Test Report:
Ballot Usability Feedback – [Mitchell] County

To: [Election director / secretary of state / advisors]
From: [moderator name]

Executive Summary

This document describes results of usability evaluation of ballot designs and instructions for voting for the [November 2008 General] Election in [name] County. The usability tests collected quantitative and qualitative feedback from people who are like typical voters on [optical scan and electronic] ballots [as well as instructions for voting].

These evaluations were conducted between [date and date, year] on site at the election department. The ballots and instructions were evaluated in individual interactive sessions with 15 people.

[Sample summary: Overall, most participants were able to mark ballots, write in candidates, and figure out how to change their votes. However, participants had difficulty changing votes on DREs and understanding and following some of the instructions for voting. Generally, participants responded very positively to the organizational layout and usefulness of the ballots, and their appearance. Areas for improvement include: supporting vote-by-mail voters better with clearer instructions and simpler graphics, replacing traditional instructions for voting with plain language instructions, and adding prompts at the bottom right-hand column on optical scan ballots to turn ballot cards over.]
About the tests

The purpose of these usability tests was to observe how easily and successfully voters could vote on ballots for the [November 2008 General] Election. [Say something about how close to final the ballots were, or that the ballots were from a previous election, etc.]

We observed people who were eligible to vote doing so and noted what they did and said. We asked participants to vote as they normally would and then cast a ballot for the mock election session.

We tried to answer these questions:

- How easily and successfully did voters mark their ballots in all contests?
- How easily and successfully did voters review and mark their ballots on measures/propositions/issues?
- What questions and problems did voters have?
- Where did voters make mistakes? Were they aware that they had made mistakes? If not, why not? If so, what did they do to recover?
- What aspects of the ballot are difficult to understand?
- What do users like and dislike about the flow of ballot, e.g., navigation, organization of information, and grouping of content?

[Sample text: It was our intention to run individual sessions of 15 to 20 minutes. We scheduled participants ahead of time, but also did sessions with people who happened in to the county offices and would give us a few minutes.]

Who participated?

[Mitchell County]

[Sample text: Mitchell County is the Eden of Kansas, being rural and lightly populated, with many of the residents being descendants of children who arrived in Kansas in the 1880s on "orphan trains." Of the 15 people who took part in the usability test on [date], five were on town councils or on county commissions. Participants’ ages ranged from 25 to 72. The average age of the participants was just over 55.]

Sample data: ]
<table>
<thead>
<tr>
<th>Participant Number</th>
<th>Age</th>
<th>Zip</th>
<th>Race/ethnicity</th>
<th>Gender</th>
<th>Any physical limitations?</th>
<th>Registered?</th>
<th>Voted before?</th>
<th>Last voting system used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>71</td>
<td>94941</td>
<td>White</td>
<td>Female</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Optical scan</td>
</tr>
<tr>
<td>2</td>
<td>72</td>
<td>94930</td>
<td>White</td>
<td>Female</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Optical scan</td>
</tr>
<tr>
<td>3</td>
<td>63</td>
<td>94901</td>
<td>Asian</td>
<td>Female</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Mail-in</td>
</tr>
<tr>
<td>4</td>
<td>56</td>
<td>94903</td>
<td>Asian</td>
<td>Female</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Punch card</td>
</tr>
<tr>
<td>5</td>
<td>69</td>
<td>94901</td>
<td>Asian</td>
<td>Male</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Optical scan</td>
</tr>
<tr>
<td>6</td>
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<td>94904</td>
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<td>Male</td>
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<td>Yes</td>
<td>Yes</td>
<td>Mail-in</td>
</tr>
<tr>
<td>7</td>
<td>34</td>
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<td>Other</td>
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<td>Female</td>
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<td>Yes</td>
<td>Yes</td>
<td>Mail-in</td>
</tr>
<tr>
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<td>Female</td>
<td>No</td>
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<td>Yes</td>
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</tr>
<tr>
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<td>White</td>
<td>Female</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Punch card</td>
</tr>
<tr>
<td>11</td>
<td>63</td>
<td>94903</td>
<td>White</td>
<td>Female</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Mail-in</td>
</tr>
<tr>
<td>12</td>
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<td>94941</td>
<td>White</td>
<td>Female</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Optical scan</td>
</tr>
<tr>
<td>13</td>
<td>45</td>
<td>94947</td>
<td>(not marked)</td>
<td>Female</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Mail-in</td>
</tr>
<tr>
<td>14</td>
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<td>White</td>
<td>Male</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Optical scan</td>
</tr>
<tr>
<td>15</td>
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<td>94930</td>
<td>White</td>
<td>Female</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Punch card</td>
</tr>
</tbody>
</table>

