, almost universally, was for the space to be more enjoyable and aesthetically pleasing. This common theme surfaced in all data collected that asked about desires, including the vision card exercise, the DUEL exercise, and desired layout sketches (further explained in the methods section). Aesthetic details such as new paint, lighting, artwork, and living plants were listed multiple times each, by different participants as important elements of a learning space. Additional details to bring in a warmer, more inviting feeling to the room also included a fireplace and comfy couches, chairs, or soft seating.

# Moveability

One of the biggest desires that surfaced in multiple ways was the ability to move around the classroom for increased interaction with students. The '*Ability to move around the classroom to interact with students where they are sitting*' was cited as the second most important feature of the Heathcote classroom according to our internal library survey, following classroom technology for the instructor station. In the DUEL (Desire, Usage, Expectations, Limitations) exercise in the design workshop, participants also cited interactive, participatory, and flexible design as their second top desire for the space, following aesthetic improvements. Finally, the desired layout sketches of Heathcote classroom showed many different options for increased instructor mobility around the classroom, including options with both fixed furniture arrangements, as well as more flexible furniture arrangements. It also surfaced that ability to move about the classroom was more important (#2 out of 10 in the library survey) than the option to move the furniture (#9 out of 10 in the library survey).

# Removability

A common feature of our data focused on the desired ability to remove or hide furniture and technology so that these elements can appear when needed and disappear when not needed.



# II. Recommendations

# Key Recommendations

Based on our findings, the task force recommends the following course of action for the Heathcote Classroom and the Library spaces ecosystem:

## For the Heathcote Classroom:

- Enjoyability:
  - Art beautification: coordinate with College of Art and Architecture to commission an art mural, possibly produced by an Indigenous artist;
  - Refresh carpet paneling;
  - Refresh ceiling paneling;
  - Purchase new chairs;
  - Install plants and other signs of life in the room, possibly on a ledge along the top of the wall(s); and
  - Install a glass door that—if possible—opens outward.
- Moveability and Technology:
  - Rearrange existing furniture and room orientation to accommodate more direct and dynamic teacher-learner interactions. The room would retain a new set of desktop computers, but with a more open, accessible layout (see Schematic B within Appendix B for space layout);
  - Install at least one additional whiteboard and one additional digital screen.
- Inclusive Student Service Model:
  - To maximize the use of the room and bring students into the space, we recommend that the Heathcote Classroom have the capacity to seat at least 25 students, and be made available as a computer lab or schedulable group study room when not in use by Library faculty and staff.
- Implementation:
  - We recommend the formation of a follow-up "Implementation Task Force" charged with considering the following:
    - Details of recommendations, including cost estimates, room layouts, and technology models;



- Potential collaborators and partners (e.g. Academic Technology and Outreach, UIT, Center for Faculty Excellence, Testing Center);
- Details of the Inclusive Student Service Model, including room scheduling and marketing/promotion; and
- Space Assessment Strategies.
- Potential members:
  - Mary Anne, Jacqueline, DLI staff.

# For the Library Learning Ecosystem:

- To capture a fuller view of our interconnected spaces, we recommend forming a "Learning Ecosystems Task Force."
  - This group could function as a successor to the "Learning Spaces Task Force" and to the "Library Spaces and Technology Renovation Committee."
  - The "Learning Ecosystems Task Force" would be charged with holistically examining current and future learning spaces throughout the building, with the goal of delivering recommendations for designing useful, dynamic, and accessible learning spaces that achieve our Master Plan's Major Architectural Goal of "Increasing and Diversifying Instruction Spaces."
- Potential members:
  - Brian Rossmann, Jacqueline, Mary Anne, Jan

# Recommendation Tiers

The task force further recommends three tiers of possible action for improving the Heathcote, based data collected. The following three tiers of recommendations represent degrees of difficulty, with considerations of:

- Time;
- Funding; and
- Political Costs.



Tier 1 is more achievable to implement; Tier 3 is more difficult to implement. Within each tier, we've also offered a set of recommendations that are marked as "easier" to implement and "harder" to implement. Beyond our Key Recommendations, we imagine that recommendations within and across tiers could be implemented in various configurations and timeframes, based on availability of funds, staff time, and political will.

# Tier 1: Aesthetics and Arrangements:

# Connected theme: Enjoyability

Improving the aesthetic appeal of the space so it's more conducive to learning.

- Easier: New paint, glass door that opens outward, new art, new plants.
- Harder: New lighting. New ceiling. New carpeting.

Overall recommendations: Improve aesthetics of the space to address moveability, and especially enjoyability. This tier primarily involves easy improvements to the space by installing a new glass door that opens outward, refreshing paint, adding living plants, artwork (potentially including student-commissioned art or murals), and rearranging the current furniture so the far West wall is the front of the room (See Appendix B, showing to-scale schematics of possible furniture arrangements).

A second, more challenging option, would be to address lighting, to possibly move to non-fluorescent or warmer lighting.

# Tier 2: Technology and Furniture:

## Connected Theme: Moveability

*Improve ease of use of the space to enable more dynamic instructor-learner interaction.* 

- Easier: Rearrange existing furniture and room orientation
- Harder: Purchase new, semi-flexible furniture to accommodate new layouts.

## Connected Theme: Removability

Learner technology that's there when you need it and not when you don't.

- Easier: Laptop stations on existing furniture; add new and multiple projectors or digital screens; movable and/or multiple whiteboards.
- Harder: New furniture, such as disappearing desktop computers.

Overall recommendations: Improve aesthetics of the space as noted in Tier 1, and refresh the technology. Options for refreshing the technology, without purchasing



new furniture, include networked, locked-in-place laptops that can be closed, thus not obstructing students' view during lecture portions of classes, but which would allow for hands-on learning as well. Adding speakers to the back of the room will allow for greater accessibility. This tier could also potentially include the installation of additional digital displays (preferred) or projection surfaces on the other three walls that currently do not have such, and additional whiteboards to facilitate more active learning. (See Appendix B with images of a Jabs Hall classroom with this type of installation.)

The purchase of new furniture is optional in this tier. Purchasing additional furniture such as desks that allow desktop computers to 'disappear' and be pushed down below the desktop would allow for networked computers to be available when needed for hands on activity, and a clear desktop space and lines of visibility when not needed. Additionally, flexible furniture that allows for the room to be configured in multiple ways, either with laptops or a mix of laptops and desktop computers would allow for increased flexibility of the space, but would also require more time from instructors to set up the room prior. The option to have flexible furniture was cited by many participants who gave feedback, although is not supported by everyone who gave input.

## Tier 3: Spaces Ecosystem:

This tier expands the scope of this study to account for other current and future learning spaces in the Library. Tier 3 complements the Master Plan in continuing to develop cohesive and dynamic library spaces. A task force would explore creating a flexible, multi-use space in the library—such as the northwest corner of first floor or the northeast corner of second floor, both of which have more square footage available to install flexible furniture and moveable partitions to allow for larger classes to be held in the library. This space would allow for both library instruction and non-library instructor-led classes, and could be open to general student use when not scheduled. Additionally, such a space would allow for public events, such as poetry readings, scholarly presentations , and small conferences. The CyberDiscovery provides a model of what such a space might be like and how it might be utilized.

# Methods



# Procedure

In order to better understand the usages, needs, and desires of Heathcote, we employed a mixed-methods approach comprising the following four complementary methods:

- 1. A Learning Spaces Survey distributed to Library faculty and staff;
- 2. An analysis of calendar bookings for the Heathcote space;
- 3. A design workshop with Library faculty, staff, and students; and
- 4. An environmental scan of contemporary learning spaces.

# 1. Learning Spaces Survey

A survey was distributed to the Library All-Staff email list on June 27, 2018, with the following invitation to complete the survey: "We are conducting a survey on how library learning spaces are currently used. If you have hosted any activities in the Heathcote classroom, please respond to this survey." The survey closed on July 13. Sixteen responses were recorded. Questions included:

- On average, how many times did you use the Heathcote classroom for your instructional activities in the past two years?
- On average, how many times did you use the Innovative Learning Studio for your instructional activities in the last two years?
- How do you use library learning spaces?
- What other, non-instructional activities, have you attended or hosted in library learning spaces (e.g. meetings)?
- How important are the following classroom features?
- Which of the following instructional techniques do you employ?
- How important are the following classroom technologies for the instructional techniques that you employ?

The survey design was based on a similar survey conducted by the Center for Faculty Excellence. This survey is available in Appendix B.

The full Library Learning Spaces survey and results are available in Appendix B.

# 2. Calendar Analysis

Heathcote Classroom reservations from January 2017 - June 2018 were reviewed to determine what the room is most often used for. Reservations from the Heathcote Classroom calendar in Outlook, as well as the public facing Library Workshops &



Events calendar through SpringShare were exported to Excel and combined to gather all scheduled events and uses. Reservations were then grouped into broad categories including instruction, workshops, and presentations.

Type of Outlook Calendar Reservation	% of Outlook Calendar Reservations	Number of Outlook Calendar Reservations	
Instruction	60.7%	176	
Workshop	26.9%	78	
Other*	9.0%	26	
Webinar/Conference	1.7%	5	
Candidate Presentation	1.0%	3	
Cancelled	0.7%	2	

*Figure 1: Proportion and Number of Heathcote Outlook Calendar Reservations by Type* \*meetings and use by non-library groups such as Testing Services and TRiO

We furthermore analyzed LibAnalytics to identify the median and mode number of attendees in sessions held in Heathcote between January 2017 - June 2018: the median is 20 attendees and the mode is 25 attendees.

Full reservation data and usage categories by percentage are available in Appendix B.

# 3. Design Workshop

An interactive design workshop for library faculty, staff, and students was planned and delivered in the ILS to elicit input from library stakeholders. All library employees were invited to join and provide feedback during our 1.5 hour workshop. In the workshop, participants were led through three exercises. First, participants were asked to select vision cards of various images to represent:

**1.** Choose a card that represents how you want a learning space to make you feel;



- Choose a card that represents how Heathcote Classroom makes you feel; and
- **3.** Choose a card that represents when a learning space goes wrong.

Second, participants were led through the "DUEL" exercise to capture their Desires, Uses, Expectations, and Limitations (DUEL):

- D: What are your desires for the space? What do you want? What would be cool features? What would get you jazzed about using this space or teaching and learning in a new way?
- U: how do you currently use the space and how do you want to use it in the future?
- E: What are your expectations of the space? What are the practical necessities? What are the essentials that need to be in place--list all, no assumptions.
- L: What are the limitations of the space?

Participants were given sticky notes to write down their thoughts on each category, then sticky notes were grouped by category using affinity mapping to show themes.

Finally, participants were asked to sketch their ideal layout of the Heathcote classroom, given a room outline. Participants labeled the elements of the room in their desired layout, including technology elements, furniture arrangement, and aesthetic elements.

Data from the design workshop were collected, and reviewed in two task force meetings to discuss themes and possible recommendations.

Full data including images of all vision cards selected, sticky notes in each category, and desired layouts are available in Appendix B.

# 4. Environmental Scan

Background information was gathered and reviewed, including the Center for Faculty Excellence survey entitled, "2014-2015 MSU Classroom Survey," along with other resources made available via the CFE on active and collaborative teaching and learning resources

Full resources and survey results from the CFE are available in Appendix B.



# Limitations

Note about potential bias in workshop findings: post-DUEL workshop, we learned that a number of participants went into workshop with the understanding that the purpose of the workshop was to change the Heathcote space into something similar to ILS; holding the workshop in the ILS perhaps contributed to that mindset among many participants.

Because the Learning Spaces Survey was optional, and its respondents anonymous, it cannot be definitively concluded that these results reflect the views and preferences of all library employees vis-à-vis instructional spaces.

# Appendix A: Report Feedback Session

The Task Force hosted listening sessions with Library faculty and staff prior to delivering the final report. Feedback was incorporated into the final report. Below are the notes from the second feedback session.

# What do you like?

- Very transparent process/methodology
- A lot of varied ideas covered in depth
- Clear well thought out ideas for improvement
- Solicited wide array of input
- Gathered lots of input

# What was missing?

- A clear recommendation of what you think we should do
- No recommendations for video conferencing improvements
- How tier 1&2 were divided. Aesthetics encompass both ideas
- Consider distilled needs list, to potentially inform new space on 2nd
- # of students in each instruction session

# What surprised you?

- How much it seems the ILS setup seems to resonate with user
- That re-painting was desired. The room was repainted ~2 year ago



• Simple changes that could be made & have such an impressive impact. Ex: paint, rearrange, furniture, etc.

## What could be improved/refined?

- Add summary of summary
- Sample tests of the simple changes and results (minimal \$ out)
- Tell us what to do
- Recommendations could be more specific. Perhaps tiered options with ballpark cost estimates,
- Gather data about number of students in the classes in Heathcote.
- How often does the room fill?

#### Misc.

Map calendar information with LibAnalytics information. Put together needs list, and ask campus planning for design.

# Appendix B: Research Data and Design References

Index of Appendix B:

- Workshop
  - Photos from the Workshop
  - Notes from the DUEL Exercise
  - Room Sketches: drawings and notes
  - Vision Cards
- Calendar Analysis
- Library Learning Spaces Survey
- CFE faculty survey
- CFE Active and Collaborative Teaching and Learning Resources
- Photo of TEAL Classroom
- Photo of Laptop Stations in Jabs Hall
- Heathcote Schematics, prepared by Steve Luft
- Montana State University Classroom Design Guide





Notes from the DUEL Exercise that captured participants' desires, uses, expectations, and limitations of the Heathcote Classroom.

