zipBoard

eLearning Development

Designing Accessible eLearning Courses
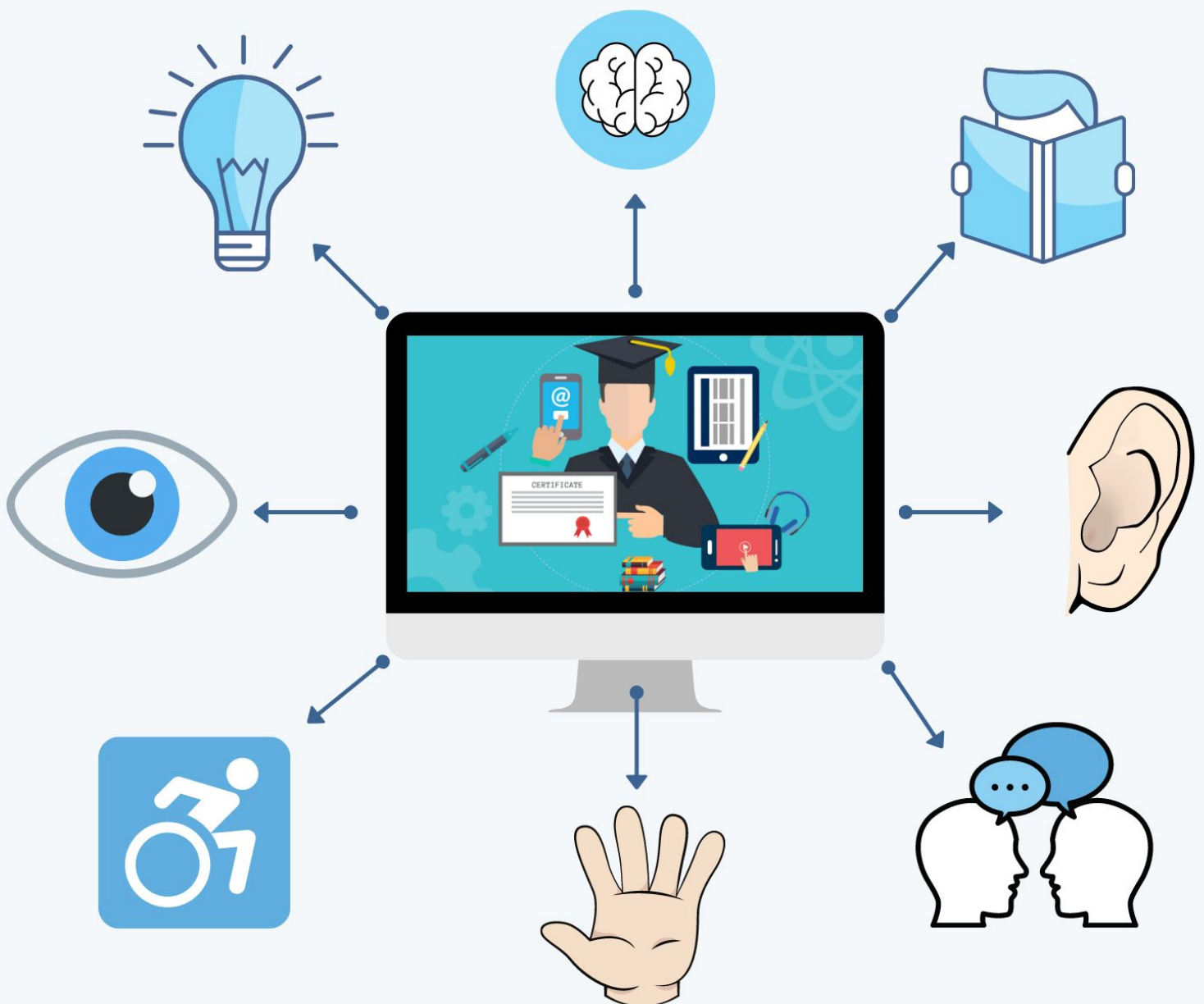
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Introduction

Accessible eLearning content provides a better and equal learning experience to everyone. It is often thought developing content with the accessibility guidelines helps specially challenged learners, but that is not true. Accessibility eLearning benefits everyone, it makes it easier to perceive, understand, navigate, and interact with the course.

"The American Community Survey (ACS) estimates the overall rate of people with disabilities in the US population in 2016 was 12.8%. … For those ages 5-17, the rate was 5.6%. For ages 18-64, the rate was 10.6%. For people ages 65 and older, 35.2% had a disability."

