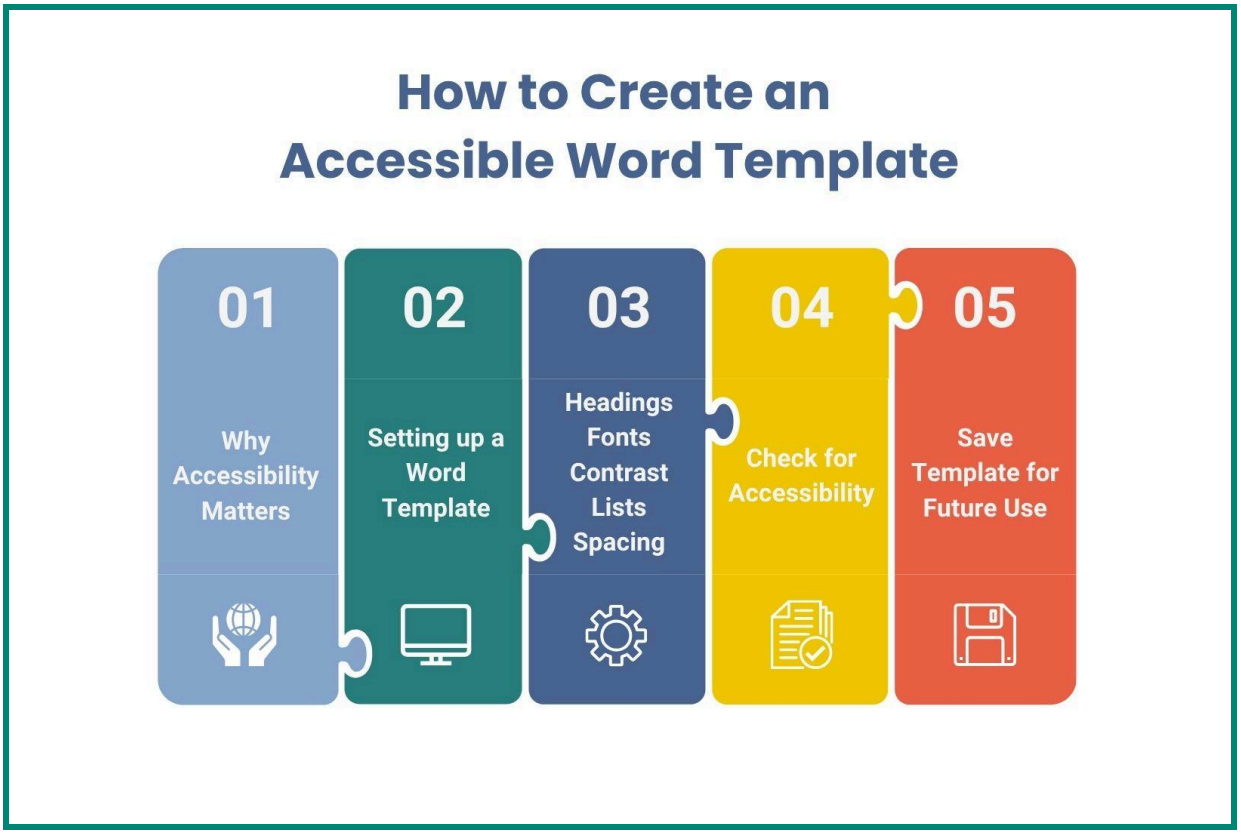

Figure 1: How to Create and Accessible Word Template Graphic Organizer

Design Debrief

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Heather Dorrell
Multimedia Learning
EDIS 7070: Dr. Dawn Aziz
University of Virginia

The Project

This project is the culmination of an eight week project created during the summer term of 2025 in tandem with Dr. Dawn Aziz and fellow students at the University of Virginia completing a course on Multimedia Learning. The topic, idea, design, and mode of delivery are all decisions executed by the instructional design student, Heather Dorrell, with iterations based on feedback received throughout the course.

The Challenge

Publicly funded institutions, such as state universities, K–12 school districts, community colleges, public libraries, and other government agencies are now legally required to ensure that their digital content complies with Web Content Accessibility Guidelines (WCAG) 2.1 Level AA accessibility standards. This requirement stems from the U.S. Department of Justice's final rule under Title II of the Americans with Disabilities Act (ADA), published in April 2024, which mandates that web content and mobile apps provided by public entities become fully compliant by April 24, 2026 (for larger entities) and April 26, 2027 (for smaller ones). Under Section 504 and Section 508 of the Rehabilitation Act, all institutions receiving federal funding are also held to standards requiring accessible electronic content, making this training relevant to any program funded through federal sources.