#### Expectaons

- Availability
  - Available and open for library reservaons/ scheduling
- Reliable Technology
  - The room and tech works. Easy set up.
  - Reliable technology
  - Reliable tech
  - Everything works in less than 5 minutes
  - Good, reliable internet connecvity
  - Networked desktop computers take less time to start teaching
  - Space works with what is needed
- Furniture
  - Instructor staon
- Usability
  - User-friendly
  - Easy to Use
  - Welcoming and accessible
  - Good acouscs
- Learning
  - Conclusive to learning
  - Students want to learn here
  - To be "findable" for new users
  - Quiet lab or learning environment
  - Private space
- Adaptability
  - Can accommodate large groups
  - Accommodate broad range of activities
  - Complementary space to ILS fulfilling different purpose

#### **Desires** (Jacqueline)

- (14) Aesthecs
  - (2) Living plants
  - (2) Art
  - (2) cosy/comfortable

- Acouscs
- Lighng
- HVAC
- (6) flexible/interacv e/parcipa tory
- (3) Technology
  - Laptops
  - BYOD
  - Smart board
- (3) Reliability of technology is extremely important
  - Mobile technology is more clunky
- (3) Signified Importance
  - Not in basement
  - Not an a. erthought
- Not just two spaces
- (2) accessibility ada & availability
- (2) Easy to use
- (1) preset furniture

### Uses (Mary Anne)

- (4) Library Instrucon
- (2) Workshops
- (3) Meetings ("last resort")
- (4) Candidate presentaons
- (2) Webinars
- Vendor visits
- Isolation chamber
- Student lab space
- Hands on training
- Leading a class on computers to follow along w/steps show at front of room (same as LIs or workshops?!)
- Group consultaon
- Professional development
- LSCI classes

### Limitations (Mary Anne)

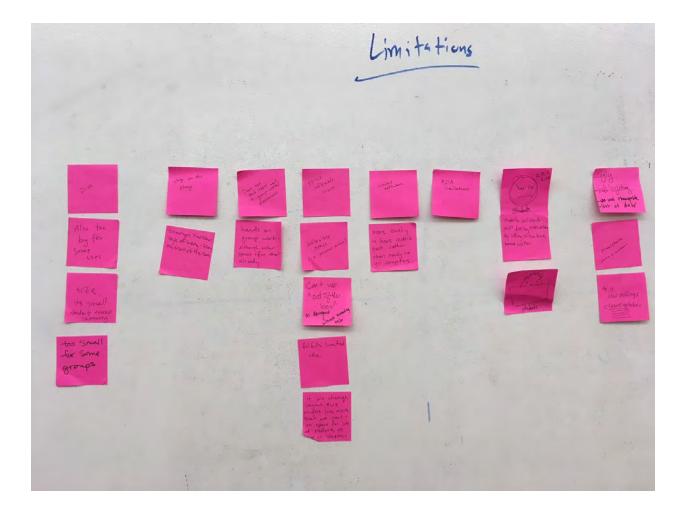
ADA limitaons

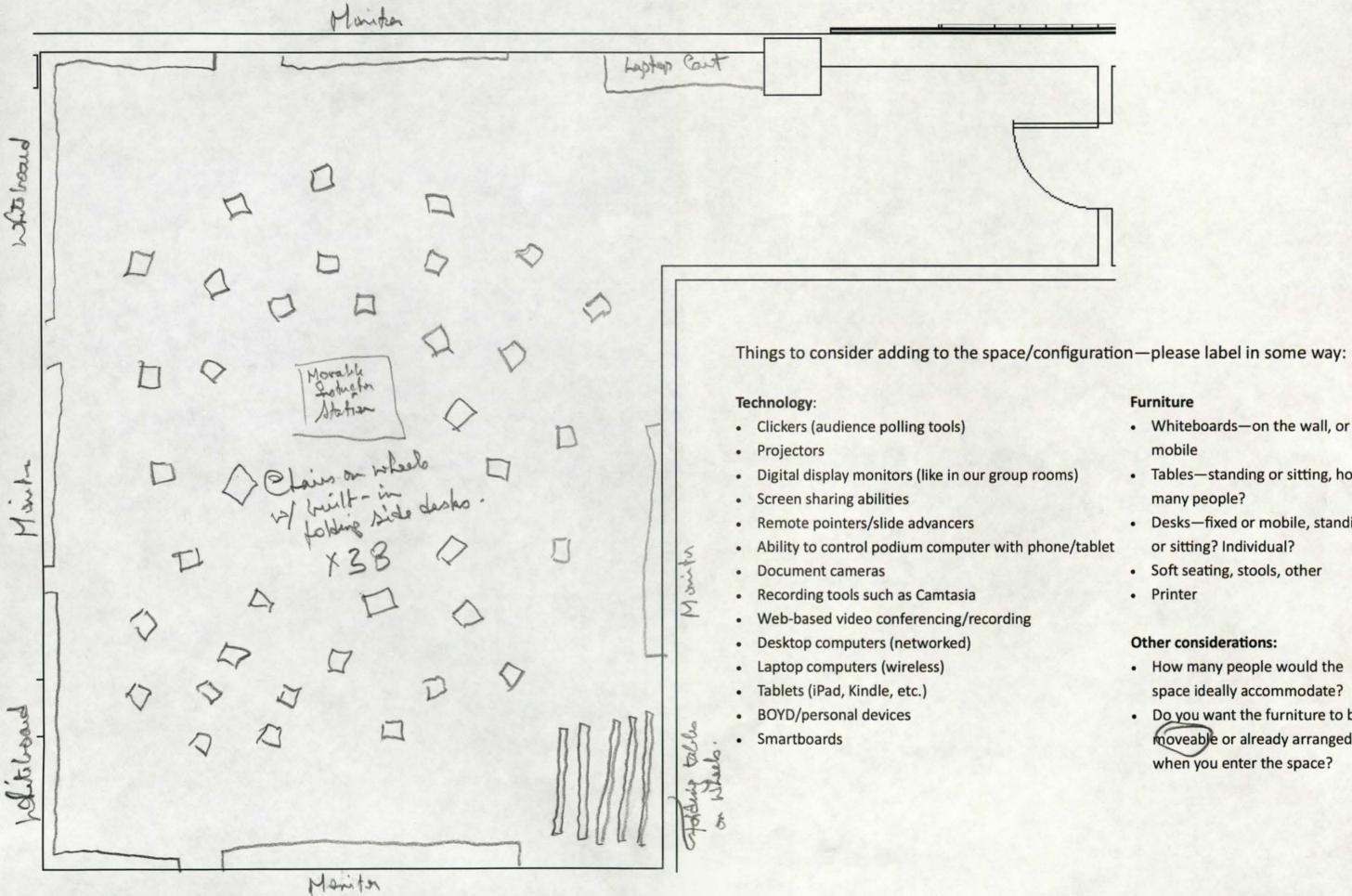
- (2) Sage on the stage
- Limited software
- Inflexible rows
- (3) Size -- too small for some groups
- Size too big for some uses/groups
- (3) Atmosphere gloomy w/no windows, claustrophobic
- (2) students can "check out" during instruction by sitting in back behind a monitor
- Inflexible space, i.e., personal devices (?)
- (2) Does not lend itself well to group work ("although some spaces offer that already"
- Can't use "out of of the box" as designed w/o knowing technology (?)
- Students buried behind large monitors
- Fulfills limited role
- If we change layout, we might lose more than we gain; no space for lots of students to learn on computers







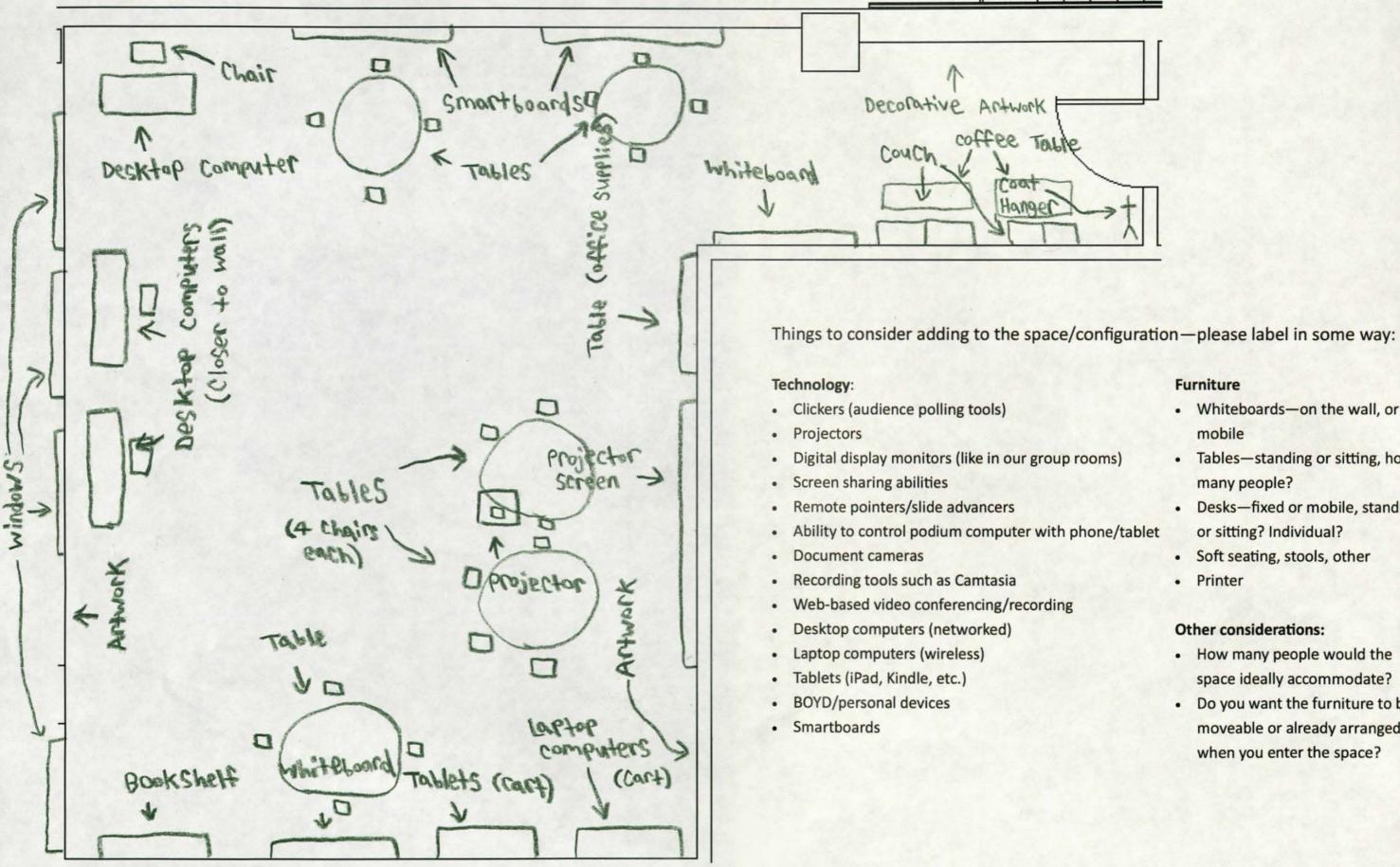




### Furniture

- · Whiteboards-on the wall, or mobile
- Tables-standing or sitting, how many people?
- · Desks-fixed or mobile, standing or sitting? Individual?
- Soft seating, stools, other
- Printer

- How many people would the space ideally accommodate?
- Do you want the furniture to be moveable or already arranged when you enter the space?



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· Could possibly look into using a Cyber Station (like on 18th) In place of the A whiteboard to end an enclosed space lots of Chairs accessible IF needed. B ai) + " Empty chairs in a large room are unnecessary. .5 are 3 (1: The Space I would have the Toom door Swing out So it Come left opent inviting for the se attending. The Hullway is derived firebut making it seem uncreased in some way Cheir Build Pristo gran A Things to consider adding to the space/configuration—please label in some way: Productor. T Furniture Technology: Clickers (audience polling tools) mobile Projectors por. Digital display monitors (like in our group rooms) Screen sharing abilities Table = T Remote pointers/slide advancers Will bener Ability to control podium computer with phone/tablet T Document cameras Recording tools such as Camtasia Printer T Web-based video conferencing/recording Desktop computers (networked) Laptop computers (wireless) Tablets (iPad, Kindle, etc.) T **BOYD**/personal devices T Smartboards Paint the room with inviting colors, yet ones that don't distruct too much. ex: I painted wall in arich Color to make it "Homey" HUBFOT Moveable tables so room can be adapted to suit the Class (like on and Floor to pull . Unsure just how many can Fit. Current pic shows possible layouts. Source to center of From) Techt retractuble Projector Screin white board = Projector on ceiling.

that can emphasize our current one.

· Hub For tech · Could include Current & new technology in the Future

- Whiteboards—on the wall, or
- Tables—standing or sitting, how many people?
- Desks—fixed or mobile, standing or sitting? Individual?
- Soft seating, stools, other

#### Other considerations:

- How many people would the space ideally accommodate?
- Do you want the furniture to be moveable or already arranged when you enter the space?

= Power Sterps along walls.

Have the charge towers (1: he on 2nd Floor to pull

Add Speakers @

0

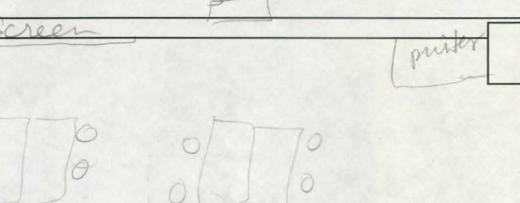
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Small

TReader

newall

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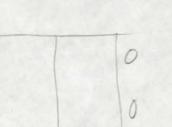
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Things to consider adding to the space/configuration—please label in some way:

# Technology:

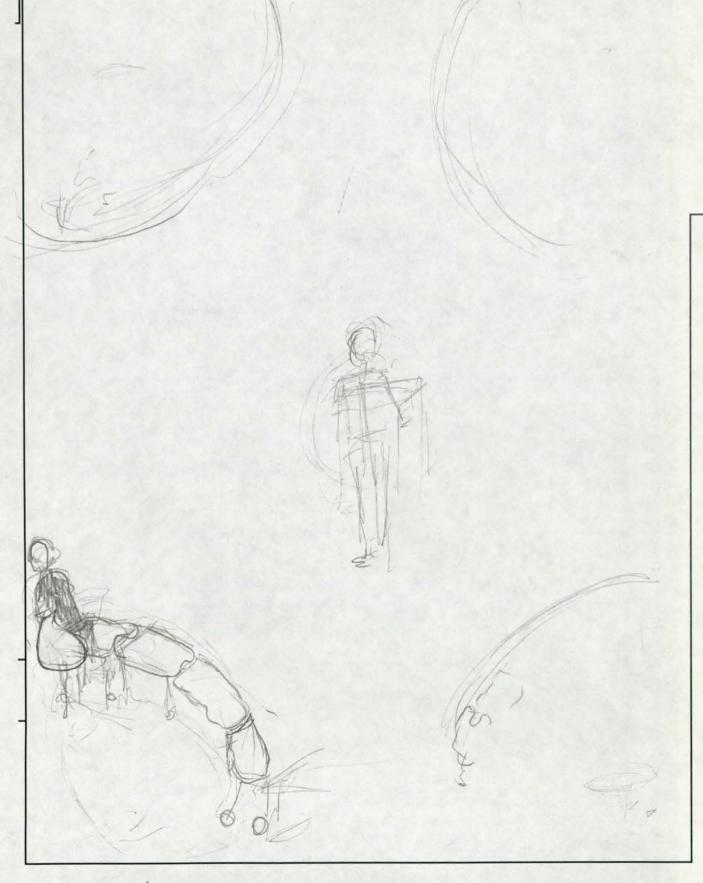
Clickers (audience polling tools)

- Projectors
- Digital display monitors (like in our group rooms)
- Screen sharing abilities
- Remote pointers/slide advancers
- · Ability to control podium computer with phone/tablet
- Document cameras
- · Recording tools such as Camtasia
- · Web-based video conferencing/recording
- Desktop computers (networked)
- Laptop computers (wireless)
- Tablets (iPad, Kindle, etc.)
- BOYD/personal devices •
- Smartboards

### Furniture

- · Whiteboards-on the wall, or mobile
- - · Tables—standing or sitting, how many people?
  - · Desks-fixed or mobile, standing or sitting? Individual?
  - · Soft seating, stools, other
  - Printer

- How many people would the 30 space ideally accommodate?
- · Do you want the furniture to be moveable or already arranged when you enter the space?



