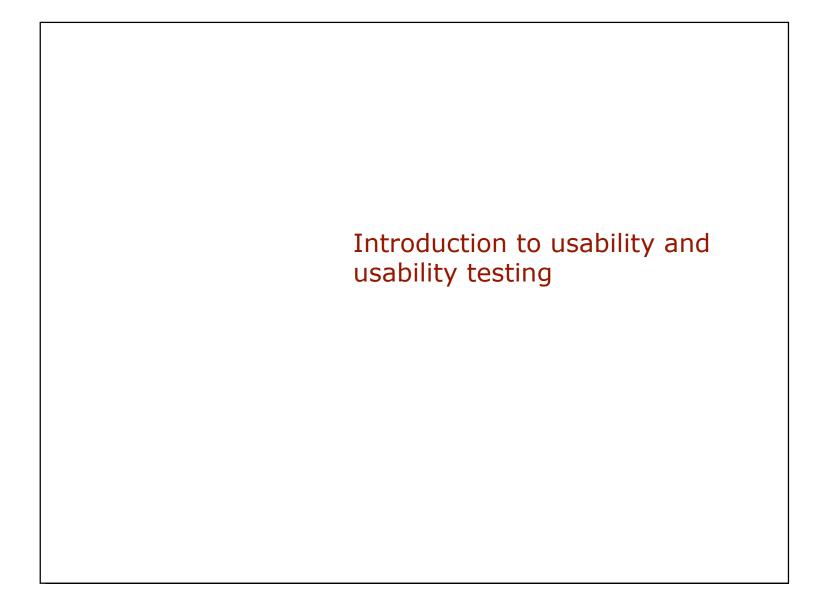


Objectives for this session

- 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

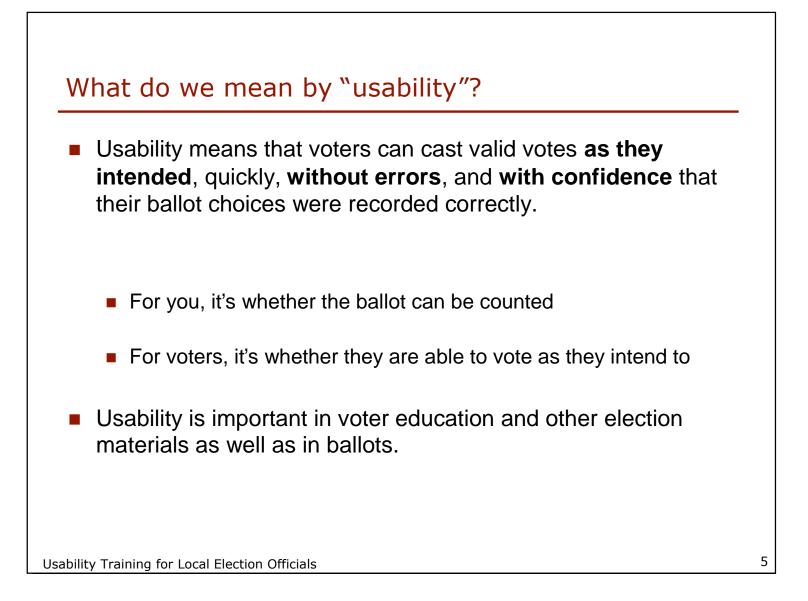
- Using the results of the test
- Guidelines from the Ballot Design Task Force report

2



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



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."

6

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

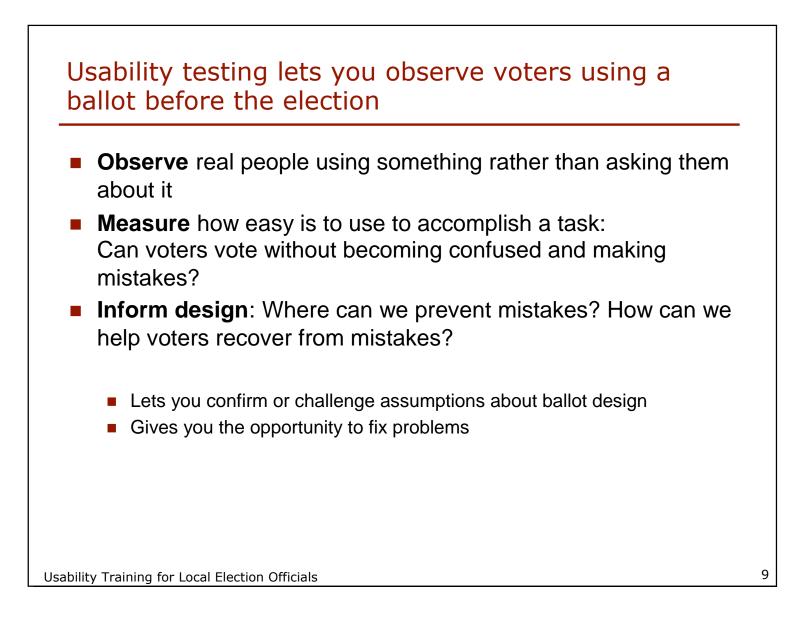
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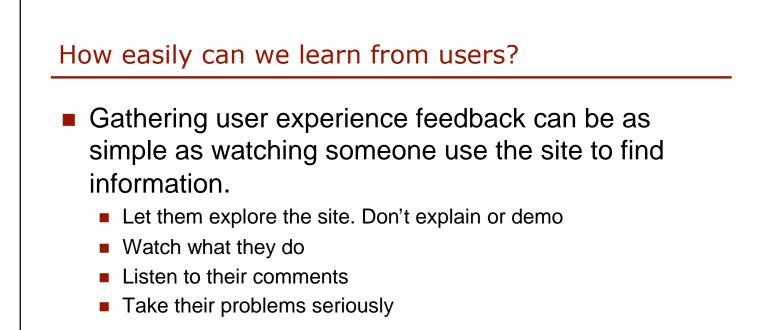
Usability Training for Local Election Officials



throughout the development process usability requirements to measure its success against human performance voter education materials meet requirements 7