The Solution

By focusing on a Word-based template design, this microtraining addresses a critical yet often overlooked area of compliance: the accessibility of documents and materials faculty routinely develop and share. Aligning instructional content with WCAG guidelines supports institutional compliance, enhances equity for learners with disabilities, and promotes inclusive practices across public-sector education.

A microtraining video was chosen as the mode of instructional delivery due to its accessibility features, its efficiency, and its ability to be watched and replayed in an asynchronous instructional environment, as needed. The function of the visual

demonstration allows instructional staff to practice the skills for optimal efficiency in respect to compliance achievement.

The Audience

This training video is for the following groups:

- **Faculty, K-12 educators, and instructional designers** within public universities, community colleges, and public schools who contribute to creating instructional materials for students in compliance with ADA and WCAG.
- **Public school district administrators and curriculum developers**, who oversee digital learning platforms and resource distribution.
- **Library and academic support staff**, especially those managing institution-wide teaching materials or platforms.
- **Contracted content providers and vendors**, including publishers and learning technology specialists, responsible for providing accessible digital content to publicly funded institutions.
- **Accessibility coordinators and compliance officers** in state and local government agencies, who must audit and oversee adherence to WCAG standards across web and mobile platforms.

The Tools

- Canva
- ScreenPal
- ChatGPT
- Google Suite
- Microsoft Suite

The Prototype

The final prototype for this design project is a 15-minute, narrated instructional video titled *Creating an Accessible Word Template*. This how-to video demonstrates, in real time, how to build a reusable Microsoft Word template that meets accessibility standards. It walks

viewers step by step through the process of formatting heading styles, selecting accessible fonts and colors, organizing lists, and using Microsoft's built-in Accessibility Checker. The content is divided into concise scenes and includes periodic knowledge checks to reinforce understanding and encourage viewer engagement.

The video was designed with faculty and educational staff in mind and aims to provide both clarity and confidence when implementing accessibility features in Word. The overall aesthetic is clean and consistent, with deliberate use of white space, high-contrast visuals, and screen captures that mirror the real user experience. Instructional narration is synchronized with on-screen highlights and demonstrations to guide the learner's attention without overwhelming them.

Various design frameworks and learning theories informed the structure and delivery of the video, including those by Williams, Gestalt theorists, Mayer, and Baddeley. This debrief focuses on how those principles were operationalized through visual, cognitive, and interactive design choices.

Instructional Design Theories and Principles

Several key design principles were used in the creation of this video after reviewing influential research and texts in the fields of instructional and visual design.

Williams' Visual Design Principles

- **Contrast:** Strong contrast between typefaces is used to catch the eye when introducing new sections of instruction, as well as to color block the quiz questions and answers.
- **Repetition:** Repetition of primary and tertiary colors with a rainbow motif throughout the video is used to signal inclusivity and add a mood of optimism and illumination. The video is meant to reach "the entire spectrum" of instructors. Repetition of animations and transition visuals were used for contiguity.
- **Alignment:** Creation of lists and visuals using the Principle of Proximity, grouping like elements together is used throughout the video. Instances of this are demonstrated in grouping photos in the "Why Accessibility Matters" section, in the

section on Accessibility Checker options, and in the Color Contrast information chart.

- **Proximity:** The graphic organizer that is used to signal the beginning of a new subtopic is an example of the use of proximity. By creating a puzzle piece with a number at the top, an explanation in the middle, and a corresponding graphic symbol at the bottom, I used repetition and proximity to imply relationships.

Gestalt Principles

Care was taken to organize visual elements within the video to guide learners in grouping information, navigating visual scenes, and perceiving relationships.

- **Proximity:** Graphics are aligned with text and narration throughout the video to assist learners with perceiving connection between words and images. This occurs within each of the pre-training subsections of the video and within the graphic organizer.
- **Similarity:** Consistent icons, headings, color palettes, and alignment is used throughout the video pre-training subsections to assist with conceptual grouping.
- **Continuity:** Lists and steps are arranged in a visually logical sequence from top to bottom and left to right to allow the learner to follow the instructional order.
- **Closure:** During the WebAIM example, learners are using basic knowledge of what a browser window looks like to support their learning, despite the blurred Bookmark bar at the top of the screen.
- **Figure-Ground:** Text has enough contrast to stand out against the background of the slide.
- **Common Fate:** Synchronized animations and colors are used in pre-training explanations where boxes form, text is highlighted, or images appear in tandem with narration. For instance, while discussing font choices to avoid, non-examples are given in congruence with narration.
- **Symmetry:** Headings, supporting examples, and visuals are evenly aligned to aid in scanning and understanding. An example can be seen when presenting types of contrast, along with synchronous images that appear in the same place to create consistency for the viewer while eliminating extraneous visual components.

