Making Every Vote Count: A Design for Better Ballots

Usability Testing for Local Election Officials

The Brennan Center for Justice
Ballot Design Task Force
Lawrence Norden
David Kimble
Whitney Quesenbery
Josephine Scott

Objectives for this session

- Learn about usability and usability testing
  - What, why and when

- Learn how to conduct a usability test
  - Planning a usability test
  - Practice

- Improve your ballots
  - Using the results of the test
  - Guidelines from the Ballot Design Task Force report
Introduction to usability and usability testing

Good usability is critical to good elections

- Usability testing by local elections officials helps meet goals for good elections:
  - Make it more likely the voter’s intention is carried out
  - Make it easier for voters to use ballots
  - Identify design problems in ballots that could lead to voters making mistakes
  - Make it more likely that media coverage of an election is positive
What do we mean by “usability”? 

- Usability means that voters can cast valid votes as they intended, quickly, without errors, and with confidence that their ballot choices were recorded correctly.

- For you, it's whether the ballot can be counted
- For voters, it's whether they are able to vote as they intend to
- Usability is important in voter education and other election materials as well as in ballots.

Usability is about people

A voter and mom:  
“I can’t take the time to wait in two-hour lines. I need to be in and out before the baby wakes up from her nap.”

A concerned voter:  
“Okay, I haven’t voted on a touch screen. How do I know I’m doing this right?”

Differently-abled voter
“A simple ballot makes it easier for all of us to vote.”
Usability testing ensures that ballots designed to good standards meet their goals

- A standard ensures a base level of usability, accessibility, and privacy.

- Usability testing and good election procedures support and extend standard requirements

Usability testing is needed throughout the election process

During design and development
Evaluate the product usability throughout the development process

For certification or qualification
Evaluate the finished product against usability requirements to measure its success against human performance

For each election
Ensure that the ballot design and voter education materials meet requirements
Usability testing lets you observe voters using a ballot before the election

- **Observe** real people using something rather than asking them about it
- **Measure** how easy is to use to accomplish a task: Can voters vote without becoming confused and making mistakes?
- **Inform design**: Where can we prevent mistakes? How can we help voters recover from mistakes?
  - Lets you confirm or challenge assumptions about ballot design
  - Gives you the opportunity to fix problems

How easily can we learn from users?

- Gathering user experience feedback can be as simple as watching someone use the site to find information.
  - Let them explore the site. Don’t explain or demo
  - Watch what they do
  - Listen to their comments
  - Take their problems seriously
Ballot usability testing does not have to be formal, lengthy or expensive

- Testing aimed at finding problems do not need:
  - A formal laboratory
  - 100's of participants
  - Special equipment (except for your voting system)
  - Special recording systems
Demonstration

- Volunteer for voter
- Everyone else observe the session
- I'll be moderator, doing what you should do if you were conducting usability testing

Voter – assume
- You haven't done much homework
- You have a vague feeling about how you want to vote
- You want to be sure to vote on the measure about education technology

Observers, please note
- What the voter does
- What the voter says
Review

- How well did that go?
- What did you observe the voter doing?
- What problems did the voter have?
- How did the moderator behave?

  **Participant:** what was it like?
  **Moderator:** what questions do you have about moderating?
  **Observer:** what did you see?
Planning a usability test

- Know why you’re testing
- Make sure the right people are on board
- Find the right participants
- Frame the voting task in a voter-centered way
- Facilitate curiously, objectively
- Know what you want to do with the results
- Be willing to iterate designs

The goals of testing are to identify problems...so you can fix them

- Identify problems in design that could lead to residual votes or fall-off
- Even the best ballot design can introduce unpredictable problems
- Make it easier to carry out the voter’s intent
- Make it more likely that the voter’s intent is carried out
- Only good news about the election
Why not do this in a group?

- In focus groups, you get
  - Preferences
  - Opinions
  - Group consensus
- In a usability test, you get
  - Individual behavior and performance
  - What happened, as well as why

There are three times when it’s especially important to test ballots

- Something about the situation has changed since the last election
  (a new voting system, ballot style or change in laws)
- When you have a good idea of what’s going to be on the ballot
  (You can test the layout, even if the details are not complete)
- Some event happens that would change the layout
  (a candidate dies or is disqualified at the last minute)
What do you need for a usability test?

