

Usability test report: Edge room reservations

Background

Emily Daly and Joyce Chapman conducted usability testing on the Edge project room reservation system (for short-term use) in the Perkins lobby on March 20, 2015, from 11:30am-1:00pm. The test consisted of a short set of background questions, one task, and six post-test questions. The test lasted approximately 5-8 minutes. See Appendix A for the full test script.

Questions that we hoped to answer through the test included the following

- What assumptions do people make about how to reserve rooms in the Edge?
- If they attempt this process online, are they able to find the information they need easily? Is the webpage about how to reserve rooms clear and informative?
- Is the process of using the iPads or kiosk user-friendly and easy?
- What do people find difficult about the process?
- What would they change?
- Is it confusing that other rooms can be reserved online but not Edge rooms? Once the reasoning for this is explained, does that change their opinion?

Participants

Six individuals completed the test. Participants included four undergraduate students (66%) and two graduates (33%). They represented the following departments: the Pratt School of Engineering, Biology, Neuroscience, Environmental Science, and Statistics. One first year student was undeclared. When asked whether they had ever reserved a room before, four (66%) responded that they had. They had reserved study rooms in Perkins (3, 50%) and rooms in the Link (2, 33%). Only one student had reserved a room in the Edge before, though some others had been in the Edge.

Key findings

- What assumptions do people make about how to reserve rooms in the Edge?
 - o Five students were new to reserving rooms in the Edge. Of these 5, two went directly to a computer (40%), two went to the Edge service desk (40%), and one who had heard about how to reserve rooms went to an iPad (20%).
- If they attempt this process online, are they able to find the information they need easily? Is the webpage about how to reserve rooms clear and informative?
 - o The two people who tried to reserve a room on a computer had a very difficult time. While they were able to easily find the correct webpage via the Library homepage or the Room Reservation page, the online information about how to reserve a room in the Edge was highly confusing to them. Neither was able to find

For more information, please contact emily.daly@duke.edu

- the information they needed, or understand how to reserve a room for short term use, even after minutes of trying and efforts to read through the page several times.
 - o Jargon and the different roles of rooms were not intuitive ("grab-bable," "shareable")
 - o The information they were looking for was buried in a lot of text that was not relevant to the need for a short-term space
- Is the process of using the iPads or kiosk user-friendly and easy?
 - o Yes, for the most part. People are making use of the stylus. They like this system. There is some confusion over whether the kiosk is a touch screen; there is no way to tell that it is if the screen saver is on. A couple students had problems with buttons being too small (on both kiosk and iPad). No one tried to zoom either screen. There were comments about being unsure whether green or blue represented available time.
- What do people find difficult about the process?
 - o That they are unable to reserve a room online.
 - o Figuring out how to reserve a room from the website.
- What would they change?
 - o They would like to be able to reserve rooms online (83%, 5), or at least be able to view the schedule of availability online (100%, 6). Some requested clearer instructions on the website, or more signage in the physical spaces about how to reserve rooms.
- Is it confusing that other rooms can be reserved online but not Edge rooms? Once the reasoning for this is explained, does that change their opinion?
 - o It is confusing. Once the reason is explained people are understanding, but after hearing the libraries' reasons, half still say they would like to be able to reserve online.
 - o It can be confusing to have different policies for different sets of library rooms (Edge versus Perkins).

Recommendations to Consider

- Make room schedules available online.
- Consider the pros and cons of the ability to reserve online again. Should we test run it? If we did, could we get the data we need to know whether what we don't want to happen is happening (possibly not)?
- Create a new webpage to be the top-level "Spaces" page for the Edge that funnels visitors to info about either one-time reservations or longer-term reservations. This would be a simple page with only two options. Then make secondary pages with more info about these two different types of reservation.
- The students asked about the time limit for a space; might be worth placing some info about room policies alongside the iPads or making the info about the 3-hour time limit more prominent in the LibCal interface, if it is there and if we have control over that text.
- Investigate whether auto-correct can be turned off on the iPads for reservations. Foreign names are being auto-corrected.

- Provide signs or info near iPads clarifying that any iPad can reserve any room, not just the room it is next to.
- Add signage around kiosk indicating that it is a touch screen. Because there is a screen saver, this is not clear (note from Joyce: I couldn't find the kiosk the first time I went in the Edge because I couldn't tell that was a touch screen either).
- Modify wording on web pages to clearly explain what "grab-bable" and "shared" or "dedicated" spaces are.
- Consider a sign on the Edge desk explaining how to book a room, with the desk isn't staffed
- Spread the word about the existence of project rooms in general
- One person wanted rooms to be reservable for four hour blocks instead of three, one didn't want rooms to be reserveable more than one week in advance, there were some complaints about the rooms always being full: not sure if it's something we want to do... review policies for potential changes?
- One student commented that the webpage could really use some pictures of the Edge. She was talking about the Spaces pages
- Could unavailable time on the schedule be shown as something like gray or black, to be clearer in meaning than blue?
- Consider UAB suggestion of ability to report an empty room that is booked to make it newly available. Ian seconds this idea.