Source – 2017 Disability Statistics Annual Report

- **Vision:** Blindness, Low Vision, Color Blindness

- **Hearing:** Deafness, Hard of Hearing

- **Mobility**: Spinal Cord Injury, Broken Limb, Cerebral Palsy

- **Speech:** Speech Impediment, Unable to speak

- **Cognitive:** Memory, Problem Solving, Attention

- **Neural**: Seizure, Multiple Sclerosis

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Accessibility
eLearning

Why Accessibility eLearning?

Equal Learning Experience

Accessibility eLearning development can help people with disabilities.

Disability

A disability is a physical, mental, cognitive, or developmental condition that impairs, interferes with, or limits a person's ability to participate, access, and interact in typical daily activities. A disability could be by birth where someone is born with challenges and in most cases will be there for a lifetime. Or disability could also be temporary and might have occurred due to unforeseen circumstances or accidents.

Developing your eLearning content to be accessible means that your content has been designed to be used by anyone. Let's take a look at how to develop content for the most common types of disability so that your eLearning course is accessible by everyone.
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In our day-to-day lives, there are circumstances when we face challenges accessing the course. For example, they have old hardware or software, there could be a bad internet connection, people who are suffering temporary illness and not able to work as efficiently as they used to, maybe someone met with an accident is unable to use some part of their body due to injury. There could be many more scenarios where people who do are having any kind of disability can find it challenging to access courses. In simple words, at least one person is directly or indirectly disabled in every learning group.

Per the CDC, one in four American adults has a disability. 26 percent which is about 61 million adults in the United States live with a disability
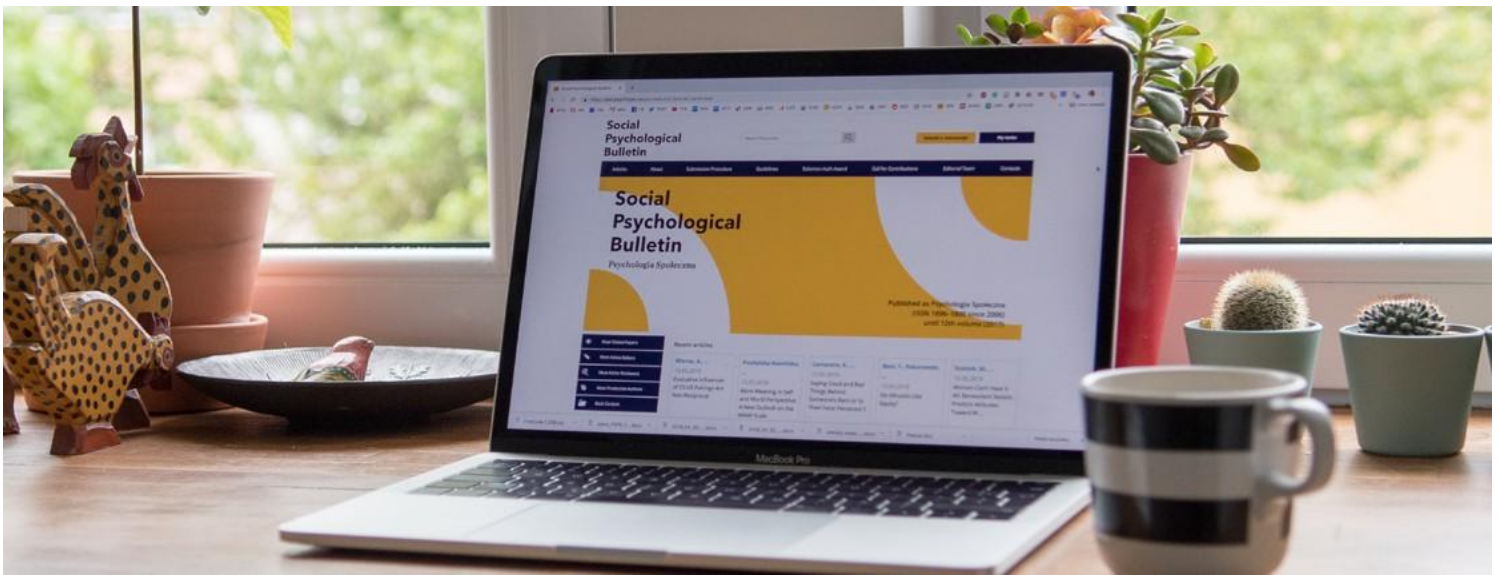
According to the World Health Organization (WHO), more than one billion people (that's 15% of the world!) live with some type of disability. Dyslexia alone affects around 10% of the population to some degree, making it one of the most common forms of learning challenges today.

