“Something for Everyone”: A Multi-Method Space Assessment of the Cabot Science Library

Overview

Background
Two floors of the Cabot Science Library at Harvard University were renovated and re-opened in April 2017. The User Research Center at Harvard Library conducted a multi-method space assessment in October 2017. Cabot Library is open 24/5 and sits in the Science Center, a hub of classrooms, lab spaces, large lecture halls, and faculty offices, with a café and a large outside courtyard.

Goals
- Gather feedback from new and returning students.
- Learn how and why students are using the renovated space.
- Evaluate usability of key areas in the library.

Methods

On-the-spot reply card surveys
Approximately 400 surveys distributed across 7 days at 9 different times, including evenings and weekends. 241 surveys returned, 89% undergraduates.

Observation
The video conference room was observed at 7 times during the survey distribution week.

Wayfinding tasks with wearable eye tracking glasses
8 participants (5 graduate, 3 undergraduate) participated in a one-hour session to complete 4 wayfinding tasks.

Interviews
Follow-up interviews with wayfinding participants and one interview with a security guard.

Results

How were students using Cabot?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Visited almost every day</th>
<th>Visited 1-3 days/week</th>
<th>Spent 1hr or less in Cabot</th>
<th>Spent 1-3 hrs in Cabot</th>
<th>Were working individually</th>
<th>Were studying</th>
<th>Were working on coursework/homework</th>
<th>Were taking a break</th>
<th>Were writing a paper</th>
<th>Were using own laptop</th>
<th>Were using own tablet/mobile device</th>
<th>Were not using technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>40%</td>
<td>48%</td>
<td>41%</td>
<td>43%</td>
<td>72%</td>
<td>32%</td>
<td>35%</td>
<td>13%</td>
<td>10%</td>
<td>69%</td>
<td>16%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Top 5 reasons for choosing Cabot

- Convenient location (35%)
- Modern atmosphere/space (20%)
- Likes spaces available for use (8%)
- Social aspect/collaboration (8%)
- Noise level (7%)

Top 5 suggested changes

- Add/update work spaces (28%)
- No changes (13%)
- Food additions/changes (12%)
- More power outlets (10%)
- Dissatisfied with temperature (8% tie)
- Update top floor (8% tie)

Conclusions

Students generally pleased with the renovation, but convenience (location) is primary reason for using the space.

Getting help is problematic – security guard (not a library employee) fields most questions; overall lack of staff visibility.

Recommendations include bringing library staff to the first floor during peak areas and adding signage to indicate key areas.

Signage (or lack thereof) and prior knowledge critical to wayfinding – many key areas are hard to find.

Space has heavy usage, but not necessarily for the “new” features; identity is unclear.

Wayfinding Tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Success indicators</th>
<th>Avg. time on task</th>
<th>Avg. number of floors visited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find a bathroom</td>
<td>50% found first floor bathroom</td>
<td>01:41 (range 01:24–02:39)</td>
<td>1.9</td>
</tr>
<tr>
<td>Find reserve books</td>
<td>57% referenced signage</td>
<td>01:51 (range 00:55–02:51)</td>
<td>2.1</td>
</tr>
<tr>
<td>Photocopy a picture</td>
<td>80% spent at least 4:00 on task</td>
<td>06:37 (range 02:14–12:02)</td>
<td>1.4</td>
</tr>
<tr>
<td>Find the “Discovery Bar”</td>
<td>All participants gave up or were unsure</td>
<td>04:10 (range 01:37–06:26)</td>
<td>2.4</td>
</tr>
</tbody>
</table>

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