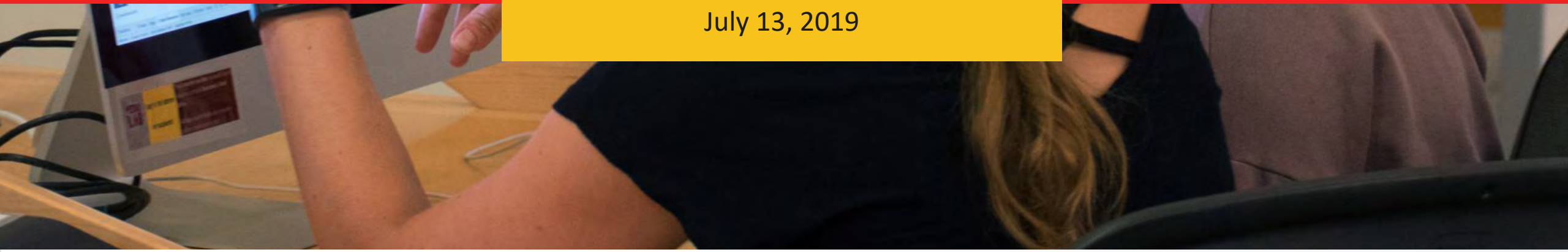
Campus-Wide Accessibility Testing

Creating & Testing with a Fluent Assistive Technology User Pool

July 13, 2019



HARVARD UNIVERSITY

Amy Deschenes & Kyle Shachmut

AHEAD Conference July 2019

A bit of background

PAIF Grant Details

HARVARD UNIVERSITY

OFFICE OF THE EXECUTIVE VICE PRESIDENT | HARVARD.EDU

THE PRESIDENT'S ADMINISTRATIVE INNOVATION FUND

FUND RECIPIENTS FUND RECIPIENTS

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FUND RECIPIENTS

- 2016 Fund Recipients
  - 21st Century Mailing
  - An Automated Allocation Innovation
  - Building a Participant Pool for Internal Accessibility Testing
  - Check-in Safe Abroad

HOME / FUND RECIPIENTS / 2016 FUND RECIPIENTS /

BUILDING A PARTICIPANT POOL FOR INTERNAL ACCESSIBILITY TESTING

Leader: Amy Deschenes

Team: Vittorio Buchieri, Michele Clopper, Maura Ferrarini, Kris Markman, Kyle Shachmut, Janet Taylor

Goals

Create a participant pool of assistive technology (AT) users who can be recruited to participate in user testing activities.

- **Increase staff participation** in testing with assistive technology (AT) users.
- **Build awareness** of how people with disabilities use technology.
- Make it **easier to recruit participants** for testing.
- Connect Harvard affiliates to testers in order to i**ncrease capacity for testing** with native AT users.

What we did

A low-cost approach to facilitating consistent accessibility testing.

- Created a process for **recruiting AT users** to be participants in usability testing.
- **Established workflows and determined compensation process** for participants.
- **Piloted the process** with five web projects

Out of scope

- Not a substitute for an accessibility audit
- Remote testing
- Unmoderated testing
- Training clients on accessibility best practices

Accessibility & UX

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User experience (UX) encompasses ***all aspects of the end-user's interaction*** *with the company, its services, and its products.*

- Nielsen Norman Group

Creating the Pool

Team

- Harvard Library
- University Disability Services
- Harvard University IT
- HarvardX

Project details

Timeline, goals, tools, and process

Timeline

July 2016-June 2017

1. Define specific **milestones** & **objectives**
2. **Communications & outreach**
3. Determine tools for **managing the pool participants** & sign-ups
4. Determine tools for **client request process**
5. **Pilot testing process** with five different Harvard digital products

Milestones & objectives

Project planning and goal setting

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Milestones

- **Create a form** for participant sign-ups
- Reach at least **50 participant volunteers** in the pool
- **Document** recruitment and payment processes
- Schedule and execute **pilot tests**
- **Perform assessment** and document lessons learned
- Iterate on process to **improve experience for clients & testers**

