

# Academic Innovation Studio

Connect. Create. Inspire.

Educational Technology Services, UC Berkeley  
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# Agenda

Overview of the Academic Innovation Studio - 3 min

Design Process - 15 min

Example Elements:

Integrated Services - 8 min

Infrastructure - 8 min

# Academic Innovation Studio

Create. Connect. Inspire.

The Academic Innovation Studio catalyzes innovation by bringing together faculty, researchers, graduate students, and service providers to **inspire and support experimentation, connect people, and share ideas.**



*Photos taken by Blitz Architecture*

# AIS Vision



meet instructors where they are



connect instructors to each other



create a safe space for exploration and risk-taking



offer proactive, integrated guidance



advocate for and empathize with instructors



positively impact student learning experiences

## Integrated Service

A core value of the AIS is to create and nurture partnerships and communities that connect visitors to each other and to a seamless support experience across a variety of campus service providers. Partners bringing their services together to provide integrated guidance include:

Seamless support across campus service providers!

### **bConnected**

They provide online services to help you easily collaborate and share information across campus and around the world. The bConnected Collaboration Services includes [Google Apps for Education](#) (bMail, bCal, bDrive), [Box](#), [CalShare](#), [bCourses Project Sites](#) and [CalMail Mailing Lists](#). We can help you choose a service to meet your needs.

### **Center for Teaching and Learning**

The mission of the Center for Teaching and Learning is to enrich, promote, and support teaching and learning effectiveness in the areas of pedagogy, curriculum, and assessment.

### **Digital Humanities@Berkeley**

Digital Humanities at Berkeley builds capacity in teaching and research among faculty, graduate students, undergraduates, librarians, curators, and postdoctoral scholars. The project is designed to integrate the digital humanities into the central academic enterprise of the university while also taking advantage of opportunities to expose digital scholars to contexts that lie outside the academy. Centered in the Division of Arts and Humanities, the project also benefits from partnerships with a broad range of Berkeley entities, including a long-standing partnership with Research IT (RIT).

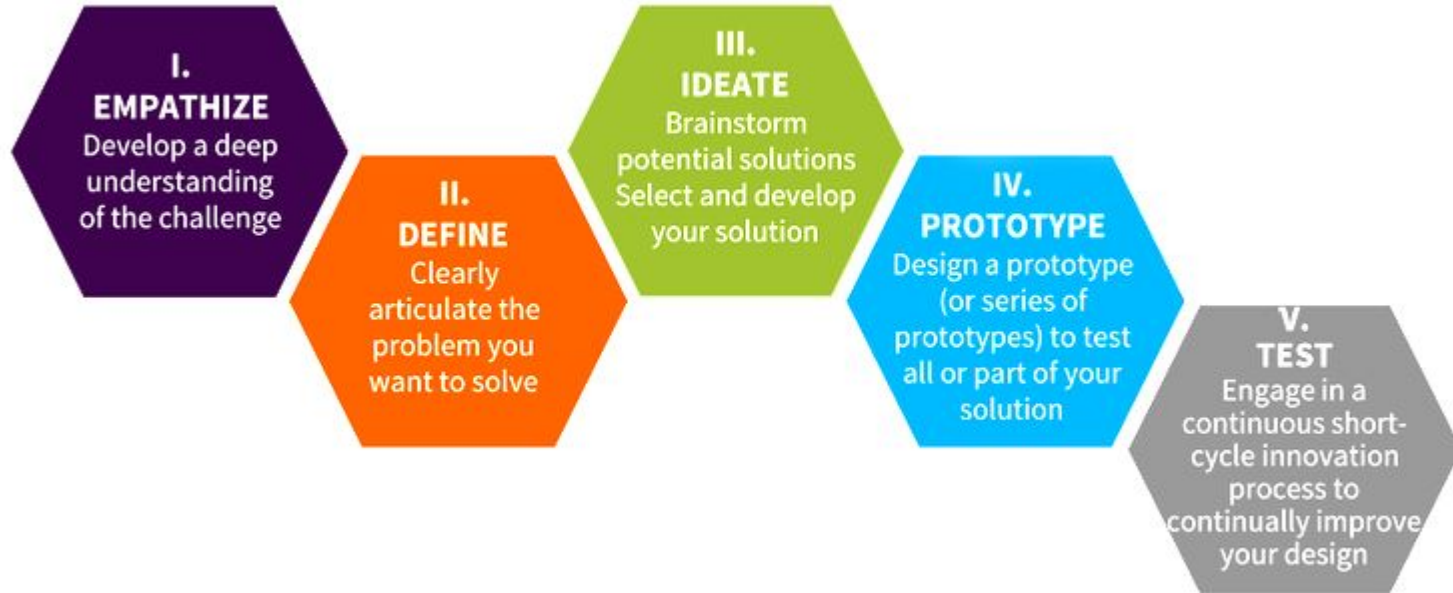
### **Educational Technology Services**

ETS enhances and supports the UC Berkeley academic experience by providing essential, responsive and innovative technology services.

