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On the importance of clear writing and information design for ballots and other materials for voters and poll-workers

Madam Chair, Members of the Committee, and other attendees:

Thank you for inviting me to address this hearing. The perspective that I bring to this discussion is that of a specialist in clear writing, information design, and usability.

Introducing myself

My name is Dr. Janice Redish. I am a linguist by training with a Ph.D. from Harvard University.

For more than 25 years, I have been helping government agencies and private companies to make information clear and understandable to the people who must use that information. I began my work in this field in 1978 through a major federally-funded project in which my group studied the problems that people have with public documents and found ways to help both the people who created those documents and the people who used them. From 1978 to 1992, I was an institute director and then a vice-president at the American Institutes for Research, a not-for-profit scientific research and development firm in Washington, DC. There, I led an interdisciplinary team of linguists, psychologists, anthropologists, and human factors specialists, as well as writers, editors, and designers who helped clients to make documents – regulations, forms, notices, letters, and instructions – clear and usable. Since 1992, I have been President of Redish & Associates, Inc., a consulting firm in Bethesda, Maryland.

Many of the projects that I work on take complex documents, like federal or state legal regulations, and revise them, using a well-developed and understood methodology, called user-centered design. The resulting documents are legally accurate, legally sufficient, and also clear and usable. Those goals are not mutually exclusive.

I am a Fellow and former Board of Directors member of the Society for Technical Communication, a professional society of more than 20,000 specialists in clear writing. I am a founding member and former Board of Directors member of the professional society of usability specialists, the Usability Professionals' Association (UPA). This year, I participated in the workshop organized by UPA's Voting and Usability Project, where a multidisciplinary group developed guidance on usability for the voting experience that led to contributing an informational annex on usability testing to IEEE P1583.

Ballots, signage, and instructions are a critical part of the voter's task

Let us think about the task of voting. Imagine, if you will, the voter doing this task – from walking into the polling place to going into the voting booth to walking out again. In any task, we have a person (in this case, our voter) who is trying to do the task – and we have all the people and materials that the person has to interact with to accomplish the task.

Those people and those materials can help – or hinder – the voter in accomplishing the task. Of course, the most important material that the voter interacts with is the ballot. To me – and to the voter – the ballot includes instructions for voting, labels on controls, formats for voting (connecting arrows, pressing out chads, touching the screen) as well as the candidates and ballot questions.

The way that the ballot is written and formatted – whether on paper or on a computer screen – can, in fact, help or hinder the voter. The words and pictures (or symbols) on the ballot, the ways those words or pictures/symbols are put together, and the presentation (the layout or formatting) of the ballot are all critical to whether voters succeed or not in voting the way they want to vote.

Specialists in clear writing, information design, and visual design can help

This is where the professional specialties of clear writing (also known as plain language), information design, and visual design come in. These are professions in which we have research-based, evidence-based guidelines and best practices that can make the difference between a ballot that causes voters to do something they did not want to do and a ballot that allows voters to quickly and easily vote for the candidates of their choice.

Research in many fields, including cognitive psychology, ergonomics, linguistics, and visual design informs these guidelines and best practices. To give you just one example, research shows that we read text in all capital letters more slowly than text in upper and lower case letters – and that we are more likely to stop reading when the text is in all capital letters. In addition, in most type fonts, all capital letters take up as much as 30% more space than the same letters in lower case. And yet we see paragraphs of instructions on ballots in all capital letters.

Clear writing and plain language refer to the words and the way the words are put together into sentences and paragraphs. Information design and visual design refer to the layout, presentation, formatting of the ballot – whether it is on paper or on a screen. Some people specialize in one; some in the other; some like myself and others specialize in both clear writing and information design.

These professional specialties all contribute to usability

Most specialists in clear writing and information design also take a broad view of the work required to produce a successful product (in this case, a ballot that helps – and does not hinder – voters). That broad view is also often called usability – because that is what we are trying to achieve – a usable document.

What is usability? What is a usable document? What is a usable system? My answer has always been that successful writing, successful information design, successful usability mean that the users (in this case, the voters) can

- find what they need
- understand what they find
- act appropriately on that understanding

and do all that in the time and effort that they think the task is worth.

Clear writing, information design, and usability specialists can help at all levels of the voting process, from working with the manufacturers to plan technologies for voting to creating the screen layouts and instructions for new voting systems to working with local election officials to develop ballots for specific elections, signage, and instructions for voters and for poll workers.

We can improve materials even given technical and legal constraints

I realize that there are constraints on what can be done for any specific ballot – constraints imposed by technology; constraints imposed by federal, state, or local law. When we take a long view into the future, we may find that changes in

technology and even changes in law may be the best way to get systems that meet the needs of all voters. But even working within constraints, there are ways of making ballots easy for voters.

An example

Let me illustrate with an example from a real ballot.

This is a sample ballot from an optical scan system that was used in a general election in 2000. In a real project, I – or any other usability professional – would, of course, work closely with the local officials. Creating or revising a document must be a team effort. Therefore, my comments today must be taken in the spirit of constructive critique and suggestions only.