Baddeley's Working Memory Model

I drew on the following theories of how people temporarily store and process information.

- **Phonological Loop**: The auditory channel is used to explain what the learner must do while performing the task visually, supporting verbal rehearsal and sequencing of the steps to each task.
- **Visuospatial Sketchpad:** The visual channel helps learners become familiar with the interface, cursor movements, and highlights in real time. This is used throughout the video how-to demonstrations.
- **Central Executive:** Narration, segmenting, signaling, and pacing is in place to reduce the cognitive load of the viewer, freeing the central executive to direct attention and support task completion.

Mayer's Multimedia Learning Principles

One of the most effective forms of multimedia is video, because it supports the multimedia principle that people learn the best when words and pictures are presented in tandem. Showing visuals while explaining the process is the first of 12 principles outlined by Mayer and his colleagues.

- **Modality**: Using voiceover instead of dense text next to visuals supports the modality principle, and there are several instances of this in each subsection of the video. One example is when discussing two options for creating headings, and another occurs when explaining the two main reasons why accessibility matters.
- **Redundancy:** To avoid redundancy, narration and visuals were rarely exact. Additional information is given during narration with more simplistic graphics, visuals, and lists during the discussion on font and bullets.
- **Coherence:** Images that do not support learning are not included, unless they are meant to signal the learner or provide for visual design principles.
- **Signaling**: An intro and outro clip are used to signal the beginning and end of the video. Graphic organizers with animations are used throughout to signal transitions, along with sound, narration, and a circle for mouse movement.

- **Spatial Contiguity:** Corresponding words and pictures are placed near each other in charts and explanations of each topic, including sections on why accessibility matters, fonts, headings, contrast, and bullets.
- **Temporal Contiguity**: Great care was taken to narrate the steps of each process while they are happening. Graphics and words are highlighted to correspond to the narration to focus viewer attention.
- **Segmenting:** The steps to creating an accessible Word document are given at each topic transition to signal the beginning of each subsection, bookended with a quiz to add engagement and emphasize the presentation of important information. Each subsection begins with a brief explanation of why the step is important, followed by a narrated tutorial of how to complete the step.
- **Pre-training:** The video begins with a discussion on what is being covered, structure, and an explanation of how to navigate accessibility features. Each subsection includes a brief introduction of specific information on the steps and reasoning behind each step of the document creation.
- **Personalization**: The video begins and ends with a visual of the narrator/presenter to add personalization and to provide the opportunity to reach out to a proctor. A conversational tone is used throughout the instructional portions of the tutorial, and a poll is positioned at the end of the video to collect more information on what additional questions and interests the viewer may have on digital accessibility. The poll will help the instructional designer prioritize topics of interest as additional materials are created.
- **Voice:** The narrator is a human voice with a conversational tone. The same voice is used throughout the video, and is directly linked to a face during the introduction.
- **Image:** An image of the narrator is not used throughout the video, except to add personalization and signal the introduction and conclusion of the video.

Conclusion

The development of *Creating an Accessible Word Template* was guided by intentional design grounded in research-based principles. This video is a carefully structured instructional experience designed to reduce cognitive load, support perceptual clarity, and facilitate

meaningful learning. The application of Williams' visual design principles ensured a consistent and user-friendly aesthetic. Gestalt principles shaped the spatial organization and visual grouping of content, while Mayer's multimedia principles informed the sequencing, narration, and alignment of audio-visual elements. Baddeley's working memory model provided the cognitive lens through which I planned pacing, information density, and the balance of visual and verbal inputs.

Through this project, I gained a deeper understanding of how theory translates into practice, particularly when designing instructional materials for adult learners working within time and attention constraints. The result is a product that not only meets compliance goals but also models accessible design in its delivery. While there is always room for iteration, this experience has reinforced the importance of research-driven design decisions and their impact on learner experience and retention. I intend to carry these principles forward into future projects that aim to improve accessibility, usability, and instructional effectiveness in digital learning environments.

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