What
- A ballot or other election materials

Where
- A polling place or other similar room

Who
- Voters: 12-15 or 5-7, one at a time
- Moderator
- Observer/note-taker

Prepare...run the test...compile the results

1. Prepare for the test
   - Prepare copies of what you want to test
   - Set up a place for the test
   - Recruit voters to try out the materials
2. Run the test
   - One at a time, have a voter try to use the materials
   - Observe what happens, note what voters say
   - Ask the voter to step through what they did, where there were questions, what was confusing
3. Compile the results
   - Over several voters, look for patterns in their problems and questions
Running a usability test: tips, techniques and practice

Moderating

- Impartial, unbiased, observing
- No teaching!
- Listen and watch
- Open-ended questions: Why? How? What were you doing?
Moderator roles

- Flight attendant
  - Ensuring safety and comfort
- Sportscaster
  - Play-by-play
  - Maximizing information flow to observer/note taker
- Scientist
  - Planning
  - Maintaining objectivity
  - Managing data
  - Producing reports
  - Iterating design

Briefing the voter

- We’re not testing you – your being here helps us create a better ballot
- You can stop if it’s uncomfortable
- Your involvement will be confidential
- Problems you have with using the ballot are not your fault
- If you get stuck or confused, say so
- Treat me like a poll worker
Maximizing information

- If the voter says, “hmmm” or “oops” or “I wonder…”
  - Say, “What questions do you have right now?”
- If the voter is silent for 10 or 20 seconds (count!)
  - Say, “What are you thinking?”
- If the voter stops because she thinks she’s done or she’s stuck (and you think there’s a problem)
  - Summarize what you saw her do
  - Ask what she will do next

Think aloud or review

- Consider asking people to “think aloud” as they vote
  - What they’re doing
  - Why they’re doing it
- Review after voting
  - Ask the voter to walk you through, step-by-step what they did and why
  - Use the ballot as a guide for the discussion
  - Ask what was confusing or frustrating
  - You may want to ask voters to do specific things now and comment
Forming task scenarios

- Open-ended
- Separate the results from the process
  - You want them to under vote
  - They want to vote in as many contests as they’re comfortable with

Task examples

- You usually vote for everyone in the Yellow party. Vote for all the people in that party at one time.

- For State Senator, instead of the Yellow party person, you want the Orange party person. Make sure your vote for State Senator is for the Orange party person.

- For now, you decide not to vote for Water Commissioners.

- When you are ready, finish voting as you really would in a real election.
Taking notes

Practice: Test a ballot

- Break up into groups
- Each person takes a role: participant, moderator, observer
Let’s try it.

Discussion

- What kinds of things happened?
- What did your voter do?
- What did your voter say?
Learning from a usability test:
Analyze what happened

Base your results on what the voters *did* and *said*

- Watch what voters *did*
  - Failures to cast ballot, or abandonment
  - Errors or hesitation in marking the ballot
  - Requests for assistance, re-reading instructions
  - Any voter adaptation or behavior that is adaptive (such as taking out reading glasses or moving in closer to the machine)
  - Incidents that would go in the poll book
  - Surprises
  - Indications of voter emotion (confusion, frustration, anger, disgust; delight, satisfaction)
Base your results on what the voters *did and said*

- Listen for things they *said* that might indicate problems
  - All voters said that the language of the measures was complex and difficult to understand
  - Some voters said that the type was too small
  - Several voters marked their selections with checkmarks or Xs rather than filling in the box
  - Only a few of the voters read the instructions on the ballot
  - Voters expected the numbers to designate steps they should take

Analyzing data

- Look for behavior that indicates potential problems
  - Hesitancy, corrections or asking for help all indicate that ballots may be difficult to use or that instructions are not clear
- Look for errors:
  - Count errors
  - Look at where in the ballot the errors occurred
  - Look at the types of errors
- Collect statements by voters
  - During the tasks
  - In the final debriefing
- Compile the results of the post-test questionnaire
- If you have a lot of notes put them on stickies and sort them
Reports compile what you observed in the test

- A good report includes:
  - Information about when and how the usability test was conducted
  - The details of what you observed (errors, statements by voters, other observations)
  - A list of recommendations for how to improve the ballot

- Encourage reporting for
  - Sunshine
  - Public relations
  - Demonstration of improvement and progress

- A sample usability report is included in the LEO Usability Testing Kit online resources

Improve your ballots: making recommendations
The Ballot Design Checklist

- Ballot instructions should be brief, simple, and clear.
  - In instructions for write-in votes, state plainly that voters should not vote for both a named candidate and a write-in a candidate for the same office.
  - Write instructions in an active voice and in positive terms. (“Fill in the oval for your write-in vote to count,” rather than, “If the oval is not marked, your vote cannot be counted for the write-in candidate.”)
  - Use common, easily understood words. (“Move to the next page of the ballot,” or “Move to the next screen,” rather than “Navigate forward through the ballot.”)
  - Provide the context of the action first, then the action. (“[Context] To vote for the candidate of your choice, [Action] fill the oval to the left of the candidate’s name.”)
  - Place each instruction on its own line.