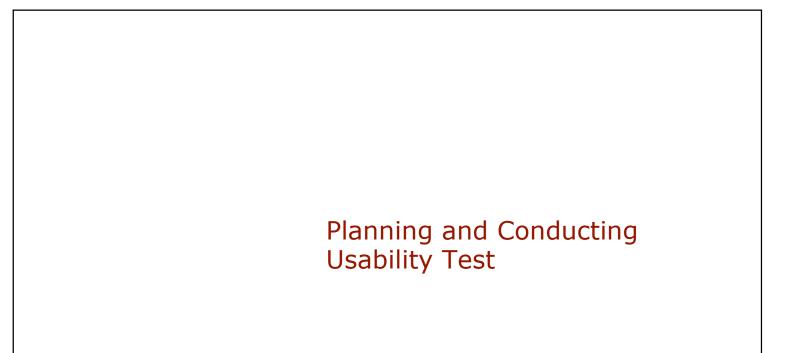
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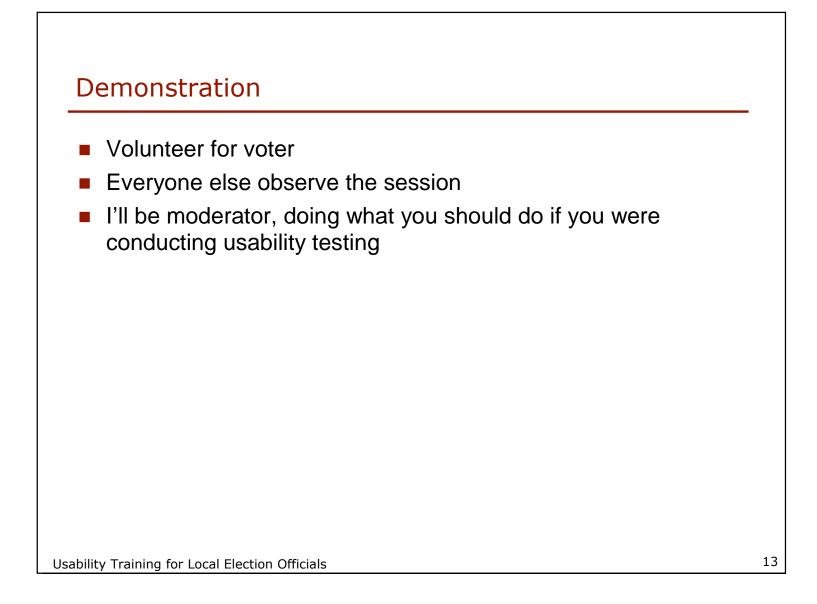


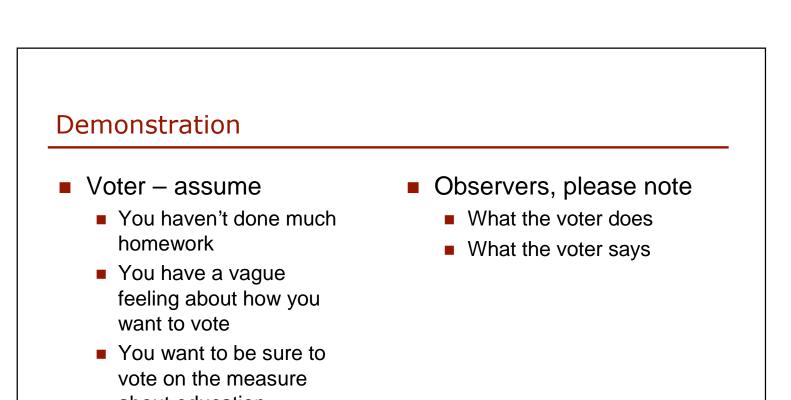




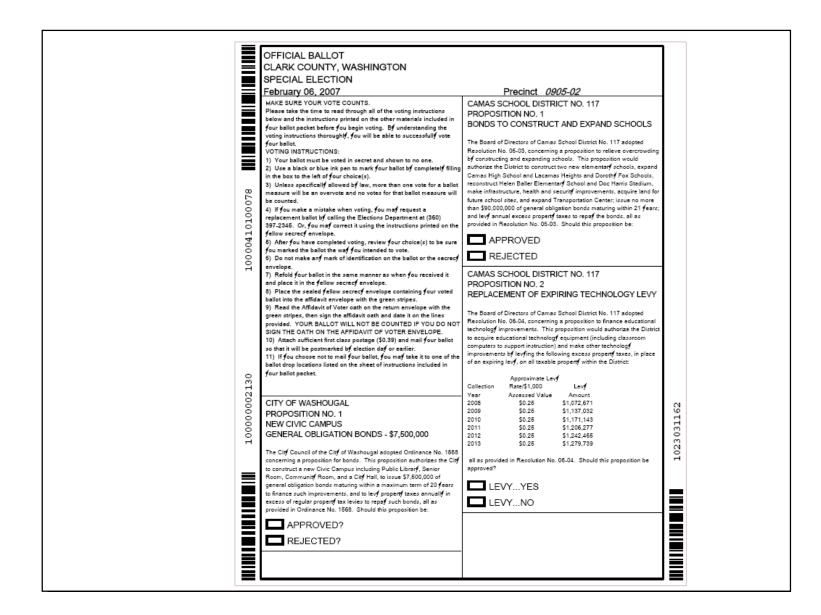
- Testing aimed at finding problems do not need:
 - A formal laboratory
 - 100's of participants
 - Special equipment (except for your voting system)
 - Special recording systems