**What did we test?**

[Name] was the main facilitator for all of the sessions with helpers from the election department. The helpers had also reviewed the LEO Test Kit. The helper greeted participants, explained the study, and walked through the informed consent form. The facilitator moderated the interviews and conducted debriefings with observers between sessions. The facilitator and helper worked together to debrief observers and elections officials at the end of the day of testing.
Sample text: There were observers from outside the Elections Department. With only two exceptions, these observers were from advisory committees to the department. The exceptions were a journalist and a photographer from the Mitchell County Independent Journal who covered the test.

We had briefed observers before the sessions started, giving them ground rules and a rundown of how the sessions were structured. The observers were earnest, respectful, and engaged. Their being present definitely helped move the discussion in end-of-day debriefings.

Ballots and voting materials tested

In Mitchell County, we evaluated optical scan ballots that the county had already worked on trying to improve based on the guidelines and suggestions in the EAC best practices report and the Brennan Center’s report, Better Ballots. We picked one ballot style to test, agreeing that it had the most complexity of the ballots that would be used in the election. All of the participants were successful using that ballot but many suggested improvements in the instructions. The instructions for using the ballot were simplified and replaced in time for the election.
Tasks

[Sample text: In our study, we asked participants to use the ballot to vote as they normally would. We watched for how they navigated and marked the ballot, whether they read the instructions, whether they remembered to turn the printed ballot over, how easily they changed votes on DREs, and then asked them how to write in candidates.]

Test Facilitator Tools

At the beginning of the session, participants completed a demographic questionnaire (see the data starting on page 2). At the end of the session, participants completed a satisfaction questionnaire in which they rated several statements subjectively. (If participants evaluated more than one ballot, they used the same rating form. See that data starting on page 9.) Then they answered several open-ended questions regarding their impressions of the ballot and voting experience.

The facilitator used a session script to ensure that all participants received the same disclosure about the study and generally the same instructions. The script also acted as a checklist for the facilitator to make sure she covered everything that the election director wanted to find out about. Otherwise, the facilitator and helpers behaved as poll workers would.

Results

What did participants find confusing or difficult?

[The following are all examples from real usability tests of ballots.]

General issues across voting systems

- Participants skipped reading instructions and went directly to voting
- Instructions for voting were unclear and difficult to understand
  - especially for first-time users of paper ballots
  - instructions used complex language: “Enclose ballot card in write-in ballot secrecy sleeve”
  - write-in instructions are problematic; it is difficult to convey the complex concepts simply and briefly
- Illustrations were too small and not obviously related to each other, the text, or the voter’s immediate task
- Participants suggested illustrating examples of correctly and incorrectly marked ballots
- Non-native English speakers requested materials in their own languages at best and in plain English at least
- Many participants complained that the language of measures was difficult to understand
• Some participants strongly suggested that sample ballots look as much like the real ballot as possible
• A few participants had questions about how to not vote in contests on paper and to skip contests on electronic ballots
• Most participants were unfamiliar with election jargon such as “electors,” “partisan,” “PBR,” and “overvote”

Optical scan ballots

• A few participants found multi-language ballots to be confusing
• A few participants marked ballots incorrectly
• Participants had suggestions for formatting the text of measures to separate out types of information
• Participants had difficulty matching up illustrations in instructions to how voting actually worked
• Aligning choices when connecting arrow ends was difficult for a few participants
• Participants assumed they could “x out” mistakes without spoiling their ballots, whether voting by mail or at a polling place