Task notes

Undergrads: 4

- Environmental science, sophomore
- First year student
- Neuroscience, senior
- Biology, senior

Grads: 2

- Pratt, 8 months
- Stats, 2nd year

Ever booked a room at the library?

- Yes, study room in Perkins
- No
- Yes, Link, 1st floor
- Yes, study room Perkins
- Yes, Link, Edge
- No

Ever booked a room in Edge?

- No, no, no, no, yes, no

Task: you want to book a room in the Edge. What do you do?

- Goes to computer
- Goes to desk in the Edge
- Goes to iPad
- Goes to computer
- Goes to iPad (already knew how)
- Goes to desk in the Edge

PERSON 1

- Begins by going to a computer.
- Typed into Google "rent a room at Duke libraries"
- Finds the room reservation page, sees the edge in the upper right and clicks that
- Hits the "request a room button" on the Edge page without really reading anything
- Says she would fill out this form [project room]
- Emily then prompts her and says "are you sure this form is for the kind of short-term use you want?" The student looks at it again, reads parts of it, and says yes, she would fill out this form.
- Emily sends her back to the main Edge room page and ask her to read it. She skims the page and says again she would click this link and fill out the form
- Emily points at the middle paragraph and says "read this part" to try and find out how to do short-term room reservations. The girl reads it and **still** can't see, or doesn't understand. She does not comprehend the line about grab-bable spaces
- Click the link in the middle of the page, it takes her to the same form she's already been on but she thinks it's a different form and says she would fill out this form instead of the other one.

PERSON 2

- Has never booked a room anywhere before
- Decides to go to the edge help desk [Emily explains what they would have told him if it had been staffed]
- Walks down the hall, sees a room with an iPad and uses the stylus to select the date
- Switches to his finger immediately for typing his name
- His experience seems pretty weird ... someone else books the room while he's doing it. He tries to go back and accidentally touches some other button because the screen is so small, and gets taken to a totally different screen
- I would say this is slightly cumbersome for him but not too bad

PERSON 3

- He's been in the Edge but not reserved a room. He thinks he's seen something over in the space to reserve a room though. So we walk over there
- He walks straight back to the reservable rooms, gets a stylus, hits a green square, uses the stylus for the entire operation
- We noticed that the reservation system auto corrects his first name, which is foreign, into some more that is not supposed to be. Can we fix this?

PERSON 4

- Begins by going to a computer
- Google's the libraries
- Finds "reserve a room" page in the top navigation bar of the libraries homepage
Sees the Edge in the upper right and clicks it, gets to the project spaces page
- Doesn't really read the page, she sees a link to reserve a room and just clicks it.
- She is totally confused by the form [project room form]
- She think she doesn't want this form but is really confused. She goes back to the main project spaces page, starts looking at it and says, "There are so many words on this page"
- "There should be a bullet points instead. what do you do for short-term and what do you do for a long term"
- She sees the word "spaces" on the left nav and clicks that. She goes to this new page and reads, then says she is totally confused still
- "Shared space, what's that? I feel stuck."
- This has taken her like four minutes so far
- She says she feel so stuck at this point she would just sign up for the shared space using the form that she found and just use it for the one time she needed

PERSON 5

- She has already reserved a room in the edge and knows how to do it. She walk straight to an iPad.
- She additionally mentions that she likes booking rooms here better than booking them in the link because it's easier
- She likes that it's this way that you can't book online. This way people aren't sticking out rooms all the time in the rooms aren't never available

PERSON 6

- He had never really even thought about the fact that any study rooms existed.
He has no idea what to do in the slides he would ask at the Edge desk
- He says he has been in the Edge before and his favorite thing is the exhibit
- Someone is actually working at the desk so he goes and asks them. She takes him to the kiosk and explained it to him, helping him register
- He is a little confused by the interface. Tries to cancel one of two spots he accidentally reserved and it is too small to touch, he accidentally hit the wrong spot. This is interesting because it's the kiosk so the screen is pretty big and it's still too small

Post-test questions

What was most challenging about booking a project room in the edge?

- This student was completely unsuccessful in figuring out how to book a room but she did not realize that
- It's not hard at all
- There aren't almost any available spots
- It was easy to find the webpage but the page was confusing. The word "grab-bable" is not a phrase I would be looking for... I didn't even see it. maybe something like "one time use"

- You have to come here and look in person
- It's very easy. Getting started might be the hardest part

What would you change to improve your experience booking a project room in the Edge?

- She says that the Edge webpage about spaces is way too wordy. It should be small bullet point information
- Not much could change. The iPad seems good. Maybe if there were a sign of the desk explaining how to book a room with the desk isn't staffed
- She wants to see the schedule online
- Some people want an online booking option, but not her
- Could be nice to be able to do this online. Also to have more information about the existence of project rooms in general

Can you think of alternatives to iPads or kiosks for booking project rooms?

- No, these are good, modern, and easy to use!

Some rooms in the library can be booked online but the rooms and the edge cannot, thoughts?