Objectives

- Launch **sign-up form**
- Conduct **outreach** with local organizations (NFB chapter, city of Cambridge, and local AT interest group)
- Create **database** of participants
- Staff form for ‘clients’ to **request use of the pool**
- Liaise with finance to **determine payment process**

Objectives, part 2

- Add client request form to the website
- Create documentation for process (available online)
- Produce accessible promotional materials
- Create NDA for test participants (liaise with OGC)
- Conduct pilot tests
- Assess and modify process as needed

Communication & Outreach

Working with the community

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Outreach: Audience

- Local affinity groups (NFB, Cambridge Commission)
- Perkins School for the Blind
- Job fair
- Local disability coordinators at Harvard
- VIBUG (assistive technology interest group)

Outreach: Methodology

- In-person visits to meeting
- Email distribution
- Advertisements in newsletters
- Online job postings as ‘occasional part-time work’
- Braille flyer
- Large-print handouts
- Short URL

Outreach: Language

Seeking proficient assistive technology users!
Paid opportunity to test accessibility of digital resources such as, but not limited to, websites, applications, and electronic documents.

If interested, please complete the questionnaire at http://harvard.edu/accessibilitytestingpool

Managing the pool

Workflow and tools for participant management & recruitment

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Tools for participant management

- Qualtrics form for sign-ups embedded on website
- Participant information stored in secure Excel file; ‘segments’ created based on AT used
- Emails sent for recruitment; interested participants respond to email

Managing client requests

Facilitating access to testing pool by Harvard community

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Tools for client requests

- Consultation request form
- Online request form for test participants

Consultation checklist

- Ensure for basic accessibility checks
- Understand the client's experience with testing, especially with people with disabilities
- Review the product and test plan
- Review disability etiquette reference sheet

Test sessions

Here's what we tested

HarvardX

Science & Cooking: From Haute Cuisine to Soft Matter Science (chemistry)

Top chefs and Harvard researchers explore how everyday cooking and haute cuisine can illuminate basic principles in chemistry, physics, and engineering. Learn about food molecules and how chemical reactions can affect food texture and flavor.

TAKE COURSE on edX

Open October 3, 2018 – July 3, 2019

Free

DURATION	6 weeks
TIME COMMITMENT	5-7 hours per
PACE	Self-paced
SUBJECT	Science
COURSE LANGUAGE	English
VIDEO TRANSCRIPT	English

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Business School MBA	Harvard Divinity School	Graduate School of Education
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School of Dental Medicine	Harvard Chan School	Non-Harvard

Library Guides

HARVARD Kennedy School
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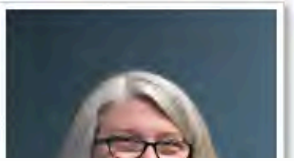
Think Tank Search

A Google Custom Search of more than 1200 think tanks and research centers.

- **Think Tank Search**
- U.S. Think Tanks
- Non-U.S. Think Tanks by Region
- Evaluating Think Tanks
- Other Think Tank Lists

Get Help



Think Tank Search

Search using Google conventions (i.e. putting quotation marks around phrases).