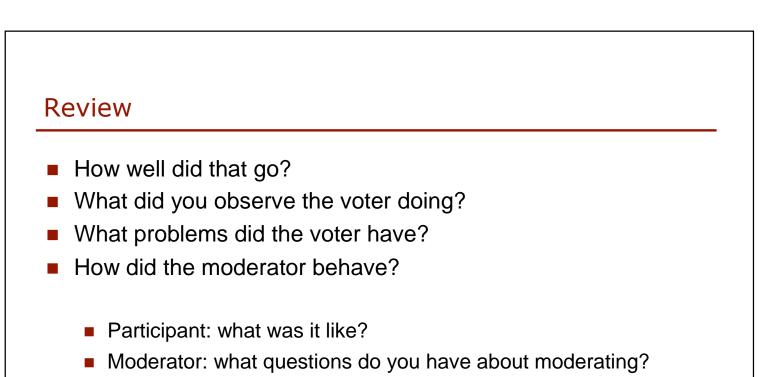




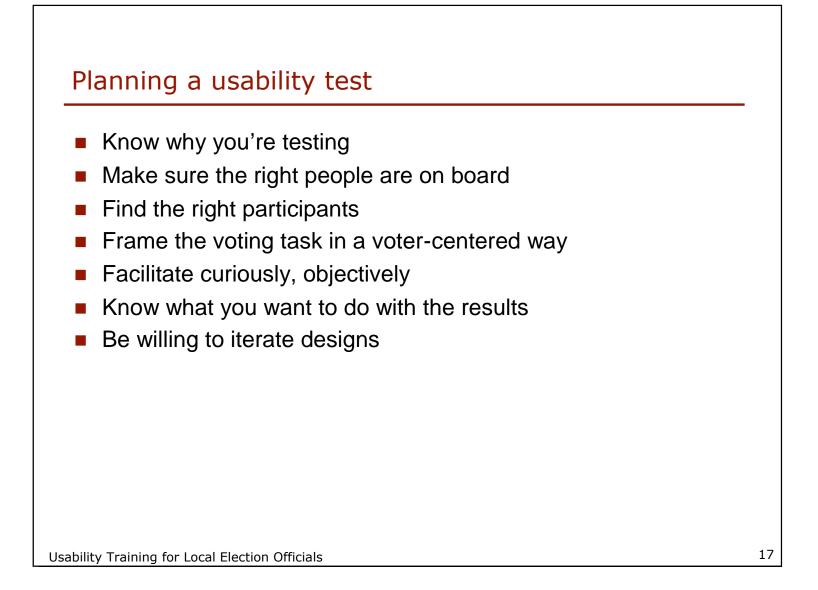


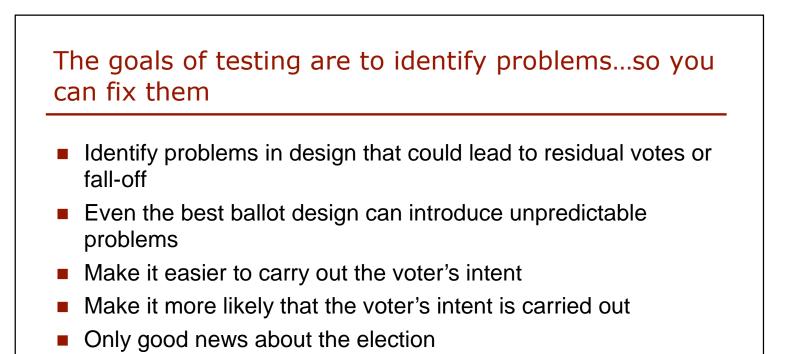
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Usability Training for Local Election Officials	14