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eLearning
Development

Designing
Accessibility
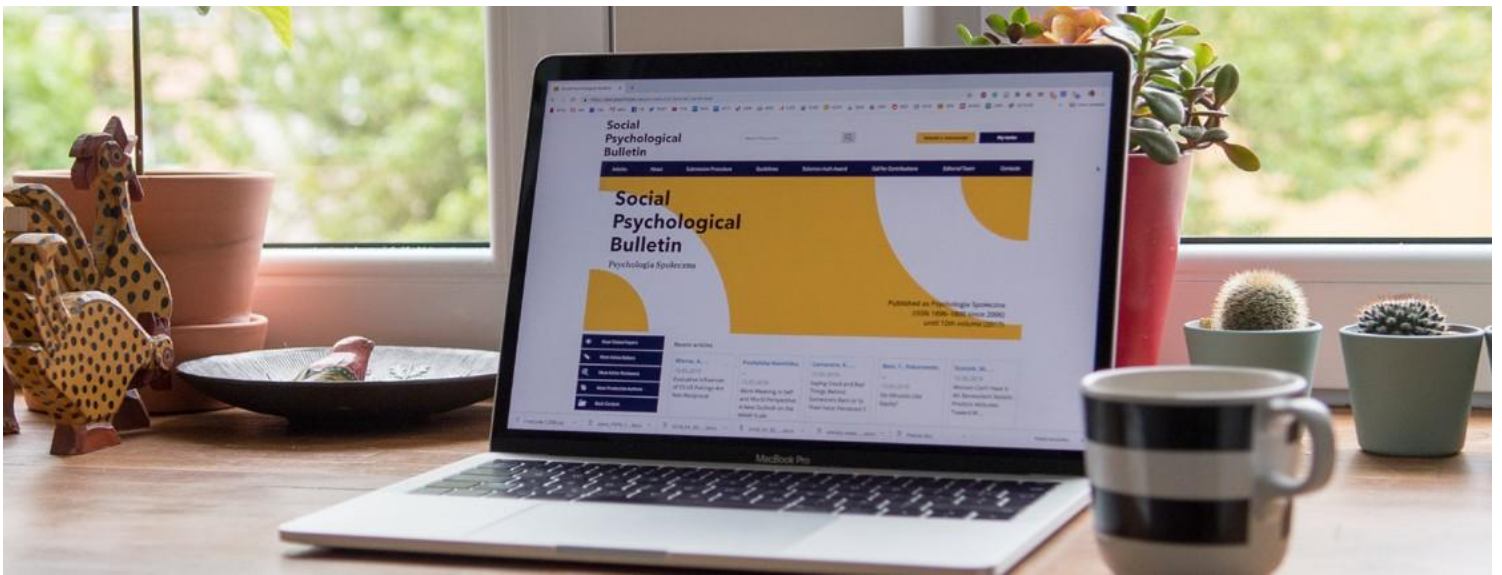
Blindness, Low Vision, Color Blindness

Vision

Do's

- Use simple, bold fonts that are at least 14pt in size.
- Use correct style and format, bold titles, different level to header H1, H2, H3
- Use a bulleted list instead of using a hyphen
- Use bold for importance, italic for emphasis, and blockquote for call-outs or quotes instead of using color to highlight important text.
- Ensure there is sufficient contrast dark and light between visual elements.
- Use alt tags for images.