Things to consider adding to the space/configuration—please label in some way:

### Technology:

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desks on rollers or "

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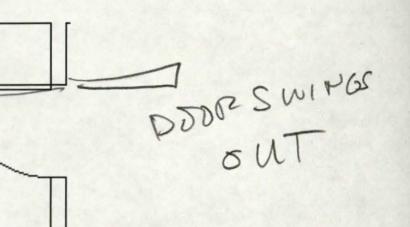
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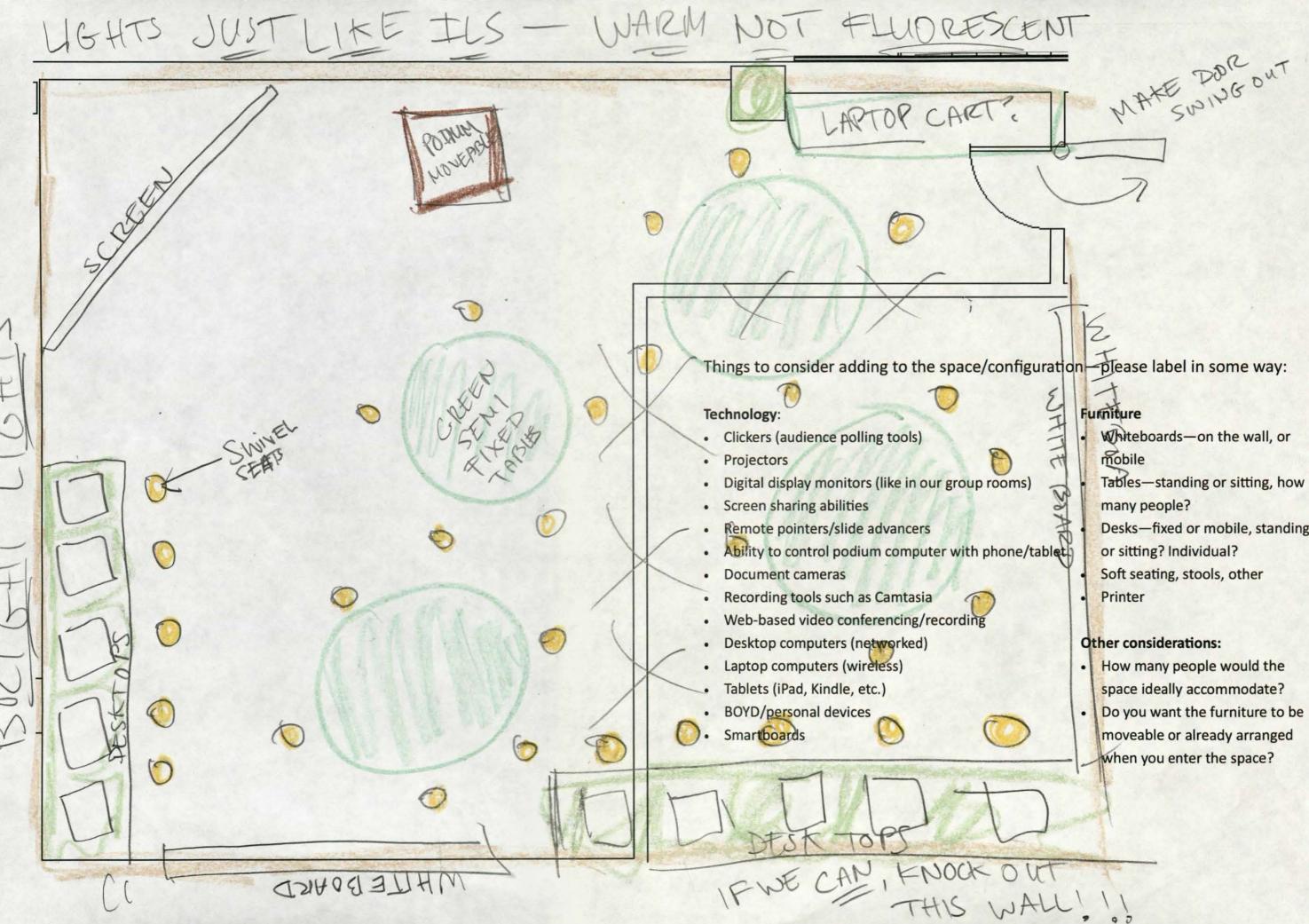
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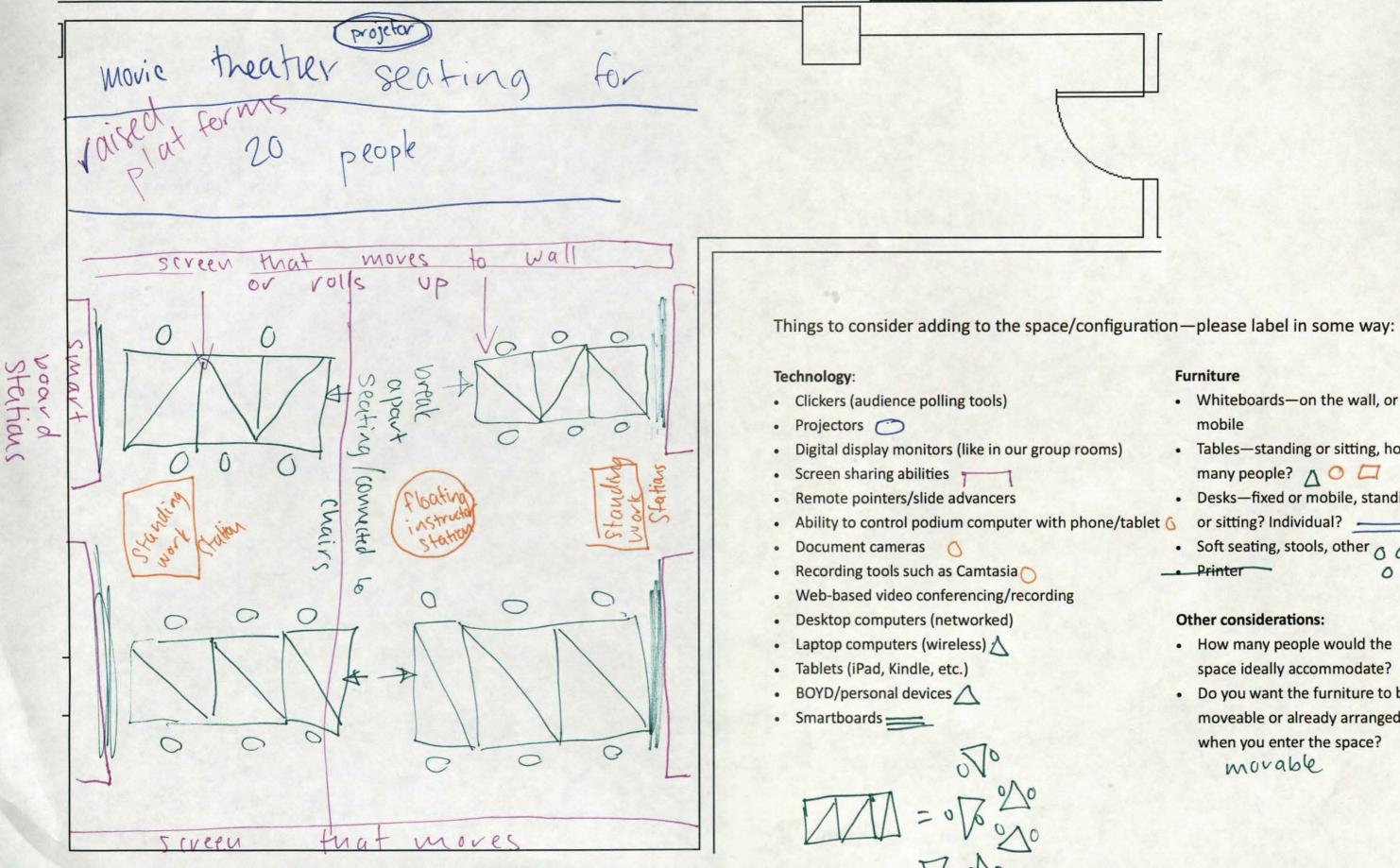
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Do you want the furniture to be moveable or already arranged

the #1 vaise voof!



### Furniture

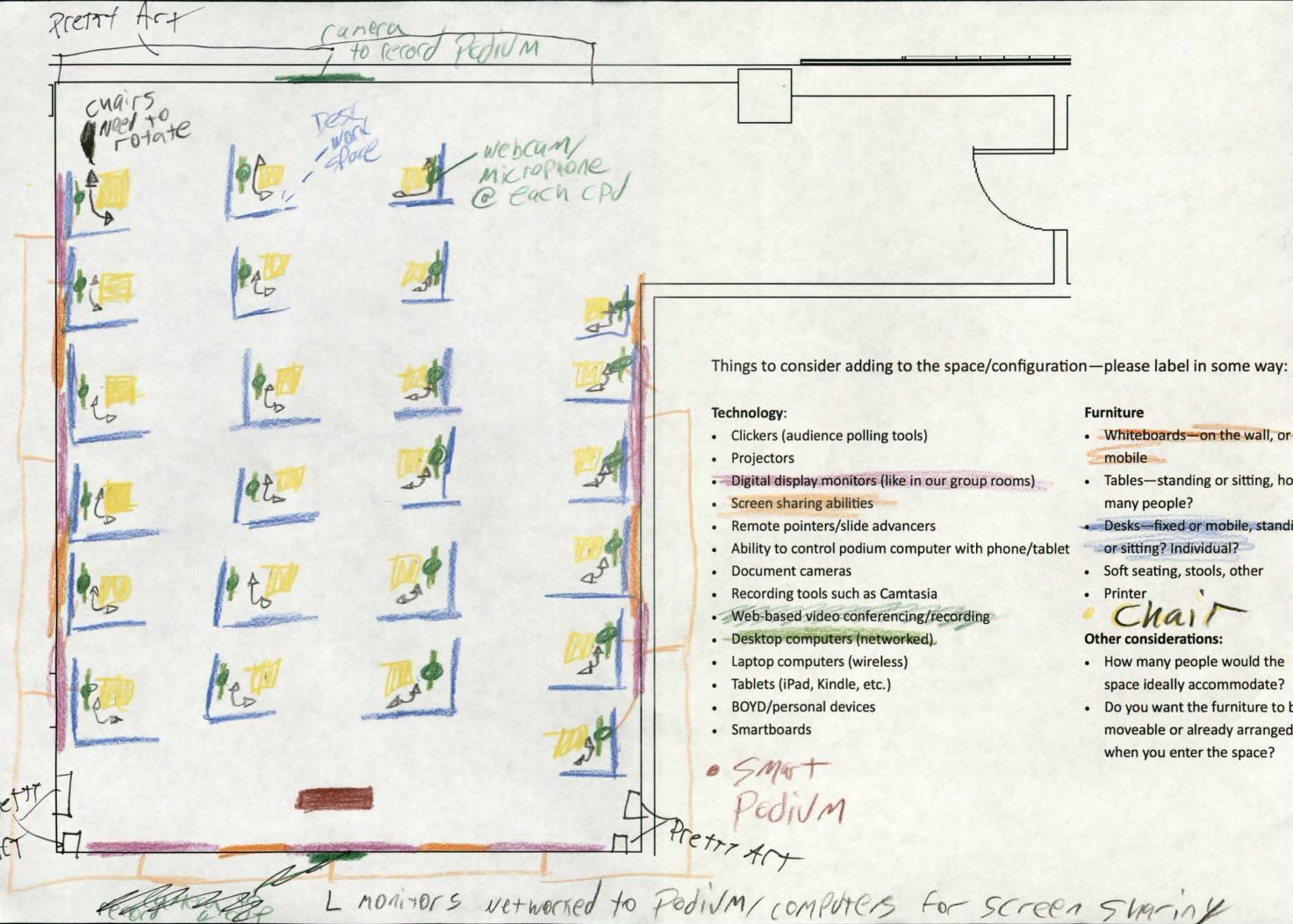
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#### Other considerations:

 How many people would the space ideally accommodate?