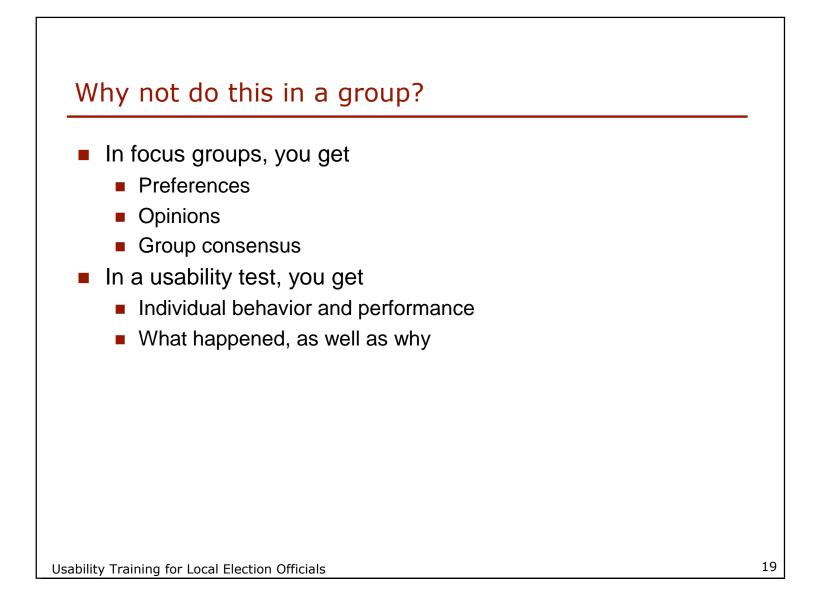


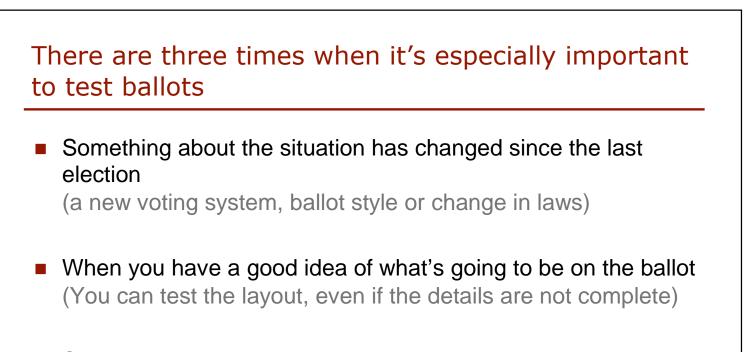




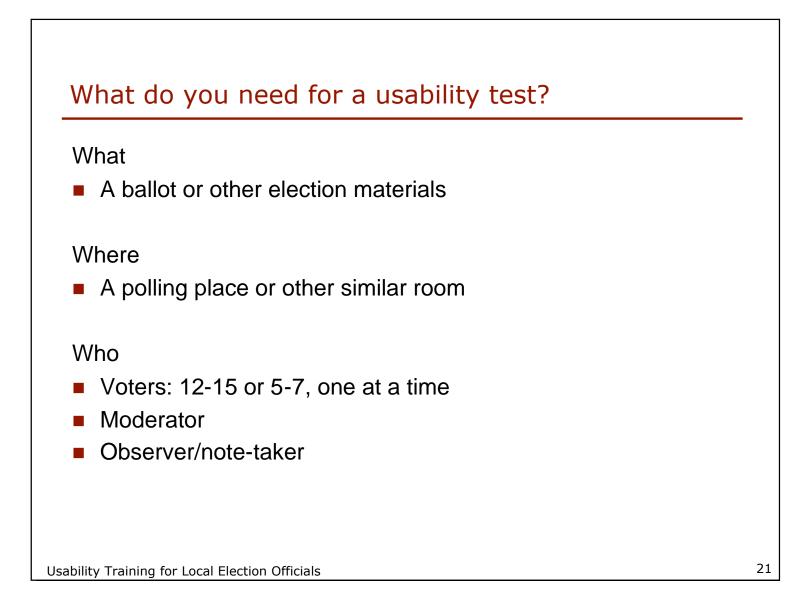


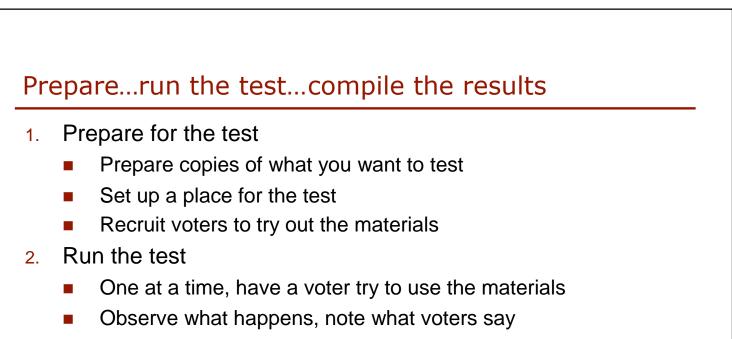






 Some event happens that would change the layout (a candidate dies or is disqualified at the last minute)
 Usability Training for Local Election Officials



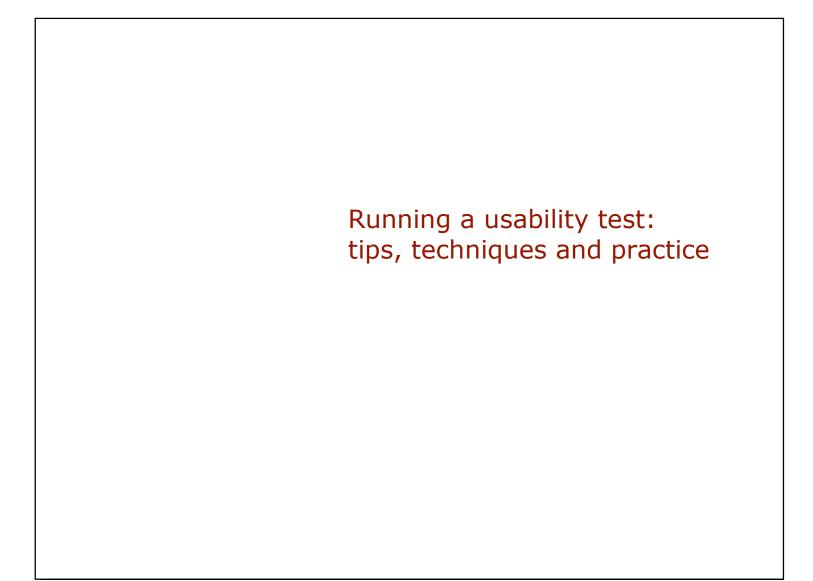


Ask the voter to step through what they did, where there were

questions, what was confusing

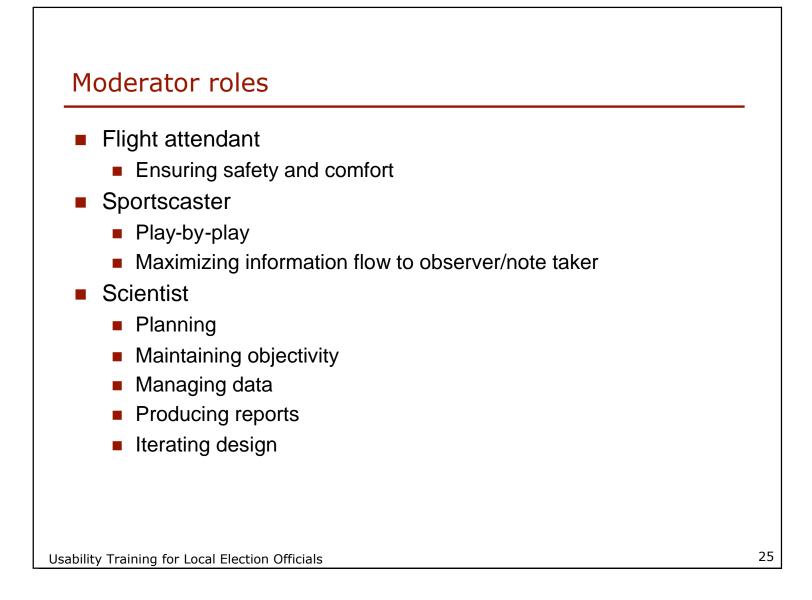
- 3. Compile the results
 - Over several voters, look for patterns in their problems and questions