- You should be able to book online
- You should be able to book online. Living on East campus this feels very inconvenient. "I'd only come over when I wanted a room and what if nothing were available then?"
- You should be able to book online. He actually already had heard from his friends that you had to come in here to reserve a room. His friends also all going to be able to book online.
- Cool that you're trying to make some flexible space. You can grab it but I'd be worried I'd come with the group and there will be no space. I'd like to schedule online. Booking online provides a certain level of security. But she sees value to this idea of being able to just grab a room
- I'm an off-campus student and will want to pop in with the group and study sometimes. But I would need to preplan to be on campus and reserve a room enough in advance to do it this way. I could do it when I come but what if it's not free then?
- I like that you can't book it online

Explain the difference. Does this change your initial thoughts about our policies?

- The issue we describe could definitely happen, but she would like the same process at the Perkins rooms for these rooms. Even if folks book and don't show others will use the room if it's empty until someone shows up with belongs to
- She sees how that could be a concern. Sometimes students don't follow through. But it's a huge commitment to come over to West campus with a group. This actually has happened to her once. All add rooms are booked for two hours when she and her group arrived. Nothing was free and Perkins either. Her whole group had to go back to East campus. She says they need to at least be able to view availability online
- Well, sometimes we just need a room. Looks like I have to walk all the way down here to get it. I suppose it's worth it to try since I need a room. But I would rather have a bookable online
- She now agrees with their method. "It's not a huge effort to just be there and reserve it"

- We make a good point. He can see either side.

Anything else?

- She's been in the Edge once but did not notice the iPads for booking rooms
- It should be reservable for four hour blocks instead of three
- The webpage could really use some pictures. It's a beautiful space but your page isn't pretty
- Rooms should not be reserveable more than one week in advance
- I don't get why there's a code pad to get in these doors but then the code is posted on the door

Undergrad Advisory Board notes

Taken by Ian Sloat

5 students

They walked in and found the touch screen computer right away and had no issues with booking a room.

A couple of people mentioned that there should be a sign, because they didn't know it was a touch screen and don't go around just touching screens in the hope that it's a touch screen.

When we walked to the actual group study rooms, they found the iPads no problem

They did have problems with

- Did not know that you could use any iPad to book any room. They had a discussion asking each other if the iPad they were using was for the room to the right or left of it.
- Did not know if green or blue on the calendar meant available

They liked that the iPad screens were on, the touchscreen computer had a screen saver which made its purpose much less obvious.

They thought that labels and signs would help the whole process

They would like to be able to book rooms online, so they can plan ahead, but understand not being able to. But would like to see the availability so they can determine if they want to come to this part of campus or not.

Someone suggested the ability to report an empty room that is booked to make it available. (I like this idea, because the website is clear that after 15 minutes you lose the reservation, but there is no real way to do that).

The students all liked the touch screens, thought there was nothing to improve.

One person questioned what you would do if you didn't have a smartphone to confirm the booking.

Appendix A: script

DUL usability test: The Edge

Thank you for agreeing to take part in this study.

We are trying to learn more about how students and faculty reserve spaces in Perkins & Bostock, and we'd like your input.

I'll be asking you to complete a task that may involve a little walking around. It would be very helpful to us if you could think aloud as much as possible while you're with us. Keep in mind that there are no right or wrong answers and that we're testing our systems and policies — not you.

Okay, first some general questions:

1. Are you an undergrad, grad student, faculty member, staff member?
 - a. If you are an undergrad, what year are you?
 - b. If you are an undergrad, what is your major?
 - c. If you are a grad student or faculty or staff member, what department are you in?
2. Have you ever booked a room in Duke Libraries?
 - a. If so, which room or type of room did you reserve?
3. Have you ever booked a project room in The Edge?

Now we have a task for you to complete. Again, it would be really helpful if you would share your thoughts and observations as you do this, so try to think aloud as much as you can. Like I said, there are no right or wrong answers.

TASK: You've heard there are Project Rooms available in The Edge for groups to use. You're interested in booking one for a group you're part of this semester. Show us how you would do that.*

Okay, that concludes the task. I have a few questions about your experience reserving a room.

POST-TEST INTERVIEW

1. What was most challenging about booking a Project Room in The Edge?

2. What would you change to improve your experience booking a Project Room in The Edge? [follow-up, if appropriate: Can you think of alternatives to ipads or kiosk for booking PRs?]
3. You may have noticed that some rooms in the library can be booked online but that the rooms in The Edge cannot. What are your thoughts about this difference?
4. *Explain the difference: The spaces in The Edge are intended for project teams rather than individuals, and we want to ensure space is available for teams who are together in The Edge.* Does this explanation change your initial thoughts about our policies? Again, are there changes you'd suggest?
5. You said you've reserved a room in The Edge before today: Describe your experience making a reservation and using the room in The Edge. Are there things you'd recommend changing based on that experience?
6. Is there anything else you'd like to tell us about your experience reserving a room in The Edge?

Thank you for your time today!

*Notes

- If participant opts to go to a desk, tell her she must go to The Edge to book a room using either an ipad or the kiosk, and encourage her to do that.
- If participant opts to go to a computer, encourage him to use a Tier One station in Perkins, and allow him to navigate Google, the DUL website, etc. to determine that he must go to The Edge to reserve a room. If time permits, ask participant to walk to The Edge to reserve a room.