PART ONE

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How to use this book

Introduction

In her book Accessibility for Everyone Laura Kalbag writes:

Accessibility is often presented as something that should be left to 'experts'. We do need experts for their specialized knowledge and guidance, but there aren't enough accessibility experts in the world to leave the task of building an accessible web in their hands alone.¹

It was this quote which convinced me to write *Designing Accessible Learning Content*. It made me realize that as eLearning professionals we all have a responsibility to learn how to make the content we design and create inclusive. I also agreed with Kalbag that although accessibility can seem like a technical and complex subject which is best supported with the help of experts, it is not something that we can leave 'in their hands alone'. Because if we do, there is no hope that it will ever become mainstream.

Luckily, increasing awareness of the importance of inclusive design coupled with changes in legislation mean that more and more elearning professionals are beginning to agree with me. Yet this leaves us facing a dilemma which, as an instructional designer passionate about elearning accessibility, I have had direct experience of. The issue we face is that there are very few experts and barely any resources available to support us. The emphasis of accessibility, as Kalbag's quote and her book make clear, is very much still focused on the 'web', ie traditional websites. The purpose of *Designing Accessible Learning Content* is to address this issue. It is centred on a pragmatic and practical approach designed to help elearning professionals

become competent and confident applying accessibility to learning content. Yet, while designing eLearning resources that are more accessible is easy to achieve, creating content which is legally compliant with the Web Content Accessibility Guidelines (WCAG) is not without its challenges.

Simplicity and usability were at the forefront of my vision when I began writing. I wanted to create a handbook which made designing fully accessible learning content so easy that there could be no excuse for not doing so. In effect, I wanted to write an 'eLearning Accessibility Made Simple' manual. I soon came to realize, however, that it would be both disingenuous and demotivating to describe it as a simple process. Nevertheless, I have tried to make it as straightforward as possible. This first chapter gives you an overview of the best way to use the book in order to suit the way you learn and the way you work. I hope that it helps to make your eLearning accessibility journey a smooth and positive experience.

Part One: Accessibility fundamentals

Chapter 2, Getting started, contains information which is essential to be aware of before you begin. While the rest of the book is designed to allow you to dip in and out, any guidance crucial to your understanding and making accessibility easier to apply to learning content is included in this chapter. The other chapters in Part One contain useful background information. It can be easy to get bogged down in the complicated intricacies of the WCAG, but digital accessibility can also be a fascinating and inspiring subject. Chapter 3, Exploring disability, helps you to understand disability from a digital perspective. As well as factual information such as statistics and examples of different types of disability and impairments, this chapter includes case studies from disabled learners. Their experiences highlight how inaccessible content can create barriers and allow you to consider the human aspect of accessibility which is often lost when we focus only on technical requirements.

Chapter 4, Designing for assistive technology and impairments, is a key chapter for making sense of the WCAG standards. I found that it wasn't until I had a better understanding of how assistive technology worked that I could fully appreciate what was required by many of the standards. This chapter also provides a useful overview of some of the key requirements for making learning content accessible for learners with a range of different needs. The final chapter in Part One is The case for digital accessibility. This provides the ethical, legal, business and learning arguments for accessibility.

It also includes a number of industry perspectives which highlight why accessibility is increasingly becoming a 'must have' feature of eLearning products and services in today's increasingly competitive market. This chapter gives you the information to allow you to advocate for accessibility. It can also provide a welcome source of motivation if at any point you feel overwhelmed or become discouraged when you are learning more about designing accessible content which, rest assured, happens to everyone.

Part Two: Accessibility frameworks

Since I believe that the technical language and structure of the WCAG are primary factors in making accessibility difficult for eLearning professionals to apply, I have created two frameworks which form Part Two of the book. These frameworks both give summarized, plain English explanations of the WCAG standards and how they apply to learning content. They both cover all 50 WCAG 2.1 level A and AA standards, which are the legal benchmark for most international accessibility legislation. The frameworks, however, are structured differently to allow you to dip in and out as you wish and to give you different ways to access the content and to apply the guidelines.