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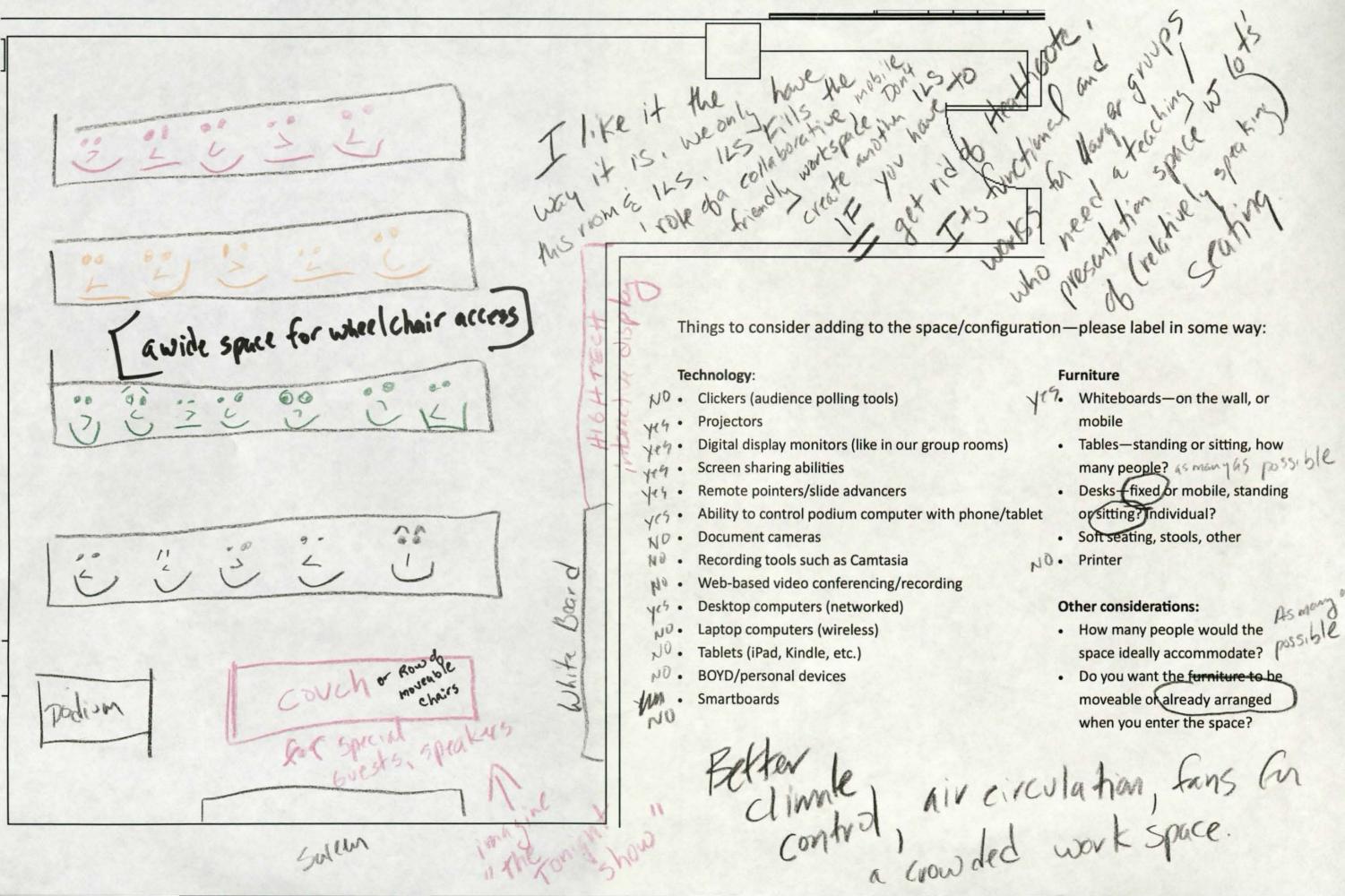
· Do you want the furniture to be moveable or already arranged when you enter the space? morable

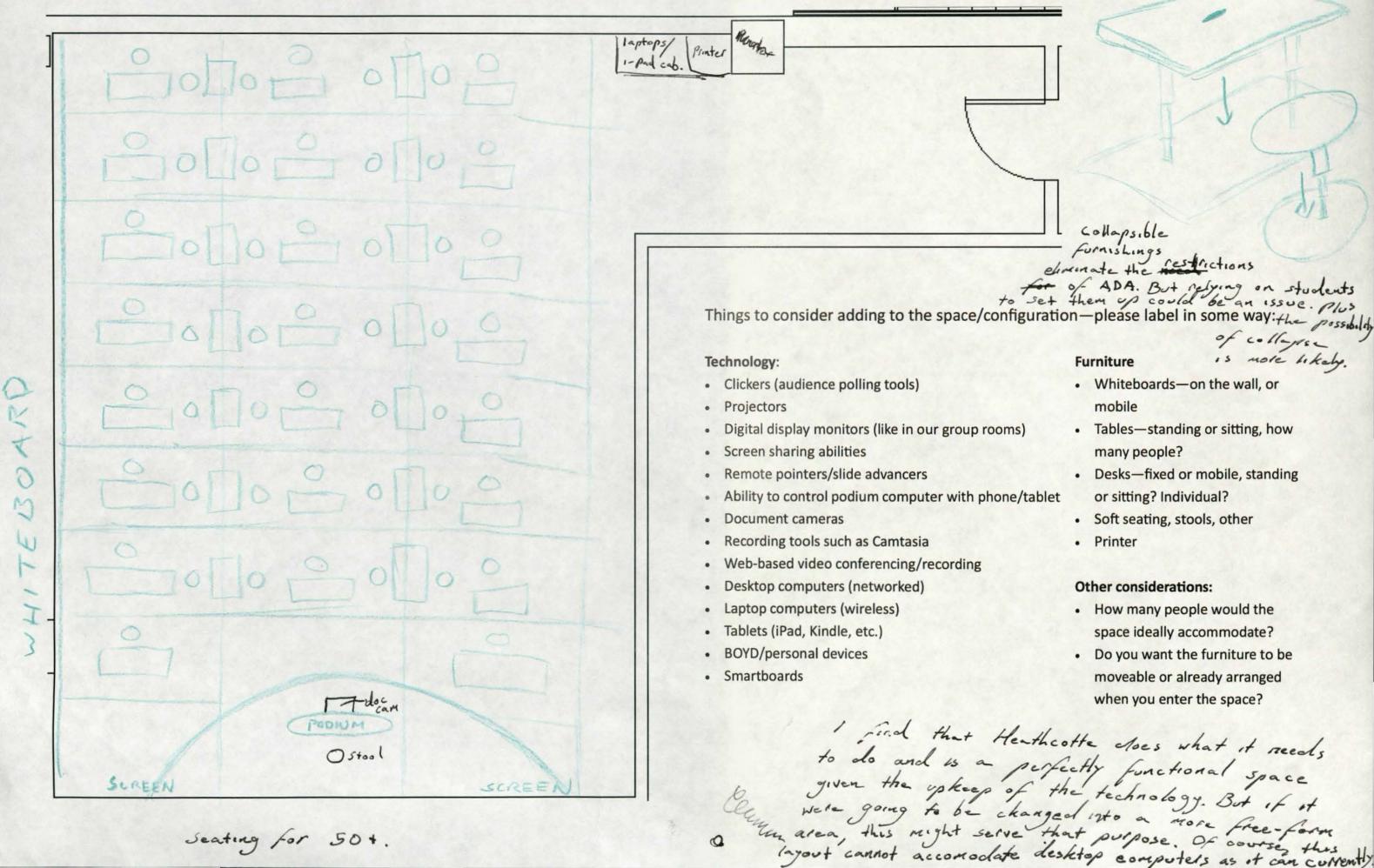


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Seating for 50+ .

# eliminate the restrictions

Collapsible

of collegree is more likely.

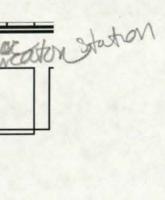
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	100,000 1000 whi	de boards on walls	<ul> <li>Tablets (iPad, Kindle, etc.)</li> <li>BOYD/personal devices</li> <li>Smartboards</li> <li>Music speakets</li> <li>around room to</li> <li>Mup create</li> <li>Mup create</li> <li>Mup create</li> </ul>	space ideally accommodate? Last 25 • Do you want the furniture to be moveable or already arranged when you enter the space? Meeds to reflect typical class system the missick/causes/teamer levels We want to reach

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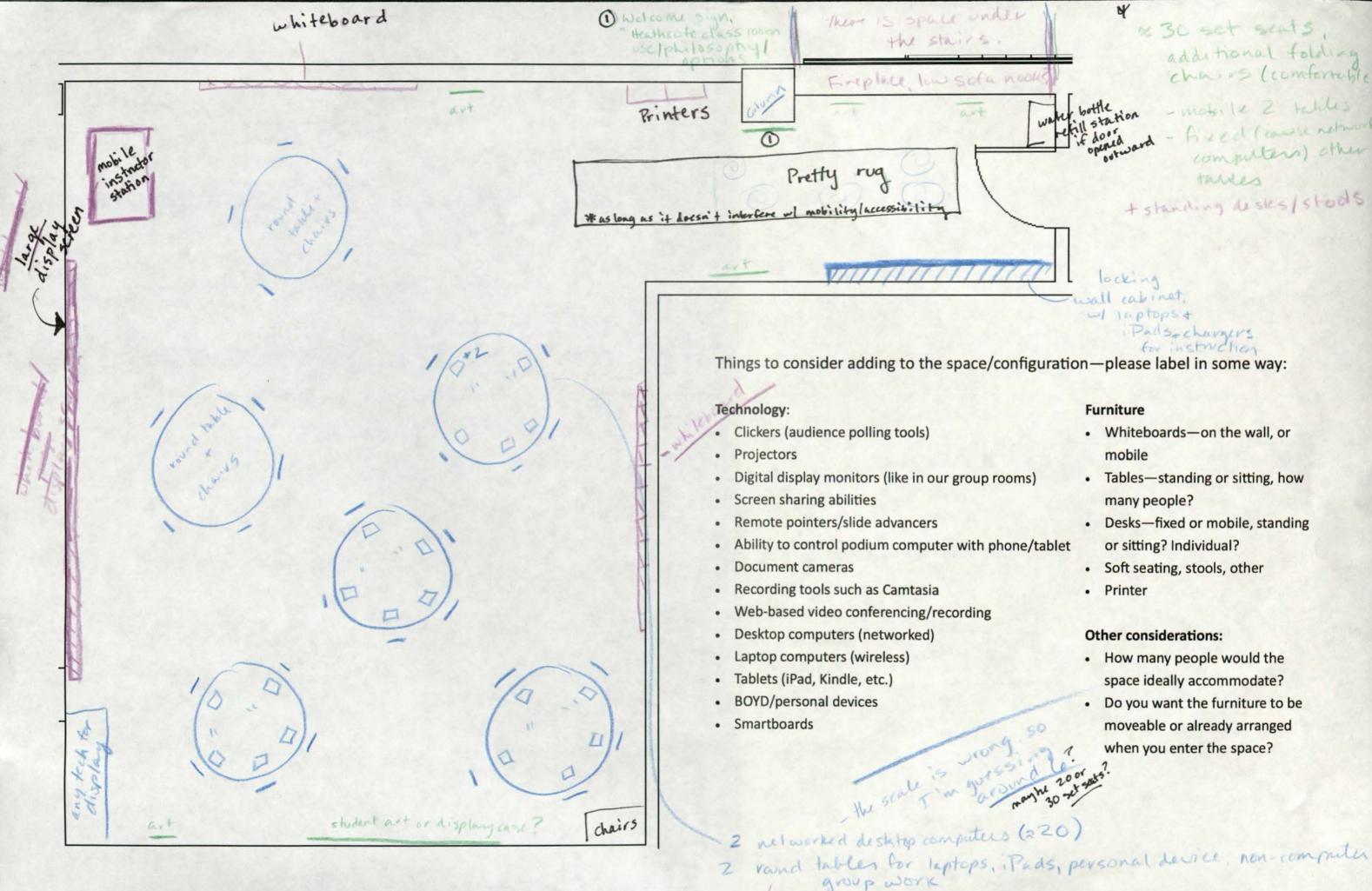


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510

¥ x 30 set sents additional folding chairs (confortable motile 2 teples computers) other tables + standing desks/stools

#### all rabinet Taptopst Padsachuraurs for instruction

locking

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		Whiteboard	

- strong Slexibility to All 51765 Que - enlowinges partil. - students an use own Levices, technology still available in the chass concessily participate

## guration-please label in some way:

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Notes from the Heathcote Classroom sketches.

These notes show themes present in the sketches.

Sketches (Sco)

- Projectors: 12
- Instruction stations: 9
- Whiteboards: 9
- Aesthetics (fireplace, paint, lighng , HVAC): 8
- Laptops: 7
- Moveable furniture: 7
- Desktop computers: 6
- Murals/Art: 4
- Printers: 4
- Round tables: 4
- Rows: 4
- Document Camera: 4
- Fixed furniture: 4
- Mic + Speakers: 3
- East is front: 2
- Door swings out: 2
- Couch: 2
- iPads: 1
- Power strips: 1

Notes from the Vision Card exercise from the design workshop.

Vision Cards

- Prompts
  - Choose a card that represents how you want a learning space to make you feel
    - Garden: grow and learn
    - Beautiful butterl y. Fly anywhere. At home.
    - "Like my pets make me feel"
    - Learning
    - Garden growing beautiful things
    - Like a squirrel eating a cookie. Devouring knowledge!
    - Free. open.
    - Bird. spread your wings.
    - Heavenly.
    - Building a mosaic.
    - Garden. Peaceful. Growing. Nature. Grounded. Positive.
    - Beautiful sunset
    - Rocks. Multi-faceted. Fun. not rigid and straight. Doesn't do just one thing.
    - Breath of fresh air when i walk into it.
  - Choose a card that represents how Heathcote Classroom makes you feel.
    - Herding cattle: have to direct people there difficulty
    - In a box. Can't move very much.
    - It works, but restrictive. Very sagey on the stagey
    - Uphill. Tech functioning.
    - Dead end
    - Compartmentalized. Fitting into the space can be hard.
    - Boarded up door. Closed image. Tight.
    - Boxed in.
    - Like a chill bird.
    - Sudoku: there's one right answer and you better get it right
    - Lava. there was once something going on, but now it's ashy, gloomy.
    - Like a battleship. It works, but not elegant.
    - Frog reading on a bench. Does rows well.
    - Not colorful. rigid.
  - Choose a card that represents when a learning space goes wrong
    - Rocky
    - Spiky and uncomfortable

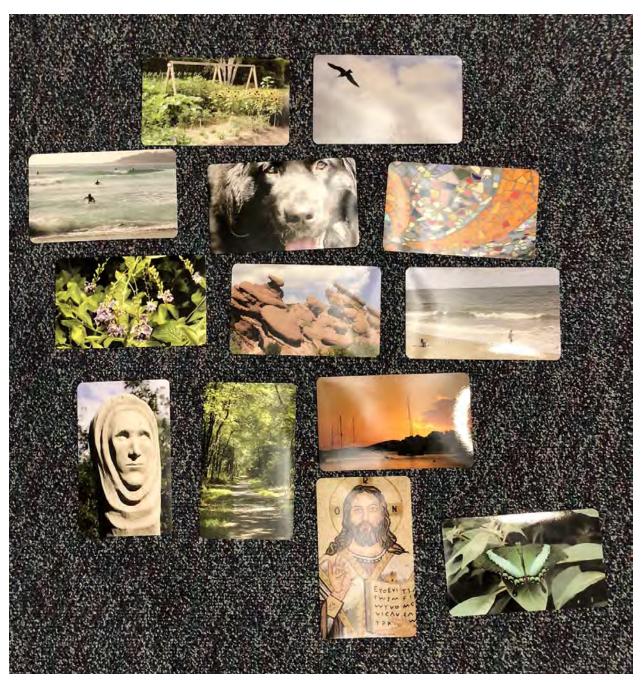
- Rocky road
- Crashing
- Like a statue. Inflexible. Stiff. No growth!
- Wagons in a ghost town: nobody can drive these anywhere. Splinters!
- Hard to define: might be wrong for one person, but right for another.
- Old theater.
- Men in uniform: rigid. conforming.
- Camel. You don't want camels in the classroom. Desert. Too hot.
- Parts that aren't being used. A junkyard. Sad.
- Turtles falling over each other not accomplishing anything.
- Block apartments. Far away. Inaccessible. Less a learning space than a factory.
- Crashing.