Don'ts

- Do not hide your content within tabs or a dropdown list. Instead, put a list of points that can be seen. This is also helpful when a learner is dependent on a screen reader to describe what is there on the screen. Screen readers cannot access and read from a drop-down list.
- Avoid using color to differentiate your content, as people with color blindness may not be able to discern the difference in content easily.
- Don't use tables to style the content unless you are representing data in the table. Eg. instead of using tables to show "Do's" on one side and Don'ts on the other side of the table. Simply put it one by one under their respective headers.
- Better organizing of content makes it easily discernible for users with limited vision or visual learning disabilities.
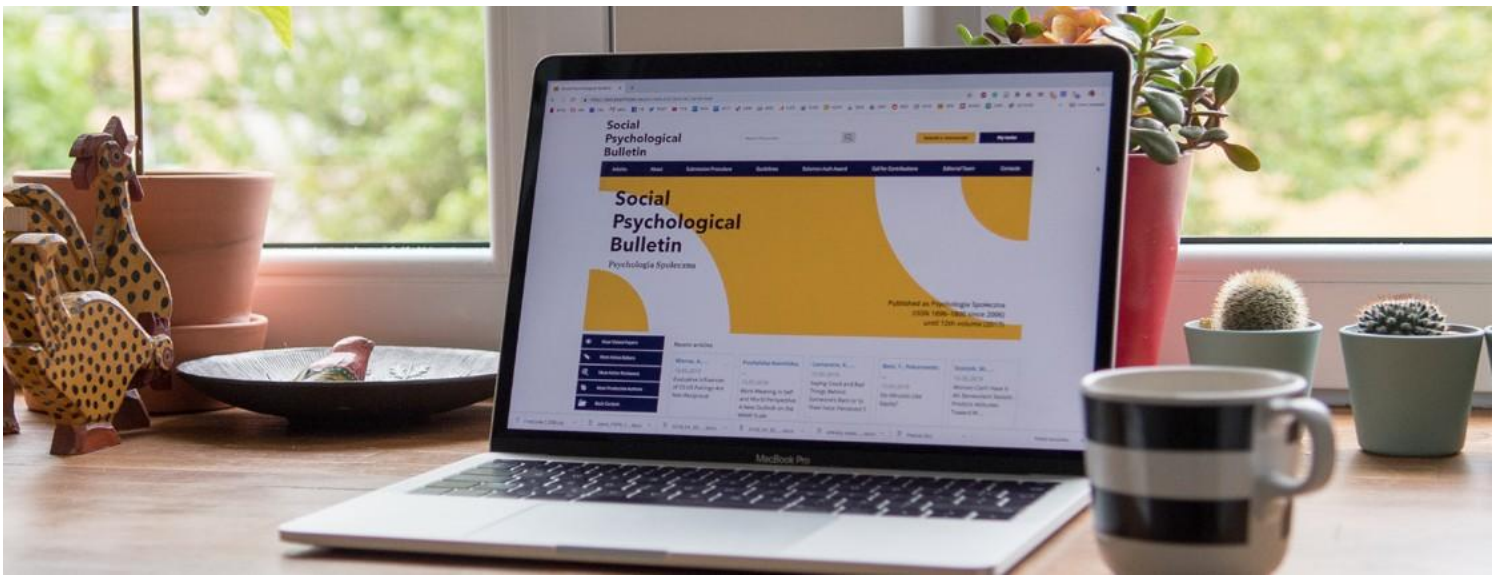
Deafness, Hard of Hearing

Hearing

People with hearing impairment tend to engage with eLearning content with more ease than people who are visually impaired. Still not being able to hear the audio is a challenge, so here are some tips to help individuals with this disability.

- Make sure to add captions for every video, especially wherever there is some kind of spoken explanation about the topic.
- For every video or audio format content offers written transcriptions. Transcriptions are not just helpful for people with hearing difficulties but it is helpful for everyone. It makes taking notes and revising the topic easy.
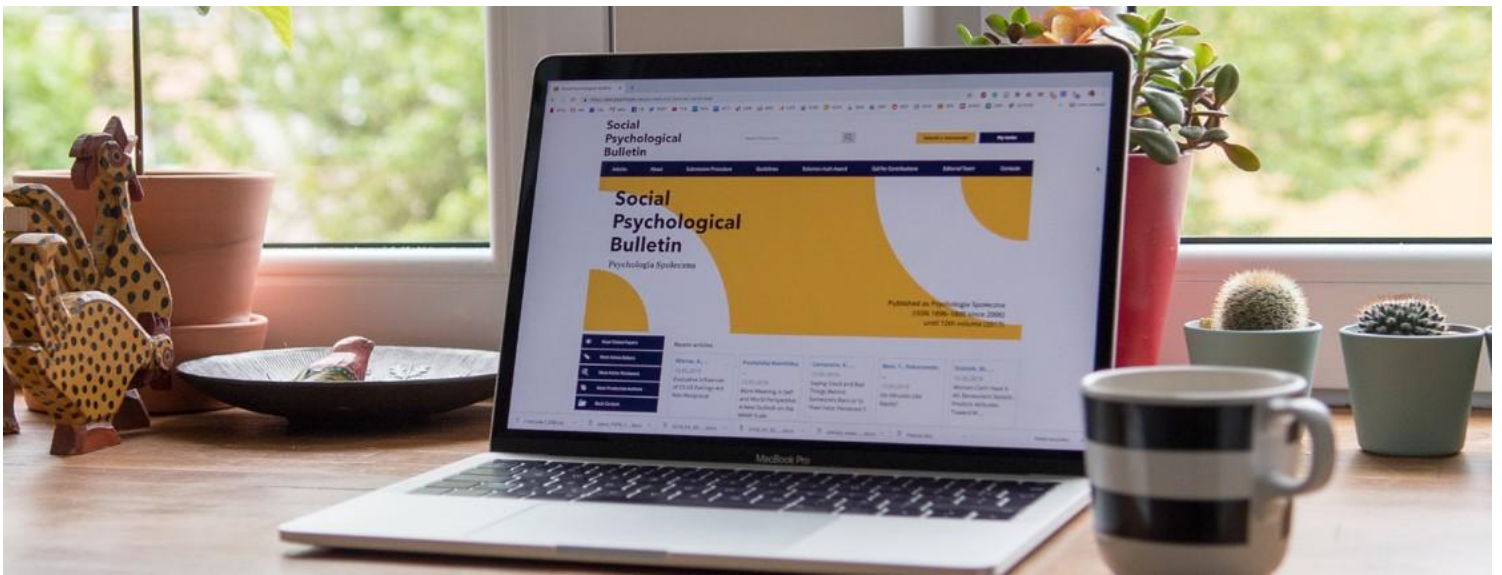
Spinal Cord Injury, Broken Limb, Cerebral Palsy

