## Changes to Content Usable 21 May 2020

## **List of Changes**

#### 1. Revised the Abstract

## Original

This document is for people who make Web content (Web pages) and Web applications. It gives advice on how to make content usable for people with learning and cognitive disabilities.

This document has content about:

- o people with learning and cognitive disabilities,
- o user needs,
- user testing,
- design patterns (ways) to make content usable, and
- o advice for policy makers.

This document builds on the Cognitive Accessibility Gap Analysis and Roadmap, Cognitive Accessibility User Research and Cognitive Accessibility Issue Papers to address user needs that are not met in technologies and accessibility guidelines.

#### Revised

This document is for people who make Web content (Web pages) and Web applications. It gives advice on how to make content usable for people with learning and cognitive disabilities.

This document has content about:

- people with learning and cognitive disabilities,
- including users in design and testing activities,
- o aims and objectives for useable content,
- o design patterns (ways) to make content usable, and
- personas (examples) and user needs.

The Objectives and Patterns presented in this document supplement the Success Criteria presented in the WCAG accessibility guidelines and address those user

needs that are not fully met in accessibility guidelines. They are designed to be informative and user friendly. They build on the:

- Cognitive Accessibility User Research,
- Cognitive Accessibility Issue Papers, and
- Cognitive Accessibility Gap Analysis and Roadmap.

## 2. Reorganized the Document

## Original

- 1. Summary
- 2. Introduction
- 2.1 Background about People with Learning and Cognitive Disabilities
- 3. Design Guide
- 4. Building in the User
- 4.1 Process
- 4.2 Usability Testing, Focus Groups and Feedback
- 5. Use Cases/Persona
- 6. User Stories

#### Revised

- 1. Summary
- 2. Introduction
- 2.1 Background about People with Learning and Cognitive Disabilities
- 2.2 Building the User into the Development Process (Note: This was 4.1 Process)
- 3. User Stories
- 4. Design Guide
- 5. Usability Testing, Focus Groups and Feedback
- 6. Use Cases/Persona
- 3. Changed #3 in Summary (Editor team please double check)

Changed "Use clear and understandable text and images." to "Help users understand with clear text and images."

## 4. Revised the Introduction

## Original

Making websites and applications that are friendly for people with cognitive impairments affects every part of design and development.

Traditionally accessibility focused on making the interface usable for people with sensory and physical impairments (vision, hearing and/or mobility). Some accessibility features will help people with cognitive impairments, but often the issues are about context, language, usability, and other more general factors that impact everyone to some degree.

This document aims to provide guidance on how to make websites and applications that are friendly for people with cognitive impairments by providing guidance for your designs and design process.

#### Revised

Making websites and applications that are friendly for people with cognitive impairments affects every part of design and development.

Traditionally, accessibility focused on making the interface usable for people with sensory and physical impairments (vision, hearing and/or mobility). Some accessibility features will help people with cognitive impairments, but often the issues that affect people with cognitive and learning disabilities about context, structure, language, usability, and other factors that are difficult to include in general guidance.

This document aims to provide guidance on how to make websites and applications that are friendly for people with cognitive impairments by providing guidance for designs and the design process.

5. Changed 3 sentences in 2.1 Background about People with...

## 1. Original

People with cognitive and learning disabilities may not be able to effectively use web content because of the design and content choices of the author.

### 1. Revised

Design, structure and language choices can make content inaccessible to people with cognitive and learning disabilities.

#### 2. Original

However, for users with cognitive and learning disabilities, these difficulties are likely to be persistent and significant, so that they are unable to access content and may be forced to abandon tasks, without any way to complete them unaided.

#### 2. Revised

However, for users with cognitive and learning disabilities, these difficulties are likely to be persistent and significant. As a result, they could be unable to access content and complete these tasks unaided.

## 3. Original

People may also experience a co-occurrence of difficulties such as dyspraxia / developmental coordination difficulties and ADHD should also be taken into account.

#### 3. Revised

People may also experience a co-occurrence of difficulties such as dyspraxia / developmental coordination difficulties. People with ADHD may also be helped by some of these techniques.

People may also experience a co-occurrence of difficulties such as dyspraxia /ADHD/ developmental coordination difficulties

People may also experience more than one type of difficulty such as dyspraxia and ADHD with developmental coordination difficulties.