### **Library**

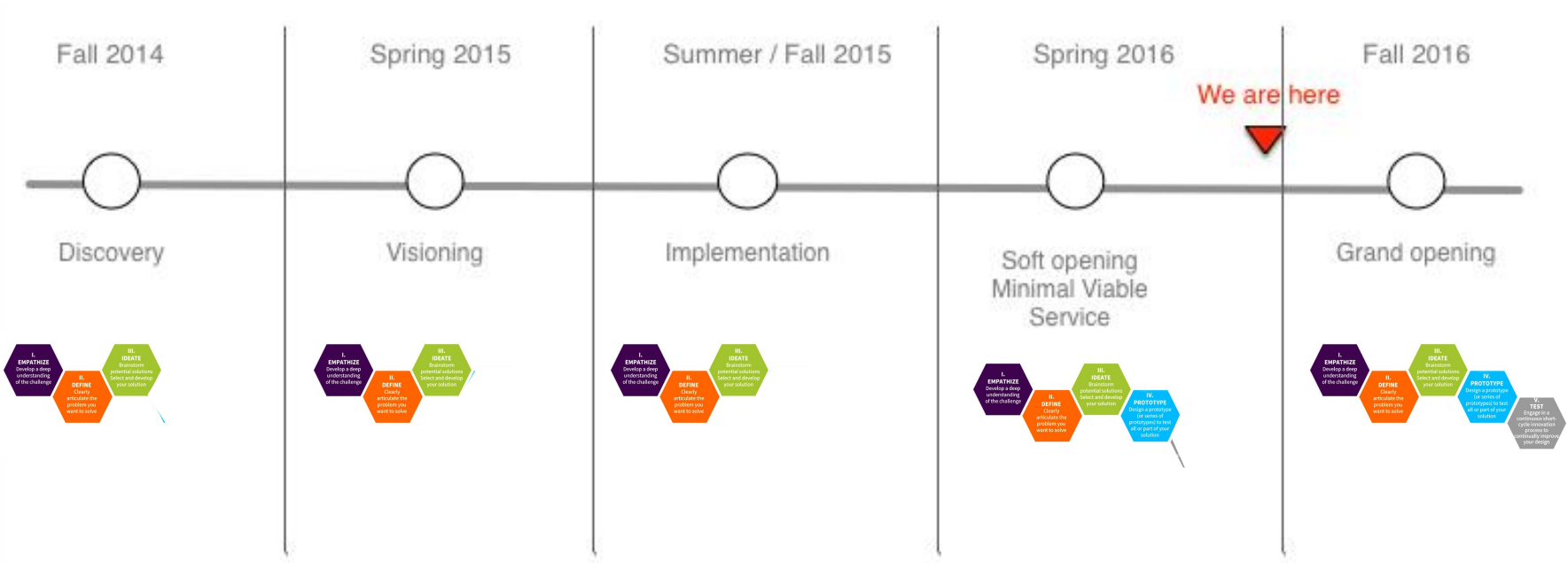
# Designing the AIS

# Design Thinking Process





# Design timeline



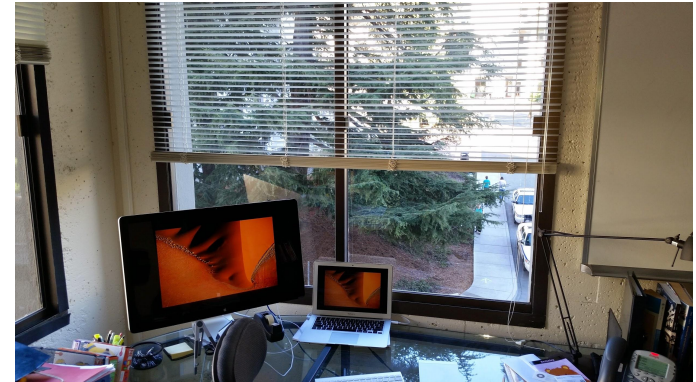
# Field Research *Go to where the users are to see how they really work*



## Faculty Interview Prep

### Task list

Develop user matrix (user attribute/behavior distinctions to try to capture)	X
Identify list of faculty to invite	X
Create recruiting message	X
Determine "thank yous" - gift cards?	X
Develop <a href="#">intro</a> / context setting for interviews	X
Create interview question list	X



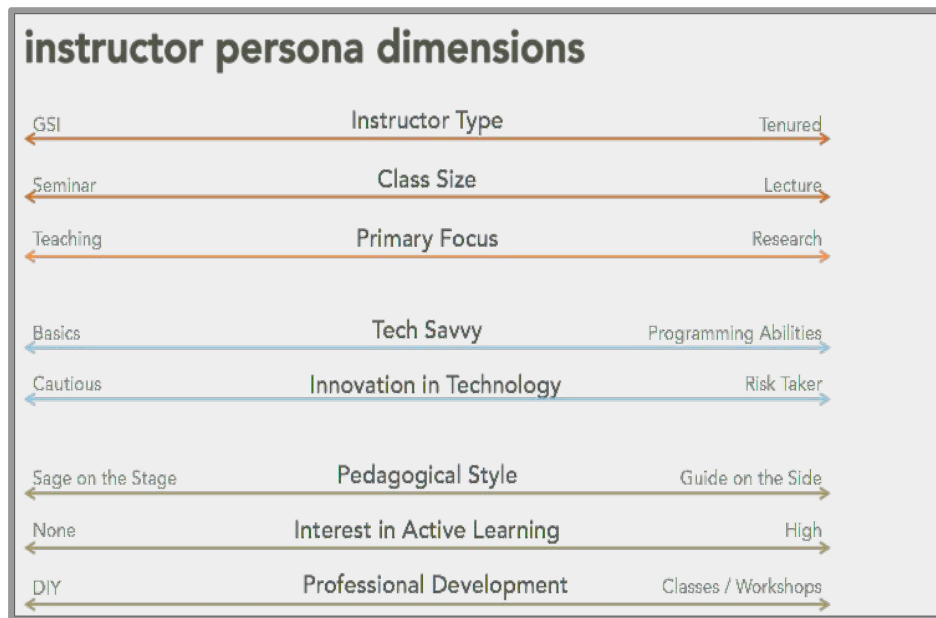
# Analysis, synthesis of research *Make sense of it all*



## Faculty Key Insights

This rollup of key insights brings together ideas and feedback from instructors into one document. (The goal is to depersonalize any aggregate data.)