Mobility

Physical or Mobility Impairment restricts an individual from proper physical coordination of different organs or parts of the body. Disability in mobility can be by birth or acquired with age or in some cases caused due to some accidents. Persons with mobility disabilities often need assistive devices to help them do any form of physical activity.

eLearning courses are specifically beneficial to people with mobility disorders as they do not have to make travel arrangements or attend workshops or classes in crowded rooms.

There is one important tip here to make a note while developing accessible eLearning content, keeping in mind the needs of mobility disorder persons. It is if the course contains any drag and drop actions to be completed by the learner to try to first see and remove it. If not, let's say it's a crucial part of the content then try to at least provide keyboard shortcuts for the ones who need them.
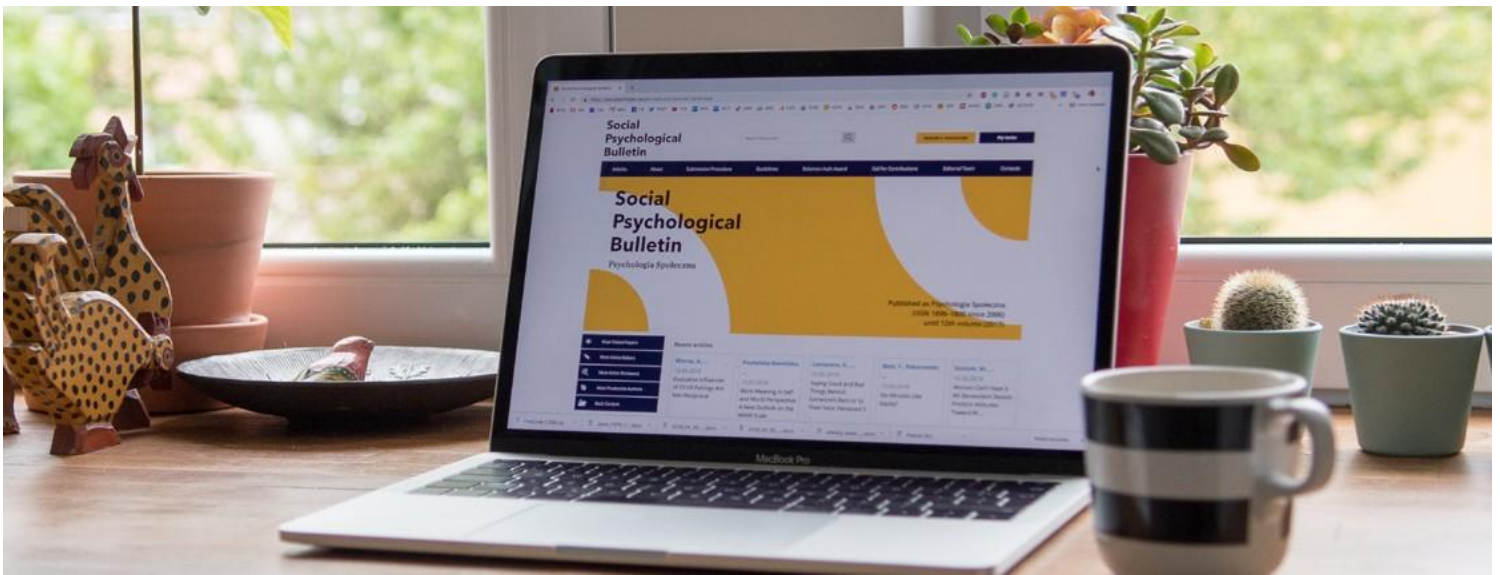
Speech Impediment, Unable to speak

Speech

For the live eLearning courses, there might be a need for participants to engage with other participants or instructors. To assist people impaired with speech disability allow participants to be able to communicate using text (message and comments). Check if they have a question or have something to share and allow them some time to write their thoughts.

Another scenario is when an eLearning course demands the learner to input voice-based commands or repeat certain words, to engage or interact with the content. In such scenarios, there should be an additional provision for people with a speech impairment to be able to use text-based input.

