



From Research to Reality: How ASU Designs Effective Learning Spaces

Agenda

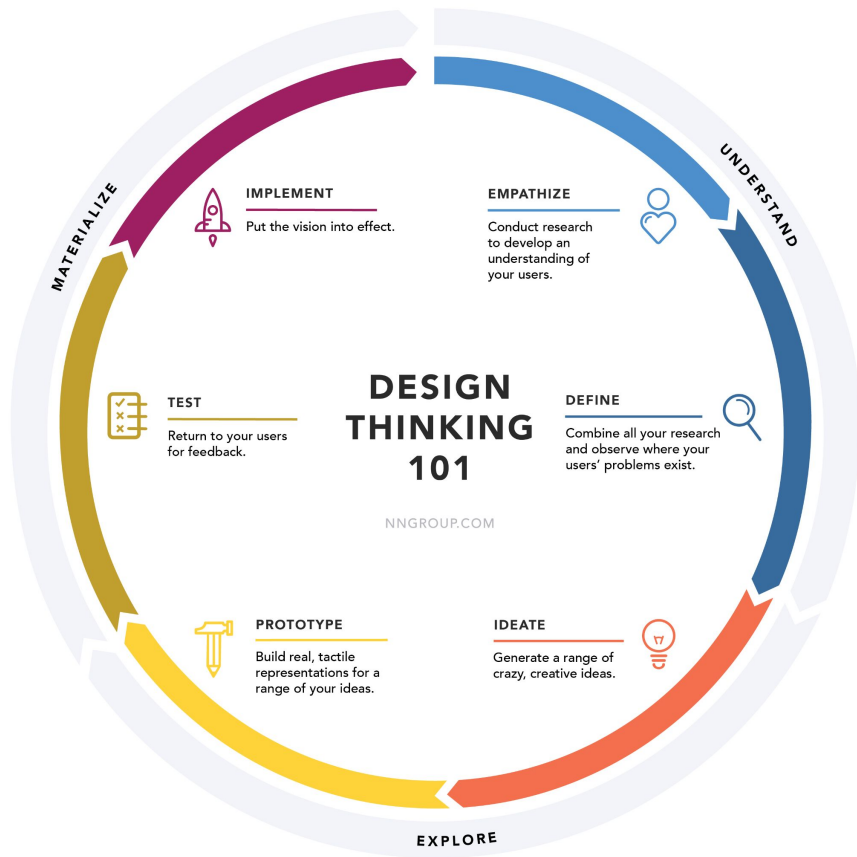


- **Design thinking overview**
- **3 ASU learning space case studies**
- **Practical takeaways**
- **Q&A**
- **Space reflection activity**

ASU Charter

ASU is a comprehensive **public research university**, measured not by whom it excludes, but by **whom it includes** and **how they succeed**; advancing **research and discovery** of public value; and assuming **fundamental responsibility** for the economic, social, cultural and overall health of the **communities it serves**.

Design thinking overview



1. Empathize
2. Define
3. Ideate
4. Prototype
5. Test
6. Implement

Image credit: [NN Group](#)

ASU case studies





Creativity Commons 1st floor

- Informal learning and interdisciplinary collaboration space
- Class-in-Residence program
- AI Creative Learning Lab
- Emphasis on collaboration using Adobe Express, generative AI, and the ZIL studios
- Ongoing user research on space and tech usage

Design thinking process

The core question:

What happens when computing is no longer a destination?

How we explored it:

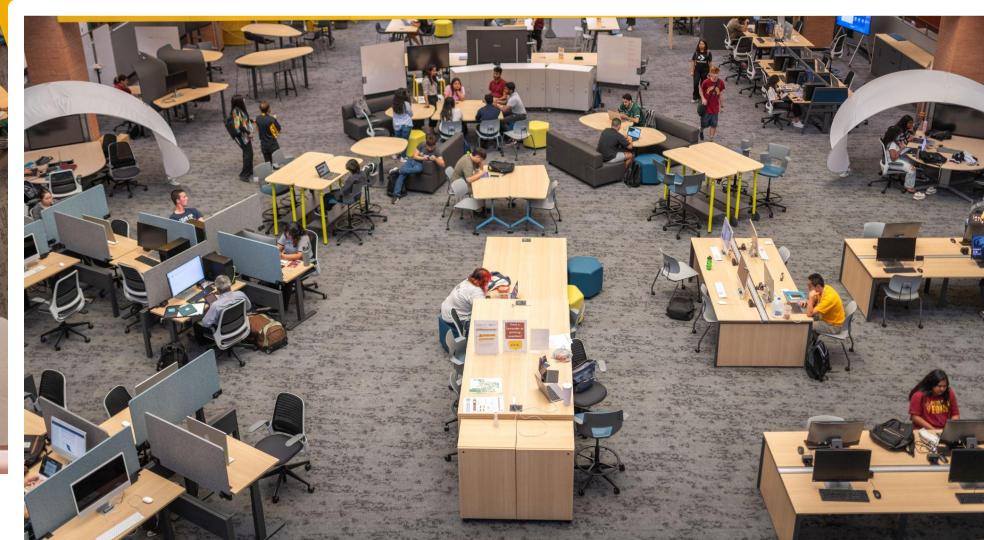
- 6 student design sessions
- Incorporate faculty needs and preferences