Cognitive and learning disabilities are usually hidden difficulties and may be age related. The terminology and definitions used for cognitive disabilities varies between countries and users are less likely to have a formal diagnosis of a disability than individuals with physical and sensory difficulties. Often, only some functions are impaired while other cognitive functions are unaffected. For example, someone with dyslexia may be a fantastic engineer. Sometimes, cognitive disability may include intellectual impairments that affect comprehension alongside written and spoken expression. People may also experience more than one type of cognitive and learning disability.

People may also experience more than one type of cognitive and learning disability.

# 6. Revised Design Guide Introduction **Original**

Making websites and applications friendly for people with cognitive and learning disabilities affects every part of design and development.

Accessibility has traditionally focused on the making the user interface usable for people with sensory and physical impairments in vision, hearing and/or mobility.

Some accessibility features that help these user groups also help people with cognitive impairments. People with cognitive and learning disabilities also need improvements to context, language, usability, and other more general factors that impact everyone to some degree. As a result, they do not fit well into traditional accessibility standards.

This document provides assistance making websites and applications friendly for people with cognitive and learning disabilities by providing you with guidance for your designs and design process.

This guide is divided into design themes. Each theme includes user stories, testing methodologies, and design checkpoints. Just understanding the themes and user stories may help you make your content more accessible to some users with cognitive and learning disabilities. Please see the section on user testing for guidance on how to perform cognitive accessibility user testing.

#### EDITOR'S NOTE

Please note this document is not the final draft. We are still working on harmonizing the content and the internal consistency of the terms and style. The task force also intends to redo the tables to make them consistent with the design patterns (such as in 5.1 and 6.1). In addition, design patterns 2.8, 2.9, 2.6 and 2.10 2.13 and 5.3 and 5.6 need to be checked for overlap. In addition, we are exploring the addition of these sections:

Items for further research;

Data driven systems - gathering and analyzing user feedback and data; Special applications such as sections on GPS systems, conversational interfaces. Comments and feedback are most welcome.

#### Revised

This guide provides assistance making websites and applications friendly for people with cognitive and learning disabilities by providing guidance for designs and the design process.

The Objectives and Patterns presented here supplement the Success Criteria presented in the WCAG accessibility guidelines and address those user needs that are not fully met current in accessibility guidelines.

This guide is divided into design themes. Each theme includes user stories, testing methodologies, and design checkpoints. Just understanding the themes and user stories may help you make content more accessible to some users with cognitive and learning disabilities. Please see the section on user testing for guidance on how to perform cognitive accessibility user testing.

7. Changed Success/Failure Examples to Do/Don't (Also want to add icons before but that isn't done yet)

## Original

Examples

Success example: Headings tell me exactly where I am.

## Failure example:

- Headings do not clarify the steps in a form;
- A page heading reads "Service not available." The user has to remember what they were doing to know what service this is about.

#### Revised

Examples

Do: Headings tell me exactly where I am.

#### Don't:

- Headings do not clarify the steps in a form;
- A page heading reads "Service not available." The user has to remember what they were doing to know what service this is about.

8. In 3.7.1 Pattern: Provide a Login...

We corrected a typo from "coping" to "copying"

- 9. Revised C Appendix: Guidance for Policy Makers
  - We changed the title from "Appendix: Guidance for Policy Makers" to "Considerations for uptake in different contexts and policies"
  - We removed the Table of design patterns and policy criteria
  - Added the following text to the beginning:

Many agencies and services are required to use plain language and to be usable by vulnerable groups. This document will help content developers know what to do to achieve this goal across different geographical areas and include user groups of people with learning and cognitive disabilities. In addition many sites want to reach user groups such as millennials with learning disabilities and people with age appropriate forgetfulness. This can be because of their commitment to inclusion, or to enable growth in these high value, under-serviced, markets. Typically, there are many more people in the target audience with a cognitive or learning disability then the content provider is aware of, and many content providers are often losing these user groups.