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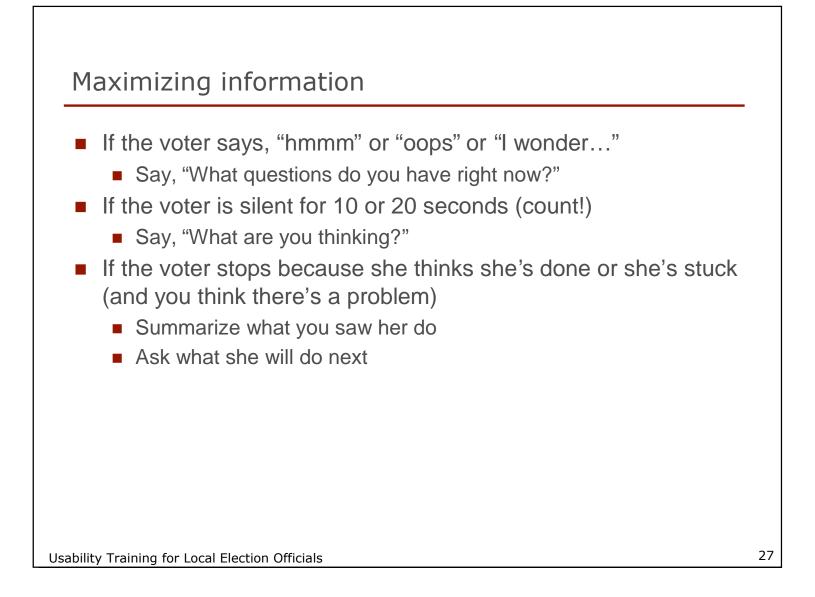
Moderating