<p><b>"Simplify and make it easy for me!"</b></p>	<ul style="list-style-type: none"> <li>• Too confusing where to go for services and help</li> <li>• Don't have time!</li> <li>• Can't find stuff on ETS website -- I just Google!</li> <li>• Some instructors feel that time spent on teaching innovation (trying new things) takes away from (more important) research - a zero sum game</li> <li>• There is some confusion about where to go for what</li> <li>• ETS needs to maintain support staff on campus, face-2-face presence very important               <ul style="list-style-type: none"> <li>◦ 2 people (ETS) sitting there waiting to answer questions, no long lines, people won't come if they think they have to wait for just 1 person!</li> <li>◦ It will be like the genius bar!</li> </ul> </li> </ul>
<p><b>Faculty/instructors are very busy . . .</b></p>	<ul style="list-style-type: none"> <li>• Changing my teaching style is a big commitment, a lot of work and a lot of time</li> <li>• Will need to clearly show the value in order for most to try / adopt new approaches and tools</li> <li>• Always a balance with research requirements / desires</li> </ul>



# Field research + [analysis]



## Personas

### instructor personas



#### The Connector

- Adjunct faculty member
- *"I love having access to the broader campus for inspiration and support around trying new things in my teaching."*



#### The Lecturer

- Teaching at multiple locations
- *"Technology is a tool just like any other, you can use it well or not. You always need to ask what it's adding?"*



#### The Balancer

- Research / teaching balancing act
- *"At this point in my career, I don't need to do stuff that pushes the envelope."*



### Ahmid, The Connector

*"I love having access to the broader campus for inspiration and support around trying new things in my teaching."*

#### Goals:

- Be part of a larger teaching community
- Inspire & be inspired by students
- Be respected & recognized by peers & students

#### Needs & Behaviors:

- Adjunct faculty member
- Organic professional development over time
- Tries things on own, looks for help when he gets stuck
- New to large lecture halls
- Seeking guidance and development for teaching transition



### Gustavo, The Learner

*"I love all the digital tools available to me in my teaching. But why are so many so cumbersome?"*

#### Goals:

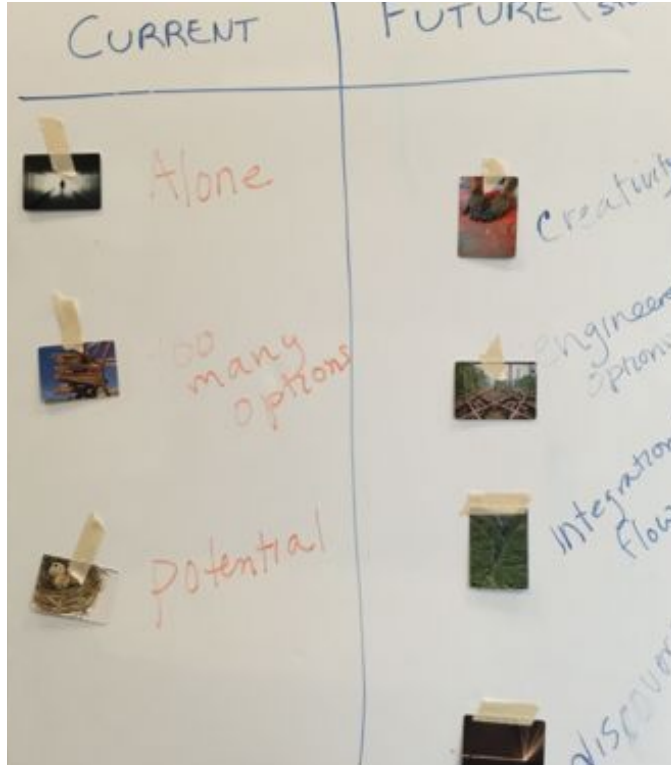
- Figure out if teaching is his calling
- Get good grades
- Not miss out on the social experience of UC Berkeley
- Build his teaching network

#### Needs & Behaviors:

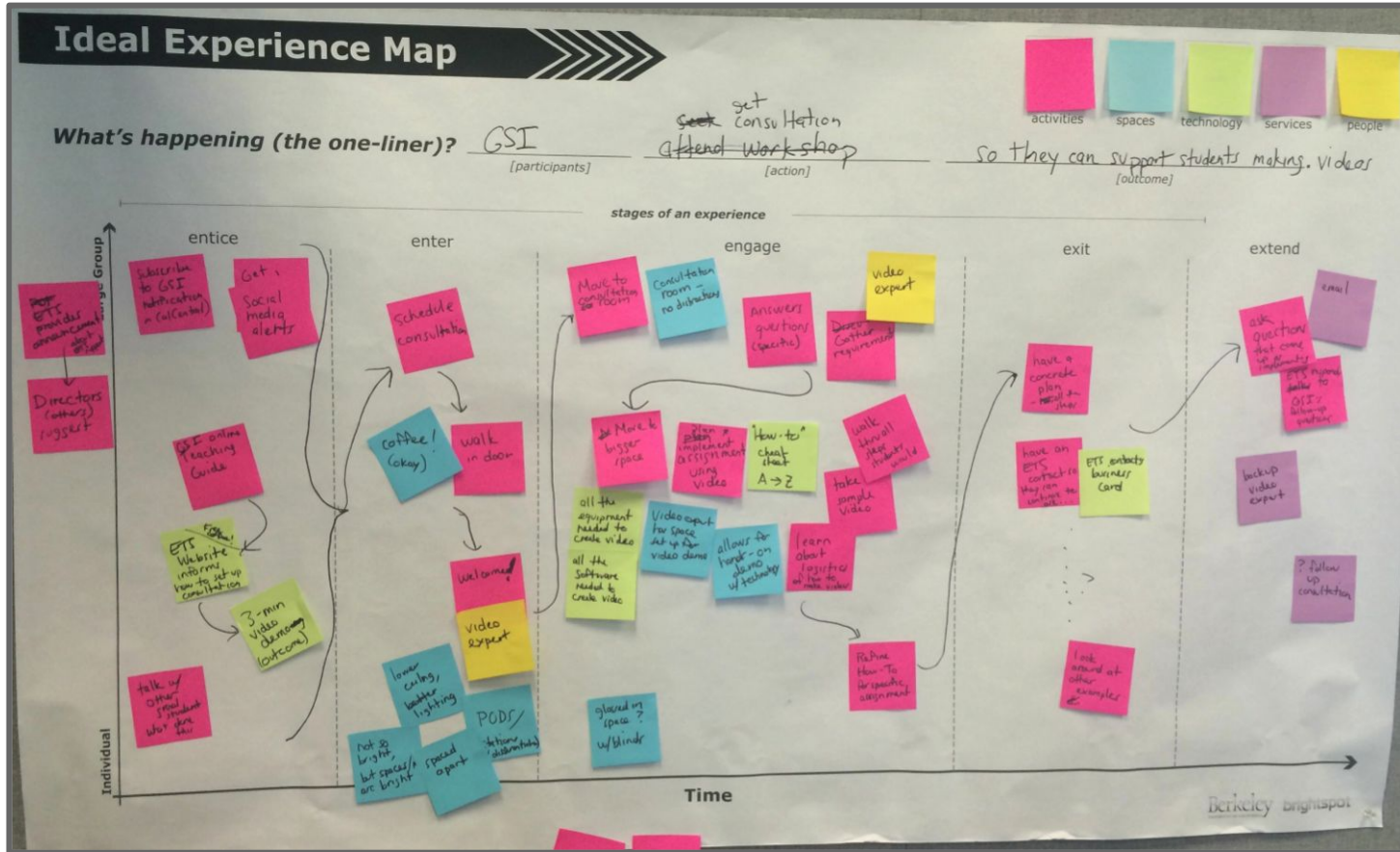
- 1st year GSI anxious to learn about teaching
- Works part-time at BID, Berkeley Institute of Design
- Not afraid to experiment with technology, fairly savvy
- 4th semester of his MIS grad program, intended PhD
- Carries tablet with him everywhere and uses it almost exclusively

