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# Design to read: designing for people who do not read easily

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**Abstract**

Many people do not read easily. They may have an impairment such as a visual problem. They may be reading in stressful conditions or poor light, or perhaps they are reading in a second language.

Is it possible to provide one consistent set of guidelines or approaches that will allow designers of electronic materials to meet all the apparently diverse needs of these people? Or are there compromises to be made? If so, what are those compromises?

**Keywords**

Accessibility, internationalization, universal design, readability, legibility

**ACM Classification Keywords**

H5.2. Information interfaces and presentation (e.g., HCI): Style guides and user-centered design

**Introduction**

Reading is a skill many of us take for granted. We learn as children and perfect (or so we hope) the ability as adolescents. It is something many of us do not even consider as a conscious activity.

Many people, however, do not read easily. This might be because of an impairment, poor access to literacy or because English is not their first language. In addition to reading the text itself, there are often other barriers or obstructions to reading, often because of poor design, layout and use of language.

The Design to Read project was founded by two practitioners, Katie Grant and Caroline Jarrett. We aim to bring together:

- researchers
- practitioners
- advocacy groups
- people who share their personal stories of why reading is difficult

so that we can:

- share resources
- understand best practices
- learn from each other

and most of all, improve the lives of people who do not read easily.

### **Aims of the workshop**

This workshop aims to explore the reasons why some people do not read easily, and what we can do to design electronic and other materials for them.

The workshop will actively encourage attendees to question the approaches that they use as designers or that they recommend based on their work with people who do not read easily.

### *The design challenge*

Many diverse problems affect reading in different ways, for different reasons. Consider challenge of designing for the following individuals:

- Jason: was diagnosed with dyslexia as a teenager. His family didn't read much - there were no books in the house. Schools in his area were poor. Now he is trying to make sense of a complex government form in small print that looks frightening. Which of his problems is most important? Are they distinct or not?
- Shali: education wasn't available in her village years ago. Now her sight is poor. Is designing for her anything like designing for Jason?
- Stephen: his profound learning disabilities result from cerebral palsy. He communicates primarily through his carer. Is designing for him anything like designing for Shali or Jason?

It seems rather likely that these are separate challenges. But we also know, for example, that people with visual impairments do not want to have a separate web site just for them: they want to be able to experience the same web site as everyone else, albeit in a different way.

### *A common set of guidelines?*

When it comes to designing for Jason, Shali, Stephen and the many other people who do not read easily, what do we know and what are we researching? Are we asking the right questions?

Whilst guidelines may have been written, have they been tested and evaluated with the audiences they are aimed at? The problem set is wide – how do we capture and engage with these people? How do we consider

their needs? Also, by engaging in consultation/user testing etc there is then an expectation to deliver and improve provision. Where does this support and commitment come from? Whose responsibility is it?

### **Previous work**

We started the project with a workshop in Liverpool, UK at the HCI 2008 conference. There were three outcomes:

- a wiki ([www.designtoread.com](http://www.designtoread.com)) that contains the position papers and links to resources recommended by workshop participants
- a framework that aims to show how the guidelines and approaches recommended by participants reflect the types of audiences that they are working with
- a recommendation that we should hold more workshops at other conferences.

We continued with a mini-workshop at a conference for technical communicators (STC 2009). This confirmed that practitioners do want to understand the compromises that they might need to make when designing readable materials for diverse audiences.

### **This workshop**

At CHI 2010, we plan to focus primarily on design, and on how approaches to design can influence and improve the readability of documents. If accessible design elements are incorporated into documents then the ability to read and absorb information can be vastly improved. As an example of one design technique, we

have attached an Appendix written in Easy Read that describes this workshop.

As with the previous workshops, we want to:

- bring together people who are working in the area of designing for people who do not read easily, whether as researchers, practitioners, advocates, or as individuals who themselves have problems with reading
- find further resources and approaches that are being used. Our experience has been that each group has its own guidelines, and we want to identify guidelines that are similar across different sets, and also contrasts or contradictions
- work with specific examples of guidelines or approaches on a typical web design problem, to help to understand how they help with design
- use the framework created at the HCI2008 workshop, to establish whether attendees find it helpful as a way of comparing their work with others'.

### **After this workshop**

During the workshop, we will prepare a poster for the CHI conference.

After the workshop, we plan to update the wiki with the resources, position papers, and recommendations from the workshop.

### **Acknowledgements**

We thank the participants in the HCI 2008 workshop for their enthusiasm and contributions to this project.

## **Making things easier to read**

### **What this workshop is about**

#### **Workshop**

**A workshop is a place for people to meet and share their ideas.**

It is very important that everyone has the chance to read.

Here are some of the people who might have problems with reading:

- People who cannot see well.
- People who need to read when the light is bad.
- People who need to read when they are upset or tired.
- People who have learned an extra language.

Sometimes the way that words and pictures are put together can make things hard to understand.

We want to invite people to talk about this in our workshop.

We want to help people who make books and web pages. We want the books and web pages to be easy to read and understand.