For eg. Type "I understand" if you understand this topic.
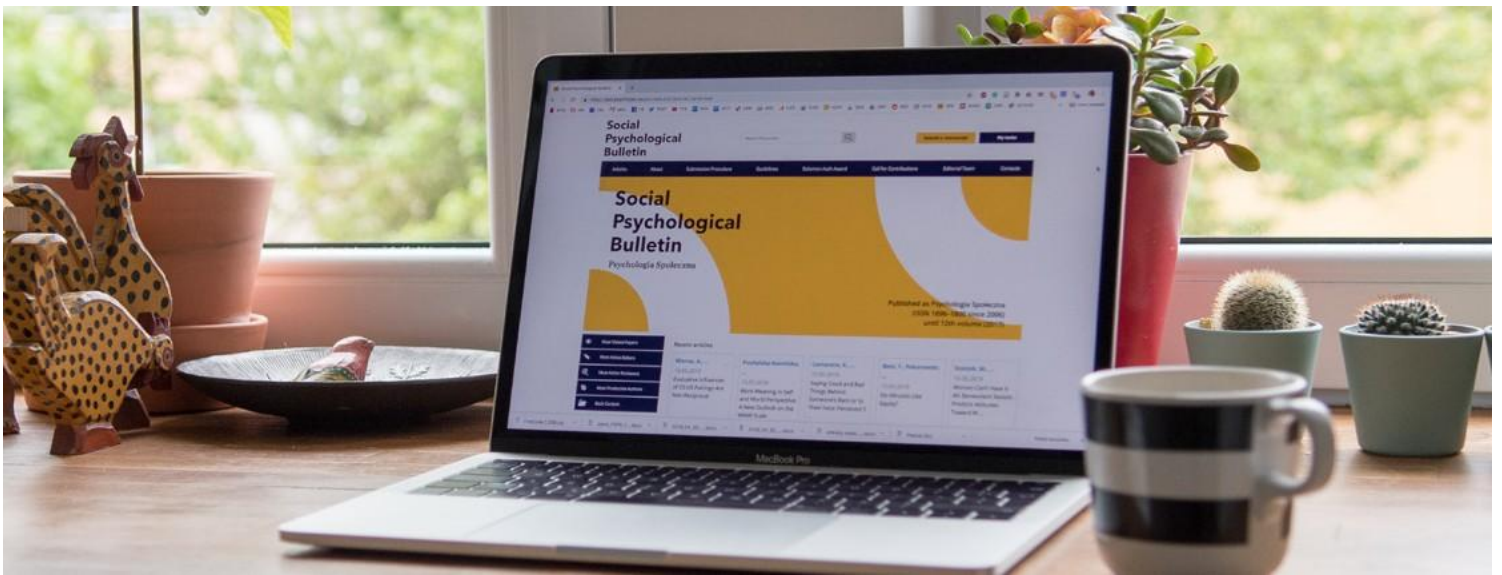
Memory, Problem Solving, Attention

Cognitive

Cognitive Impairment is when a person has difficulty concentrating, remembering, learning new things, or making decisions in their everyday activities.

Accessibility eLearning development can assist such individuals to better grasp, retain, and implement what they learn.

Ask yourself this question while designing your content.

1. Is the content easy to understand/comprehend?
2. If a problem arises, is it easy to solve?
3. Can learners easily recall or recognize information?
4. Is the task learners are asked to complete doable?
5. Is the reading level appropriate for my audience?

Seizure, Multiple Sclerosis

Neural

Neural disability is a condition caused by a dysfunction in part of the brain or nervous system, that results in physical or psychological disorders. All neurological disorders include the brain, spinal column, or nerves. And it can have a wide and varied range of causes, complications, and outcomes.

Some examples of neural disability are

- Cerebral palsy
- ADHD (Attention Deficit Hyperactivity Disorder)
- Autism
- Meningitis
- Stroke, Trauma, Hypoxia