Electronic ballots on DREs

• Participants had difficulty finding instructions and reading instructions in the plastic sleeve
• Participants had difficulty changing votes (even participants who said they had used DREs before)
• Reviewing and changing choices at the end of the voting process was confusing and difficult
• Nevada ballot had “None of the above” as a choice on state contests but not on others, which some participants found odd
• Navigating from the Review page through the ballot was not easy
• Forced review of undervoted contests confused participants; one participant suggested a message that explains this is what is happening
• The type size on the paper printout was too small to be read by some participants
• Participants were confused about how to cast their ballots

Mail-in ballot packages

• Instruction booklets were visually cluttered, leaving voters overwhelmed: “too confusing to look at”
• It was often difficult to understand the order of information and what belonged together
• Some important things were not made obviously important

What changes did we suggest?

Though we provided some specific suggestions in each jurisdiction at the end of each day of testing, most of those suggestions roll up to these recommendations (see also the discussions about the ballots starting on page 4):

• Simplify language as much as legally possible.
• Use the largest type possible.
• Replace all upper-case text with mixed case.
• Left-justify headings.
• Use color, shading, and emphasis carefully.
• Revise instructions to use plain language, and conduct usability tests to determine whether the revisions remedy the problems.

What changes were made for the election?

Mitchell County was able to make changes in time for the upcoming election. We focused on the instructions for the ballot. Below we show the instructions we started with, the suggested language, and the language used.

**Original**

**Instructions to voters**

- Use only the marking pen provided or a ball point pen with black ink.
- **To vote for a candidate**, completely blacken the oval next to your choice, like this [image]. **Do not vote for more than the number of candidates to be elected.**
- When there are two (2) or more candidates to be elected for the same office, blacken the ovals next to each of your choices.
- **To vote on a measure**, blacken the oval next to the word YES or next to the word NO.
- **Write-in candidates**: To vote for a qualified write-in candidate, blacken the oval next to the blank line for the office and write the name of the person on the line. **Do not vote for both a write-in candidate and a candidate whose name is on the ballot for the same office.**
- All distinguishing marks on the ballot are forbidden and void the ballot.
- If you make a mistake, tear your ballot, or want to change a vote, return it to the election official and obtain another.

**Suggested**

**Instructions to voters**

Use only the marking pen provided or a ball point pen with black ink.

**To vote for a candidate**, fill in the oval to the left of the name, like this [image]. Vote only for the maximum number of candidates allowed for each race.

**To vote for a measure**, fill in the oval next to YES or NO.

**If you make a mistake or you want to change a vote**, take your ballot to an election
worker and get another.

To write in a qualified candidate who is not already on the ballot, fill in the oval next to a blank line for that office and write the name of the person on the line. Don't write in someone who is already on the ballot.

If you make marks on the ballot besides filling in the oval, your votes will not be counted.

Final

INSTRUCTIONS TO VOTERS:
• Use only the marking pen provided or a ball point pen with black ink.
• To vote for a candidate, completely blacken the oval to the left of the name, like this ☑. Where two or more candidates for the same office are to be elected, blacken the oval to the left of each of your choices.
• To vote on a measure, completely blacken the oval next to YES or NO.
• To vote for a qualified write-in candidate, completely blacken the oval next to the blank line for that office and write the name of the person on the line.
• If you make a mistake, damage your ballot, or you want to change a vote, take your ballot to an election worker and get another. All distinguishing marks are forbidden and void the ballot.
Satisfaction Results

We asked participants to rate their reactions to seven statements (shown in the left column in each table below). These subjective ratings data are based on a 5-point scale, from 5=Strongly agree to 1=Strongly disagree. The numbers in the cells represent how many participants gave the statement that rating.

Mitchell County – optical scan ballot

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I thought the ballot was easy to use</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The instructions for this ballot were difficult to understand</td>
<td></td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>It was easy to mark my choices</td>
<td>7</td>
<td>7</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would imagine that most people would be able to use this ballot without problems</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>I found this ballot awkward to use</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>I felt very confident casting my vote using this ballot</td>
<td>7</td>
<td>6</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would need help to use this ballot</td>
<td></td>
<td>2</td>
<td>5</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>