



Universal Design

Overview

Most people will have a disability during their lifetime or will know someone who does.⁴ As people age, disability becomes more common.⁴ However, many people experience changes in their functioning before entering a later stage of life. For instance, breaking a bone, being pregnant, or not being able to focus in a noisy environment can affect functioning. This is why universal design benefits everyone. Universal design is the planning of products and environments to be usable by people regardless of their age, size, or disability status.^{6,7} A benefit of universal design is that it promotes independent living by creating inclusive designs that can be used by people with all levels of ability.³ Some examples of universal design are captioned videos, using a variety of teaching and instructional methods, and automatic sliding doors. Universal design promotes access for people with disabilities but benefits all people.

“Disability drives innovation. The existence of disability forces you to come up with new solutions, it does not impair you.”⁶

Universal design applies to more than objects. Programs can also be universally designed. Many times, when a product or program is designed to benefit a group of people, it ends up benefitting everyone. This is known as the curb-cut effect. It refers to how curb cuts were initially created in response to the advocacy of people in wheelchairs. Then it was realized how curb cuts benefit everyone, like parents pushing a stroller and cyclists, and they became the norm.¹

Universal Design and Mental Health

Universal design applies to mental health in more than one way. A person’s mental health struggles can affect how they interact with their environment. For example, students with anxiety or trauma and stressor-related disorders may have trouble engaging and learning in school. One recommendation is using universally designed mental health programming in schools. This includes teaching all students coping strategies for anxiety. This can reduce stigma too, which may be created when students are identified and separated to participate in a program.⁵

Also, mental health resources are not always universally designed. As a result, not everyone has equal access to mental health supports. A person’s language proficiency, income level, and other personal characteristics can limit resources. These factors can affect how someone engages with a product or program and what resources are available to them. A person’s culture can also affect their interaction with mental health services. If a service is designed without considering diverse cultural values, then it may not serve everyone equally.

Universal Design Principles

There are seven principles of universal design that provide guidance when creating a product, program, or environment. Universal design can be applied to anything we create such as instructional methods, buildings, and websites. Try to think of how each principle can apply for you.

Equitable Use

Is the product or environment design useful and usable to people with a wide range of abilities? This includes making the design appealing to all users and avoiding separating or stigmatizing people. One example is an accessible website that everyone can use.^{2,3}

Flexibility in Use

Does the design allow for individual preference and abilities? This could mean that users can go at their own pace and have choices in how they use the product. Also, depending on the product you may see if it works equally well for right and left handedness.^{2,3}

Simple and Intuitive

Is your product easy to understand for people with different levels of experience? You may take into consideration the different levels of knowledge, literacy, and language skills your users have. If appropriate, you can include prompts and feedback for users.^{2,3}

Perceptible Information

Is information communicated to users in an effective way? Consider the immediate environment and conditions and how they can change. Also, is the information communicated effectively to people with a range of sensory abilities? One example of a factor to consider is the contrast level between the information text and its background.^{2,3}

Tolerance for Error

Does your design minimize consequences if a person makes a mistake? For example, if a user accidentally leaves a question blank then software can prompt and provide them with guidance. You can arrange elements to minimize errors and provide warnings.^{2,3}

Low Physical Effort

Can your design be used comfortably and effectively by people with a wide range of

physical characteristics? Depending on the product, you can check to minimize repetitive movements needed and only require a reasonable amount of force to operate.^{2,3}

Size and Space for Approach and Use

Does the size of your product and amount of space given, allow for people to use it regardless of size, posture, or mobility? You can check to see if information or visuals are visible to people in standing and sitting positions. Also, does the amount of space allow for assistive devices and personal assistance to be used?^{2,3}

Additional Resources

If you would like to learn more about how you can use universal design, you can visit the University of Washington's [DO-IT \(Disabilities, Opportunities, Internetworking, and Technology\) Center website](#). On this site, you can find a process to follow when applying universal design. There are also additional resources listed that apply to universal design in education, software, and physical spaces.

CAST is a nonprofit education research and development organization that focuses on universal design for learning. On the [CAST website](#), you will find guidelines about how to optimize teaching and learning for all people. These guidelines are available in multiple languages and can be found on the [CAST's downloads page](#).

Also, you can visit the Web Accessibility Initiative's [Introduction to Web Accessibility](#) to learn about how to make a website accessible. This site offers many resources and is available [in Spanish](#). By using a tool located at the top of the page, you can translate the information into other languages too.

Contributors

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