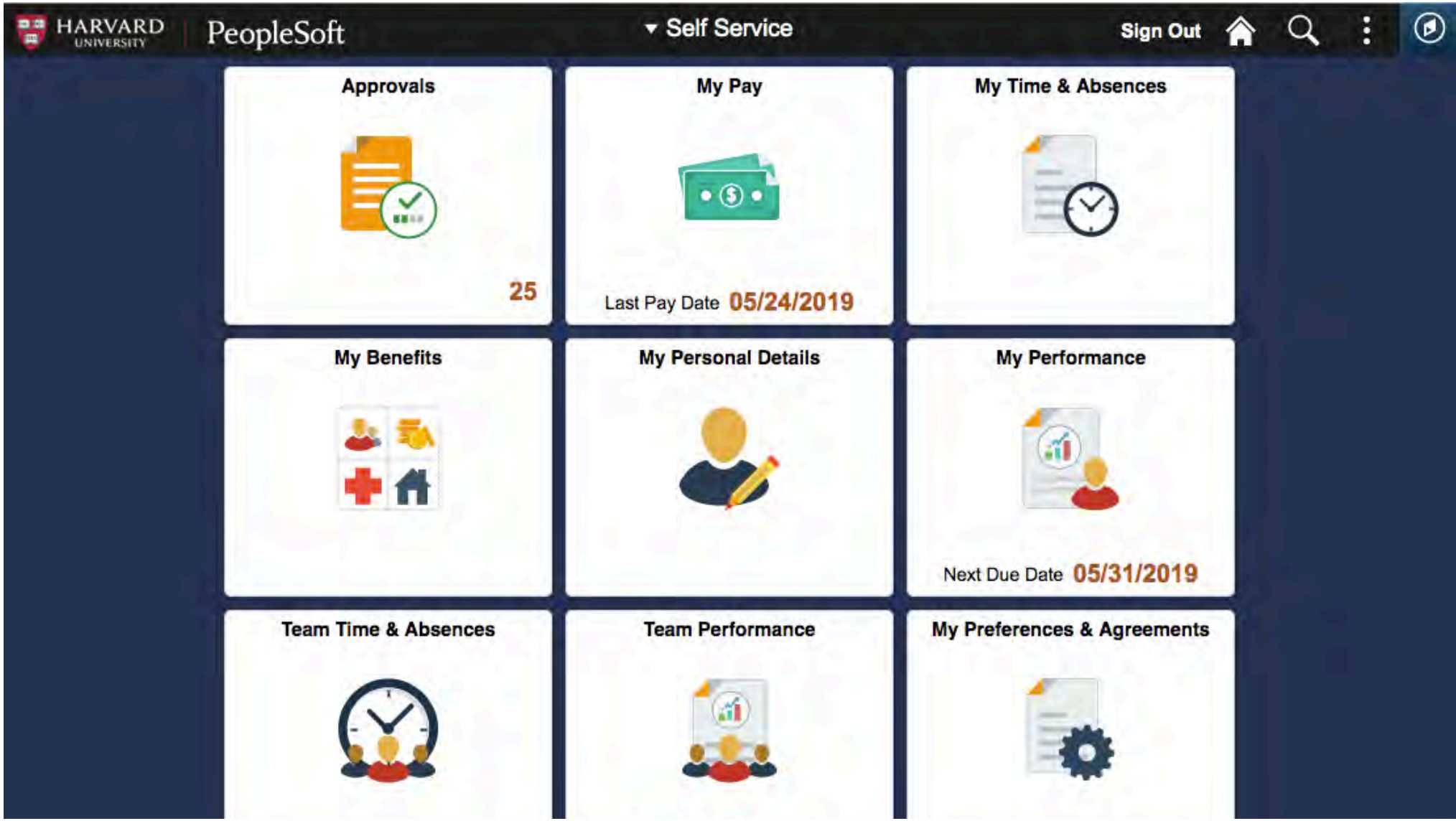
Search

Inclusion Policy

Think Tank Search searches the websites of institutions that generate public policy research, analysis, and activity. These sites are affiliated with universities, governments, advocacy groups, foundations, non-governmental organizations, and businesses. Inclusion is based upon the relevancy of subject area to HKS coursework and scholarship, the availability of the think tank's research in full-text on the website, and the think tank's reputation and influence upon policy making. The list represents a mixture of partisan and non-partisan think tanks.

Related Links

Peoplesoft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PeopleSoft
Self Service
Sign Out
Approvals
25
My Pay
Last Pay Date 05/24/2019
My Time & Absences
My Benefits
My Personal Details
My Performance
Next Due Date 05/31/2019
Team Time & Absences
Team Performance
My Preferences & Agreements

Library Catalog

HOLLIS

ADVANCED SEARCH | STARTS WITH / BROWSE | NEW SEARCH | DATABASES | ...

Deschenes, Amy

monkeys

Everything

Chat with a Librarian

PAGE 1 679,804 Results

Save search

Personalize

1

BOOK

Monkeys

Jardine, William, Sir, 1800-1874. / Edinburgh, W.H. Lizars / (Naturalist's library. (2d issue) vol. XXVII. Mammalia [v. 13])

1854

Available at Ernst Mayr Library Spec. Coll.