The WCAG framework

The WCAG framework divides the standards into the World Wide Web Consortium's (W3C) POUR principles. These stand for Perceivable, Operable, Understandable and Robust. Each of the principles is further subdivided into guidelines. While the WCAG framework can be useful when developing content, the way it is structured means you may find it is better suited to testing for conformance or for formulating an accessibility statement.

Each of the standards in the framework has an icon set which indicates exactly what it applies to in an eLearning context. For example, WCAG 1.1.1 Non-text Content has the following icon set:









These icons indicate that you need to consider this standard when you set up your eLearning resource. They also show that the standard is relevant for images, interactive items, and audio and video content.

The eLa (eLearning accessibility) framework

The eLa framework also covers all the 50 WCAG 2.1 level A and AA standards. Rather than grouping the guidelines into the four POUR principles, however, the framework is divided into six steps. These are each relevant to a particular eLearning theme or subject area and are structured in a contextual order which is logical for designing and developing learning content with a range of authoring tools. I initially developed this framework to help make my own learning content accessible. It is now at the core of the training I provide, and I have used it successfully with numerous delegates and organizations.

Checklists

To accompany the frameworks there are additional checklist versions which can be accessed at www.koganpage.com/DALC (archived at https://perma.cc/6UCY-FE7F). They are provided in an online format so that they can be easily reproduced, but also so that they can be customized and adapted to suit your way of working and your authoring tool.

Part Three: WCAG 2.1 level A and AA accessibility standards

Part Three contains detailed explanations of each of the WCAG 2.1 level A and AA standards. As with the WCAG framework, the standards are ordered according to the W3C POUR principles, with one chapter dedicated to each principle. To make them easier to understand and cross reference they also include the icon sets used in the WCAG framework and are broken 70/ down into the following topics:

- Key information
- How to conform
- Why?
- Examples
- How to test
- Useful resources

Part Four: WCAG 2.1 level AAA and WCAG 2.2 draft accessibility standards

WCAG 2.1 level AAA accessibility standards

The first chapter in this section provides a brief overview of each of the advanced AAA standards. Bearing in mind that conforming to this level requires 28 additional criteria, it is understandable that content authors are often primarily concerned with meeting the requirements of levels A and AA. The pragmatic approach adopted in the book is to include a brief explanation of the AAA guidelines in this separate chapter for reference. If they are related to the requirements of any of the level A and AA standards, they are also included in the detailed explanations of these standards in Part Three.

WCAG 2.2 draft accessibility standards

The second chapter in this section provides the nine WCAG 2.2 standards which were released in August 2020. As with all new W3C standards they are first released in draft form and are then finalized after feedback from accessibility experts has been taken into consideration. They are included for reference and because they give an indication of future requirements and best practice. These are not plain English interpretations of the guidelines, but simply the WCAG wording.

Disclaimer

No resource which gives guidance on meeting the requirements of the WCAG standards is complete without a disclaimer. *Designing Accessible Learning Content* is no exception. It is important to be aware that the information and advice it contains are not intended to guarantee that learning content will be fully compliant with legal regulations. It is well known that the WCAG standards are open to differing interpretations. I have based my explanations on commonly referenced and recommended digital accessibility sources. They have also been verified and approved by experts both in accessibility and in online learning. As with all guidance created to help people make sense of the WCAG standards, however, my explanations are ultimately only interpretations and should not be considered legal advice.

Summary

- To get the most out of this book, it's important to understand the information it contains and how it is structured.
- Part One contains useful accessibility background information which can
 either be read before you begin or can be referred back to at any time if
 you need further support. It also includes the Getting started chapter
 which contains crucial information to be aware of before you start.
- Part Two contains the WCAG and the eLa frameworks. These frameworks both give summarized, plain English explanations of each of the WCAG standards and how they apply to learning content but are structured in different ways to suit the task you are trying to achieve.
- Part Three contains detailed explanations of each of the 50 WCAG 2.1 level A and AA standards.
- Part Four contains a brief overview of all 28 level AAA standards. It also contains the nine 2.2 standards which were available only in draft format at the time of publishing.
- The guidance in this book should not be considered legal advice which guarantees conformance to the WCAG standards.

Endnote

¹ Kalbag, L (2017) Accessibility for Everyone, A Book Apart, New York