For addressing the challenges of people with this group of disabilities it is suggested that you make the content accessible for the previously discussed challenges. Most of those points would be helpful for people with Neural disabilities.
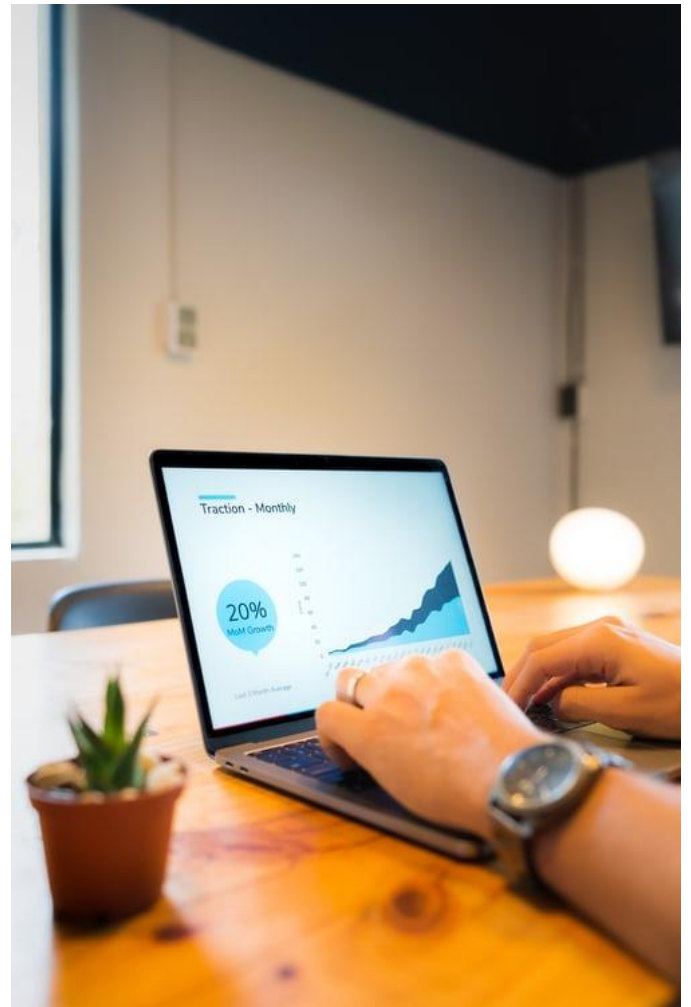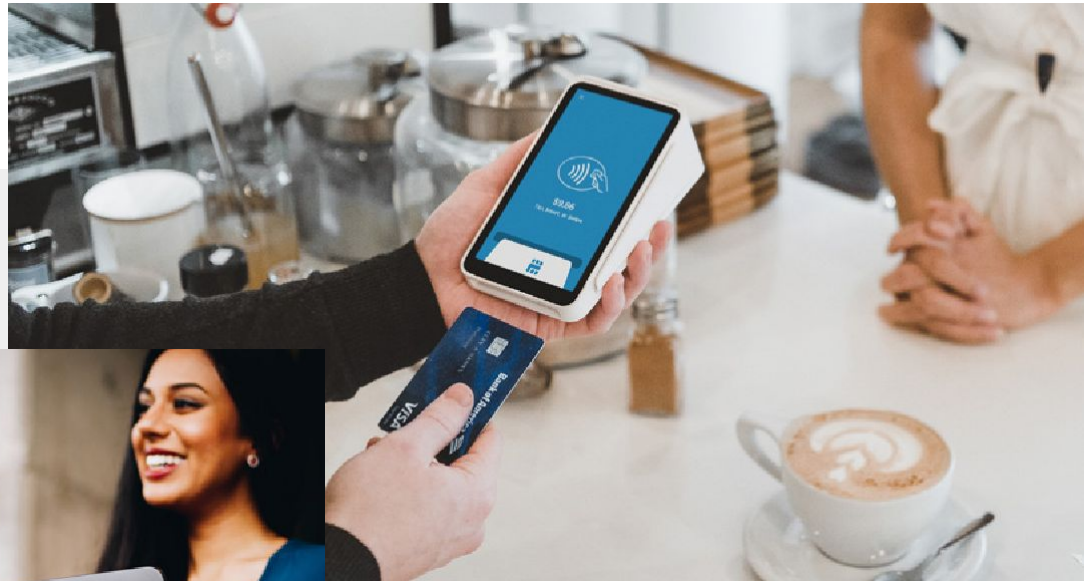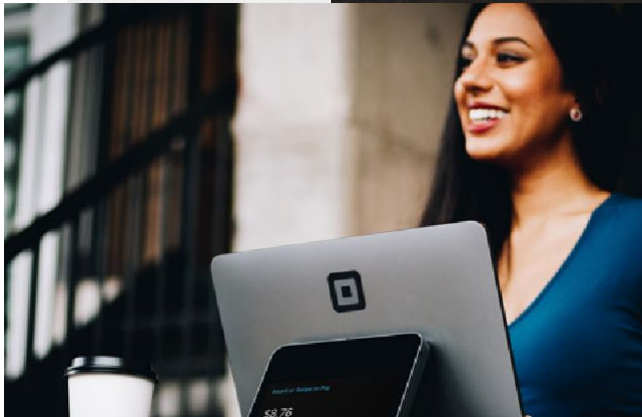
IDEA

IDEA was created to provide children with disabilities the same opportunity for education as is given to those who do not have a disability

About the ACT

 Individuals with Disabilities Education Act is a part of the American legislation. This law makes it legally applicable to create an eLearning course as per the guidelines set by the IDEA so that it solves the purpose of ensuring children with disabilities get equal learning opportunities. And that the disability of students should not be a hindrance in their education. It also makes sure that students with a disability get Free Appropriate Public Education (FAPE).

