



Usability Testing Ballots: What you need to know

This document outlines the basics of putting your ballot – at whatever stage of the election cycle you are – in front of real voters to find out what types of problems they have using the ballots and what you can do to correct the problems before Election Day.

It is part of a set of documents and templates developed by the Usability Professionals' Association (UPA) that we call a "kit" for usability testing ballots and other elections materials.

What you need to usability test ballots

- A moderator
- A voter
- A ballot
- A polling place
- Some way to take notes

Why you should test ballots

We created this kit with these goals in mind:

- Make it more likely the voter's intention is carried out
- Make it easier for voters to use the ballot
- Identify problems in the design of the ballot that could lead to residual votes or drop-off
- Make it more likely that media coverage of an election is positive

When to test ballots

There are three times during the cycle when you can test ballots to understand training issues for election workers and to prepare for ballot design:

- When something about the voting situation has changed since the last election, such as new machines, a new ballot layout, new regulations or ordinances have been enacted.
- When you have a good idea of what is going to be on the ballot for the next election.
- When some significant event happens that may cause the overall layout of the ballot of page to change.

Questions to answer in a ballot usability test

- How easily and successfully do voters mark a ballot?
- What questions do they have when marking the ballot?
- What mistakes do they make in marking the ballot?
- How close is the marked ballot to how they say they intended to vote?

When something is new	Close-to-real ballot	Last-minute changes
<ul style="list-style-type: none"> How sure is the voter that they have voted what they intended to vote for? How many errors did voters make? 	<ul style="list-style-type: none"> What's different from typical elections (e.g., more candidates than usual)? What's different about the ballot layout from other elections (primary, general, mid-term, special, local only, recall)? Satisfaction Confidence level 	<ul style="list-style-type: none"> Does this make a change in the layout of the ballot? Does it make a change in the layout of the page? Satisfaction Confidence level

Whom to include in the ballot test

Who	When something is new	Close-to-real ballot	Last-minute changes and double-check
Voters	12 to 15 people who reflect the demographics of your voters*	12 to 15 people who reflect the demographics of your voters	5 to 7 people
Moderator	You, or someone who was not involved in designing or writing the ballot. The moderator takes the role of the poll worker.		
Helper / note-taker	Someone in the Elections Department who can help you review what you both saw and suggest solutions.		
Observers	Up to 2	Up to 2	None

*Remember to include people with limitations and disabilities and people who are not native English speakers.

How to test ballots

Usability studies like this one provide a systematic, controlled, and semi-realistic situation for the voter. They set up opportunities to observe how easy or difficult it is for voters to use a ballot (either paper or electronic), to ask questions with measurable answers, and to confirm (or challenge) assumptions.

You will observe individual people using a ballot to learn about how users go about using the ballot, and to learn why things work or don't work for them.

Process

Each 15-minute session has one participant (voter). A moderator (you) will be near the voter to give instructions and ask follow-up questions. During the session, the moderator and note-

taker collect data and comments from which to draw conclusions and make inferences, and to convey recommendations for changes on the ballots.

Each participant uses copies of the same ballot. The moderator guides voters through the session, observes their behavior, and takes notes (if possible, which is why you have a note-taker), but do not help participants do the tasks. (*After* the testing part is done, if there is time at the end of the session, you may help voters learn how to use the ballot or the machine. They often appreciate knowing what their mistakes were. Doing this will help you understand what to fix in the ballot, too.)