# Vision cards

Provide cards of abstract images and **ask users** to collaboratively select cards that best **describe their current & envisioned experience**.



# Ideal Experience Mapping: Ask users to map an "Ideal Experience"



Vision cards +  
experience  
mapping



Principles &  
Vision  
Statement

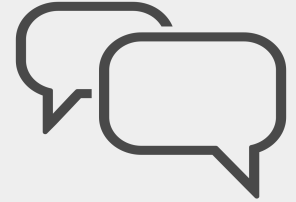
## Experience Principles of the AIS



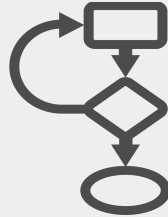
Feeling safe,  
comfortable, and  
welcome



Visibility of recent  
and ongoing work



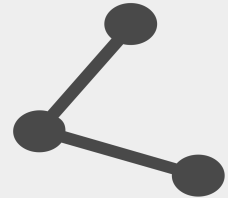
Long-term  
relationship / point  
of contact



Ability to test and  
iterate



Seamless support  
experience



Learn with and  
from other faculty

# Floorplay workshop

*Chips help us define the spaces within the space*





# Body Storming

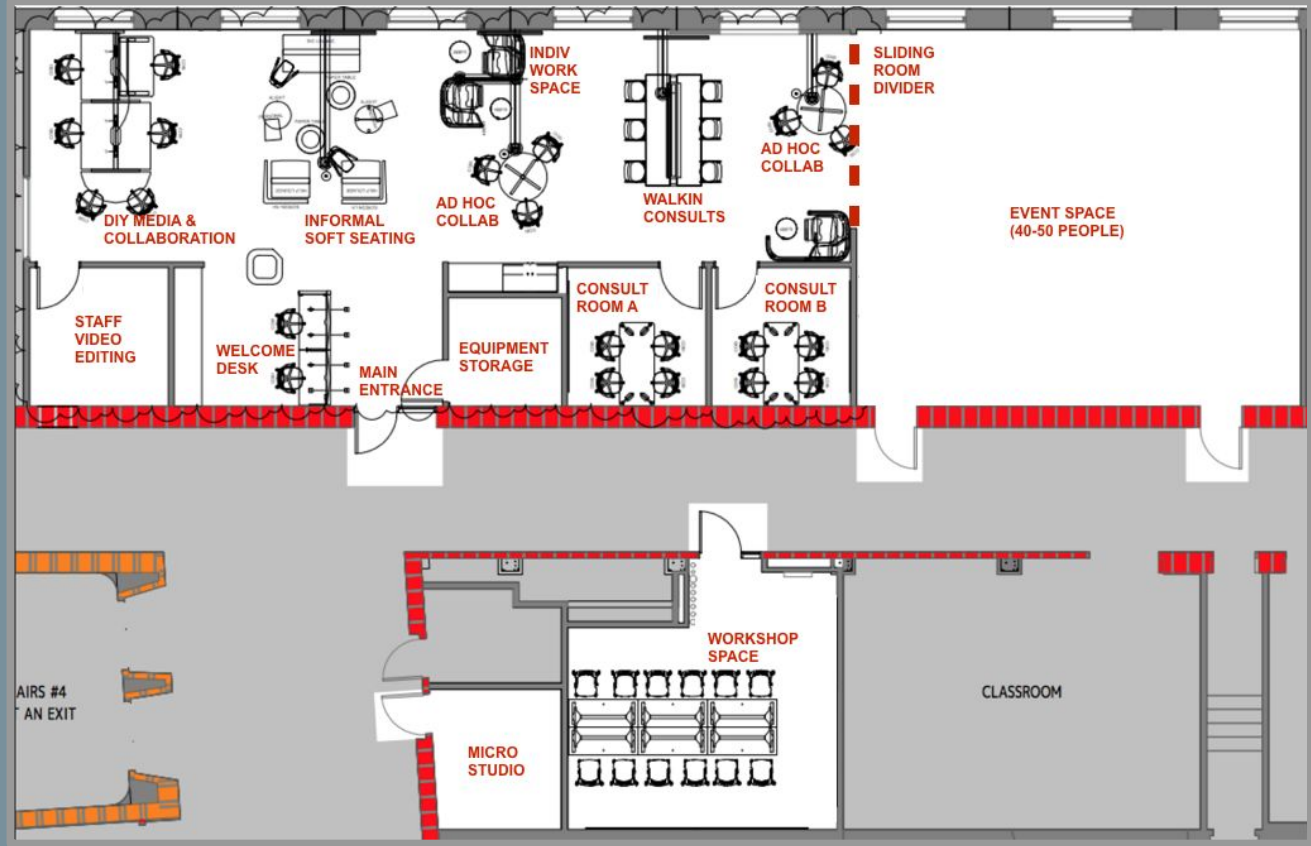
*Figure it out by trying it out*



Floorplay  
Workshop +  
Bodystorming

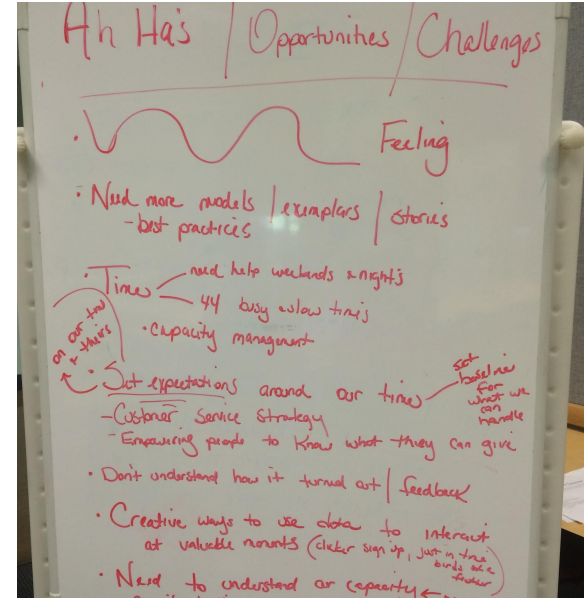
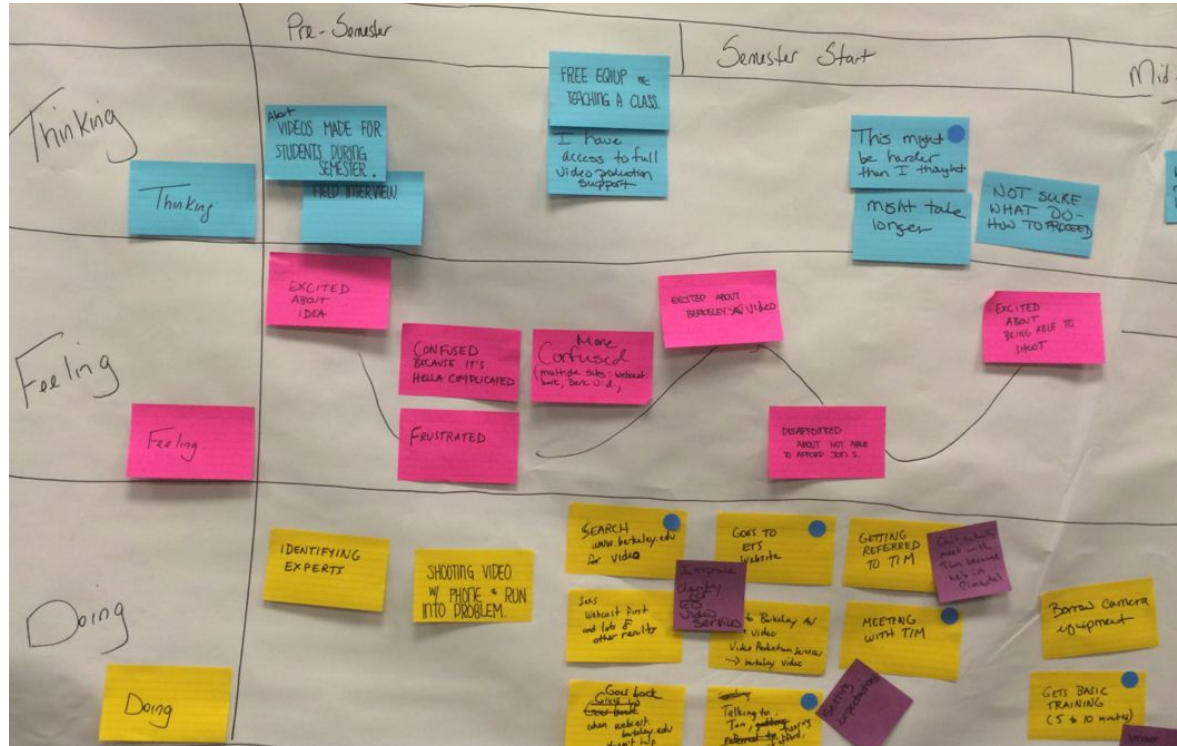


Space Plan



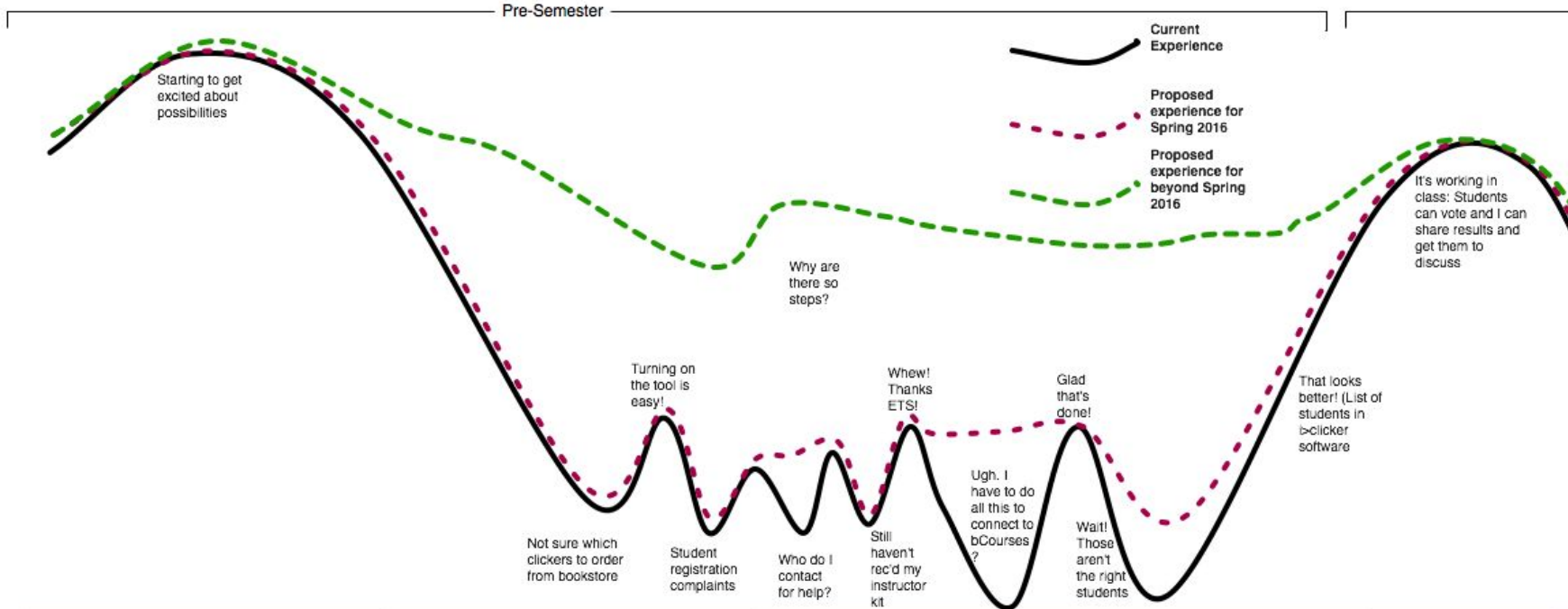
# Journey Mapping

Map our customer's journey over time through our service.



# Journey Mapping ⇒ Journey Map / New Service Ideas

## The Experience of an Instructor New to Using Clickers in Fall 2015



Starting to consider		Commit		Get and start using software and hardware			Resync roster	First attempts in class
Hear about clickers from colleagues	Decide to use Clickers	Request instructor kit	Clickers order to bookstore	Download b-clicker software	Configure b-clicker apps	Follow steps to set up b-grader / bCourses integration	Contact ETS because roster is wrong	Run a few polls the 1st week
	Find Clickers service page on ETS website	Inform students they need clickers	Turn on b-clicker tool in bCourses	Emails ETS to get instructor kit	Emails ETS because haven't rec'd instructor kit		Rename course site(s) in bCourses	

# Service Blueprinting

Map customer actions alongside touchpoints



# Mystery Shopping

*Ask users to secretly visit & give feedback*



- Excellent
- Very good
- Good
- Average
- Poor



# Service Blueprinting + Mystery Shopping ⇒ Continuous Service Improvements

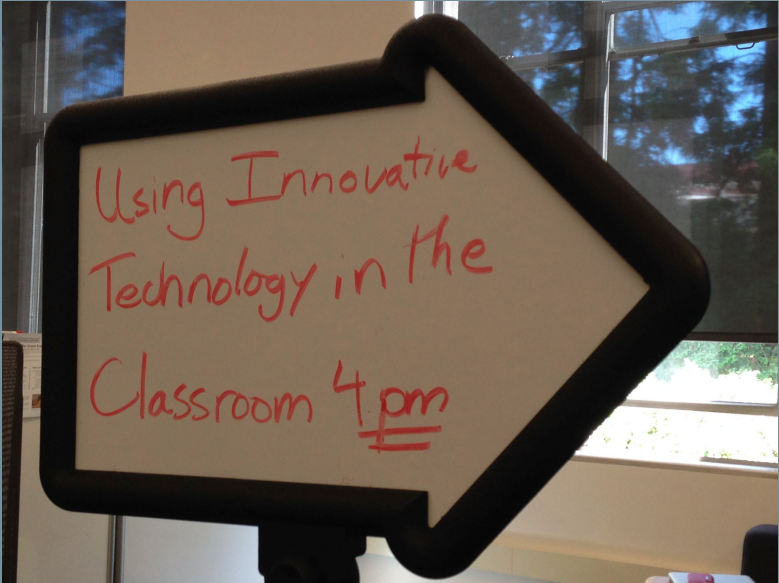
Academic Innovation Studio  
Connect. Create. Inspire.

**AIS Room Sign-in Sheet**

Name	Email		
Role	<input type="checkbox"/> Faculty (Professor, Lecturer, Researcher) <input type="checkbox"/> Decal Instructor	<input type="checkbox"/> Graduate Student <input type="checkbox"/> Academic Support Staff	<input type="checkbox"/> UR <input type="checkbox"/> Ot
Reason for Visit	<input type="checkbox"/> Scheduled Event, Workshop, Peer Group Meeting, Consultation <input type="checkbox"/> bCou	<input type="checkbox"/> DIY Media Station <input type="checkbox"/> Equipment Checkout	<input type="checkbox"/> Ind <input type="checkbox"/> Get



New sign in



Improved Wayfinding

Example elements of the AIS



# Integrated Service

# Designing Integrated Service

Instructor Need	Service Design Consideration
Confused about where to go for help	Clarify and offer more integrated services
Inspired by and learn from colleagues	Communities of practice, Showcase instructor innovation, Social events
Diverse backgrounds and expectations	Range of options to meet instructors needs

## Workshops on Pedagogical Topics

CTL consultants deliver and facilitate workshops for faculty groups across campus on a variety of teaching and learning topics

*More info:* [Workshops Special Topics](#) 

*Consultations:* [Email](#) 

## Scholarly Publishing

The Library provides support for faculty participation in the UC Open Access Policy, and provides scholarly communication consultations.

*More info:* [Open Access Berkeley Library](#) 

*Consultations:* [Email](#) 

## Research Data Management

Consulting service providing support to campus researchers with their research data questions throughout the lifecycle of their research projects.

*More Info:* [Berkeley Research Data](#) 

*Consultations:* [Email](#) 

## Pedagogical Consultations

The CTL provides consulting services for faculty on all aspects of course design, teaching, and evaluating student learning.

*More Info:* [Services and Programs](#) 

*Consultations:* [Email](#) 

## Library Instruction and Research Assignment Design

Librarians are available to help teach students to find relevant information, understand scholarly sources, and think critically about information.

*More info:* [Library Website](#) 

*Consultations:* [Visit a Librarian](#) 

## DIY Media

Facilities enabling Berkeley instructors to create media content for online lectures, flipped classroom activities, blended learning materials, tutorial videos and more.