Let's <u>create Engaging online course</u> for people with all abilities.

Let's Talk

Discover how to make your eLearning courses accessible to people with all abilities.

Schedule a call with us to talk about how we can assist in speeding up and improving your eLearning development project..

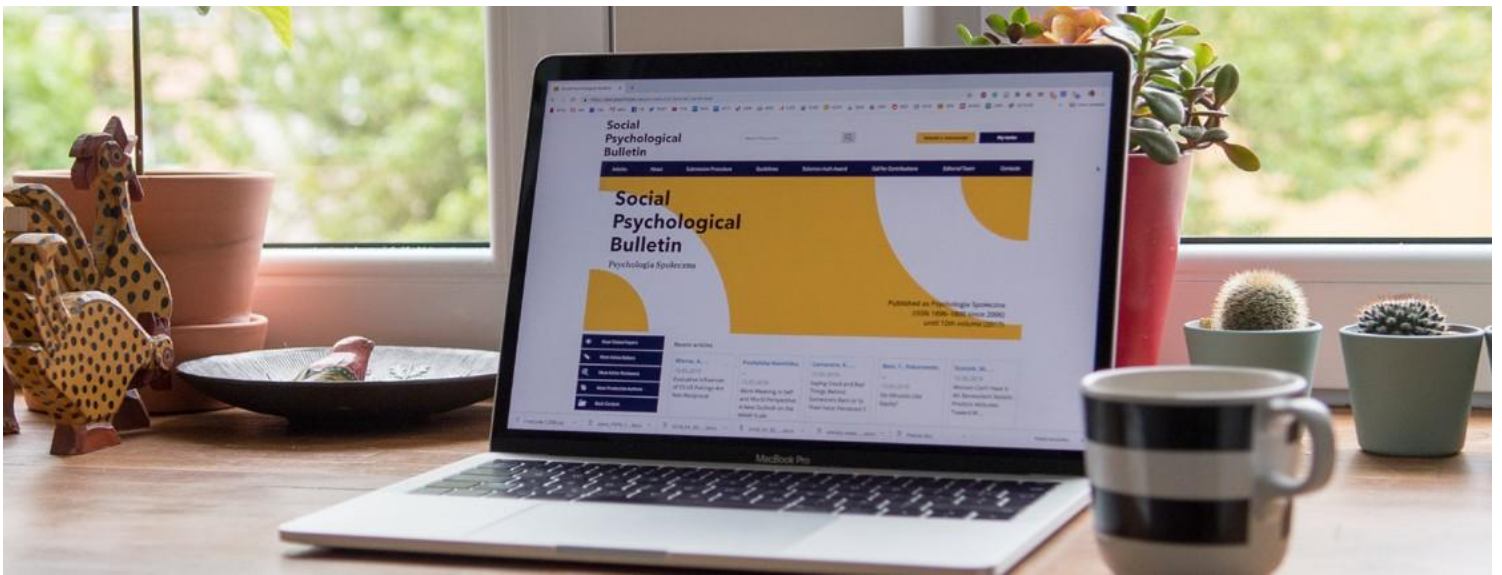<div style="button">Request Demo</div>

About Us

Visual Feedback & Bug Tracking tool faster eLearning development. Compatible with all kinds of eLearning courses

zipBoard makes collaboration among agile teams easier. It makes communication easier amongst web developers, designers, project managers and QA.

zipBoard is flexible as per the needs of your team. Product Manager, Subject Matter Expert (SMEs), or Instructional Designer – everyone does not need to install an authoring tool or LMS – they can all stay on the same page with zipBoard.

zipBoard

Thank you !

Resources

https://disabilitycompendium.org/sites/default/files/user-uploads/2017_AnnualReport_2017_FINAL.pdf

https://www.who.int/news-room/fact-sheets/detail/disability-and-health

https://www.disabled-world.com/disability/types/mobility/

https://elearningindustry.com/designing-accessible-elearning-6-tips

https://www.childneurologyfoundation.org/patients-or-caregivers/living-neurological-condition/what-is-a-neurologic-disorder/

https://unsplash.com/photos/tZnbakTUcTI

https://unsplash.com/photos/Kn_l9o5220Y

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https://en.wikipedia.org/wiki/Individuals_with_Disabilities_Education_Act

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