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



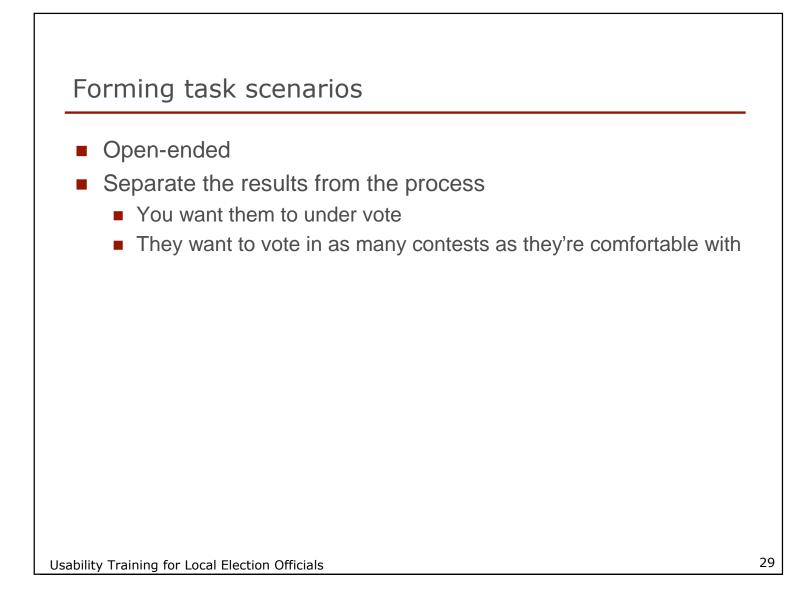
Briefing the voter

- 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



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

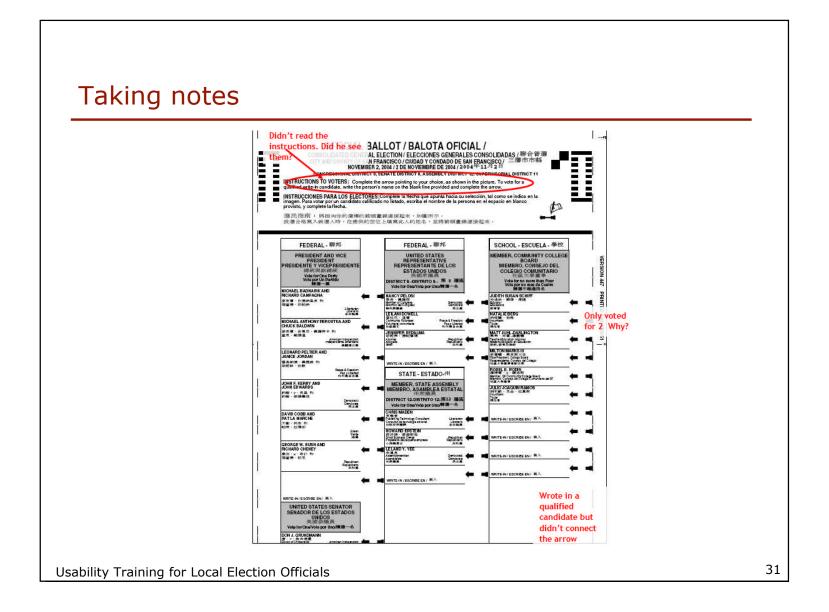


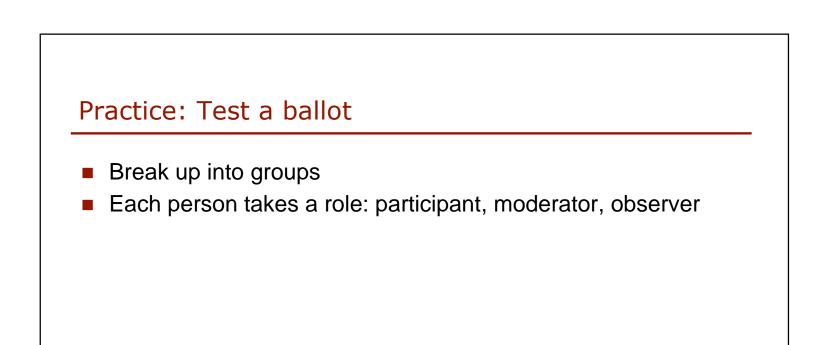
Task examples

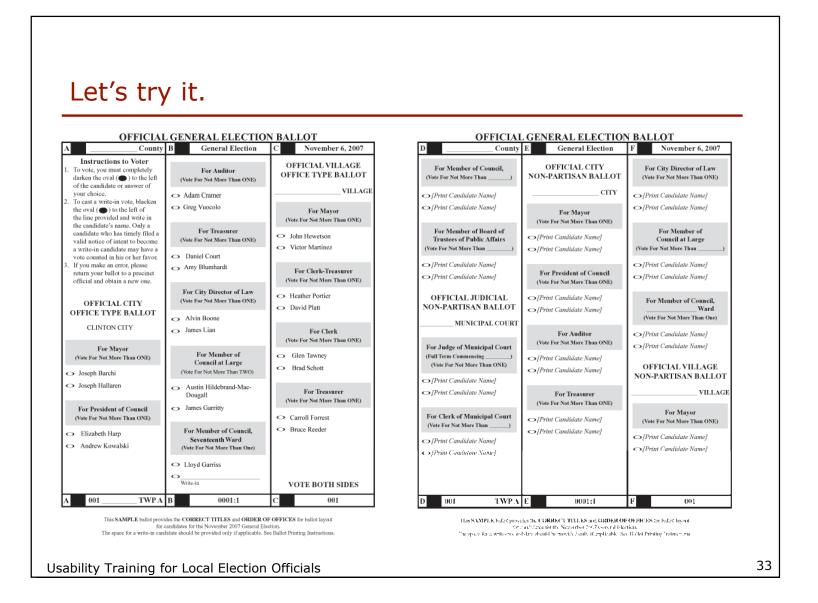
- You usually vote for everyone in the Yellow party. Vote for all the people in that party at one time.
- For State Senator, instead of the Yellow party person, you want the Orange party person. Make sure your vote for State Senator is for the Orange party person.

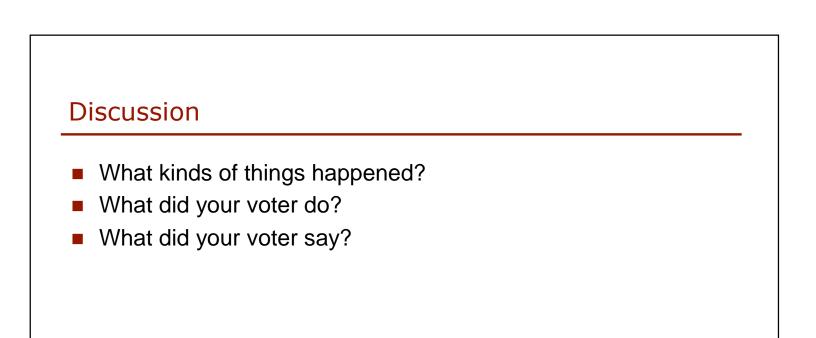
For now, you decide not to vote for Water Commissioners. When you are ready, finish voting as you really would in a real election.

Usability Training for Local Election Officials









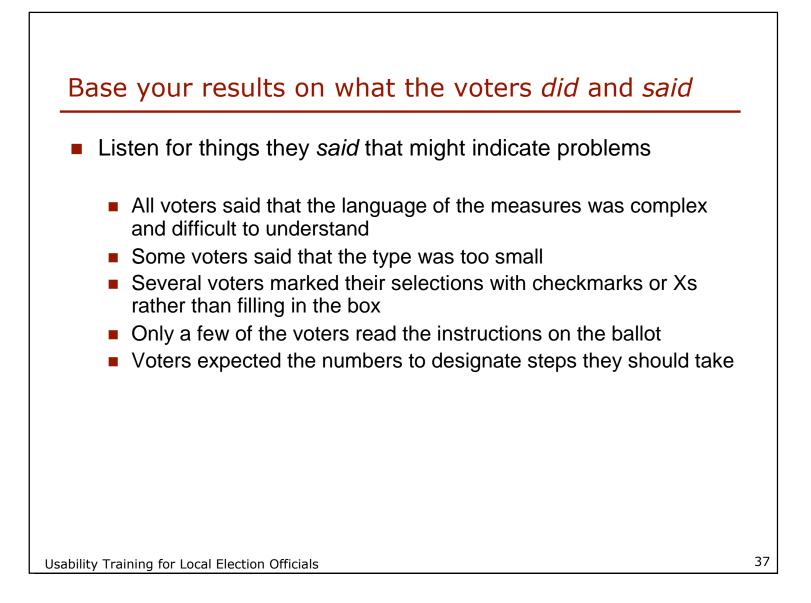
Learning from a usability test: Analyze what happened

