



Institute for Human Centered Design

What is universal design...inclusive design...design-for-all?

...a **framework** for the design of places, things, information, communication and policy that focuses on the user, on the widest range of people operating in the widest range of situations without special or separate design.

Or, more simply: **Human-Centered design (of everything) with everyone in mind**

Universal Design Principles:

Equitable Use: The design does not disadvantage or stigmatize any group of users.

Flexibility in Use: The design accommodates a wide range of individual preferences and abilities.

Simple, Intuitive Use: Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

Perceptible Information: The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

Tolerance for Error: The design minimizes hazards and the adverse consequences of accidental or unintended actions.

Low Physical Effort: The design can be used efficiently and comfortably, and with a minimum of fatigue.

Size and Space for Approach & Use: Appropriate size and space is provided for approach, reach, manipulation, and use, regardless of the user's body size, posture, or mobility.

[Developed by a group of US designers and design educators from five organizations in 1997. Principles are copyrighted to the Center for Universal Design, School of Design, State University of North Carolina at Raleigh. The Principles are in use internationally.]

Relationship between Legally Mandated Accessibility & Inclusive Design

Legally mandated requirements for accessible design, within a civil or human rights context, provide a vital basis for autonomy and equal opportunity for people with disabilities. To be effective, legal mandates require an infrastructure of information and enforcement in order to ensure meaningful compliance. Inevitably, the legal mandates establish a set of minimum standards for some built,



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information and communication environments and address the needs of people with some types of functional limitations. Too often those minimum standards are understood as maximums.

Accessibility is focused on people with disabilities, especially those who are 'qualified' as defined in the law. The design standards for accessible design focus primarily on accommodating the needs of wheelchair users and, to a lesser extent, people who are blind. Wheelchair users are a small number of people but their wheeled devices make very clear demands on the built environment and design features that make it possible to wheelchair users to participate benefit the much larger number of people with difficulty walking. Additional requirements for "effective communication" also require taking at least minimum steps to provide for alternative means of communication through auxiliary aids and services.

Accessibility laws and state codes on accessibility are a limited indicator of the potential of design to facilitate independence, participation and wellbeing for a growing proportion of people. In a world in which we live 30 years longer than people did 100 years ago and survive illness and injury at record rates, most of us will experience at least periods of functional limitation in the course of our lives. It is not about "special" anymore.

Universal or inclusive design *starts* with accessible design and calls for a more creative and imaginative engagement of designers to design places, products and technology that will work seamlessly for the widest possible group of potential users. The goal is to eliminate disabling environments (physical, information, communication, social and policy environments) in favor of enabling ones for everyone.

Sustainable design is not limited to *environmental sustainability* but also to *social sustainability*. Demographic changes in the 21st century demand setting a priority on the power of design to minimize anyone's functional limitations and facilitate everyone's performance. To succeed, we must reframe an agenda for inclusion and embed this vision of universal design into public policy at every level and into sustainable development and organizational policy.