Choose a card that represents when a learning space goes wrong



Choose a card that represents how Heathcote Classroom makes you feel.



Choose a card that represents how you want a learning space to make you feel

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Description of the second	
Requested technology class & tech consul - mail merge tech consult	Workshop
Excel Basics (Level I)	Workshop
"Hope from Our Grandmothers: Decolonizing Data through Stories of Resilient	· ·
Community history workshop (JZ)	Workshop
EndNote Basics	Workshop
EndNote Advanced (GN)	Workshop
Qualtrics Basics	Workshop
Software Studio	Workshop
EndNote Basics	Workshop
EndNote Advanced (GN)	Workshop
EndNote Basics	Workshop
EndNote Advanced (GN)	Workshop
Excel Basics (Level I)	Workshop
Excel Beyond the Basics (Level II)	Workshop
EndNote Basics	Workshop
EndNote Advanced (GN)	Workshop
Excel Basics (Level I)	Workshop
Excel Beyond the Basics (Level II)	Workshop
Electronic theses and dissertations	Workshop
Qualtrics Basics	Workshop
EndNote Basics	Workshop
EndNote Q&A	Workshop
Software Studio	Workshop
EndNote Basics	Workshop
EndNote Advanced (GN)	Workshop
Excel Basics & Beyond	Workshop
Qualtrics Basics	Workshop
EndNote Basics	Workshop
EndNote Advanced (GN)	Workshop
EndNote Basics	Workshop
EndNote Q&A	Workshop
Designing for Digital (D4D) Conference Live Stream - KJ	Heathcote ClaWebinar/Confer
Designing for Digital (D4D) Conference Live Stream - KJ	Webinar/Confer
Designing for Digital (D4D) Conference Live Stream - KJ	Webinar/Confer
Diversity and Inclusion Webinar (SY)	Webinar/Confer
Webinar - Decolonizing Descriptions: Finding, Naming and Changing the Relati	•
Art+Feminism Wikipedia edit-a-thon	Other
Brian - Update Computers	Other
Christa Merzdorf (BWR)	Other
Flute Studio (GN)	Other
Heathcote UX (SY)	Other
Hold for MPLEX/Orientation Testing (Testing Center-KJ/BR)	Other
Hold for MPLEX/Orientation Testing (Testing Center-KJ/BR)	Other
HR	Stephanie BogOther
HR, Margaux Lilly, per Brian Rossmann	Other
IT Cable Running	
IT: Cable Running	Other
ITC fiber optic installation	Other

ITC fiber optic installation		Other
Maintenance (Brian Lamb)	#NAME?	Other
MPLEX/Orientation Testing (Testing Center-KJ/BR)		Other
MPLEX/Orientation Testing (Testing Center-KJ/BR)		Other
MPLEX/Orientation Testing (Testing Center-KJ/BR)		Other
MPLEX/Orientation Testing (Testing Center-KJ/BR)		Other
Office of International Programs (BWR)		Other
Search UX Session (SY)		Other
Testing Center (BWR)		Other
Testing Services Math Placement Testing (BWR)		Other
UX Mini-Meet (Scott Young)		Other
UXUP		Other
Wiring pulling fiber optics		Other
Yewno presentation/Kenning (SB)		Other
9:25-10:50, mah EDU 101 for Dawn Silva		Instruction
A.C.E.		Instruction
Amber Fischer - Graduate School	#NAME?	Instruction
ANTY 242D (yamaguchi; hm)		Instruction
ANTY 337 (Yamaguchi; hm)		Instruction
ANTY 428 (Yamaguchi; hm)		Instruction
Belgrade HS (JZ)		Instruction
Belgrade HS and the Doig Archive (JZ)		Instruction
Canceled: WRIT 101, Kelly Massey, mah - CLASS		Instruction
Canceled: WRIT 101, Kelly Massey, mah - CLASS		Instruction
Christina Amadon, COLS 100, mah		Instruction
CHTh 445 for Mark Schure, mah		Instruction
CHTH 445, Mark Shure, mah		Instruction
COLS 100		Instruction
COLS 101		Instruction
Conservation Genetics	Heathcote	Instruction
Criminology, Eitle (hm)		Instruction
EDU 222		Instruction
EDU 222		Instruction
EDU 223		Instruction
EDU 432		Instruction
ENGL 121 Porter (JZ)		Instruction
ENGL 450 Ryan (JZ)		Instruction
ENGL 450 Ryan (JZ)		Instruction
ENGL 450 Ryan (JZ)		Instruction

ENGL 450 Ryan (JZ)		Instruction
ENSC499, Cathy Zabinski (Star)		Instruction
FCS 101		Instruction
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FCS 101		Instruction
HDFS 101		Instruction
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HDFS 101		Instruction
Heritage Christian School		Instruction
Heritage Christian School		Instruction
HHD 512	Heathcote	Instruction
HHD research lab, Wan-Yuan Kuo, mah		Instruction
HIST 540 Walker (JZ)		Instruction
HISTR 499 - Research and Secondary Source Instruction	Heathcote Cl	aInstruction
HSTR 408 Murphy (JZ)		Instruction
HSTR? Ore (Jz)		Instruction
Interlink Students (Cheri LeCain) JZ		Instruction
loe Janzen		Instruction
loe Janzen (BWR)		Instruction
loe Janzen Ag 341 (Donna Kelly-5723) (B. Rossmann)		Instruction
Kate Cottingham (BWR)		Instruction
Kelly Masse, WRIT 101, 2 sections		Instruction
Kelly Massey (BWR)		Instruction
Kelly Massey, mah		Instruction
Kristin Ruppel		Instruction
Kristin Ruppel, NAX 451/541		Instruction
LI: ANTY 225 (Yamaguchi; hm)		Instruction
LI: ANTY 225 (Yamaguchi; hm)		Instruction
LI: ANTY 441 (Yamaguchi; hm)		Instruction
LI: Qualtrics (Arnold; hm)		Instruction
LI: Sociology of Religion (Monique Gregg; hm)		Instruction
LIT 322 Uphaus (JZ)		Instruction
LS 101		Instruction
LS 101		Instruction
LS 101	#NAME?	Instruction
LS 101		Instruction
Maggie Thorsen, SOCI 434 (BWR)		Instruction
mah for Janet Heiss Arms - COLS 260RS		Instruction
Mary Guthmiller - Library Instruction with Veterans	Heathcote	Instruction
MDA (SB + MAH)		Instruction
MDI		Instruction

MDI program, Coleen Kaiser (mah and sb)	Set up	Instruction
MUSI 301 (GN, Antonopolous)	#NAME?	Instruction
NAS 280 (Herman, Thull)		Instruction
Psyc 225 suzanna powell, mah		Instruction
PSYX 223, Michelle Meade, mah		Instruction
PSYX 225		Instruction
PSYX 499		Instruction
PSYX 499		Instruction
RLST 407 Cohen (JZ)		Instruction
RLST 494/499 Cohen (JZ)		Instruction
sb for GEOPHY 425 if ILS needed by Sara M.		Instruction
SFBS 451, Lacy Stephens (MAH)		Instruction
Stephanie Boginson		Instruction
Stephanie Boginson		Instruction
TEA international group, mah		Instruction
UC221 - SBradley		Instruction
UC221 Pinkava (JZ)		Instruction
US 101	Heathcote Cla	
US 101		Instruction
US 101	#NAME?	Instruction
US 101		Instruction
US 101	Sheila	Instruction
US 101	*Mary Anne	
US 101	*Star	Instruction
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US 101	Star	Instruction
US 101	Greg	Instruction
US 101	Mary Anne	Instruction
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US 101	Matthew	Instruction
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US 101		Instruction
Veteran Jumpstart group, Kelly Massey, mah		Instruction
Visual Arts StephanieJT		Instruction
WRIT 101	Heathcote	Instruction
WRIT 101	Heathcote	Instruction
WRIT 101	Heathcote	Instruction
WRIT 101		Instruction
WRIT 201	Class 3.05-4	:2 Instruction
WRIT 201		Instruction
WRIT 201		Instruction
WRIT 201		Instruction
WRIT 376	CLASS	Instruction
WRIT 376		Instruction
WRIT 376		Instruction
DTDL Presentation		Candidate Prese
		Summuter rese

Id	Date	Time	Session	Host	Attende es	Activity	Length of Instruction
017237238	1/18/17	9:00	Excel Basics (Level I)	Jacqueline Frank	1	Workshop	60
017237222	2/1/17	9:00	Excel Basics (Level I) EndNote	Jacqueline Frank	1	Workshop	60
015421177	4/19/17	11:00	Advanced Interlink		1	Workshop	50
o20434017	4/11/18	10:46	Internationa I Students Excel	Cheri LeCain	3	Library Instruction	60
017237461	6/14/17	9:00	Beyond the Basics (Level II)	Jacqueline Frank Montana	4	Workshop	60
016429239	7/6/17	13:00	Qualtrics Basics MUSI X95	Team Nutrition	4	Workshop	60
o19709715	1/30/18	11:00	Flute Studios	Sue Makeever	4	Library Instruction	50
017237365	5/10/17	9:00	Excel Basics (Level I) AGED 401 (Qualtrics	Jacqueline Frank	5	Workshop	60
014741867	3/7/17	15:05	Training Session) Excel	Shannon Arnold	6	Library Instruction	75
017237433	5/24/17	9:00	Beyond the Basics (Level II)	Jacqueline Frank	6	Workshop	60
017237448	6/7/17	9:00	Excel Basics (Level I)	Jacqueline Frank	6	Workshop Library	60
014496881	2/22/17	15:10	US101	Brenda York	7	Instruction	50

017237262	2/15/17	9:00	Excel Beyond the Basics (Level II)	Jacqueline Frank	8	Workshop	60
			HHD UG Research Lab: lentils/puls e crops, in vitro, low				
			glycemic index,	Wan-Yuan Kuo (no			
			recipes/pro	course		Library	
017453989	9/18/17	15:00	duction	number)	8	Instruction Library	30
019837705	10/3/17	3:00	HIST 540 Outlook	Walker	8	Instruction	120
4-00-00-0	- / - /		•	jacqueline			60
017237377	5/17/17	9:00	Tricks Excel Pivot	frank	9	Workshop	60
. 4 7 2 2 7 4 7 2	C 124 147	0.00	Tables	Jacqueline	0		60
017237472	6/21/17	9:00	(Level II)	Frank Sarah	9	Workshop	60
				Schmidt		Library	
017467145	9/8/17	9:00	EDU 223	Wilson	9	Instruction	50
			Excel Beyond the				
			Basics	Jacqueline			
017237170	11/30/17	9:00	(Level II)	Frank	9	Workshop	60
4 6 9 9 9 9 9 9	o /oo / 4 =			<b>D</b> : 1	10	Library	60
016398803	2/23/17	12:00	UC 221	Pinkava	10	Instruction	60
			Excel Basics	iacqueline			
o17237299	3/9/17	9:00	(Level I)	frank	10	Workshop	60
			· · ·	Charlie		Library	
017778377	10/9/17	18:10	LS101	Pinkava	10	Instruction	50
				Kathleen		Library	
018360700	10/30/17	17:10	US 101	Melee	10	Instruction	75
022346623	2/21/18	<b>0.</b> 00	WRIT 101	Thornburg	10	Library Instruction	50
022340023	2/21/10	0.00	VVINI TOT	inombulg	10	mstruction	50

			ANTY 225: Culture, Language,	Tomomi		Library	
014414721	2/16/17		and Society		11	Instruction Library	75
014608438	2/27/17	14:10	LS101	Pinkava Sarah	11	Instruction	50
017467127	9/7/17	16:30	EDU 223	Schmidt Wilson Liz	11	Library Instruction Library	50
018401174	11/2/17	13:40	US 101	Greenfield Crystal	11	Instruction Library	75
018401179	11/2/17		US 101 RLST	Stanionis	11	Instruction Library	75
o22346610	1/25/18		494/499 SOCI 311:	Cohen	11	Instruction Library	90
o20063469	3/9/18		Criminology ANTY 225: Culture,	David Eitle	11	Instruction	50
014336260	2/14/17	12:02	Language, and Society Excel	Tomomi Yamaguchi	12	Library Instruction	75
017237348	3/22/17		Beyond the Basics (Level II)	Jacqueline Frank Barbara	12	Workshop Library	60
017816637	10/12/17	10:50	WRIT 101	Komlos Christine	12	Instruction Library	75
019821782	4/6/17	12:00	COLS 100	Amidon Amanda	13	Instruction Library	75
014469508	2/21/17	14:17	US101	Bitz	14	Instruction	75
014472469	2/21/17	15:05	US 101	Steve Guetterman Amanda Rose	14	Library Instruction	75
016500367	2/21/17	10:50	US 101	Echeverria Bitz	14	Library Instruction	75
018401164	11/1/17	16:10	US 101	Alli Gidley	14	Library Instruction	75

						Library	
022346611	1/30/18	8:00	WRIT 101	Arthur	14	Instruction	50
			Heritage				
			Christian				
			School				
			juniors and				
			seniors -				
24202505	2/44/40	0.00	Rhetoric	Wayne		Library	0.0
o21293595	2/14/18	8:30	class	Tofslie	14	Instruction	90
00065010	<b>4 /</b> ⊑ /10	16.20	COLS 101	Cheryl	1.4	Library	75
020365310	4/5/18	10:38	COLS 101	Hendry	14	Instruction	75
016490708	2/2/17	12.00	FCS 101	Wendy Bianchini	15	Library Instruction	60
010490708	2/3/17	12:00		Bianchini	15	Instruction	60
			ANTY 441:				
			Social	Tomomi		Librory	
o14244324	2/8/17	0.00	Movements in Japan	Tomomi Yamaguchi	15	Library Instruction	75
014244524	2/0/1/	9.00	шаран	ramaguciii	13	Instruction	75
			ANTY 428:				
			History of Anthropolog	Tomomi		Library	
019947761	2/20/18	Q·25	ical Theory		15	Instruction	75
019947701	2/20/10	9.25	WRIT 101,	Tamaguciii	15	mstruction	75
			Lynn			Library	
o20359576	4/5/18	11:57	Kinnaman		15	Instruction	75
0200000000	1, 0, 10	11.07		Shannon		Library	
o20420850	4/10/18	10:50	WRIT 101	Mahoney	15	Instruction	75
				Wendy		Library	
o14140948	2/1/17	12:00	FCS101	, Morrison	16	Instruction	50
						Library	
016490682	2/1/17	12:00	FCS 101		16	Instruction	60
				Amanda		Library	
014469490	2/21/17	9:25	US101	Bitz	16	Instruction	75
				Megan			
				Dumas		Library	
016500320	2/22/17	10:00	US 101	Swanson	16	Instruction	50
						Library	
019822486	10/26/17	9:25	EDU 101	Dawn Silva	16	Instruction	75
			ANTY 242D:				
	_		Contempora			Library	
019962920	3/1/18	13:34	ry Japan	Yamaguchi	16	Instruction	75

				Library	
o22338180	3/26/18	11:00 US 101 002	Tuttle	16 Instruction Library	60
022338231	3/27/18	10:50 US 101 005	Guetterman	16 Instruction Library	60
o22338242	3/27/18	15:00 US 101 008	Gidley Wendy	16 Instruction Library	60
016490688	2/1/17	13:00 FCS 101	Bianchini	17 Instruction Library	60
016490770	2/21/17	12:15 US 101	Megan	17 Instruction	75
016500332	2/22/17	11:00 US 101	Dumas Swanson	Library 17 Instruction	50
			Judi Lynn	Library	
016500345	2/22/17	13:10 US 101	Haskins Charlie	17 Instruction Library	50
o17778369	10/9/17	14:00 LS101	Pinkava	17 Instruction Library	50
019838222	10/11/17	16:00 HIST 468	Fiege	17 Instruction Library	60
o22257526	10/25/17	10:00 US 101	Wan-Yuan	17 Instruction Library	50
o21292869	1/18/18	12:15 HHD 512	Кио	17 Instruction Library	60
o22346608	1/24/18	15:00 RLST 407	Cohen Charlie	17 Instruction Library	90
o20012626	2/23/18	14:10 UC221	Pinkava Erin	17 Instruction Library	50
o16490775	2/22/17	14:00 US 101	MacDonald Jacob	18 Instruction Library	75
015173842	3/31/17	14:21 WRIT 201	Henan Sarah	18 Instruction	50
o17467171	9/12/17	16:30 EDU 223	Schmidt Wilson	Library 18 Instruction	50
o19842872	11/21/17	12:15 ENGL 450	Ryan	Library 18 Instruction	75
022346617	2/13/18	13:40 ENGL 450	Ryan	Library 18 Instruction	75
020012341	2/22/18	12:15 LS101	Charlie Pinkava	Library 18 Instruction	75
020012071	2,22,10	12.13 13101			, ,

011146622	1/2/10	12.40		Buon	10	Library Instruction	75
022346633	4/3/18	13:40	ENGL 450	Ryan Wendy	18		75
o14231114	2/3/17	12.00	FCS 101	Morrison	10	Library Instruction	50
014231114	2/3/1/	12.00	105 101	Kate	19	Library	50
019822108	9/8/17	12.00	PSYX 499	Kujawa	19	Instruction	50
019022100	570717	12.00	COLS 100,	Rajawa	15	histidetion	50
			Cheryl			Library	
018432637	11/6/17	11:31	Hendry		19	Instruction	50
	, _,		,				
				Wendy			
				Morrison, 2nd of 2			
				sections (SB			
				and I each			
				took half of			
				the two			
				sections in			
				the two			
				teaching		Library	
o21293434	1/31/18	12:00	HDFS 101	spaces)	19	Instruction	50
				Sarah			
				Schmidt		Library	
014045318	1/25/17	16:10	EDU 222	Wilson	20	Instruction	50
						Library	
016398725	2/2/17	16:30	HSTR 499	Janet Ore	20	Instruction	90
				Janet Heiss-		Library	
016490801	2/23/17	15:10	COLS 260RS	Arms	20	Instruction	60
				Sarah			
				Schmidt		Library	
o17467159	9/11/17	9:00	EDU 223	Wilson	20	Instruction	50
						Library	
019837685	10/3/17	12:30	ENGL 450	Ryan	20	Instruction	30
			ANTY 337:				
			Sex,				
			Gender,				
			&				
		_	Sexuality in	Tomomi		Library	
o18262507	10/24/17		Japan	Yamaguchi	20	Instruction	75

				Stephanie Kern &			
				Sarah		Library	
018315684	10/25/17	13:10 U	JS 101	Coletta	20	Instruction Library	50
019842807	11/14/17	10:45 W	VRIT 376	Ryan	20	Instruction Library	75
o21292905	1/18/18	13:50 PS	SYX 499	Jessi Smith Wendy	20	Instruction Library	75
o21293417	1/31/18	11:00 HI	IDFS 101	Morrison	20	Instruction Library	50
o22346625	2/21/18	15:10 W	VRIT 101	Thornburg	20	Instruction Library	50
014351945	2/14/17	8:00 W	VRIT 201	Jean Arthur	21	Instruction	75
		Cł So	leritage hristian chool	how to find scholarly articles, books, etc., for Rhetoric I and II			
015002541	2/21/17	2	uniors and	assignment	21	Library	120
o15003541	3/21/17	ju 10:18 se		assignment s	21	Instruction	120
o15003541 o19837728	3/21/17 10/4/17	10:18 se		s Greene		Instruction Library Instruction	120 50
		10:18 se 9:00 W 16:05 W	eniors VRIT 101 VRIT 201	S	21	Instruction Library Instruction Library Instruction	-
019837728	10/4/17	10:18 se 9:00 W 16:05 W	eniors VRIT 101 VRIT 201 VRIT 201	s Greene Jean Arthur- Sellgren Jake Henan Sarah	21 21	Instruction Library Instruction Library Instruction Library Instruction	50
o19837728 o19876072	10/4/17 10/12/17	10:18 se 9:00 W 16:05 W 8:00 He	eniors VRIT 101 VRIT 201 VRIT 201	s Greene Jean Arthur- Sellgren Jake Henan	21 21 21	Instruction Library Instruction Library Instruction Library Instruction	50 75
o19837728 o19876072 o18271499	10/4/17 10/12/17 10/20/17	10:18 se 9:00 W 16:05 W 8:00 He 9:00 EI	eniors VRIT 101 VRIT 201 VRIT 201 Ienan	s Greene Jean Arthur- Sellgren Jake Henan Sarah Schmidt-	21 21 21 21 21	Instruction Library Instruction Library Instruction Library Instruction Library Instruction Library Instruction	50 75 50
o19837728 o19876072 o18271499 o19462283	10/4/17 10/12/17 10/20/17 1/24/18	10:18 se 9:00 W 16:05 W 8:00 He 9:00 Ef 9:00 W	eniors VRIT 101 VRIT 201 VRIT 201 Ienan DU 222	s Greene Jean Arthur- Sellgren Jake Henan Sarah Schmidt- Wilson Thornburg Mark Shure Beth	21 21 21 21 21 21	Instruction Library Instruction Library Instruction Library Instruction Library Instruction Library Instruction Library Instruction	50 75 50 50
o19837728 o19876072 o18271499 o19462283 o22346624	10/4/17 10/12/17 10/20/17 1/24/18 2/21/18	10:18 se 9:00 W 16:05 W 8:00 He 9:00 Ef 9:00 W 14:30 Ch	eniors VRIT 101 VRIT 201 VRIT 201 Ienan DU 222 VRIT 101	s Greene Jean Arthur- Sellgren Jake Henan Sarah Schmidt- Wilson Thornburg Mark Shure	21 21 21 21 21 21 22	Instruction Library Instruction Library Instruction Library Instruction Library Instruction Library Instruction Library	50 75 50 50 50

			Sarah Schmidt-	Library	
o21293122	1/22/18	9:00 EDU 223	Wilson	22 Instruction Library	50
o22346612	1/30/18	13:40 WRIT 101	Arthur	22 Instruction Library	75
o22346630	3/28/18	14:00 WRIT 101	Greene Sarah	22 Instruction	50
016490571	1/23/17	9:00 EDU 223	Schmidt- Wilson Sarah	Library 23 Instruction	60
016490577	1/23/17	16:00 EDU 223	Schmidt- Wilson	Library 23 Instruction	60
016490596	1/25/17	9:00 EDU 223	Sarah Schmidt- Wilson	Library 23 Instruction	60
014351956	2/14/17	9:25 WRIT 201	Jean Arthur	Library 23 Instruction	75
014331330	2/14/1/	5.25 WINT 201	Sarah Schmidt-	Library	75
o17202970	9/8/17	11:00 EDU 223	Wilson	23 Instruction Library	50
019838425	10/18/17	8:00 WRIT 201	Parker	23 Instruction Library	50
019838433	10/18/17	14:10 WRIT 201	Parker Wendy	23 Instruction Library	50
o22257644	2/2/18	11:00 HDFS 101	Morrison Jena Arthur	23 Instruction Library	50
014053105	1/26/17	15:05 WRIT 101	Sellegren	24 Instruction Library	75
014137214	1/26/17	12:15 WRIT 101	Jean Arthur Shauna	24 Instruction Library	75
014533438	2/24/17	13:10 WRIT 101	Stephens Maxwell	24 Instruction Library	50
o22257422	9/1/17	11:00 PSYX 225	Burns Suzanne	24 Instruction Library	50
016490608	1/25/17	16:00 CHTH 445	Held	25 Instruction	90

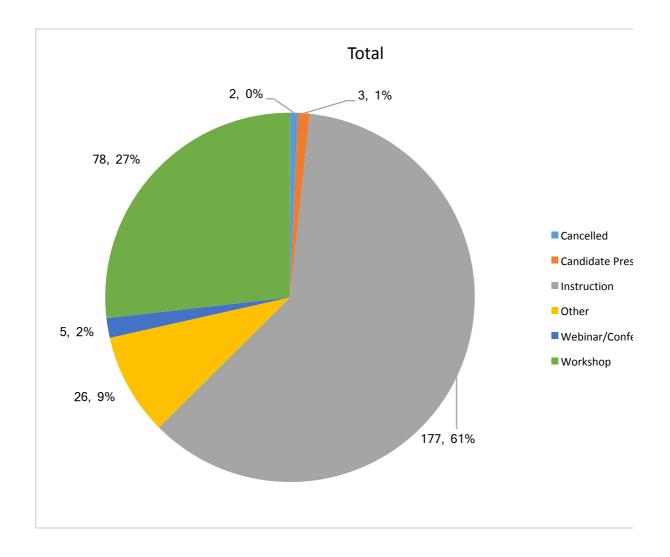
016735109	8/2/17	Die	ontana etetics erns)	Colleen Kaiser/Anna Diffenderfer	25	Library Instruction	120
			ontana etetic	Coleen Kaiser,			
			ernship	Anna		Library	
016767349	8/2/17	9:00 Pro	-	Diffenderfer	25	Instruction Library	120
019837063	9/19/17	10:50 WF	RIT 101	Jean Arthur	25	Instruction Library	75
019837184	9/19/17	13:40 Wr	rit 101	Jean Arthur	25	Instruction Library	75
019837718	10/4/17	8:00 WF	RIT 101	Greene Kelsey	25	Instruction	50
				Weyerbach		Library	
o19837752	10/4/17	12:00 WF	RIT 101	er	25	Instruction	50
				Kelsey			
				Weyerbach		Library	
019837777	10/4/17	1:10 WF	RIT 101	er	25	Instruction	50
				Carter		Library	
019837792	10/4/17	15:10 WF	RIT 101	Walker	25	Instruction	50
				Carter		Library	
019838130	10/5/17	13:40 WF	RIT 101	Walker	25	Instruction	30
				Carter		Library	
019838146	10/6/17	14:10 WF	RIT 101	Walker	25	Instruction	30
010020170	10/6/17	10.00 \//	DIT 101	Julie Christon	25	Library Instruction	50
019838170	10/6/17	10:00 WF	101	Christen	25	Library	50
019838236	10/13/17	8:00 WF	RIT 101	Benton	25	Instruction	50
019030230	10, 10, 1,	0.00 11		Chamberlai	23	Library	30
019838325	10/17/17	8:00 WF	RIT 101	n	25	Instruction	75
				Chamberlai		Library	
019838345	10/17/17	13:40 WF	RIT 101	n	25	, Instruction	75
				Chamberlai		Library	
019838355	10/17/17	15:05 WF	RIT 101	n	25	Instruction	75

			Kate Emmerich/		
			Marianne	Library	
o18429792	11/2/17	9:20 US101	Brough	25 Instruction	75
			Kelly	Library	
o22257551	11/8/17	10:00 WRIT 101	Massey	25 Instruction	50
			Maxwell	Library	
016490560	1/20/17	8:00 PSYX 225	Burns	26 Instruction	60
			Cathy	Library	
017246963	9/13/17	12:00 ENSC 499	Zabinski	26 Instruction	120
			Cara		
			Sabo/Ann	Library	
o18429722	10/25/17	12:00 US101	Tuttle	26 Instruction	50
			Judi Haskins		
			& Jade	Library	
o18319982	10/27/17	13:10 US 101	Lauder	, 26 Instruction	50
			Amanda		
			Bitz/Daniell	Library	
o18429771	10/31/17	12:10 US101	e Nicholas	26 Instruction	75
	-/-/		Wendy	Library	
o22257651	2/2/18	12:00 HDFS 101	Morrison	26 Instruction	50
			Sarah		
			Schmitt-	Library	
o19822135	9/11/17	11:00 EDU 223	Wilson	27 Instruction	50
	-/ /			Library	
017466822	9/18/17	18:00 EDU 432	Sue Stolp	27 Instruction	60
			Stephanie		
			Kern/Evan	Library	
018429690	10/25/17	9:00 US101	Wilmes	27 Instruction	50
	,,		Anna		
			Tuttle/Man	Library	
o18429737	10/27/17	10:00 US101	dy St Aubyn	27 Instruction	50
010.107.07	_0, _, , _,		Brenda		
			Truman/Am	Library	
018429804	11/2/17	10:50 US101	anda Bitz	27 Instruction	75
010125001	± ±,	10.30 00101			,5
			Ann		
			Ellsworth/R	Library	
018429706	10/25/17	11:00 US101	oger Fischer	28 Instruction	50
010723700	10/23/17	11.00 03101	of the second		50

			Sarah Coletta		
018322277	10/27/17	US 101 32 12:00 & 44	& Jade Lowder	Library 28 Instruction	50
			Anna Tuttle/Max	Library	
o18429748	10/27/17	11:00 US101	Maxfield	28 Instruction	50
		SOCI 320:	Karen		
			of Monique-	Library	
013973730	1/20/17	15:10 Religion	Gregg	29 Instruction	50
			Deb		
			Blanchard		
		US 101	&		
		Sections 3	,	Library	
018867363	11/2/17	12:15 & 41	Stanionis	29 Instruction	75
			Mark	Library	
o21293305	1/29/18	13:10 CHTH 445	Schure	29 Instruction	150
			Lacy	Library	
016490510	1/18/17	17:00 SFBS 451	Stephens	30 Instruction	60
	0/07/47		Wendy	Library	-0
019822372	9/27/17	14:10 HDFS 101	Morrison	30 Instruction	50
019822476	10/4/17	10:00 US 101		Library 30 Instruction	50
019822470	10/4/1/	10.00 03 101	Suzanna	Library	50
o21293137	1/22/18	12:00 PSYX 225	Powell	30 Instruction	50
021255157	1/22/10	12.00 1 517 225	Wendy	Library	50
o19822401	9/29/17	10:00 HDFS 101	Morrison	31 Instruction	50
	-,,		Michelle	Library	
o21292843	1/18/18	9:25 PSYX 225	Meade	31 Instruction	75
			Wendy	Library	
o19822357	9/27/17	10:00 HDFS 101	Morrison	32 Instruction	50
			Suzanna	Library	
016490500	1/18/17	12:00 PSYX 225	Powell	33 Instruction	60
			Suzanna	Library	
019822095	9/8/17	10:00 PSYX 225	Powell	33 Instruction	50
				Library	
016399137	3/20/17	14:10 LIT 322	Uphaus	37 Instruction	50
2222224	2/26/46		Schumacher	Library	~~~
022338219	3/26/18	16:15 US 101 00	7 and Kearns	37 Instruction	60

			Belgrade High School Montana History			Library	
o15497090	4/25/17	9:00	Students		60	Instruction	120
				Emily		Library	
019896711	4/25/17	9:00	Belgrade HS	Nelson	60	Instruction	120
022346636	4/18/18	9:00	Belgrade HS Advanced Placement English		60	Library Instruction	150
019913286	10/31/17	15:05	US 101	Anna Greenberg & Jim Thull	Sections 11 & 25	Library Instruction	75
019913300	10/31/17	16:30	US 101	Steve Guetterman & Anna Greenberg	Sections 13 & 36	Library Instruction	75
019913265	10/31/17	10:50	US 101	Steve Guetterman & Gennifre Hartman Erin	Sections 18 & 30	Library Instruction	75
019913279	10/31/17	13:40	US 101	MacDonald- Peck & Meg Konkel	9 &	Library Instruction	75
018346980	10/30/17	16:41	US 101, two sections	Steve		Library Instruction	75
019913206	10/31/17	9:25	US 101	Guetterman & Gennifre Hartman		Library Instruction	75

DTDL Presentation		Candidate Prese
ERDS Presentation		Candidate Prese
Canceled: Art+Feminism Wikipedia edit-a-thon training session		Cancelled
Canceled: Workshop - JF	#NAME?	Cancelled



# Default Report

MSU Library Learning Space Usage August 8, 2018 3:41 PM MDT

### Q1 - On average, how many times did you use the Heathcote classroom for your

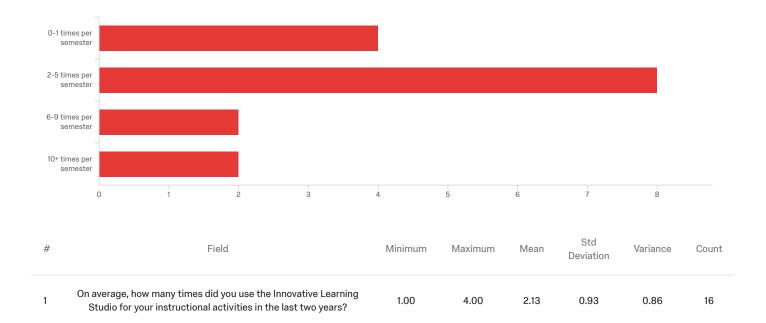
#### 0-1 times per semester 2-5 times per semester 6-9 times per semester 10+ times per semester i 2 3 4 7 8 9 5 6 10 0 11 Std # Field Minimum Maximum Variance Mean Count Deviation On average, how many times did you use the Heathcote 1 1.00 4.00 1.88 1.22 1.48 16 classroom for your instructional activities in the past two years? Choice Field # Count 62.50% 10 0-1 times per semester 1 2 6.25% 1 2-5 times per semester 3 6-9 times per semester 12.50% **2** 4 10+ times per semester 18.75% **3** 16

instructional activities in the past two years?

Showing Rows: 1 - 5 Of 5

Q2 - On average, how many times did you use the Innovative Learning Studio for your

instructional activities in the last two years?



#	Field	Choice Count	
1	0-1 times per semester	25.00%	4
2	2-5 times per semester	50.00%	8
3	6-9 times per semester	12.50%	2
4	10+ times per semester	12.50%	2
			16

Showing Rows: 1 - 5 Of 5

Instructional sessions (e.g. lecture instruction) Training sessions Workshops Hosting/attending webinars and online conferences

Q3 - How do you use library	learning spaces? Rank these in	order of priority (lower score
-----------------------------	--------------------------------	--------------------------------

Hosting/a webinars a con		0.5	1	1.5	2	2.5	3	3.	5	
#		Field			Minimum	▲ Maximum	Mean	Std Deviation	Variance	Count
5	Other (please define)				1.00	5.00	4.50	1.32	1.75	16
1		Worksho	ps		1.00	5.00	2.50	1.22	1.50	16
4	Instructional sessions (e.g. one-shot/guest lecture instruction)				1.00	4.00	2.19	1.42	2.03	16
2	Hosting/att	ending webinars a	and online confe	rences	1.00	4.00	3.50	0.79	0.63	16
3		Training ses	sions		2.00	3.00	2.31	0.46	0.21	16

is better)

#	Field	1		2		3		4		5		Total
1	Workshops	25.00%	4	25.00%	4	37.50%	6	0.00%	0	12.50%	2	16
3	Training sessions	0.00%	0	68.75%	11	31.25%	5	0.00%	0	0.00%	0	16
5	Other (please define)	12.50%	2	0.00%	0	0.00%	0	0.00%	0	87.50%	14	16
4	Instructional sessions (e.g. one-shot/guest lecture instruction)	56.25%	9	6.25%	1	0.00%	0	37.50%	6	0.00%	0	16
2	Hosting/attending webinars and online conferences	6.25%	1	0.00%	0	31.25%	5	62.50%	10	0.00%	0	16

Showing Rows: 1 - 5 Of 5

#### Q8 - What other, non-instructional activities, have you attended or hosted in library

#### learning spaces (e.g. meetings)?

What other, non-instructional activities, have you attended or hosted in li...

Library all-staff meetings, Hosted DEAL (MSU Leadership program meetings) 8 times over 1 year, Hosted DISC meetings

retreats

meetings

staff meetings

Design Sandbox, Diversity Dialogue, Staff learning/development

Meetings/planning sessions with internal and external faculty, students, and staff

Meetings

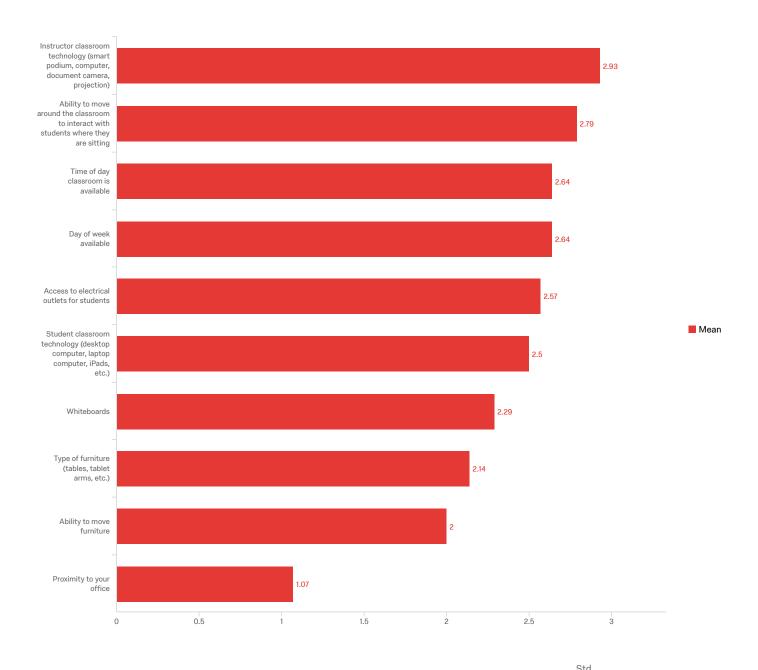
meetings with provided technology to participants

t

#### Meetings

Workshops hosted by other campus departments; student projects on display from the department I am a liason for

Showing Records: 1 - 11 Of 11



Q4 - How important are the following classroom features? (higher score is better)

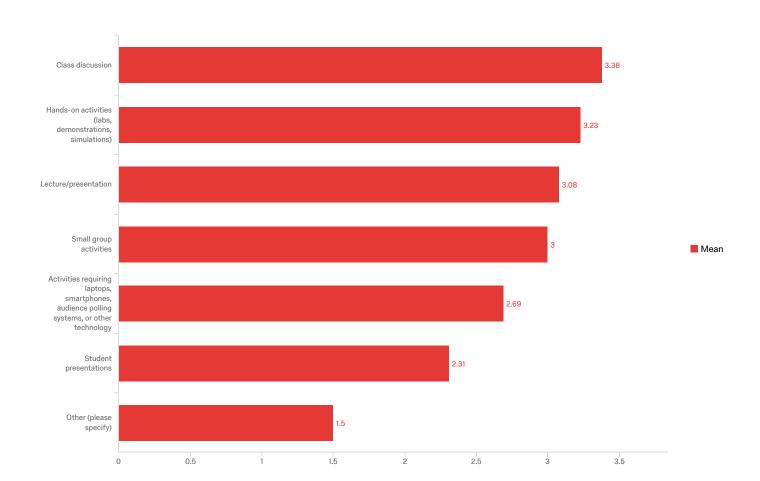
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Instructor classroom technology (smart podium, computer, document camera, projection)	2.00	3.00	2.93	0.26	0.07	14
2	Ability to move around the classroom to interact with students where they are sitting	2.00	3.00	2.79	0.41	0.17	14
3	Type of furniture (tables, tablet arms, etc.)	1.00	3.00	2.14	0.64	0.41	14
4	Ability to move furniture	1.00	3.00	2.00	0.76	0.57	14

5	Time of day classroom is available	2.00	3.00	2.64	0.48	0.23	14
6	Day of week available	2.00	3.00	2.64	0.48	0.23	14
7	Whiteboards	1.00	3.00	2.29	0.59	0.35	14
8	Proximity to your office	1.00	2.00	1.07	0.26	0.07	14
9	Access to electrical outlets for students	1.00	3.00	2.57	0.62	0.39	14
10	Student classroom technology (desktop computer, laptop computer, iPads, etc.)	1.00	3.00	2.50	0.63	0.39	14

#	Field	Not important	Somewhat important	Very important	Total
1	Instructor classroom technology (smart podium, computer, document camera, projection)	0.00% <b>0</b>	7.14% <b>1</b>	92.86% 13	14
2	Ability to move around the classroom to interact with students where they are sitting	0.00% <b>0</b>	21.43% <b>3</b>	78.57% 11	14
3	Type of furniture (tables, tablet arms, etc.)	14.29% <b>2</b>	57.14% <b>8</b>	28.57% <b>4</b>	14
4	Ability to move furniture	28.57% <b>4</b>	42.86% <b>6</b>	28.57% 4	14
5	Time of day classroom is available	0.00% <b>0</b>	35.71% <b>5</b>	64.29% <b>9</b>	14
6	Day of week available	0.00% <b>0</b>	35.71% <b>5</b>	64.29% <b>9</b>	14
7	Whiteboards	7.14% <b>1</b>	57.14% <b>8</b>	35.71% <b>5</b>	14
8	Proximity to your office	92.86% <b>13</b>	7.14% <b>1</b>	0.00% <b>0</b>	14
9	Access to electrical outlets for students	7.14% <b>1</b>	28.57% <b>4</b>	64.29% <b>9</b>	14
10	Student classroom technology (desktop computer, laptop computer, iPads, etc.)	7.14% <b>1</b>	35.71% <b>5</b>	57.14% <b>8</b>	14

Showing Rows: 1 - 10 Of 10

Q7 - Which of the following instructional techniques do you employ? (higher score is