Before



Image credit: [ASU's Week in Pictures - Sep 6, 2012](#)

Renovated Creativity Commons



AI Creative Learning Lab

- Launched summer 2025
- Open to faculty, staff, and students
- Explore practical uses of generative AI in teaching & learning
- One-on-one guidance from ASU strategists & specialists
- Support with activities, tools, and ethics
- Grounded in ASU's Principled Innovation values



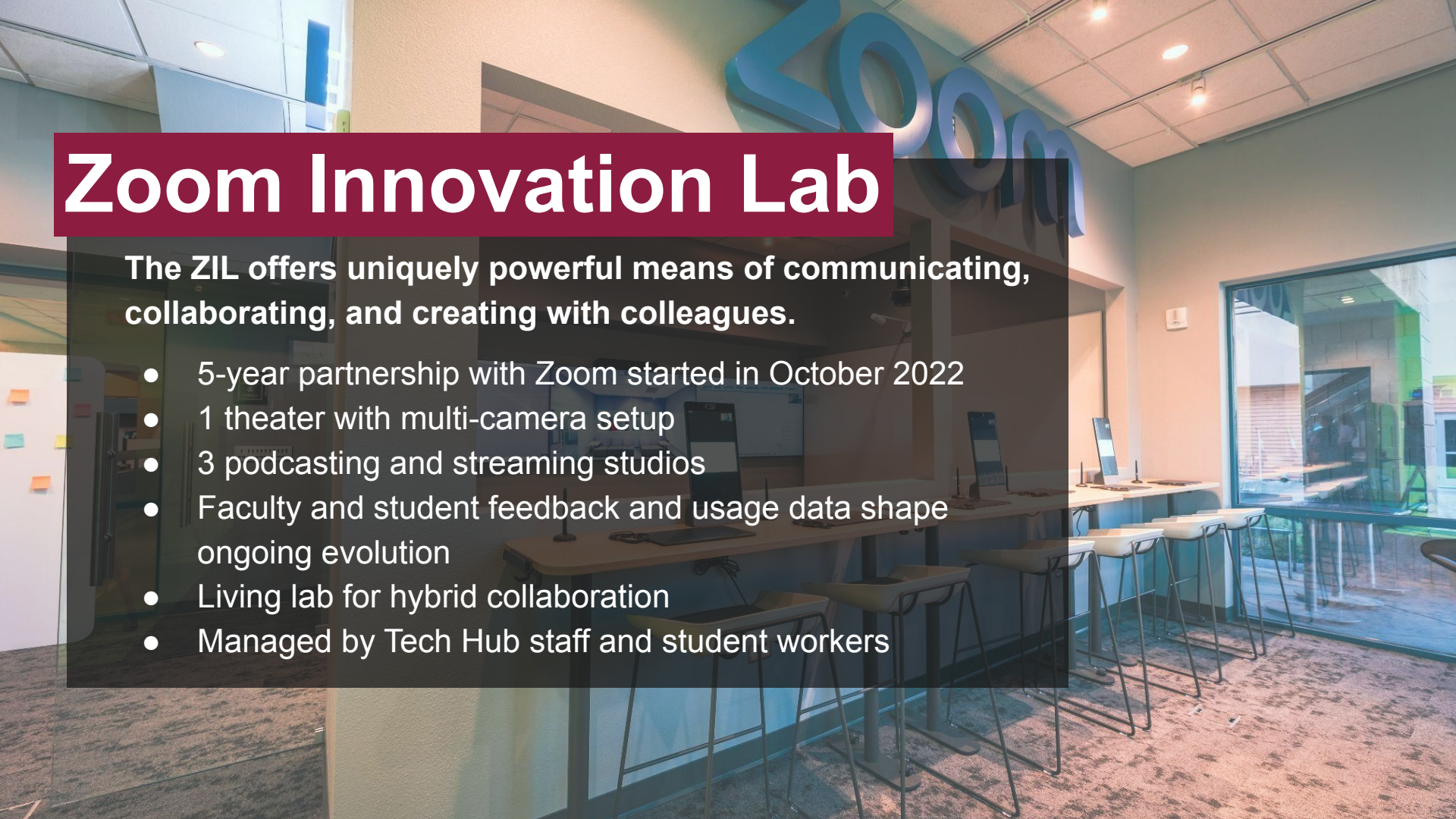
Ongoing user research

- Quick surveys
 - 1–2 minutes max, anonymous
 - Focus on behaviors, such as furniture preferences and tech use
- Multiple easy access points
 - QR codes on tables/displays
 - iPads stationed in the space
 - Allows for passive engagement
 - Occasionally, we employ active student outreach
- Keeps the space continuously aligned with user needs

Zoom Innovation Lab

The ZIL offers uniquely powerful means of communicating, collaborating, and creating with colleagues.

- 5-year partnership with Zoom started in October 2022
- 1 theater with multi-camera setup
- 3 podcasting and streaming studios
- Faculty and student feedback and usage data shape ongoing evolution
- Living lab for hybrid collaboration
- Managed by Tech Hub staff and student workers



Design thinking process

The core question:

How might we partner with a large vendor to improve student-facing services?

How we explored it:

- Regular meetings and communication with tech vendors
- Survey students
- Prototypes
- Analyze booking and usage data

Space features

ZIL Theater

- Large podcasting studio and multi use space
- Modular seating with 3 displays
- Green screen, Alienware PC, Wacom tablet