2

BOOK

Monkeys

Minot, Susan. / 1st ed. / New York : Dutton

c1986

Available at Lamont Library GEN (PS3563.I4755 M6 1986) and other locations

Limited search in HathiTrust

PAGE

REFERENCE ENTRY

Refine my results

Sort by Relevance

Show only

Peer-reviewed articles (386,890)

Online (525,350)

In library or storage (2,030)

In library (1,384)

Open Access

Date

Session details

- Meet participant at building entrance; accompany them to User Research Center.
- Introductions to clients.
- Explanation of NDA and payments.
- Set up AT customizations
- Run through test tasks
- Wrap-up and payment

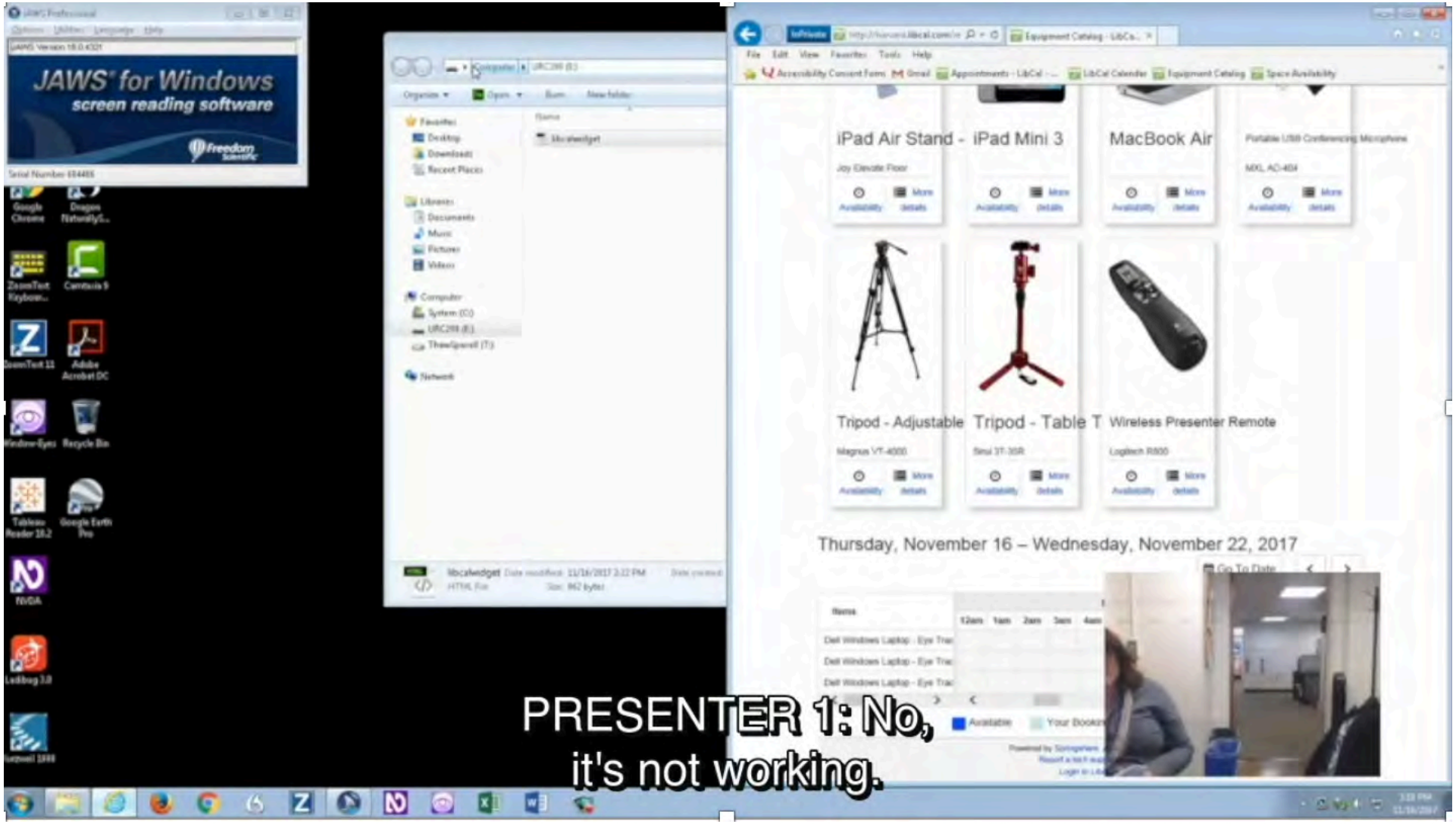
NDA

By [signing below/clicking the “I agree” button below] I hereby agree that I will not disclose any of the following information to any person other than Harvard personnel working directly with me on this project:

1. confidential information about Harvard’s information systems and internal business processes;
2. personal information about members of the Harvard community contained in or stored on Harvard’s information systems; or
3. information relating to my testing of Harvard information systems in connection with this project, including the findings I report as a result of my testing.

I also understand and agree that my findings may be disclosed and shared by and within Harvard.

Testing Session Video



Paying participants

This should have been easier….

Case Study 1:

HOLLIS

HOLLIS, Tasks

- Search for a book; determine which libraries have copies; get the citation; understand request links
- Use filters on search results to find an online article
- Check the date of a book you have checked out in your account
- Search for an author and limit to books in Widener; how many items are displayed?

HOLLIS, Participants

- 1 ZoomText user
- 2 JAWS users
- 1 VoiceOver user

HOLLIS, Findings

- Issues with applying filters
- Problems with contrast and enlarging text
- Reported issues to the vendor with notes and video
- Recommended complete accessibility audit of the system

Case Study 2:
HarvardX Course

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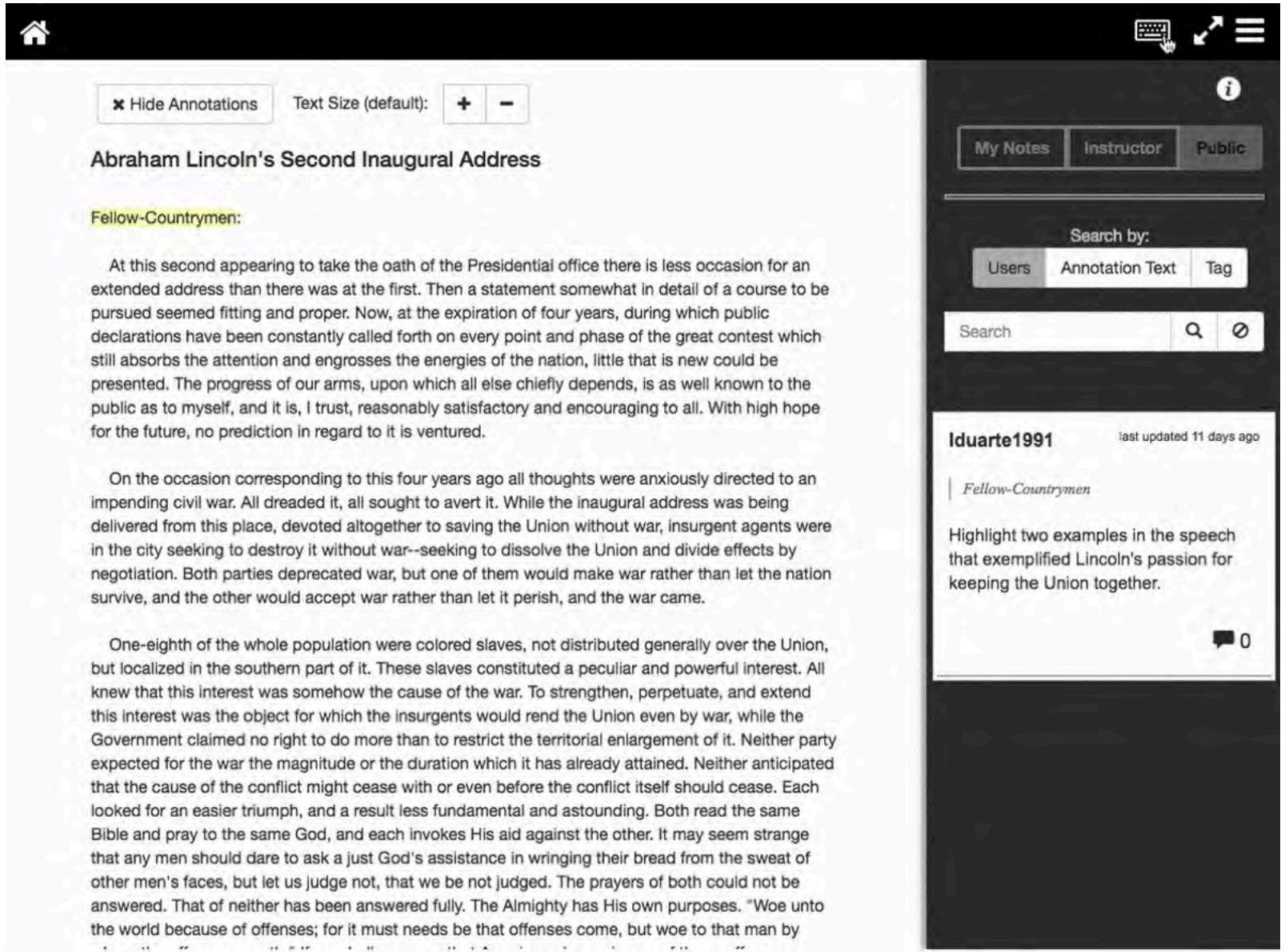
HarvardX, testing goals

