

MAKING YOUR DIGITALLY-FACILITATED SKILLS TRAINING MORE ACCESSIBLE

Around 10 percent of the world's children and young people have one or more sensory, intellectual, mental health, or other functional impairment. Young people with impairments are less likely to progress through school and their unemployment rate is double that of those who do not have an impairment. They face distinct barriers to accessing skills training opportunities, and digital training may allow for greater participation. To provide these types of opportunities, there is a need to remove barriers to make Digitally-Facilitated Skills Training more accessible. Doing so will allow for a more diverse group of learners to engage with the training material and build skills. Organizations can better facilitate and achieve the effective participation and inclusion of young people with disabilities by understanding their needs and integrating universal design principles and simple accessibility features when developing or adapting content.

IYF's Advancing Economic Mobility with Skills (AEMS) Project seeks to lower barriers for youth-serving organizations to launch engaging, impactful, inclusive and targeted online skills training programs world-wide. This brief introduces strategies to make learning more accessible to young people with disabilities by making changes to your Digitally-Facilitated Skills Training material.

Understanding Accessibility in Digital Environments

Digitally-Facilitated Skills Training can play a role in helping to ensure that young people with disabilities have fair access to opportunities. This type of training may be more accessible than traditional learning environments as it allows for, and encourages, flexibility. To ensure its promise, it is important to select training content that is accessible, or to adapt training material accordingly. Doing so requires an understanding of what functional disabilities are and how they impact the use of digital technology.

A functional disability is a limitation of a person's ability to perform essential activities of everyday life. Functional disabilities are varied, and they may or may not be permanent. Many people have temporary impairments due to an accident or because of short-term medical conditions. Others are long-term conditions that people manage throughout their lives. Functional disabilities can be supported by technologies that make computers more accessible. Assistive technologies can increase, maintain, or improve an individual's functioning with a computer or software. Many assistive technologies are already built into the devices and software that you are already using, or are available to be purchased.

The four major categories of functional disabilities are detailed here, along with information about corresponding assistive technologies that can be provided to these learners:

| Impairment | Barrier | Accommodations and Assistive Technology |
|--|--|---|
| Legally Blind and Partially Sighted | Low vision, Light Perception/Projection, Total Blindness | Use special software called screen readers or the ability to use magnifiers, bright lighting, larger lettering, sans-serif typefaces, and high contrast coloring on their devices. (VIDEO) Refreshable braille displays. (VIDEO) |
| Deaf and Hard of Hearing | Hearing loss, hearing impaired | Captioned audio, Video Relay Signing, or videos or assistive listening accessories. (VIDEO) |
| Motor Impairments | Quadriplegia, paraplegia, Amputation, Arthritis, Back disorders, Cerebral palsy, Neuromuscular disorders, Fibromyalgia | Adaptive keyboards, switch controls, and simplified navigation. (VIDEO) |
| Cognitive Impairments | Clinical impairment (autism, Down syndrome, traumatic brain injury (TBI), and dementia). Less severe cognitive conditions include attention deficit disorder (ADD), dyslexia (difficulty reading), dyscalculia (difficulty with math), and learning disabilities | May need course or screen modifications that facilitate and support greater focus and attention. (VIDEO) |

TOOLS AND RESOURCES

| | | |
|---|---|---|
| Accessible Language: A Guide for Disability Etiquette ↗ | InclusionHub: Digital Accessibility and Accommodation Directory ↗ | DO-IT: Resources for Educators and Learners ↗ |
|---|---|---|

The Rights of Persons with Disabilities

A disability is an impairment in combination with barriers to participate. Persons with disabilities have rights, and all people can contribute to the removal of barriers, both physical and digital, to create accessible environments. This is outlined in the United Nations Convention on the Rights of Persons with Disabilities (CRPD).

Article 24 – Education

Parties shall enable persons with disabilities to learn life and social development skills to facilitate their full and equal participation in education and as members of the community.

Article 27 – Work and employment

Parties recognize the right of persons with disabilities to work on an equal basis as others. This includes the right to have the opportunity to gain a living by work freely chosen or accepted in a labour market and work environment that is open, inclusive and accessible to persons with disabilities.

Once you have a better understanding of functional disabilities, accommodations, and assistive technology, you can delve into some of the ways that you can make your training more accessible. This requires understanding the [UNIVERSAL DESIGN FOR LEARNING \(UDL\)](#) for content development/adaptation, as well the use of the [WEB CONTENT ACCESSIBILITY GUIDELINES \(WCAG\)](#) when uploading it into your LMS.

Create More Accessible Training: Choosing or Adapting Your Material

Just like buildings and infrastructure are now built with ramps to allow them to be accessed to the greatest extent possible by all people, referred to as Universal Design, so can training and educational content be developed to allow a broader range of learners to be able to access training and courses. The Universal Design for Learning (UDL) principles and approaches recognize that people learn in different ways and educators need to accommodate for this, during both in-person and online learning. Using a range of teaching and instructional methods removes many barriers to learning and provides the flexibility for learners to adjust based on their strengths and needs. The result of this approach is the development of learning environments that are accessible and challenging for all.

The UDL guidelines have taken many principles that you likely recognize in good teaching practice and have formalized them into a set of guidelines to be considered in your project. Incorporating strategies for increasing accessibility using UDL does not require you to start from scratch; you may only need to integrate some new considerations when designing or adapting your content. The UDL guidelines have three components and help to ensure that different learners across a range of learning preferences and disability types can engage with and benefit from a training course.

The UDL guidelines and their application can be found on this page.



UDL Guidelines

Provide Multiple Means of Engagement

Learners can:

- Regulate their own learning.
- Sustain effort and motivation.
- Engage and interest all learners.

Key Changes:

- Allow learners to demonstrate learning by using different media in assignments.
- Provide content in smaller units that facilitate practice and include lots of quizzes.
- Allow learners to work together or communicate about their learning.
- Keep learners motivated through prompts and positive reinforcement.

Provide Multiple Means of Representation

- Reach higher levels of understanding.
- Understand the symbols and expressions.
- Perceive what needs to be learned.

- Provide mixed media to represent concepts using simulations, graphics, activities, and videos.
- Use simple terms and explanations and provide a glossary for more complicated concepts.
- Anchor new learning in participants' prior knowledge.
- Offer ways of customizing display of text.

Provide Multiple Means of Action and Expression

- Express themselves fluently.
- Physically respond using accessibility tools.
- Set goals and plan actions.

- Allow students flexibility in the time required to respond to different types of content.
- Provide alternative ways for students to provide answers or complete activities.
- Support goal setting and ensure that assignments are clearly described.
- Vary methods of response and navigation and provide tools and assistive technology.
- Provide tools and assistive technology.

[Vetting Content for Accessibility ↗](#)

[UDL Tools For All Grades and Subjects ↗](#)

[Facilitators Guide to UDL ↗](#)

TOOLS AND RESOURCES

Using UDL is not new to experienced facilitators, and it formalizes much of the good practice that you may already know. Providing flexibility in the ways learners access material and show what they know keeps them motivated and provides them with an equal opportunity to succeed.

Create More Accessible Training: Putting Your Content Online

Making your content accessible can also be supported by using technologies you are already familiar with and accustomed to. As accessibility has increasingly become a norm for good practice, in addition to being a legal requirement, many companies have adapted commonly used tools to make them more accessible. This is aligned with international standards called [The Web Content Accessibility Guidelines \(WCAG\)](#). They provide guidelines for making web content more accessible to people with a wide variety of functional disabilities. WCAG is composed of four principles, covering the core concepts that need to be integrated when creating a website or application that is considered accessible. These are known as the POUR Principles (**P**erceivable, **O**perable, **U**nderstandable, and **R**obust) that work together to create an accessible user experience.

- Learners need to be able to access information regardless of their ability to see, hear, or touch.
- Learners need to be able to perform all the actions required of them in the course.
- Learners need to be able to understand both the content of the course and how to navigate the user interface.
- Course content must make sense to assistive technologies such as screen readers.

These WCAG principles have been widely adopted and incorporated into many different tools and web applications used to develop digital course material. Applying these guidelines can appear challenging but many things you need to do may already be built into applications like your Learning Management System (LMS), Microsoft Word or Google Docs, or Youtube/Vimeo. See the table below for ways to incorporate WCAGs into systems you are already using:

| POUR Principles in:* | Learning Management Systems | Word Processors and Presentation Software | Video and Audio |
|------------------------------------|---|---|---|
| Available Tools or Features | <ul style="list-style-type: none"> • Provide alternative text descriptions for images. • Screen reader adjusted to simplify and read out loud. • Size change: allow users to increase the size of content. • Keyboard navigation. • Assessment approaches (including complexity and time). | <ul style="list-style-type: none"> • Use Styles for section headings and to break up text. • Make sure your Hyperlinks have descriptions and are meaningful. • Ensure that Images have text descriptions or alternative text. • Design your document with high contrast and easily perceivable fonts. | <ul style="list-style-type: none"> • Youtube: Use auto-captions in English, plus translations, keyboard shortcuts in YouTube. Options for multi-audio tracks and descriptive audio also available. • Vimeo: Add subtitles and captions in Vimeo. Also supports higher color contrast, focus states, and screen readers. |
| REFERENCE RESOURCES | <ul style="list-style-type: none"> • Blackboard Accessibility Checklist ↗ • CBM Digital Accessibility Toolkit ↗ | <ul style="list-style-type: none"> • Microsoft Accessibility Fundamentals ↗ • Creating Accessible Documents Tutorial ↗ • A Guide To Producing Easy Read Documents ↗ | <ul style="list-style-type: none"> • What Makes a Video Accessible ↗ • Checklist for Creating Accessible Videos ↗ |



The WCAG provides a single shared standard for web content accessibility that can be applied to all the software you may use. This can allow you to adapt your content to make it more accessible as part of your content development workflow. Learn more about WCAG and consider some of the changes that you might make to improve accessibility.

Building Your Culture & Capacity for Inclusion

Making Digitally-Facilitated Skills Training inclusive to persons with disabilities is needed to ensure equitable access to learning and skill-building opportunities. The UDL guidelines and WCAG allow you to improve accessibility for all participants, especially for young people with disabilities.

This is a job that needs to be shared and supported by your organization. Ways of building greater awareness and understanding within your organization and team might include:

Inform and Engage Your Wider Team

Many people assume that accessibility issues are primarily for those with visual impairments. Provide an overview to your team about the different categories of disability, how common they are, and the steps you can take to support those persons with disabilities.

Understand Your Target Learner

When doing needs assessments, or profiling your learners prior to launching your project, include questions about potential disabilities and be cognizant of the impairments they may have. This will allow you to better plan for accessibility in your digital skill training.

Keep Learning and Improving

Work on improving digital accessibility throughout the whole project lifecycle and not just at the beginning.

Incorporate Accessibility into Procurement and Budgets

Consider accessibility as part of your LMS selection as well as the hiring process for those who are developing/adapting your training materials. Allocate additional resources to provide staff time or other types of support that might allow young people with disabilities to participate and remain engaged with online learning material.

Use Accessibility Supports and Tools

Accessibility is a public good. As a result, there are lots of training and free tools that you can use to support your process. Consider the resources provided in this document and online to support your work in this area.



By thinking about accessibility as something that you need to incorporate into your organizational culture, you are more likely to be able to secure the buy-in and support necessary to make it happen. Remember that accessibility is a process and not a project. In taking on this work, you are supporting young people to be able to build the skills they need to empower themselves.



LIST OF TOOLS AND LEARNING OPPORTUNITIES

LEARNING OPPORTUNITIES

[Accessibility of eLearning](#)

[The Open University ↗](#)

[Digital Accessibility Foundations](#)

[The World Wide Web Consortium ↗](#)

[An Introduction to Accessibility and Inclusive Design](#)

[Coursera ↗](#)

ADDITIONAL AEMS RESOURCES

[Brief 1: Developing Engaging Digitally-Facilitated Skills Trainings ↗](#)

[Brief 2: Making Your Digitally-Facilitated Skills Training More Accessible ↗](#)

[Brief 3: Selecting the Right Learning Management System for Your Youth-serving Organization ↗](#)

[Brief 4: Encouraging Diversity and Inclusion in Your Digitally-Facilitated Skills Training ↗](#)

[Resource 5: Overview of Leading Learning Management Systems ↗](#)

[Resource 6: Available Curricula and Learning Material Library for Skill Building ↗](#)