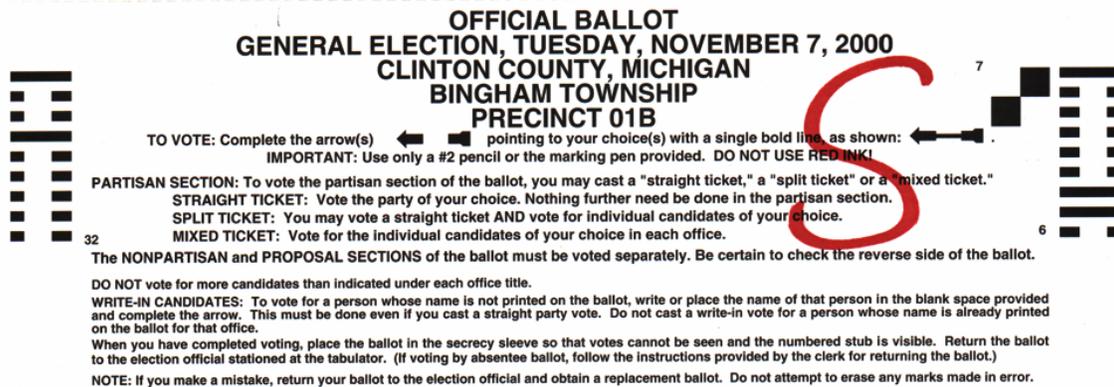


Figure 1. The instructions from the top of a ballot used as an example in this statement

The top of the ballot includes instructions. I could comment on almost every line here, but let's look just at the lines that describe the sections of the ballot.

Before voters even get to the meat of the ballot, they are confronted with explanations that may be confusing. "Partisan Section" This line does not explain what "Partisan" means in this context. Many users will feel lost right here because they do not understand the term. Election officials spend so much time in the language of elections, that it is hard for them to remember that typical voters may not know or be comfortable in that language. This problem is, of course, not unique to election officials; it's the problem of "jargon" in any field. The language that we use every day in our work becomes second nature to us and we forget that it is not plain language – that people who do not work on these

issues every day may not know our words. And voting is not an every day activity.

All the instructions are clustered at the top of the ballot. Research shows that people tend to skim and skip over information if it is not immediately relevant and they will be more successful if the instructions come at the moment that users need them. This means rethinking how the ballot is laid out and the words that are used on it, but we might better serve the voters if we did that.

The voters' experience is more than the ballot

I have spent the past five minutes talking about and showing you the importance of clear writing, information design, and usability for ballots.

But let's go back to thinking about our voter and the entire task of voting – where completing the ballot is only part of the task, albeit the most important part. There are other people and materials that are part of the overall voting task. Before voters even get to the polling place, we have the instructions they receive about where to go to vote and how to vote. It is critical that election officials write these clearly, also.

The instructions sent out to Florida voters who used the Votomatic machine say "Step 4. Vote all pages." Shortly after the 2000 election, the New York Times reported that "get out the vote workers" in some precincts reminded voters to "vote all pages." Unfortunately, the butterfly design put one race – for President – across two pages. We might speculate that this instruction caused some of the misunderstanding that contributed to overvoting.

You may be thinking, but getting it right is complicated. Yes, sometimes it is. But that's what professional technical communicators do. They solve problems in how to communicate complex information so that the people who need that information understand it. And we have a proven technique, usability testing, for finding out if the people who will be using the information understand it – and finding that out *before* it causes problems.

When the voter comes to the polling place, signage becomes important. Where the signs are put, what they say, how they use arrows or other symbols, all impact the voter's experience. These instructions and signs can also help or hinder voters. And specialists can work with election officials to make sure that signs, too, help, not hinder.

Poll workers need clear instructions and training

Poll workers are also part of the voting process and of the voter's experience. Their training and understanding of the process is critical. They are the human face of voting and their communication skills can affect whether an eligible voter even gets the opportunity to vote.

Just as we pictured the voters interacting with people and materials to vote, we must picture the poll workers trying to accomplish their tasks – arranging the polling place, setting up the machines, helping users, and taking down the machines. So instructions for poll workers and training materials for poll workers are also important. And the same skills of clear writing, information design, and usability are relevant.

The EAC must keep the voting experience from being overwhelming

One of the goals of the Election Assistance Commission must be to make the experience of voting as comfortable as possible for as many people as possible. Traditionally, in this country, we have relatively low turnout to vote. We do not know to what extent low turnout is due to people finding that trying to vote is an overwhelming experience. My guess is that the experience *is* overwhelming to many people – to come to what may be a place not often visited, into a bewildering array of signs, to instructions that are not clear, to a ballot that confuses rather than helps. A frustrating experience may lead to just not bothering to try again in another election.

The EAC should adopt a standard that these materials must be understandable

I urge the Election Assistance Commission to adopt a standard that the ballot and all the signage and other instructions in the polling place must be understandable and usable to all voters. I urge the Commission to provide guidance to election officials in clear writing, information design, and usability. And to remember that guidance must also be written clearly. A model for the level of guidance that would be appropriate might be the Department of Justice's ADA Checklist for Polling Places, <http://www.usdoj.gov/crt/ada/votingck.htm>.

The way to find out if a particular ballot is understandable and usable is to conduct usability testing with representative users on a sample ballot. Beyond

usability testing for certification of machines, we should also have usability testing (on a much smaller scale) of specific local ballots for specific elections.

With all the focus on security, it is too easy to forget that voting is about people – and the materials that communicate the voting process. I urge you to focus on usability, accessibility, and clear communications as critical components of a standard.

Thank you for the opportunity to present my views to the Committee. I would be pleased to answer questions.