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

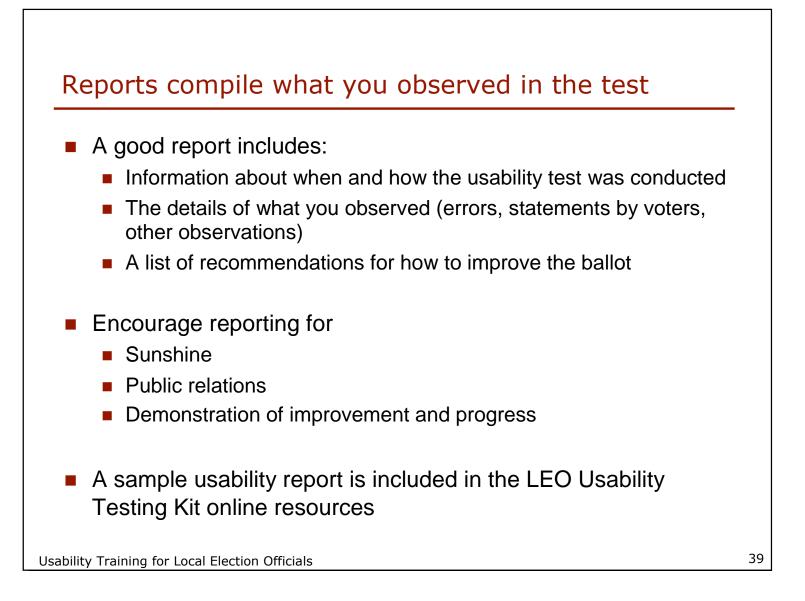
 Indications of voter emotion (confusion, frustration, anger, disgust; delight, satisfaction)

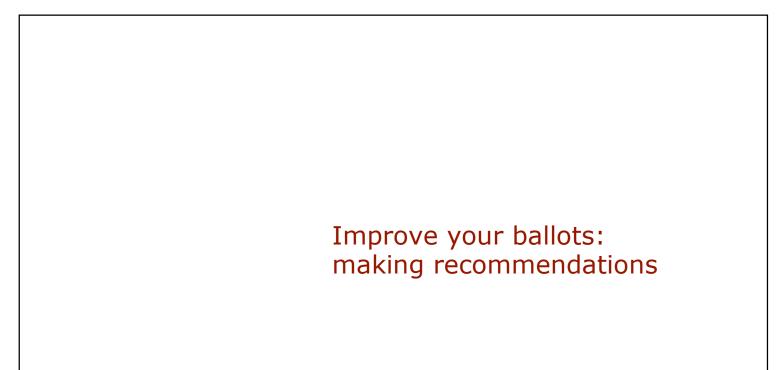
Usability Training for Local Election Officials

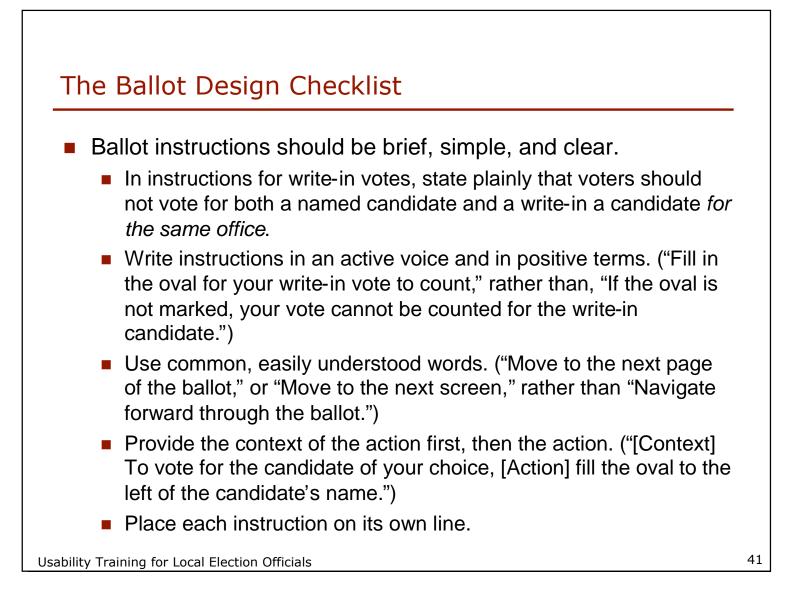




- Look for behavior that indicates potential problems
 - Hesitancy, corrections or asking for help all indicate that ballots may be difficult to use or that instructions are not clear
- Look for errors:
 - Count errors
 - Look at where in the ballot the errors occurred
 - Look at the types of errors
- 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

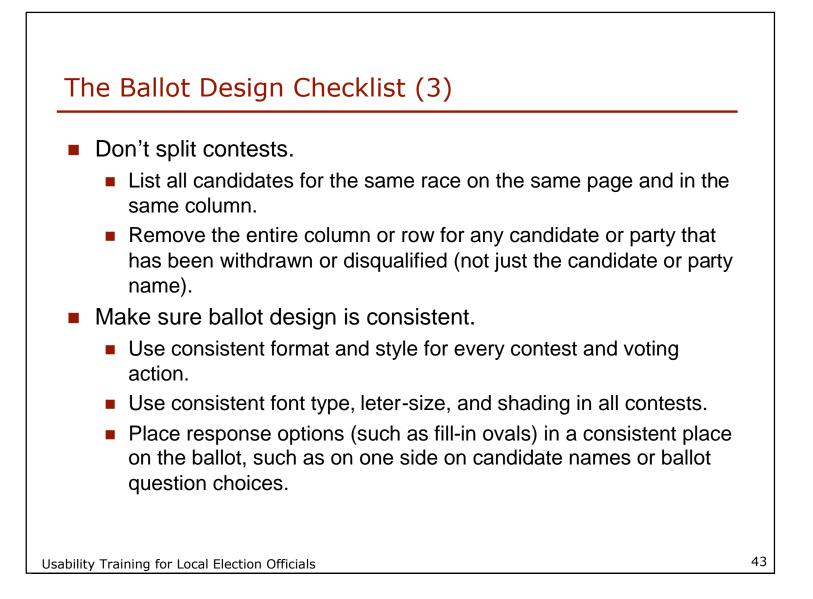






The Ballot Design Checklist (2)

- 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.
- 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.
- Degin
- Let voters know that if they make a mistake, they can get a new ballot. Include this information in the initial instructions.
- Instruct voters to review selections and provide clear instructions on how to change a selection and cast the ballot.



