Usability Testing with PWD
A pre-conference workshop

Elisa Miller, CA Technologies
Jayne Shurick, Knowbility
Marine Menier, Knowbility
Agenda

• Why usability testing?
• Planning your usability test
  • What to test (creating tasks)
  • Who to include
  • When and where
  • Operational considerations

• Conducting your tests
  • In-person
  • Remote

• Analyzing your results
Course objectives

As a result of this course, you will be able to:

• Design a usability study
• Identify participants
• Create testable tasks
• Recruit participants (including PWD)
• Conduct a test
• Analyze your test results
Introduction to Usability testing

Who, what, why, when, where and HOW
What is usability testing?

Because personal computers are just too hard to use, and it isn’t the users’ fault
What usability is not

- Quality assurance
- Zero defects
- Utility of design features
- Intrinsic in products
These are items typically of concern for physical products
What usability is:

The official ISO 9241-11 definition of usability is: “the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use.”
This includes utility...
A usable interface has three main outcomes:

1. It should be **easy for the user to become familiar with and competent in** using the user interface during the *first* contact with the website.

2. It should be **easy for users to achieve their objective** through using the website.

3. It should be **easy to recall the user interface and how to use it on subsequent visits**.
1. It should be **easy for the user to become familiar with and competent in** using the user interface during the *first* contact with the website. For example, if a travel agent’s website is a well-designed one, the user should be able to move through the sequence of actions to book a ticket *quickly*.

2. It should be **easy for users to achieve their objective** through using the website. If a user has the goal of booking a flight, a good design will guide him/her through the *easiest* process to purchase that ticket.

3. It should be **easy to recall the user interface and how to use it on subsequent visits**. So, a good design on the travel agent’s site means the user should *learn* from the first time and book a second ticket *just as easily*.

4. More and more, users expect interesting and
Types of Usability Tests

• In person vs. remote
• Moderated vs. unmoderated
Operational Considerations

- Time
- Budget
- Suitable accessible location
- Access to PWD
Planning your usability test

Step-by step exercises
Exercise #1

- Break into groups of four to five
- Introduce yourselves to the others in your group.
- Discuss your current projects
- Select one of those projects that might be a good prototype or product to test.
Usability Testing Checklist

• What is the purpose of the test?
• What are you going to test? What is the scope of the test?
• Who are you going to include?
  • Do you have defined personas?
  • Will you be testing PWD?
  • How many people will you test?
• What tasks will you test?
• What is the environment for the test?
What you are going to test?

• Look for a product or prototype that has tasks that are easily defined.
• Keep the selection to less than five pages
• Keep the task list to fewer than five tasks
Examples would include purchasing a pizza online and selecting size, crust, sauce and toppings, as well as how the pizza will be acquired (pick up, delivery etc)
Prior to Testing

Do a basic accessibility audit

• E.g., text alternatives, headings, contrast text resizing, keyboard access, visual focus, etc.
• See WAI Easy Checks
  https://www.w3.org/WAI/eval/preliminary
How to Write Good Tasks

• Make it simple
  • “Select the red sweater in size medium”
  • Select “Buy Now”

• Make it complex
  • “Buy a sweater”
Simple Tasks: What You’ll Learn

- Whether there’s appropriate alt-text on images
- Whether the red sweater is identified by color alone
- Whether the size drop-down works with a screen reader and keyboard
- Whether the “Buy Now” button works with a screen reader and keyboard
Simple Tasks: Limitations

• May not identify the most important usability issues
• May not allow participant to experience the full interface
Complex Tasks: What You’ll Learn

• Whether participants can buy the sweater
• What tasks to focus on in a moderated study
Complex Tasks: Limitations

• If participants can’t buy the sweater, they may not be able to say why, and you may or may not be able to infer (particularly in a remote or unmoderated test).

• You may be limited in the number of tasks you can complete in a session.
Exercise #2

In your groups:
• discuss the tasks you want to include in your test
• create the tasks
• validate the tasks
Who will you ask to test the product?

• Who are the primary users for this product or service? Are there other types of users?
• How will you find / recruit your participants?
• What do you need to know about them before selecting / including them?
• Will your users expect compensation? What kind and how much?
Talk about personas
Discuss options for recruiting – including the Knowbility service
Screeners
What You Can and Can’t Learn

• Identify usability issues, especially those faced by PWD
• Won’t identify all accessibility issues, only those that are encountered when performing your tasks
When to Include PWD

• Before and/or after manual accessibility testing
• Prior to redesign
• During the iteration process—as design validation
• Whenever you do a usability test
Why Include PWD in Usability Testing

• Find accessibility issues
• Find usability issues exacerbated by disability
• Set priorities for redesign
• Make it read (human face)
• Certification or other requirement
Exercise #3

• Define your audience / personas
• Discuss the various characteristics you would look for in appropriate participants
• Create a screener
• Decide where you would recruit these participants
• Discuss payment for participation
Exercise #4

• Create the script for your usability test
• Practice your script with your team
Conducting your tests

Time for a little practice
Exercise #5

• Conduct your usability test with the various participants.
• Be sure to change roles, where you rotate out who will be the conductor, who will be the greeter, who will be the observers (have at least two)
• Debrief between sessions
Demo: remote usability testing
Talk about personas
Discuss options for recruiting – including the Knowbility service Screeners
Analyzing your results

What did you find out?
Analysis

Quantitative:
• Time on task
• SUS (System Usability Scale)
• How often did you see the same problem?
• Problem severity ratings (0-4)

Qualitative:
• When were the participants uncomfortable?
• Did you see similar problems / responses?
Debrief

• What did you learn from this process?
• How is testing with PWD different from traditional usability testing?
• How did their insights change the way you look at your website / product / service?
Resources

• *Don’t make me think* (2011) Steve Krug
• *Usability testing and research* (2002) Carol Barnum
• (from Shawn Henry-- a GREAT guide about usability testing and accessibility)
Online panel of people with disabilities

- Include people who are blind or have low vision, a physical impairment, hearing impairment, and/or cognitive impairment
- Includes people who use a variety of assistive devices, including screen readers, screen magnification software, alternative input devices, keyboard only, etc.
- Includes people with a variety of demographics and computer skills
AccessWorks Use Cases

- Remote unmoderated test
  - Loop11, UserZoom
- Remote moderated test
  - Zoom, WebEx, etc.
  - Anonymous or not
- In person moderated test
- Surveys
AccessWorks: How it Works

• Send email to access-works@knowbility.org with subject “Testing Platform Inquiry”
• Tell us your requirements and schedule
• Set up your test in Loop11 or UserZoom
• Collect data and report!
Your presenters

Elisa Kaplan Miller
Design Transformation Coach
CA Technologies
Elisa.miller@ca.com

Jayne Schurick
UX Researcher
Knowbility
jschurick@knowbility.org

Marine Menier