- Fluent AT testers supplemented developers, who learned to use screen readers
  - Learning opportunity for those moderating test(s)
- Multiple AT: JAWS, Voiceover, & Zoom Text
- First tested tools used many times across multiple courses

HarvardX, Learning Tools

GIF showing the HarvardX Annotation Tool using keyboard text selection.

Asterisks (*) mark the beginning and end of a selection (highlight), removing need of a mouse to click-and-drag to highlight.



HarvardX, Tools for Multimedia

GIF demonstrates the HarvardX Annotation Tool acting as a tool to aid accessibility.

The tool adds descriptive text to explain sections of an image as students zoom to different levels. These ensure comments are made in the right region. Built using included annotation and tagging features of the tool.

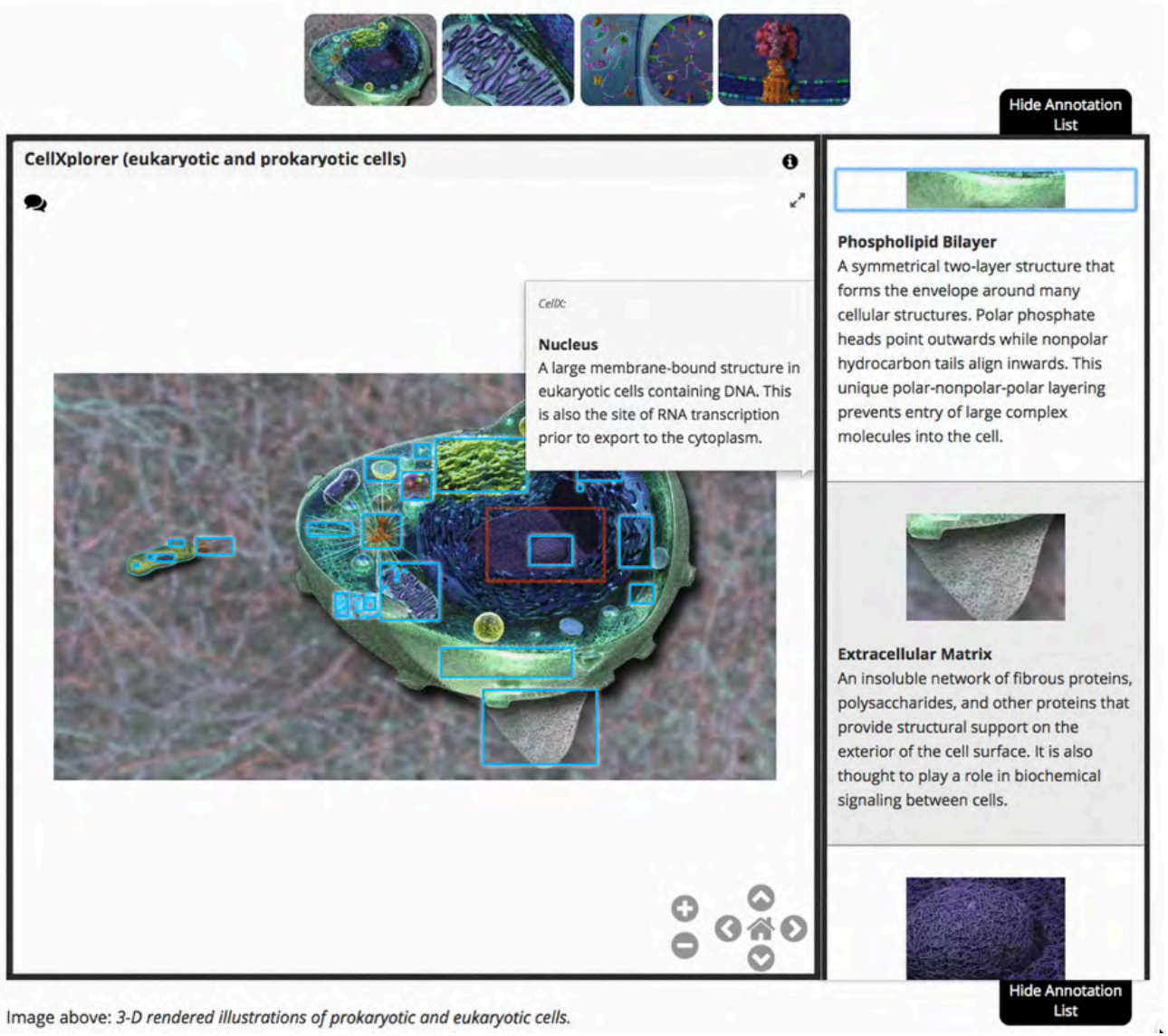


Image above: *3-D rendered illustrations of prokaryotic and eukaryotic cells.*

Lessons Learned

Lessons Learned: Logistics

- Provide participants with contact information in case of delays or questions while en route.
- Get feedback on directions to testing location from people with disabilities.
- Make testing script and language free of exclusive language (i.e. “seeing” or “viewing”)

Lessons Learned: Tech

- Use local computers, but offer time for customization of settings and usage of personal peripherals.
- Provide customizable lighting in testing room.
- Screen recorder doesn't capture magnification software adjustments.

Lessons Learned: Overall

- Participant pool should not be the first thing someone uses to ensure accessibility there are a number of steps that can be taken before recruiting testers, to make the test sessions as fruitful as possible.
- Think about the best approach for scheduling that works for your pool and your locations.
- Consider the physical accessibility of the places where you'll hold testing sessions.