- Student worker support for setup/use

Podcasting studio

- Compact space for up to 4 people
- Professional RODE mics and headphones
- RodecasterPRO II console

Streaming studios

- Audio/video, XR, post-production, live streaming
- Premium mics, cameras, Wacom tablets
- Alienware PCs



Zoom Innovation Lab Usage | Academic Year 24-25

1222

Scheduled Reservations

The Zoom Theater, Podcasting Studio, and Streaming Studios

349

Distinct Clients

600

Podcast Sessions

539

Streaming Sessions

83

Production Sessions

Experimental Classrooms (EXCL)

Learning Experience
ASU Enterprise Technology
Spring 2023

Research study designed and
conducted by
Megan Workmon-Larsen
and Celia Coochwyte



Guiding research questions

How can learning spaces be designed to provide faculty and students with an engaging and quality teaching and learning experience?



**Authentic
relationship
building**



Collaboration



Participation



**Active use of
space**



**Active use of
technology**



**Instructional
techniques &
quality**

Overview

- ◆ Flexible furnishings for traditional and group styles
- ◆ 7 refreshed classrooms on 4 campuses (Downtown, Poly, Tempe, and West)
- ◆ 43 faculty & 1000+ students from 6 colleges
- ◆ 20 EXCL study participants (IRB approved)
- ◆ 2 design vendors



Design highlights

What we asked the vendors for



Anchor space

Supports social-emotional needs for learners and provides a non-mobile accommodation



Whiteboards

Provide opportunities for immediate formative assessments, ideation, and privacy



Flexible

Allow for multiple seating formations appropriate for effective instructional techniques