The Ballot Design Checklist (2)

- Ballot instructions should be brief, simple, and clear.
- Paper ballots:
  - Display general instructions in the top left-hand corner of the ballot. Place specific instructions and related actions together. Do not put all instructions at the beginning of the ballot.
  - Let voters know that if they make a mistake, they can get a new ballot. Include this information in the initial instructions.
- Electronic ballots:
  - Display startup instructions in an easy-to-spot location in the voting booth.
  - Place specific instructions and related actions together. Do not put all instructions at the beginning of the ballot.
  - Instruct voters to review selections and provide clear instructions on how to change a selection and cast the ballot.
The Ballot Design Checklist (3)

- Don’t split contests.
  - List all candidates for the same race on the same page and in the same column.
  - Remove the entire column or row for any candidate or party that has been withdrawn or disqualified (not just the candidate or party name).
- Make sure ballot design is consistent.
  - Use consistent format and style for every contest and voting action.
  - Use consistent font type, letter-size, and shading in all contests.
  - Place response options (such as fill-in ovals) in a consistent place on the ballot, such as on one side on candidate names or ballot question choices.

The Ballot Design Checklist (4)

- Make ballots easy to understand visually.
  - Use flush-left text, instead of centered text.
  - Display all text in mixed case, rather than all capital letters.
  - Use a simple, easy-to-read font, such as Arial or Univers.
  - Bold and/or shade certain text, such as office names.
  - Use a legible, minimum text size, meeting VVSG requirements, such as 12 points.
  - Eliminate extraneous information or design it to avoid visual clutter.

**Paper ballots:**
- Use the fill-the-oval, rather than the connect-the-arrow, method of selecting a choice in a contest.

**Electronic ballots:**
- Only place one contest on each screen.
The Ballot Design Checklist (5)

- Give voters maximum flexibility.
  - Electronic ballots:
    - Allow voters to select or change the language of the ballot at any time during the voting process.
    - Allow voters to change text size and contrast levels and to get audio support at any time during the voting process.

Last words

- Usability test your ballots
- Understand the what happened in the test
- Turn that into improved ballots
Resource: The Ballot Usability Testing Kit

- A kit of materials to help local election officials run usability tests with ballots for each election
- A project of the Usability Professionals’ Association (Dana Chisnell, Laurie Kantner, Ginny Redish, Whitney Quesenbery, Josephine Scott, Sarah Swierenga)
- It includes:
  - Usability Testing Ballots: What you need to know
  - Session script
  - Report template

www.usabilityprofessionals.org/civiclife/voting/leo_testing.html

Resources to learn more about usability

- **Letting Go of the Words** by Janice Redish
- **Handbook of Usability Testing** by Jeff Rubin and Dana Chisnell
- **Don’t Make Me Think: A Common Sense Approach to Web Usability** by Steve Krug
- **Ballot Usability and Accessibility**
  - http://ballotusability.blogspot.com/
- **Usability.gov**
  - A guide to developing usable and useful web sites (from US Dept of HHS)
The Brennan Center for Justice at New York University School of Law is a non-partisan public policy and law institute that focuses on fundamental issues of democracy and justice.

The Brennan Center’s Voting Rights and Elections Project promotes policies that protect rights, equal electoral access, and increased political participation on the national, state and local levels. The Voting Rights and Elections Project works to expend the franchise, to make it as simple as possible for every eligible American to vote, and to ensure that every vote cast accurately recorded and counted.


UPA is an association of professionals with a mission to advance the usability profession through education, information, skill-building and improved methods and practices.

The Usability in Civic Life project promotes usability in elections, plain language and accessibility. Projects include participation in the Brennan Center’s Ballot Design Task Force, the EAC’s Technical Guidelines Development Committee and the US Access Board’s advisory committee to update “Section 508” accessibility regulations.

UPA maintains a list of professionals interested in working with local election officials:
http://www.usabilityprofessionals.org/civiclife/voting/consultants.html