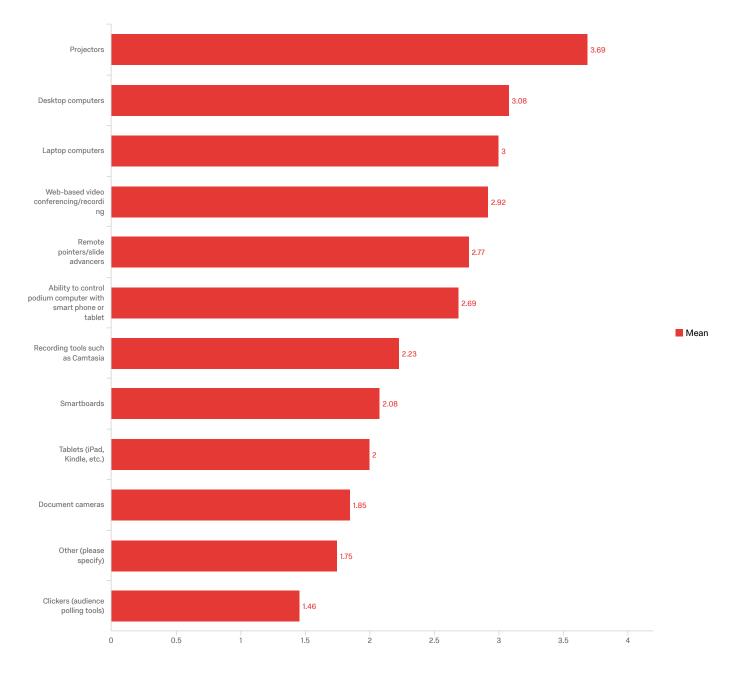
better)

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Lecture/presentation	2.00	4.00	3.08	0.62	0.38	13
2	Class discussion	3.00	4.00	3.38	0.49	0.24	13
3	Small group activities	2.00	4.00	3.00	0.55	0.31	13
4	Student presentations	1.00	3.00	2.31	0.72	0.52	13
5	Hands-on activities (labs, demonstrations, simulations)	2.00	4.00	3.23	0.58	0.33	13
6	Activities requiring laptops, smartphones, audience polling systems, or other technology	1.00	4.00	2.69	0.72	0.52	13
7	Other (please specify)	1.00	3.00	1.50	0.87	0.75	4

#	Field	Never		Rarely		Sometim	ies	Always		Total
1	Lecture/presentation	0.00%	0	15.38%	2	61.54%	8	23.08%	3	13
2	Class discussion	0.00%	0	0.00%	0	61.54%	8	38.46%	5	13
3	Small group activities	0.00%	0	15.38%	2	69.23%	9	15.38%	2	13
4	Student presentations	15.38%	2	38.46%	5	46.15%	6	0.00%	0	13
5	Hands-on activities (labs, demonstrations, simulations)	0.00%	0	7.69%	1	61.54%	8	30.77%	4	13
6	Activities requiring laptops, smartphones, audience polling systems, or other technology	7.69%	1	23.08%	3	61.54%	8	7.69%	1	13
7	Other (please specify)	75.00%	3	0.00%	0	25.00%	1	0.00%	0	4
	Showing Rows: 1 - 7 Of 7									

Q5 - How important are the following classroom technologies for the instructional

techniques you employ? (higher score is better)



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count	
1	Document cameras	1.00	3.00	1.85	0.95	0.90	13	
2	Remote pointers/slide advancers	1.00	4.00	2.77	0.89	0.79	13	
3	Clickers (audience polling tools)	1.00	3.00	1.46	0.63	0.40	13	

4	Recording tools such as Camtasia	1.00	3.00	2.23	0.80	0.64	13
5	Smartboards	1.00	3.00	2.08	0.83	0.69	13
6	Ability to control podium computer with smart phone or tablet	1.00	4.00	2.69	0.99	0.98	13
7	Web-based video conferencing/recording	1.00	4.00	2.92	1.00	0.99	13
8	Desktop computers	1.00	4.00	3.08	1.00	0.99	13
9	Laptop computers	2.00	4.00	3.00	0.68	0.46	13
10	Tablets (iPad, Kindle, etc.)	1.00	3.00	2.00	0.68	0.46	13
11	Projectors	2.00	4.00	3.69	0.61	0.37	13
12	Other (please specify)	1.00	4.00	1.75	1.30	1.69	4

#	Field	Not at all important	Slightly important		Moderate importan		Very importa	nt	Total
1	Document cameras	53.85% <b>7</b>	7.69%	1	38.46%	5	0.00%	0	13
2	Remote pointers/slide advancers	15.38% <b>2</b>	7.69%	1	61.54%	8	15.38%	2	13
3	Clickers (audience polling tools)	61.54% <b>8</b>	30.77%	4	7.69%	1	0.00%	0	13
4	Recording tools such as Camtasia	23.08% <b>3</b>	30.77%	4	46.15%	6	0.00%	0	13
5	Smartboards	30.77% 4	30.77%	4	38.46%	5	0.00%	0	13
6	Ability to control podium computer with smart phone or tablet	15.38% <b>2</b>	23.08%	3	38.46%	5	23.08%	3	13
7	Web-based video conferencing/recording	7.69% 1	30.77%	4	23.08%	3	38.46%	5	13
8	Desktop computers	7.69% 1	23.08%	3	23.08%	3	46.15%	6	13
9	Laptop computers	0.00% <b>0</b>	23.08%	3	53.85%	7	23.08%	3	13
10	Tablets (iPad, Kindle, etc.)	23.08% <b>3</b>	53.85%	7	23.08%	3	0.00%	0	13
11	Projectors	0.00% <b>0</b>	7.69%	1	15.38%	2	76.92%	10	13
12	Other (please specify)	75.00% <b>3</b>	0.00%	0	0.00%	0	25.00%	1	4
	Showing Rows: 1 - 12 Of 12								

Showing Rows: 1 - 12 Of 12

## Q9 - Is there anything else you'd like to tell us about your use of library instructional

## spaces?

Is there anything else you'd like to tell us about your use of library inst...

I feel it's important to have spaces that can handle hands-on work (whether through use of laptops or desktop computers) for larger groups than the ILS can accommodate; and sometimes larger even than the Heathcote can at present. By larger I mean 25-40 students. The Heathcote has always been barely adequate for larger groups but it at least will accommodate 30-35 in a pinch and allow students to work with our or their own computers. The fact is, in my mind, we need a larger group learning space than either of the rooms we have now, one that can handle either small groups or larger (25-40) doing real work on flexible furniture rather than in rigid rows. I do still like a central teacher station but that too could be moveable. Though I don't think my office needs to be near an instructional space I don't like a basement location for our classroom -- I know that's what we've made due with but it speaks volumes imo about our attitude toward the library as a teaching entity. Learners shouldn't be smashed into a sensory deprivation chamber. Thanks for doing this survey and thanks for listening!

Flexible space does not have to mean flexible furniture. Being able to move around the space and allowing students to move around the space seems more important than moving furniture, which often looks a mess. The teal classrooms have less movable furniture, for example, and instructors don't have to spend time configuring it.

No

Showing Records: 1 - 3 Of 3

## **End of Report**

### 2014-2015 MSU Classroom Survey

I am pleased to share a summary of the findings from the spring 2015 survey on MSU classrooms that was distributed to the Bozeman campus academic faculty. Thank you to everyone who responded. These findings will be used to provide input for future classroom design and renovation, to make improvements in classroom technology, and to design upcoming faculty workshops. Comments about specific classrooms will be tabulated and reported to the Classroom Committee and to Classroom Planning, Design, and Construction.

A summary of the results follows, with a more detailed report becoming available later this summer on the Center for Faculty Excellence Website. More details about the summary report are currently located below.

## Faculty responses:

A total of 301 faculty (33% response rate) from all colleges completed the survey. These responses represented class sizes of <21 (19%), 21-49 (44%), 50-70 (12%), 70-100 (9%), 100 – 200 (8%), and >200 (8%).

## **Classroom design:**

The survey asked participants about the types of room designs that would work best for their teaching needs. Faculty (50%) preferred classroom designs that offer flexible seating that include either movable tablet arm chairs or movable tables and chairs that can be configured in a collaborative environment. Technology Enhanced Active Learning (TEAL) classrooms were viewed as having a good fit with their preferred teaching methods by 48% of faculty. Classrooms with swivel stadium seating (26%) or fixed tiered seating (21%) were ranked lowest in terms of fitting with their preferred method of teaching. Some faculty responded they would need more information to determine if a TEAL (10%) or collaborative learning design (8%) would align with their preferred method of teaching.

## Important classroom features and technology:

Faculty were asked about classroom features (i.e., what things they valued in a teaching space) and technology use. The features rated as very important by faculty were classroom technology

(86%), the ability to move around the classroom to interact with students (72%), instructor wireless internet (57%), and the type of furniture (53%).

The survey also addressed the use of classroom technology. Faculty reported that they use or have used document cameras (61%), remote pointers to advance slides (41%), and clickers (28%). Faculty responded that they would like training on smart boards (45%), web-based video conferencing (45%), controlling the podium computer with a smart phone or tablet (40%), and lecture recording tools such as Camtasia (33%).

Twenty-four percent of faculty integrate student use of technology with classroom activities. About half of faculty strongly agree (21%) or somewhat agree (31%) that personal technology during class has been a disrupting influence in their classroom. Twenty-seven percent of faculty do not have a policy on the use of personal technology in the classroom and thirty percent of faculty have policies that vary from course to course.

If you have comments, please contact Marilyn Lockhart, <a href="https://www.lockhart.com">lockhart@montana.edu</a>.

	Very Important	Somewhat important	Not at all important
Classroom technology (computer, document camera, projection)	86%	12%	2%
Ability to move around the classroom to interact with students where they are sitting	72%	16%	12%
Wireless internet for instructor	57%	22%	21%
Type of furniture (tables, tablet arms, etc.)	53%	35%	12%
Ability to move furniture	51%	23%	26%

## Importance of classroom features:

Time of day classroom is available	51%	40%	9%
Day of week available	51%	41%	8%
Wireless internet for students	34%	28%	38%
Whiteboards	33%	34%	33%
Proximity to your office	14%	44%	42%
Access to electrical outlets for students	13%	31%	56%

## Experience with classroom technologies

	Am currently using or have used	Have heard and would like to learn more	Have heard but not interested in using or learning	Am not at all familiar with it
Document cameras	61%	16%	14%	9%
Remote pointers to advance slides	41%	29%	25%	5%
Clickers	28%	22%	41%	9%
Recording tools such as Camtasia	26%	33%	30%	11%
Smart boards	20%	45%	21%	14%
Ability to control podium computer with	13%	40%	32%	15%

smart phone or tablet				
Web-based video conferencing	26%	45%	33%	10%

# Use of instructional techniques – (in courses taught most often)

	Often	Sometimes	Rarely	Never
Lecture/presentation	78%	18%	4%	0%
Class discussion	56%	32%	12%	1%
Small group activities	49%	29%	14%	9%
Student presentations	16%	31%	20%	32%
Hands-on activities (labs, demonstrations, simulations)	37%	22%	22%	19%
Activities that require laptops, smart- phones, i-clickers, or other student technology	28%	19%	22%	32%

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#### Center for Faculty Excellence TI Resources / Documents TEAL Classrooms: Active and Collaborative Teaching and Learning Resources

TEAL Classrooms: Active and Collaborative Teaching and Learning Resources

This page is your resource for links, papers, and other information about teaching and learning strategies for active and collaborative learning environments.

These environments are often referred to as **TEAL** (*Technology Enhanced Active Learning*), **ALC** (*Active Learning Classroom*) or **SCALE-UP** (Student-Centered Active Learning Environment with Upside-down Pedagogies) classrooms.

#### Introduction to the TEAL classrooms from Professor Bill McLaughlin (click on the title to open the video)

- Introduction to the Videos
- Creating Student Groups
- Innovative Active Learning Activity Idea
- Conclusion to TEAL Video
- Resources Shared with MSU TEAL Pilot instructors

(Note that some of these may be duplicated below under the specific institution where they came from)

#### Guides, handouts, and references

- University of Minnesota Active Learning Considerations handout (PDF)
  - This handout is also on the web at: <a href="http://www1.umn.edu/ohr/teachlearn/alc/considerations/">http://www1.umn.edu/ohr/teachlearn/alc/considerations/</a> NOTE: The U of M has a number of excellent ALC resources, including an annotated bibliography, at: <a href="http://www1.umn.edu/ohr/teachlearn/alc/index.html">http://www1.umn.edu/ohr/teachlearn/alc/considerations/</a>
- "Flipped Classroom" <u>References</u> (PDF) from a 2012 POD conference presentation: "Multiple Ways to "Flip/Invert" Instruction to Enhance Learning", by Dr. Jim Eison, University of South Florida
- Notes from Dec 11 TEAL Instructors' Skype session with D. Langley, with plenty of tips and advice. (PDF)
- Immediate Feedback Assessment Technique (IF-AT) cards that Business TBL presenters recommended are at: <u>www.epstelneducation.com</u>
- Group Testing bibliography from Faculty Focus.

#### Books and Videos of interest:

- Books
  - Learner-Center Teaching: Putting the Research on Learning into practice. Terry Doyle
  - Cooperative learning in higher education: Barbara Millis
  - Facilitating Seven Ways of Learning: Davis and Arend
  - Active Learning: 101 Strategies to Teach Any Subject: Mel Silberkman
- Videos
  - http://www.youtube.com/watch?v=IfT\_holuY8w (UofMinn's Inside Active Learning Classrooms video)
  - http://go.ncsu.edu/fctp-p (From NCState's Flipped Classroom Training Program On the left at the bottom, click on "online" and then on the next page, in particular, see Module 1: #1 Watch Katie Gimbars video, #2: A look at Katies classroom documentary, and #3: Video Lecture Resources.)
- Articles
  - Susan Dana's "Implementing Team Based Learning in an Introduction to Law Course" article (PDF), referred to in the TBL workshop.
- Resources from Scale-Up / North Carolina State
  - "Scale-up" program

("The purpose of this website is to share designs for state-of-the-art learning studios, teaching methods, and instructional materials that are based on more than a decade of discipline-based education research") Start here: http://scaleup.ncsu.edu/

- Resources from MIT
  - TEAL program description
    - http://web.mit.edu/edtech/casestudies/teal.html
  - Papers and case studies http://web.mit.edu/edtech/casestudies/pdf/teal2.pdf http://web.mit.edu/edtech/casestudies/pdf/teal1.pdf http://www.nytimes.com/2009/01/13/us/13physics.html http://web.mit.edu/jbelcher/www/TEALref/fnlEditedLinks.pdf
- Resources from the University of Minnesota

YouTube video of an ALC : <u>http://youtu.be/ifT hoiuY8w</u> ("Inside Active Learning Classrooms")

For more info contact Marilyn Lockhart (994-4555, lockhart@montana.edu).

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