*More info:* [DIY Media Website](#) 

*Consultations:* [AIS Consultation Calendar](#) 

## Digital Humanities Course Support

Support for DH courses.

*More info:* [DH Website](#) 

*Consultations:* [Email](#) 

## Digital Humanities Consulting

Consulting services supporting DH projects.

*More info:* [DH Website](#) 

*Consultations:* [Email](#) 

## Berkeley Video

Berkeley Video offers campus professional video production services, with a focus on telling the Berkeley story at all levels.

*More info:* [Berkeley Video Website](#) 

*Consultations:* [Email](#) 

## Course Readings & Media

The Library can help teachers find, create and include accessible content for bCourses.

*More info:* [Readings in bcourses](#) 

## Clickers

Clickers (also known as audience response tools) are devices that can be used to gather real-time feedback during class sessions.

*More info:* [ETS Clickers page](#) 

*Online help:* [Clickers Help Pages](#) 

*Consultations:* [AIS Consultation Calendar](#) 

## Classroom Technology Services

General Assignment (GA) classroom AV support team providing on-call help, and GA technology orientations and consultations.

*More info:* [CTS](#) 

*Online Help:* [CTS Help](#) 

*Consultations:* [Request Form](#) 

## bConnected

The bConnected team is available to consult with faculty to support their research and academic collaborations.

*More info:* [bConnected Website](#) 

*Online Help:* [bConnected Resources](#) 

*Consultations:* [Email](#) 

## Berkeley Research Computing

BRC Consulting supports research with a coordinated set of services across a range of computation and data analysis needs.

*More Info:* [Berkeley Research](#) 

*Online Help:* [Berkeley Research Help](#) 

*Consultations:* [Email](#) 

## bCourses

Berkeley's official campus Learning Management System (LMS).

*More info:* [bCourses Website](#) 

*Online Help:* [bCourses Help](#) 

*Consultations:* [AIS Consultation Calendar](#) 

## Academic Integrity

Academic Integrity services at Berkeley provides students and instructors tools to review documents for originality via Turnitin and iThenticate.

*More info:* [Academic Integrity](#) 

*Online Help:* [Berkeley Service Help](#) 

# Hub for Academic Innovation

**Events**

**Workshops**

**Consultations**

**Helpdesk**

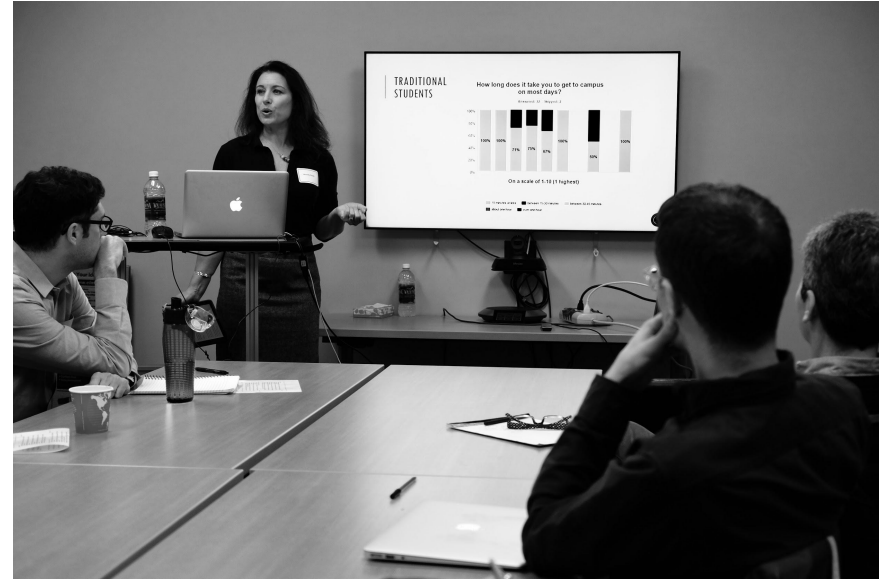
**Peer Groups**

**Tools & Facilities**



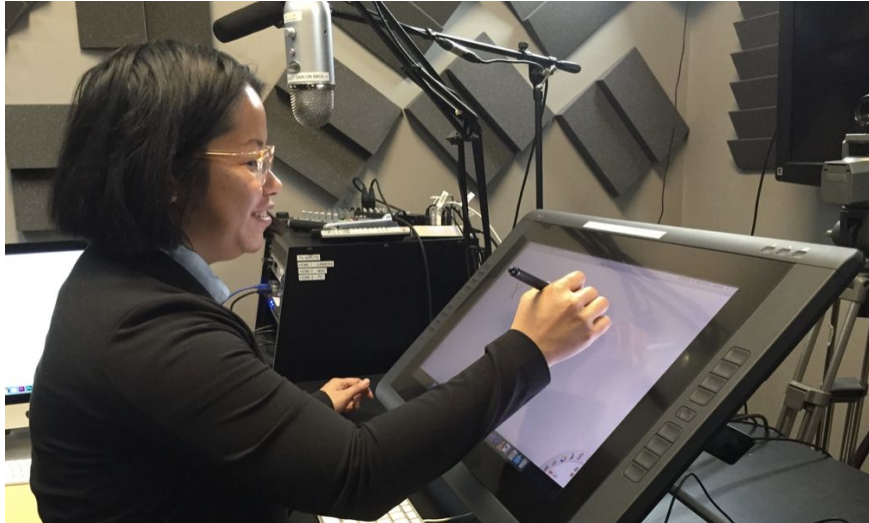
# Events: Sparking Innovation, Fostering Community

- Instructional Design Workshops
- Faculty User Groups
- Showcases of Pedagogical Practices and Student Projects
- Facilitated Faculty and Student Design Studios
- Teaching “Dialogues”
- Committee on Teaching
- Digital Humanities @ Berkeley Summer Institute



# DIY Media Service

Our Do-It-Yourself Media Service includes DIY Media Studios and DIY Media Workstations. Instructors use these facilities to create video content for online lectures, flipped classroom activities, blended learning materials, tutorial videos, and more.