Mobile

Mobile teaching station allows instructor to move through the space

Final designs

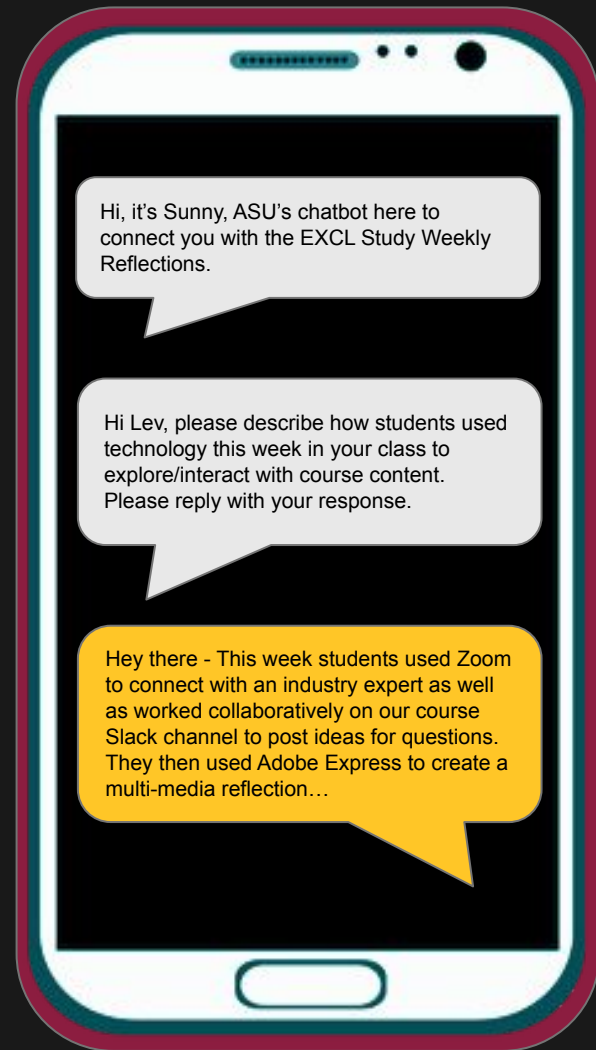


Classroom animations



How we collected data

- **Surveys (Pre/Post study)**
 - Faculty perceptions of redesigned classrooms
 - Quantitative and qualitative
- **Chatbot check-ins**
 - Weekly real-time feedback on tech, activities, comfort
 - (See pic to the right for an example)
- **Faculty interviews**
 - End-of-semester deep dives into teaching and learning impact
- **Classroom observations**
 - Layout use, collaboration, tech integration, alignment to objectives





Impact & forward thinking

- Informs new, future, and refreshed classroom designs
- Identifies new options to consider for next iterations
- Encourages the exploration of new ideas

Case study summary

Area	Core question	Feedback cycles
CRTVC 1st floor	What happens when computing is no longer a destination?	<ul style="list-style-type: none">• Student design sessions• Faculty interviews
ZIL	How can we partner with a large vendor to improve student-facing services?	<ul style="list-style-type: none">• Prototypes• Stakeholder meetings• Student interviews
EXCL rooms	How can we strategically update classrooms to drive collaboration?	<ul style="list-style-type: none">• Surveys• Chatbot check-ins• Faculty interviews• Classroom observations

Key takeaways from case studies



- Spaces are always a prototype. Our work is never done!
- Small changes make a big difference.
- Take what works and expand on it. Don't just fix problems.
- Always collect feedback before, during, and after changes.

Questions?



Space reflection activity

1 ☐
2 ☐
3 ☐

Ways to implement design thinking

Step	Actions	Guiding questions
1) Empathize	Observe, interview, survey, and shadow users	What challenges or behaviors do we see?
2) Define	Synthesize findings into insights and problem statements	What's the core user need?
3) Ideate	Brainstorm widely and explore multiple approaches	What are all the ways we could address this?
4) Prototype	Build low-cost mockups, layouts, and sketches	How can we test this idea quickly and cheaply?
5) Test	Gather feedback, observe reactions, and refine designs based on evidence	How do users interact with this idea in practice?
6) Implement	Scale promising solutions and monitor impact	How will we keep gathering feedback and iterating?

Step 1: Pick a space

5 minutes

- **Choose one space** you know well (classroom, study area, studio, etc.).
 - It can be a space at your institution or a client's.
- Write its name and type.
- Define key stakeholders and user groups.

Step 2: Record behaviors

5 minutes

- **Who** uses it (e.g. students, faculty, staff)?
- What **activities** happen?
- **How long** do they stay? Where do they cluster?
- Do people **move or adapt** the furniture/equipment? If so, how?
- Which **technologies or tools** are used, and which are ignored?

Step 3: Friction points

5 minutes

- Identify 3 **challenges or frustrations**.
- Examples:
 - hard-to-move furniture
 - confusing tech
 - noise
 - no anchor or retreat spaces

Step 4: Design ideas

10-15 minutes

- **Brainstorm** research-driven changes in 4 categories:
 - Furniture
 - Technology
 - Training
 - Aesthetics
- Dream big!

Step 5: Experiment & measure

5 minutes

- **Pick one small experiment** to test in the next 60 days.
- Define what will change and how you'll **measure impact**.

Step 6: Share

10 minutes

- Each table shares one actionable change from the activity.
 - Space's name, type, and users
 - Observations
 - The experiment/change you'll try

Contact me



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Special thanks to

- Megan Workmon-Larsen:
[linkedin.com/in/workmon/](https://www.linkedin.com/in/workmon/)
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