Which ballot to test

When...	Test
Something about the voting situation has changed (regulations, machine, other)	Proposed designs , including the National Institute of Standards and Technology (NIST) specification for whatever is new NIST reference ballot (VVSG) Mock ballot from the last complex election Printed Electronic Audio Entire ballot process, including feeding the ballot through the scanner
You have a good idea of what is going to be on the ballot	A mock-up Printed Electronic Audio
A significant event happens that may cause the overall layout of the ballot or the page may change	A real ballot Printed Electronic Audio

Schedule for each test

- 4 weeks before the test
- Decide why you are doing the test and what ballot you want to use
 - Announce the usability test to the public; place advertisements
 - Invite observers, with a deadline for registering to observe
 - Identify the issues in the ballot that you want to test for
 - Start creating the ballot
 - Find someone in the department to help you coordinate scheduling and logistics
 - Find someone to coordinate with and schedule observers
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- 3 weeks before the test
- Find a note-taker or another person to help you moderate ~~sessions~~
 - Decide whether you want one person to moderate all of the sessions, or if you will trade off moderating and taking notes
 - Draft the document you will use as a script for the session
 - Start scheduling observers
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- 2 weeks before the test
- Test your session script with someone you know acting as the voter; make changes if necessary
 - Finish scheduling observers
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- 1 week before the test
- Print copies of the ballot and/or make sure the ballot runs on the appropriate machine
 - Dry-run the session script with your note-taking partner to test timing, logistics, ease of taking notes
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- Testing week
- Set up the voting booth(s), along with everything you'll need to welcome participants, observe them, take notes, and gather demographic and satisfaction data
 - Copy consent forms and voting instructions sheets
 - Brief observers about how to observe
 - Practice – do a pilot test with someone in the department
 - Run the sessions

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- After the test
- Review what the moderator and note-taker (or more of you) saw together
 - Invite observers to share what they saw
 - Call in a usability expert if you need help interpreting the data
 - Compile a list of what to change on the ballot and how to change it
 - Work with the designer, machine manufacturer, or whomever you need to implement changes
 - Review the changed ballot against your list of what to change

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- 2 weeks after the test
- Announce the findings to the public if you have to or want to
 - File in compliance with Freedom of Information Act
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Where to test ballots

- In a central, public place, such as the town hall or city hall
- In a place similar to a regular polling place, following the same guidelines for layout, traffic management, amount of space, light, and so on. If your elections are all mail-in, simulate a kitchen or dining room or some other home-like setup, if possible.

What to look for

Success and failure

- Failure to cast, abandonment
- Errors
 - On ballot compared to selections
 - Types of errors by task (initiating, costing, marking different Types of races)

Behavior

- Requests for assistance
- Spoken comments
- 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
- Assessments of voter emotion (confusion, frustration, anger, disgust; delight, satisfaction)
- Distractions (glare, noise, movement)

What to do with what you find out

Data to match up

What it might mean

Match requests for assistance and spoken comments to typical problems or mistakes observed. Your note taker should record questions that participants have or other requests they make of the moderator/poll worker. In addition, you should note what problems people have and what errors they make.

- What is confusing to voters
- What isn't clear and why
- What might need instructions or different labels or headings

Match requests for assistance and spoken comments to scores of satisfaction, frustration, and confidence. You will observe people having problems or making mistakes on their ballots. Review that data long with participants' answers to the final rating questionnaire.

- How severe a given problem is
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Session outline

Here is what will happen in each 15-minute session:

- **Introduce the session** (2 minutes)
make the participant comfortable
 - Go over what will happen in the session
 - Make sure the participant understands the consent form (Participant signs form.)
 - Get answers to a few specific questions about the participant's voting history: Have they voted; how often; have they used this system before; NOT anything about their political stance or positions
 - introduce the ballot
- The participant votes the ballot. (Up to 10 minutes)

- The facilitator intervenes only to act as a poll worker would, without teaching the voter how to vote.
 - The note-taker uses a prepared note-taking form to take data on the participant's reading and voting behavior.
 - (In a companion "session script" we will give you specific instructions on how to intervene and what types of questions to ask participants.)
- **Satisfaction questionnaire** (2 minutes)
The facilitator gives the participant the very short questionnaire on satisfaction and confidence and then wraps up the session by thanking the participant.
 - If there is time, instruct the voter about what would make their vote successful next time.

Note: Be sure to leave time between sessions to reset everything.