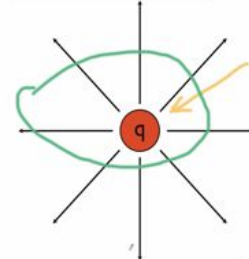


## Electric potential around a point-like charge

$$E = \frac{kq}{r^2}$$

Units = N/C or V/m

$$E = mc^2$$

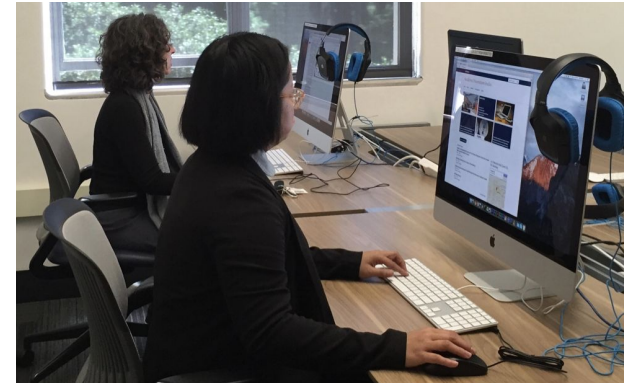


V=0 at infinity

r

The electric potential is a scalar field. (A magnitude but not a direction at every point in space.)

Electrical Potential



# The Infrastructure of Sharing



# Cross-platform screen sharing, painlessly!

- Collaborators sharing screen content
- Avoid clutter of cables and adapters
- Accommodate as many platforms as possible
- Ease of setup
- Ease of use
- Security
- Keep costs manageable
- Use of displays while not sharing
- Chromecast? Apple TV? Mersive Solstice?
- Airtime!



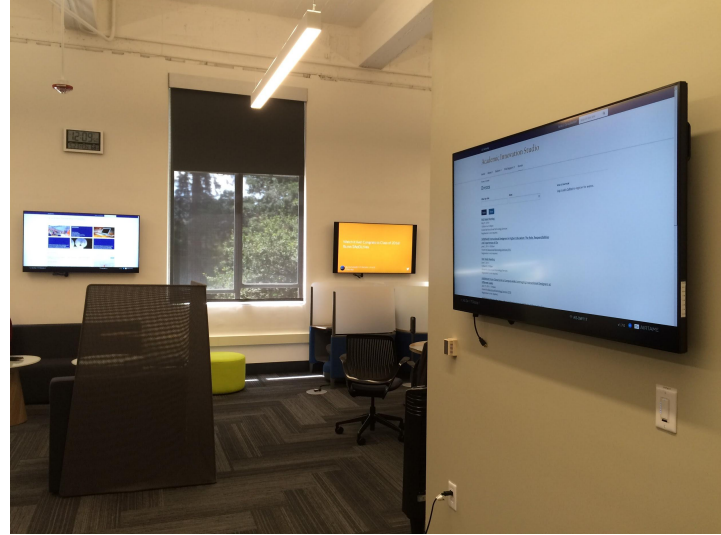
# Making the connection

## What we got

- Flexible networking
- Single, multiple display capability
- Built-in web browsers
- Personal vendor attention

## How we put it together

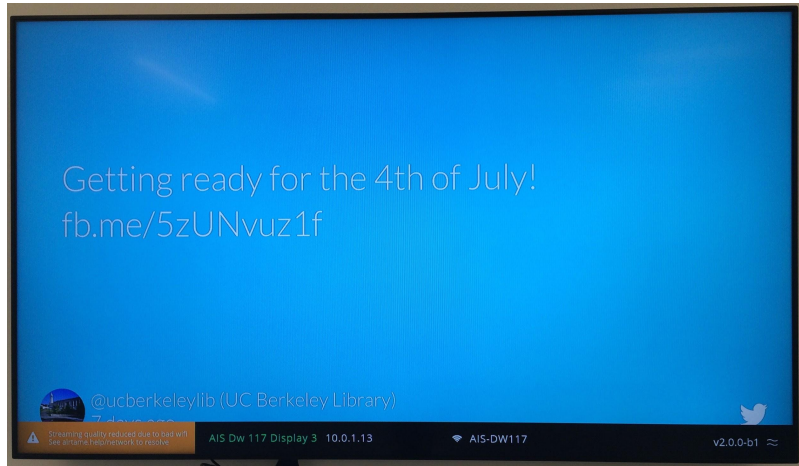
- AIS Open Space (117) - 4 displays
- Consult Rooms (117A and B) - 1 display each
- Workshop Room (128) - 1 display
- Event Space (127) - AMX, 1 projector, 4 displays



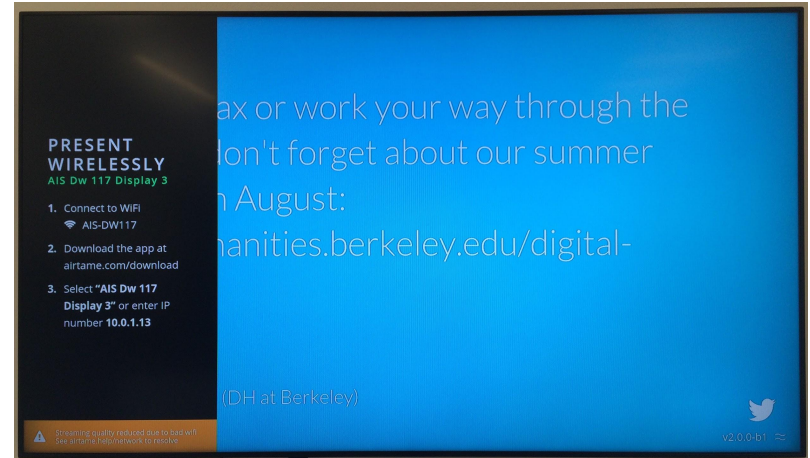
# Dashboard modes

Helping clients get connected!

Bottom banner



Side banner



Full-screen





Thank you  
& Questions