The Ballot Design Checklist (4)

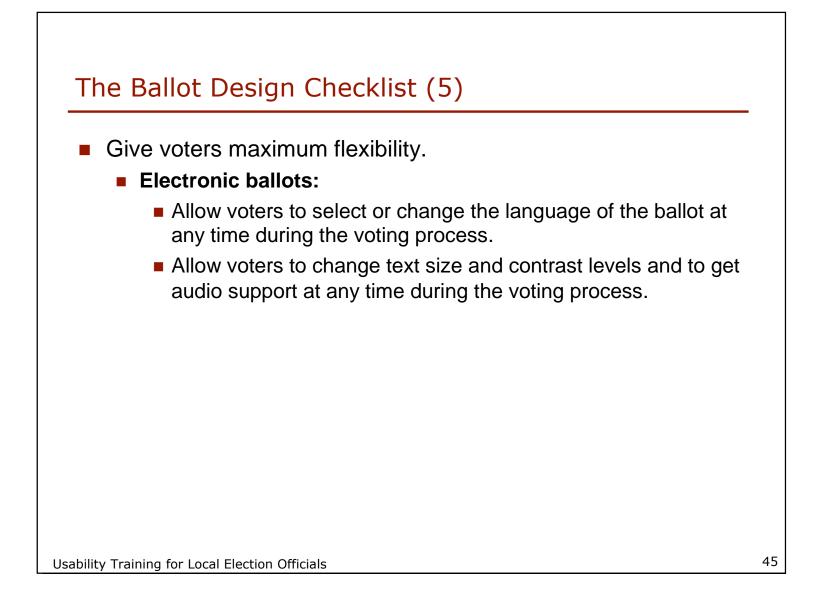
- Make ballots easy to understand visually.
 - Use flush-left text, instead of centered text.
 - Display all text in mixed case, rather than all capital letters.
 - Use a simple, easy-to-read font, such as Arial or Univers.
 - Bold and/or shade certain text, such as office names.
 - Use a legible, minimum 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.

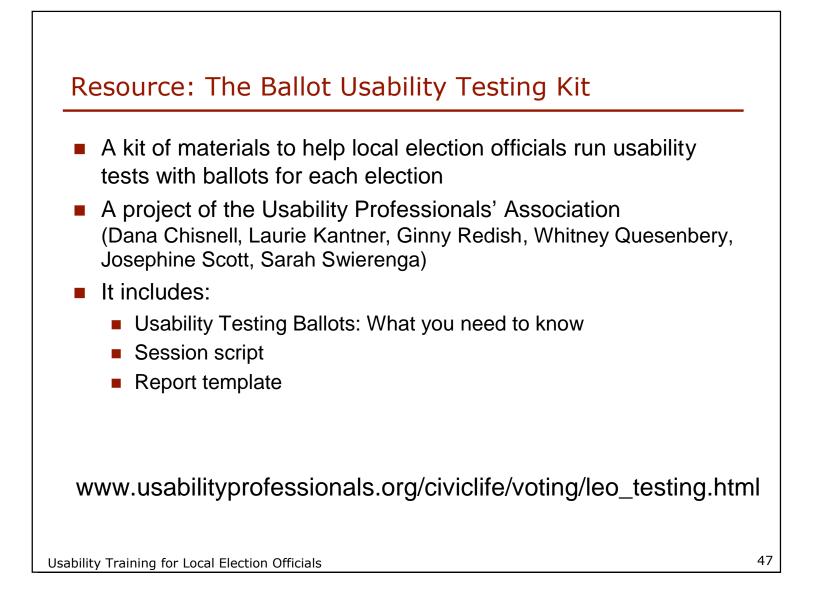
Electronic ballots:

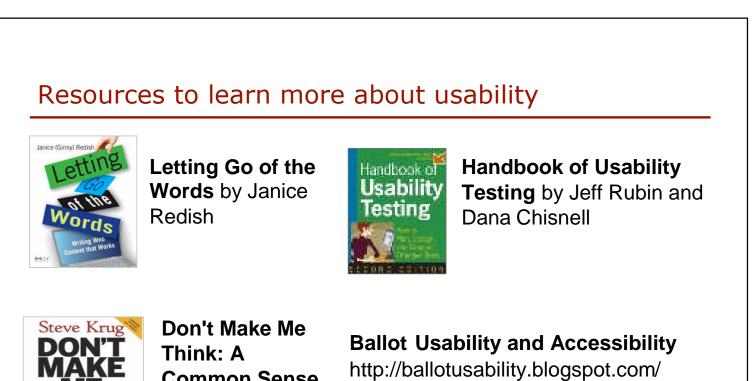
 Only place one contest on each screen.



Last words

- Usability test your ballots
- Understand the what happened in the test
- Turn that into improved ballots







Common Sense Approach to Web Usability by Steve Krug

Usability.gov

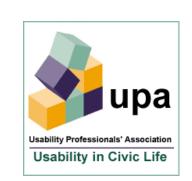
A guide to developing usable and useful web sites (from US Dept of HHS)

<u>BRENNAN</u> Center For Justice

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.

It has published two path-breaking reports: *The Machinery of Democracy: Protecting Elections in an Electronic World*, which focused on voting system security, and *The Machinery of Democracy: Voting System Security, Accessibility, Usability, and Cost.*



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