This document is not normative or designed for wide applicability for all websites and contexts. There are sites that may choose not to follow some or all of the advice in this document. For example, a Web site for accountants may disregard any advice on accommodation for people who do not understand numbers, whilst realizing that many of their colleagues have other learning or communication impairments and age appropriate forgetfulness. (In contrast conformance to The Web Content Accessibility Guidelines (WCAG) is required by law in many countries, and is designed to enable clear conformance and wide applicability for all web content.)

10. Under Objective 8, is the following paragraph:

#### **Current Text**

People with cognitive disabilities often use add-ons or extensions as assistive technology. This includes spell checkers, passwords support, and support for text-to-speech with synchronized highlighting of the phrase being read. It is important that developers do not disable these tools.

## **Proposed Text**

People with cognitive disabilities often use add-ons or extensions as assistive technology. This includes spell checkers, passwords support, and support for text-to-speech with synchronized highlighting of the phrase being read. It is important that these tools are supported and work on all content. In other words, content should not include code that disables these tools.

11. In the same section under More Details it states:

#### **Current Text**

People with cognitive disabilities are often using add-ons as assistive technology. It is essential that add-ons and similar tools work. Otherwise, we need to make the author support all the functions of the add-ons in use as assistive technology.

## **Exceptions:**

When there is a security or safety requirement, these API's may be disabled for the relevant field

## If it breaks the main function of the site, such as evaluation and testing applications

## **Proposed Text**

People with cognitive disabilities often use add-ons as assistive technology. It is essential that add-ons and similar tools work, except when:

- 1. A security or safety requirement requires these API's be disabled. In this case they should be disabled only for the relevant field(s).
- 2. The add-on breaks the main function of the site, such as evaluation and testing applications.

When add-on's are automatically disabled by the code, the burden of supporting the extra functionality of the add-ons falls to the author.

## 12. Under 4.2.1 Finding People to Include

## **Current Text**

Alternatively, small developers can achieve a large improvement by asking people who they know, such as friends, colleagues, relatives or neighbors who:

## **Proposed Text**

Alternatively, small development groups can achieve a large improvement by asking people who they know, such as friends, colleagues, relatives or neighbor

13. Appendix Appendix: Testable Statements for Each Pattern

The testable statements have been moved to a wiki page.

#### Added Paragraph

There have been different attempts to make testable statements for the design patterns. These statements address test processes, failure examples, etc.. In many cases, the results of these attempts only represent a subset of the corresponding design pattern. A full table of the draft testable options are available at Testable Statements for COGA Design Patterns.

The Cognitive Accessibility Taskforce intends to continue working on these statements as a supplement to the design guide.

## Proposed:

There are ongoing efforts to make testable statements for each design patterns w ith corresponding test processes, failure examples, etc.

Note that in many cases, the testable statement only covers the part of the design pattern that is automatically testable. A full table of the draft testable options are available at Testable Statements for COGA Design Patterns.

The Cognitive Accessibility Taskforce intends to continue working on these statements as a supplement to the design guide.

Note that in many cases, the testable statement only covers the part of the design pattern that is automatically testable.

## 14. Judy/Michael Request

The Objectives and Patterns presented in this document supplement the Success Criteria presented in the WCAG

accessibility guidelines and address those user needs that are not fully met in accessibility guidelines. This guidance

is not required for sites that conform to WCAG, but is valuable additional information for sites that wish to provide increased

accessibility to users with cognitive or learning disabilities. The Objectives and Patterns are designed to be informative and user friendly.

Chuck's Recommended Sentence: This guidance is not a requirement for sites to conform to WCAG.

#### Lisa:

This guidance is intended to provide additional information for sites that wish to provide increased accessibility for users with cognitive or learning disabilities that is not included in WCAG. It does not affect conformance to WCAG.

#### MichaelC

This guidance is intended to provide additional information, beyond the normative guidance in WCAG, for sites that wish to provide increased accessibility for users with cognitive or learning disabilities.

Following the guidance in this document does not affect conformance to WCAG, but will increase accessibility for people with cognitive and learning disabilities.

### Proposal:

The Objectives and Patterns presented in this document supplement the Success Criteria presented in the WCAG accessibility guidelines and address those user needs that are not fully met in current accessibility guidelines. Following the guidance in this document does not affect conformance to WCAG, but will increase accessibility for people with cognitive and learning disabilities. The Objectives and Patterns build on the: