

# GUIDELINES FOR ISOC TUTORS

**ENSURING INCLUSIVE ONLINE LEARNING FOR  
PERSONS WITH DISABILITIES**



**Guidelines for ISOC Tutors:**  
**Ensuring Inclusive Online Learning for Persons with Disabilities**

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## Executive summary

Online education offers significant benefits for individuals with disabilities, but barriers like inaccessible course materials and lack of support can hinder their participation. Tutors play a crucial role in creating an inclusive learning environment by adapting course materials, providing alternative formats, and offering personalized support to students with disabilities.

This document provides guidelines for Internet Society (ISOC) tutors to promote accessibility and inclusivity in online learning environments for students with disabilities. The document outlines various types of disabilities and the challenges they pose in online learning environments. It recommends Universal Design for Learning principles to design flexible and adaptable learning experiences that cater to diverse learning styles and needs.

The document also provides resources and recommendations for tutors to enhance their understanding of accessibility and implement best practices. It emphasizes the importance of open communication and collaboration between tutors, students, and relevant authorities to address accessibility challenges and continuously improve online learning experiences. Thus, this guide aims to enhance the understanding of the general concept of disability among ISOC tutors and provide them with awareness about the needs of trainees with disabilities. Its basic idea is to empower tutors to integrate accessibility into their instructional materials, encouraging them to facilitate online learning to accommodate the diverse requirements of trainees with various disabilities.

These guidelines also aim to close the gap between facilitators, coaches and instructors and persons with disabilities through providing general guidance followed by checklists on three levels: identification/registration, accessible content, and inclusive facilitation on how to achieve reasonable level of accessibility for students with different disabilities. By embracing these guidelines and fostering a culture of inclusion, ISOC can ensure that all learners, regardless of their abilities, can benefit from its online education offerings.

## Background

Systematic exclusion, inaccessible learning institutes and prevalent lack of opportunities are some of the most common barriers faced by persons with disabilities in physical as well as in online environments. In the developing world, these barriers, compounded by poverty create a group of learners that is not homogeneous and do not enjoy accessibility<sup>1</sup> of learning opportunity: an individual with visual disability may have reading difficulty owing to inaccessible reading material, a girl with speech and hearing disability may require sign-language interpretation during learning sessions, and a youth with mild learning disability may require additional time for understanding the content<sup>2</sup>. Women and men with disabilities are often not visible, making it difficult to know exact statistics on their type and intensity of disabilities, what is often known as disability disaggregated data. As UNESCO puts it - One of the significant *challenges* in adult learning and education is to reach *those* who require it the most across the globe<sup>3</sup>.

Digital accessibility brings everyone together regardless of ability, widening doors of opportunities for adults to interact with learning platforms and materials on the internet. Websites, social media platforms and applications, including documents and images must meet specific guidelines relating to how elements look, sound, and interact with assistive technology (AT).<sup>4</sup> Accessible content ensures provision of an inclusive experience for persons with physical, visual, auditory, speech, cognitive and neurological disabilities. People with disabilities often use the internet with the help of assistive devices and software, therefore it is critical to design websites, platforms and applications in accessible formats ensuring equal and full interaction. This is observed to be an efficient approach providing relaxed access also to people outside disability groups such as people having slower internet or experiencing temporary injury.

In this context, this specially prepared guide aims to enhance the understanding of the general concept of disability among ISOC tutors and make aware them of the needs of trainees with disabilities. Its basic idea is to empower tutors to integrate accessibility into their instructional materials, encouraging them to facilitate online learning to accommodate the diverse requirements of persons with various disabilities.

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<sup>1</sup> "Accessible means a person with a disability is afforded the opportunity to acquire the same information, engage in the same interactions, and enjoy the same services as a person without a disability in an equally effective and equally integrated manner, with substantially equivalent ease of use. The person with a disability must be able to obtain the information as fully, equally, and independently as a person without a disability. Although this might not result in identical ease of use compared to that of persons without disabilities, it still must ensure equal opportunity to the educational benefits and opportunities afforded by the technology and equal treatment in the use of such technology."

[https://www.iup.edu/pse/files/programs/graduate\\_programs\\_r/instructional\\_design\\_and\\_technology\\_ma/paace\\_journal\\_of\\_lifelong\\_learning/volume\\_27\\_2018/mcginty.pdf](https://www.iup.edu/pse/files/programs/graduate_programs_r/instructional_design_and_technology_ma/paace_journal_of_lifelong_learning/volume_27_2018/mcginty.pdf)

<sup>2</sup> <https://ldaamerica.org/info/adults-with-learning-disabilities-an-overview/>

<sup>3</sup> <https://uil.unesco.org> > adult-education-does-not-reach..

<sup>4</sup> "Assistive technology (AT) is any item, piece of equipment, software program, or product system that is used to increase, maintain, or improve the functional capabilities of persons with disabilities."

<https://www.atia.org/home/at-resources/what-is-at/#what-is-assistive-technology>

## Disability Overview

The World Health Organization estimates that there are over one billion persons with varying degrees of physical, sensory, or cognitive disabilities in the world, meaning 15 per cent of the world's population, and 80 per cent of them live in developing countries. Thus people with disabilities as a community forms what some describe as the 'world's largest minority'. Disability cuts across gender, race, religion, age, and/or geographic boundaries.

The United Nations Convention on the Rights of Persons With Disabilities (UNCRPD)<sup>5</sup> recognizes "that disability is an evolving concept and that disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others". Thus, disability is a broad term that refers to a physical, cognitive, intellectual, sensory, visual, or developmental impairment that significantly limits an individual's ability to perform daily activities due to the barriers in the physical or online environments. Impairments can be present from birth or acquired later in life due to illness, injury, or other factors. The impact of a disability can vary from person to person, and it may affect mobility, communication, learning, and other aspects of daily living.

### **Why online education is highly significant for learners with disabilities**

In today's connected world, equal opportunities are crucial, especially with technology making things more accessible. The Internet Society's online courses would have a greater impact if everyone, including those with disorders or disabilities, had fair access. The element of inclusion ensures that everyone can benefit from online spaces equally.

Online education is crucial for addressing the educational needs of persons with disabilities, offering benefits such as enhanced accessibility with features like closed captions and screen readers. Its flexibility in learning time and location is really valuable for those facing mobility challenges. Online courses can be customized to accommodate diverse learning styles, promoting an inclusive environment that positively impacts self-esteem. Remote learning eliminates barriers associated with transportation, and diverse course offerings allow individuals to align education with their interests and career goals. Online education facilitates peer interaction, reducing isolation, and seamlessly integrates assistive technologies. Learners can progress at their own pace, and online education opens up career opportunities, promoting inclusiveness in the workforce. In simple words, online education empowers individuals with disabilities to pursue academic goals and contribute meaningfully to society. The role of ISOC tutors, therefore, is of greater importance as with the help of a little adaptation in the process they follow, the learning experience can be highly beneficial for trainees with disabilities.

### **Purpose of the Guideline**

- **Guideline Development: Establish a set of meticulously crafted guidelines, fostering inclusive teaching methodologies and communication strategies tailored for ISOC tutors engaging with persons with disabilities in online courses.**
- **Tutor Empowerment: Equip ISOC tutors with the requisite knowledge and skills necessary to cultivate an accessible and supportive online learning experience for a diverse range of students.**

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<sup>5</sup> <https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-persons-disabilities>

- **Eliminate Barriers:** By providing accessible content, we eliminate barriers that may hinder the participation of individuals with disabilities in our online courses.
- **Ensure Equal Opportunities:** Accessibility guidelines ensure that every learner, regardless of their abilities, has an equal opportunity to access, comprehend, and engage with course materials.
- **Encourage Inclusive Learning:** Creating an inclusive learning environment not only aligns with principles of equity and social responsibility but also enhances the overall quality of education by incorporating diverse perspectives.

## Research Methodology

In formulating this guideline document, our research involved diverse interactions. To understand the challenges faced by online learners with disabilities, we gathered feedback from local individuals who completed online courses and interviewed a couple of visually impaired individuals who took Internet Society courses in the past year or so.

Due to the low proportion of persons with disabilities taking ISOC e-courses, study cases were limited. However, the invaluable insights from these individuals helped us compile various suggestions for the tutors. We also broadened our understanding by consulting tutors from local organizations experienced with learners with disabilities in online settings. Additionally, input from Alessandro Costanza, an ISOC tutor, provided useful feedback in this regard. The collected feedback, along with contents shared here, facilitated the development of solutions to enhance ISOC courses' accessibility for trainees with disabilities.

## Description of impairments and challenges people face online

As discussed previously, impairment is a physical condition and disability is caused when a person with impairment meets barriers.

Impairments can be permanent, temporary, or situational. They can also be invisible. Removing barriers to access helps many people, not just those considered disabled.

Below is a description of vision, hearing/speech, physical and cognitive impairments and a description of some of the barriers they face in the online world.

### **Visual Impairment:**

Visual impairment refers to a condition where an individual experiences limitation in their vision, ranging from partial to total blindness. This impairment can result from various causes, including congenital conditions, diseases, injuries, or age-related factors.

People with visual impairment often rely on assistive technologies, such as screen readers, braille devices, or magnification tools, to access information.

### **Challenges in Online Learning for Individuals with Visual Impairment:**

- **Inaccessible Course Materials:** Many online materials, such as images, graphs, and videos, may lack alternate text or captions, hindering comprehension for visually impaired learners.<sup>6</sup>
- **Screen Reader Compatibility:** Some of the learning management systems (LMS) and course platforms are not compatible with screen readers.

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<sup>6</sup> <https://www.digital.govt.nz/standards-and-guidance/design-and-ux/accessibility/alternate-formats/types-of-alternate-formats/>

- ❑ **Navigational Issues:** Complex or poorly structured interfaces can pose difficulties for screen readers, impacting the ability to navigate through online courses seamlessly.
- ❑ **Interactive Content Challenges:** Activities heavily reliant on visual elements, like diagrams or interactive maps, may be inaccessible without appropriate alternatives.
- ❑ **Assessment Barriers:** Traditional assessment methods, especially those heavily dependent on visual elements, may not accurately measure a visually impaired student's understanding.<sup>7</sup>

The video link in the footnote provides a concise overview of multiple challenges experienced by visually impaired students and suggesting possible solutions.<sup>8</sup>

### **Persons who are Deaf or Hard of Hearing:**

Hearing loss refers to a condition where an individual experiences partial or complete loss of hearing. This loss can range from mild to profound, impacting the person's ability to perceive sounds and speech. Causes of hearing loss include genetic factors, diseases, exposure to loud noise, or aging. Individuals who are hard of hearing may use hearing aids, cochlear implants, or other assistive technologies to enhance their auditory experience.

The individuals who identify as Deaf often see themselves as part of a distinct cultural and linguistic community. Deaf culture is rich and vibrant, with its own values, traditions, and art forms. The primary mode of communication within this community is sign language, a visual language that utilizes hand gestures, facial expressions, and body movements to convey meaning. It is important to note that there are over 300 different sign languages used around the world, each with its own unique grammar and vocabulary. However, there is also a Unifying International Sign (UIS), which is not a complete language itself, but rather a collection of hand signs and gestures commonly understood by signers from various backgrounds. This system helps facilitate communication across different sign languages, particularly in international settings.

### **Challenges in Online Learning for Individuals who are Deaf or hard of hearing:**

- ❑ **Lack of Captions:** Videos or audios without captions or transcripts pose a significant barrier for students with hearing loss as they may miss crucial auditory information.<sup>9</sup>
- ❑ **Ineffective Audio Quality:** Poor audio quality in online lectures or discussions can hinder comprehension for students relying on amplification devices.<sup>10</sup>
- ❑ **Limited Sign Language Support:** Online courses may lack support for sign language interpretation, making it challenging for students who rely on sign language as their primary mode of communication.
- ❑ **Asynchronous Communication Barriers:** Synchronous discussions and real-time interactions can be challenging for students with hearing loss. Lack of real-time captioning or sign language interpretation may limit their participation.<sup>11</sup>

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<sup>7</sup> <https://www.w3.org/WAI/test-evaluate/>

<sup>8</sup> <https://www.washington.edu/doit/videos/index.php?vid=81&s=screen>

<sup>9</sup> [www.w3.org/WAI/WCAG21/quickref/](https://www.w3.org/WAI/WCAG21/quickref/)

<sup>10</sup> <https://adasitecompliance.com/audio-description-accessibility/>

<sup>11</sup> [https://www.angelo.edu/faculty-and-staff/instructional-design/online-teaching/section\\_31.php](https://www.angelo.edu/faculty-and-staff/instructional-design/online-teaching/section_31.php)



This video link in the footnote offers valuable insights about major challenges experienced by Deaf or hard of hearing students and suggests useful solutions.<sup>12</sup>

### **Physical Impairment:**

Physical impairment refers to a condition that affects a person's physical abilities, such as mobility, dexterity, or coordination. It can result from congenital conditions, injuries, or medical conditions that impact the musculoskeletal system or nervous system. Individuals with physical impairments may use mobility aids, assistive devices, or adaptive technologies to enhance their independence and access to information.

### **Challenges in Online Learning for Individuals with Physical Impairment:**

- ❑ **Limited Navigation Options:** Online platforms may pose difficulties for individuals with physical impairments who face challenges in using standard input devices like a mouse or keyboard.
- ❑ **Difficulty in Hands-On Activities:** Some courses may include hands-on or practical components that are challenging for students with physical impairments.<sup>13</sup>
- ❑ **Assistive Technology Compatibility:** Online tools and platforms may not always be compatible with assistive technologies used by individuals with physical impairments.
- ❑

### **Cognitive Impairment:**

Cognitive disabilities refer to a group of disorders that affect an individual's ability to acquire, store, process, or communicate information. These disabilities can manifest as difficulties in reading, writing, mathematics, or other cognitive processes. Learning disabilities are neurological and often persist throughout a person's life, impacting academic and, in some cases, professional success.

### **Challenges in Online Learning for Individuals with Cognitive Disabilities:**

- ❑ **Complex Instructional Design:** Courses with complex instructional design may overwhelm individuals with learning disabilities, impacting their ability to process and retain information.
- ❑ **Difficulty in Organizing Information:** Courses requiring organization and synthesis of information may pose difficulties for individuals with learning disabilities in information processing.<sup>14</sup>
- ❑ **Limited Accommodations:** Inadequate accommodations for online assessments or activities can disadvantage students with learning disabilities.<sup>15</sup>

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<sup>12</sup> [https://www.angelo.edu/faculty-and-staff/instructional-design/online-teaching/section\\_31.php](https://www.angelo.edu/faculty-and-staff/instructional-design/online-teaching/section_31.php)

<sup>13</sup> <https://www.washington.edu/doit/what-are-alternatives-disability-related-simulations-promote-disability-awareness>

<sup>14</sup> <https://www.ldonline.org/ld-topics/study-skills/organizational-skills-students-learning-disabilities-digital-master-filing>

<sup>15</sup> <https://files.eric.ed.gov/fulltext/ED593920.pdf>

Please note that this is neither an exhaustive list of impairments nor of the barriers they face. It is important to understand that disabilities are diverse, and individuals with disabilities can lead fulfilling lives with the right support and accommodations. Hence, with the proper awareness of a particular disability as well as the needs connected with it, ISOC tutors can surely make the online learning more productive and quite accessible for trainees with disabilities. If tutors are faced with a situation not described in this document, it is recommended to contact [mshabbirawan@gmail.com](mailto:mshabbirawan@gmail.com)

### **General Guide Lines**

While ISOC tutors are expected to facilitate online learning in a manner that accommodates all students, considering potential physical challenges, there are certain aspects beyond their control. For instance, the presentation of content on webpages must be compatible with screen readers for visually impaired learners. Web pages containing educational material should include a text zoom option for those with low vision, and important information conveyed through images should be captioned or indicated for students with hearing loss. Also, individuals who are unable to use a mouse due to a physical or visual disability, the alternative keyboard-based commands or voice input option must be made available.

In light of this, it is recommended that tutors maintain communication with web developers or relevant personnel to ensure the incorporation of the discussed accessibility features on webpages, as well as several other possible modifications that maybe carried out to assist trainees with disabilities. Directives should be provided to ensure that study materials are made available online in an accessible format, thereby eliminating barriers.

### **Special note for Tutors**

Based on the feedback received, it is crucial to communicate the following valuable recommendations to ISOC tutors:

Sensitization regarding disability is of utmost importance. When tutors discover that a student with a disability is enrolled in their course, it should not evoke surprise. Instead, consider the disability factor as an opportunity for providing additional support or extended assistance. A previous student with a disability expressed dissatisfaction when a tutor seemed overly astonished upon learning about her visual impairment. Reacting as if being blind is exceptionally rare or unusual, although unintended, may inadvertently offend or discourage learners with disabilities.

Furthermore, a quick adjustment on the part of tutors is essential for making course content accessible. For instance, if a student with a disability faces challenges accessing materials on webpages or the ISOC portal, tutors should promptly offer alternative options. This could involve sharing course content through email in the preferred document format, such as MS Word or PDF and extending the same consideration to assignments. Such flexibility can significantly aid learners in need of additional support.

Additionally, tutors should proactively inquire about any extended support required by trainees with disabilities. Some course materials, especially those containing graphics, diagrams or charts, may pose challenges for screen readers. In such cases, tutors can ask if students require a descriptive interpretation of the content. Moreover, the limited technological background of some trainees with disabilities in online environments may prevent their productive

engagement in courses. Tutors should be willing to provide extra time and support by explaining simplified versions of complex terminologies or technical operations. Taking these measures can contribute to creating a smoother and more manageable learning experience for students with disabilities.

Last but not the least, while the overall responsibility for accessibility lies with the institution (ISOC in this case), tutors can play a crucial role in promoting and ensuring accessibility in online learning environments. They can act as a bridge between students and the institution by gathering feedback on accessibility issues encountered in the online learning environment. They can share this feedback with ISOC to help identify areas for improvement and inform future accessibility initiatives.

### **Expected role of ISOC tutors**

In the rapidly growing field of online education, it is imperative to establish an inclusive environment, particularly for students with disabilities.

Below are a few areas which the online tutors associated with Internet Society may consider to promote accessible learning for students with disabilities:

#### **Accommodations & Support:**

ISOC tutors must adapt to individual needs, providing alternative formats, screen reader-friendly platforms, and detailed verbal descriptions for visual impairments. Students with hearing loss benefit from closed captions, transcripts, and sign language-friendly platforms. Accommodation surpasses tools, encompassing proactive communication, feedback on adjustments, and responsive actions to individual needs. ISOC tutors should instill a growth mindset, celebrate achievements, and offer constructive feedback for a positive learning experience.

#### **Flexible approach and Accommodations:**

Recognize that students with disabilities may require flexibility in deadlines or alternative methods for participation. Work collaboratively with students to find reasonable accommodations.

#### **Inclusion & Psychological Well-being:**

A student's sense of belonging significantly influences their mental well-being. ISOC tutors can nurture this by recognizing diverse perspectives, promoting group discussions with varied viewpoints, and facilitating collaborative activities leveraging everyone's strengths.

Being mindful of potential challenges, ISOC tutors may conduct regular check-ins, providing a safe space for academic and emotional concerns. Active engagement helps build resilience, self-esteem, and confidence, positively impacting mental well-being. By showing a helping hand, the ISOC tutors may be of significant assistance to such learners to accomplish their online education.

### **Provide Resources and Support:**

Share information about available resources and support services on the platform or within the course. Collaborate with disability services forums that are available online, for additional guidance to the students.

### **Stay Informed and Seek Feedback:**

Stay updated on advancements in accessible technology and best practices. Actively seek feedback from students about the accessibility of course content and adapt accordingly.

### **Communication:**

Clearly communicate with the student about their preferred mode of communication. Some may prefer email, while others may prefer audio or video calls. Try to provide information in multiple formats (text, audio, and video) to accommodate different learning preferences.

### **Feedback and Encouragement:**

Provide constructive feedback in a positive and encouraging manner. Recognize and celebrate the student's achievements, no matter how small. Sometimes, a bit of motivation gives a much-needed push to persons with disabilities to carry on with their aspirations.

### **Universal Design for Learning (UDL):**

Universal Design for Learning presents a set of guidelines for designing instruction based on principles of cognitive science that emphasize flexibility in the presentation and demonstration of knowledge. According to The Center for Applied Special Technology (CAST), the UDL framework guides the design of instructional goals, assessments, methods, and materials that can be customized and adjusted to meet individual needs.

Incorporating UDL principles into online instruction maximizes learning for all students, minimizes the need for individual accommodations for students with disabilities and promotes a culture of inclusiveness where diverse student populations benefits such as non-traditional students, international students, or students with older operating systems.

### **Principles of Universal Design for Learning**

The Universal Design for Learning guiding principles are:

- Engagement.** For purposeful, motivated learners, stimulate interest and motivation for learning.
- Representation.** For resourceful, knowledgeable learners, present information, and content in different ways.
- Action and Expression.** For strategic, goal-directed learners, differentiate the ways that students can express what they know.

## **Provide Multiple Means of Engagement**

Affect represents a crucial element to learning, and learners differ markedly in the ways in which they can be engaged or motivated to learn. There are a variety of sources that can influence individual variation in affect including neurology, culture, personal relevance, subjectivity, and background knowledge, along with a variety of other factors. Some learners are highly engaged by spontaneity and novelty, while others are disengaged, even frightened, by those aspects, preferring strict routine. Some learners might like to work alone, while others prefer to work with their peers. There is not one means of engagement that will be optimal for all learners in all contexts; providing multiple options for engagement is essential.

Instructors should provide options for:

- Recruiting learners' interest
- Learners to sustain their efforts
- Learners to self-regulate

## **Provide Multiple Means of Representation**

Learners differ in the ways that they perceive and comprehend information that is presented to them. For example, those with sensory disabilities (e.g., blindness or deafness); learning disabilities (e.g., dyslexia); language or cultural differences, and so forth may all require different ways of approaching content. Others may simply grasp information quicker or more efficiently through visual or auditory means rather than printed text. Also learning, and transfer of learning, occurs when multiple representations are used, because they allow students to make connections within and between concepts. In short, not one means of representation will be optimal for all learners; providing options for representation is essential.

Instructors should provide options for:

- Perception through different modalities
- Language and symbols
- Comprehension through the design and presentation of information that builds scaffolds for knowledge

## **Provide Multiple Means of Action and Expression**

Learners differ in the ways that they can navigate a learning environment and express what they know. For example, individuals with significant movement impairments (e.g., cerebral palsy), those who struggle with strategic and organizational abilities (executive function disorders), those with language barriers, and so forth approach learning tasks differently. Some may be able to express themselves well in written text but not speech, and vice versa. It should also be recognized that action and expression require a great deal of strategy, practice, and organization; this is another area in which learners can differ. There is not one means of action and expression that will be optimal for all learners; providing options for action and expression is essential.

Instructors should provide options for:

- Interacting with tools and environments that make learning physically accessible
- Learners to express themselves and communicate
- Building learners' executive functions through scaffolding

To learn more, refer to The Center for Applied Special Technology (CAST): The UDL Guidelines.<sup>16</sup>

## Checklists for accessible learning

This set of checklists is on three levels: accessible registration/identification of needs, accessible content, and inclusive facilitation on how to achieve a reasonable level of accessibility for students with different disabilities. The checklists are based on the discussion and guidelines in this document.

Each checklist will focus on a particular part of the e-learning experience. The first two checklists are mostly directed to ISOC communications/IT and e-learning staff but all three are provided here as tutors will likely be given feedback from trainees about potential issues relating to accessible identification/registration and accessible content. This will assist tutors better understand common accessibility issues and be able to transfer trainees' feedback to relevant ISOC staff for remedial action. The third checklist is specifically directed towards tutors.

### Accessible registration/identification of needs

- ✓ Design registration promotion in large, uncluttered formats ensuring visibility of text in contrasting colors
- ✓ Make instructions easily readable and understandable.
- ✓ Avoid animations and dynamic content in registration process.
- ✓ Encourage participation by trainees with disabilities in course announcements/promotion (e.g. people with disabilities are welcome to apply stating that there will be dedicated effort to provide a reasonable level of accessibility).
- ✓ Based on received expression of interests/registration forms, reach out to applicants to understand their disability, and formulate training methodology (e.g. organize meeting and note down all specific needs. Do not forget to discuss alternatives e.g. content read by humans to blind people can also be achieved through pre-recorded material).
- ✓ Internally discuss and finalize types of specific needs your team/setup at ISOC can easily provide (align it with budget, feasibility, and learning experience).
- ✓ Inform relevant colleagues involved in registration process about specific needs

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<sup>16</sup> <https://udlguidelines.cast.org/>

- ✓ Welcome feedback from applicants with disabilities to make the registration process accessible.
- ✓ Explore best practices on inclusive and accessible registration processes.
- ✓ Document your learning experience on identification/registration and share it with co-workers for multiplying accessibility impact.

### Accessible content

- ✓ Based on registered persons with disability, revisit your training content with disability lens (e.g. for trainee with low vision, is content readable?).
- ✓ Choose simplest layouts, heading styles and formatting options to present content. Built-in formats often tend to be accessible for various assistive technologies (AT).
- ✓ Ensure hyperlinks are tagged with descriptions and easily identifiable.
- ✓ Utilize minimum number of tools and those with accessible features (e.g. Zoom and Microsoft Teams).
- ✓ Utilize tools and technology for content that provides maximum inputs via keyboards.
- ✓ Give alt text and captions to diagrams, graphics, pictures, and videos in clear and concise language for blind, low-vision, and trainees with reading difficulties. Accessible content goes way beyond learners with disabilities only.
- ✓ Integrate sign language interpretation in content for Deaf people.
- ✓ Make entire content, presentations, word documents, PDF accessible. There are several solutions available e.g. built-in accessibility checker by Microsoft.

### Inclusive facilitation

- ✓ Maintain relationship with participants with disabilities and keep open communication. Do not hesitate to refer to skill enhancement training during early stages, which would help bringing trainees with disabilities up to same level of required expertise (e.g. understanding how the ISOC e-learning portal works).
- ✓ Design accessible group activities and learning interactions that ensure equal participation of trainees with disabilities.
- ✓ Proficiency in the use of assistive technologies (AT) may significantly vary, therefore consider giving additional time/attempts during quiz/assignments/projects to trainees with disabilities based on your observation.
- ✓ Speak slowly and clearly and repeat information for those with reading difficulties.

- ✓ Utilize multiple mediums of communication and mixed methodology involving combination of videos, lecture style presentations and interactive activities.
- ✓ Encourage participation of trainees with disabilities through icebreaking activities with whole group.
- ✓ Share training materials with trainees with visual disabilities prior to the course to make them adequately aware and familiar with the content,. This will help your facilitation.
- ✓ Clearly provide instructions and clarify expectations and use repetition if needed.
- ✓ While explaining topics, bring in examples linked with disability.
- ✓ Provide varied opportunities for absorbing information and for trainees to practise their learning.
- ✓ Provide constructive feedback and welcome the same for improving accessibility.

### **Conclusion:**

The fundamental objective of the guidelines outlined above is to support ISOC tutors in effectively addressing the diverse needs of learners, particularly those with disabilities. Central to these guidelines is for ISOC tutors to ensure that individuals with specific requirements are not only included but also provided with required support to meet their unique needs. By championing the idea of inclusion and adaptability, the Internet Society endeavors to promote a digital environment where every individual, regardless of their abilities, can actively participate and benefit from the educational opportunities available in this digital era.



## Suggested sources for further Consultation

1. A Tutorial for Making Online Learning Accessible to Students with Disabilities  
<https://www.washington.edu/doi/tutorial-making-online-learning-accessible-students-disabilities>
2. Disability and eLearning: Opportunities and Barriers  
<https://dsq-sds.org/index.php/dsq/article/view/3815/3830#:~:text=eLearning%20has%20great%20potential%20to,of%20people%20in%20higher%20education.>
3. E-Learning for People with Disabilities: How Technology Erases Hurdles on the Challenged People Getting the Education  
<https://www.joomlms.com/elearning/e-learning-for-people-with-disabilities-how-technology-erases-hurdles-on-the-challenged-people-getting-the-education.html>
4. The goal of this training is to help educators improve their teaching strategies so they can reach all learners through the delivery of a high quality inclusive education pedagogy built with a universal design for learning.  
[https://pdf.usaid.gov/pdf\\_docs/PA00Z8NH.pdf](https://pdf.usaid.gov/pdf_docs/PA00Z8NH.pdf)
5. The following sites can be visited for more detail regarding the management of accessible online education:

<https://www.unhcr.org/sites/default/files/legacy-pdf/62961ba14.pdf>

<https://bettercarenetwork.org/library/particular-threats-to-childrens-care-and-protection/children-with-disabilities/toolkit-for-disability-inclusion-in-care-reform-understanding-disability-inclusion-training>

<https://intelligentlives.org/wp-content/uploads/2022/03/InclusionFacilitatorsGuide.pp0-101.pdf>

<https://deareverybody.hollandbloorview.ca/wp-content/uploads/elearning-modules/docs/facilitators-guide-en.pdf>

<https://bettercarenetwork.org/library/particular-threats-to-childrens-care-and-protection/children-with-disabilities/toolkit-for-disability-inclusion-in-care-reform-facilitator%E2%80%99s-guide-introduction-to-identification>

<https://www.bc-ipse.org/guide-for-facilitators.html>

[https://procurement-notice.undp.org/view\\_file.cfm?doc\\_id=248280](https://procurement-notice.undp.org/view_file.cfm?doc_id=248280)

[https://asiapacific.unfpa.org/sites/default/files/pub-pdf/section-3-workshop-facilitator-materials\\_final.pdf](https://asiapacific.unfpa.org/sites/default/files/pub-pdf/section-3-workshop-facilitator-materials_final.pdf)