And since then…

Harvard & accessibility now

- **Simplified** the sign-up process. Conduct an annual push for new participants and email current participants to confirm they still want to be involved. URC manages the pool.
- **Hired someone part-time** who coordinates test requests and management of the pool.
- **Added an expert review service**; adjusting to needs of Harvard.
- **Offering more trainings** on digital accessibility to Harvard community.
- **Accessible procurement** project.
- Harvard adopted a **Digital Accessibility Policy**

Harvard *Digital Accessibility Policy*

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Online Accessibility

Home | Content Creators | Developers | Resources | Techniques | FAQs | Policies

HOME / POLICIES /

Harvard University Digital Accessibility Policy

Policy Statement

Harvard University is committed to making its websites accessible. In accordance with this commitment, and with the knowledge that accessible digital content generally enhances usability for everyone, this Policy is established to improve the user experience for those with disabilities. The University recognizes that websites and web-based applications are often integral to the academic and administrative work of the University. This Policy addresses the needs of individuals with disabilities who seek to use University Websites to participate in University programs and activities and/or conduct University Business.

Applicability

This policy applies to University Websites.

Accessibility Standards

For the purposes of this policy, Harvard University will use The Worldwide Web Consortium's Web Content Accessibility Guidelines version 2.1, Level AA Conformance (WCAG 2.1 Level AA) as "the Standards."

POLICY FAQS

Frequently Asked Questions

IN THE GAZETTE

Read the Gazette Article

Q&A

Thank you

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