Position Paper
Design to read: Designing for people who do not read easily

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Past work and interest in the topic
I have been active in plain language for more than 30 years. Plain language to me means designing information (in whatever medium) that works for the people who must read, understand, and use it.

For almost every project I have worked on, the many audiences have included people who do not read easily. Their difficulties may come from one or more of many different factors: too little schooling, ineffective schooling, trying to read in a second -- or third or fourth -- language, or specific disabilities, such as dyslexia or other cognitive impairments.

In fact, my introduction to clear writing for functional documents (also to information design and usability) came in 1978 in the request for proposal for what became the Document Design Project and then the Document Design Center. In the request for proposal, the U S government agency that was looking to fund a large project on why people have so much trouble with public documents required all respondents to carry out two example assignments. One of those required assignments was to revise a typical apartment lease with an emphasis on making it work for low-income renters. We changed the organization, formatting, and writing in the lease, focusing on the needs of people who do not read easily; and we conducted usability tests of our prototype in a community center in an inner-city neighborhood of Washington, DC. The experience was eye-opening to all of us on the team. I don't know if we were the only proposers who took the assignment through the entire user-centered design process with people who do not read easily, but I am convinced that the way we carried out the assignment contributed significantly to our winning the project.

Knowing how serious and widespread the problem of functional literacy (illiteracy) is in the U S (as well as, I'm sure, other countries), I have always been concerned with writing for people who do not read easily. It remains a critical topic for both print and web.

Current motivation for the workshop
As the workshop organizers point out, research shows that when we make information work better for people who do not read easily, everybody does better. In my workshops (tutorials) on writing for the web, I make the point that while we want simple language for low-literacy people, we also want simple language for high-literacy people. High-literacy people are often the busiest and most impatient users of your information. And we all read simple, common words faster than long, abstract, less common words. Plain language helps everyone. Straight-forward, clear flow of information helps everyone.
That said, we still have issues to consider related to people who do not read easily.

**Critical issues**
Here are four issues that I would like to see us discuss at the workshop:

1. **Question:** How can we design and write to help people get the true meaning of a message?

   **Explanation of question:** In our research at the Document Design Center, we found that people who have significant problems reading tend to read in small chunks and take the meaning of each small chunk very literally. They often do not get the "big picture" of what is going on in the information. They are spending so much effort on decoding that they don't really comprehend, and thus they miss a lot of the meaning that is behind the literal words.

2. **Question:** Can the way we design and write information help at all in making up for knowledge gaps that go beyond the ability to read?

   **Explanation of question:** This issue is related to my first question but goes beyond it. In research at the Document Design Center and in more recent research on ballots that Dana Chisnell and I did, we found that the same people who have trouble reading also have other knowledge deficits that keep them from being successful at a task. In the workshop, I can describe two examples of this problem -- one in application forms and another in voting.

3. **Question:** How do people assess reading level quickly when screening potential participants or at the beginning of a usability test session without giving a full-scale reading test and without making the participant uncomfortable?

   **Explanation of question:** I know of a quick assessment sheet for medical terminology, but that is not appropriate for all topics that we do usability testing on. I also know of formal tests of reading ability, but they are not suited to the time we have in a typical usability test session. I am interested in ways of being able to measure an individual's reading level objectively and quickly.

4. **Question:** Can reducing the reading burden of information be automated?

   **Explanation of question:** Some web sites include multiple versions of information, including an "easy to read" version. But I think those are hand-crafted. In the 1980s, I knew of a computer program that claimed it could automatically give you the "gist" of an article. While in Boulder for a semester, I also worked with a U Colorado group that had a grant from Google to investigate finding ways to automatically create "easy read" versions of web pages for people with cognitive impairments. The group did not get very far in doing that while I was there. I understand that a graduate student is still working
on it, but I think they are far from a practical application. Is this even feasible? How would one do such a project?

**Issues to avoid**
We should not spend time discussing: Readability formulas and grade level assessments as measures of success. I hope that the group agrees these are not the way to measure either reading or writing.

I look forward to a productive day with interesting discussions.
Ginny Redish