IDeA Center

VIDEO LECTURE TRANSCRIPT

GOALS OF UNIVERSAL DESIGN

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Welcome to the video lecture, “The 8 Goals of Universal Design.” I’m Alexis Donnelly with the Center for Inclusive Design and Environmental Access at the University at Buffalo’s School of Architecture and Planning.

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Before I begin explaining the Goals of Universal Design, lets first talk about what Universal design or UD is.

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Our definition of universal design created by Edward Steinfeld and Jordana Maisel of the IDEA Center is a design process that enables and empowers a diverse population by improving human performance, health and wellness, and social participation. UD reduces stigma and provides benefits for all users.

In other words, making things easier to use, healthier and friendlier!

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So, at this point, you may be asking yourself...where did universal design come from?

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Well over the last 40+ years, significant efforts have been made to increase inclusivity and accessibility in the built environment through efforts such as the Architectural Barriers Act in 1968, the Americans with Disabilities Act in 1990...among others. Although accessibility laws have helped to support these outcomes and decrease discrimination due to physical barriers, UD aims to go ***further*** to better support the needs of ***all*** people. Building upon these laws and the foundation of the Seven Principles of UD, the Goals of Universal Design were created.

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Why is this needed you may ask?

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Universal design goes beyond the minimal requirements of accessibility and aims to address the needs of more diverse stakeholders.

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OK-now let's talk about the difference between universal design and accessibility because the two very different concepts are often confused. In short, universal design goes beyond the accessibility requirements.

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Accessibility implies compliance with minimum ADA codes and other standards while universal design aims to achieve universal access for all by eliminating barriers.

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Let's take a bathroom for example, when designing for accessibility, the design will comply with the required codes for wheelchair access.

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Whereas, when designing a bathroom for universal design, the design will exceed code requirements and provide high levels of convenience, privacy, and sensory enhancements for all.

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The IDEA Center expanded the conceptual framework of universal design to go beyond usability to include social participation and health and wellness while also acknowledging the role of context when developing realistic applications.

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Now let's talk about the Eight Goals of Universal Design... Grounded in evidence-based research, the eight goals are stated concisely in terms of measurable outcomes.

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They include four goals oriented to human performance, each focusing on one of the four areas of knowledge, including: anthropometry, biomechanics, perception, and cognition.

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Three other goals address social participation outcomes.

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Wellness, and goal number 5, is the bridge that addresses both human performance and social participation

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First off... Body fit: Does the design accommodate a wide a range of body sizes and abilities?

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The illustration pictured here features varying swing sizes to allow people of all shapes and sizes the opportunity to comfortably play and swing alongside one another.

Many of us have been to a playground in the past and observed swings and other pieces of equipment that are unusable on account of their height or size. This goal aims to address those populations so that, as is the case in this example, everyone can play!

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The second goal is Comfort: Are the demands of the design within desirable limits of body function and perception?

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Providing a choice in design can create a supportive and comfortable environment. Here, those waiting for the bus can choose to sit or stand and are provided with shaded and un-shaded options.

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The third goal is Awareness: Does the design ensure that critical information for use is perceived easily?

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This illustration includes tactile ground guides to help individuals with visual impairments avoid getting too close to the street. The tactile guides also assist fully sighted pedestrians and serve as an affordance to help everyone remember to stay back until the crossing signal gives the OK to begin walking. Also illustrated is a pedestrian crossing signal providing audible information coinciding with the visual cues. Combined, these features provide visual, audible and tactile cues to pedestrians.

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The fourth goal is Understanding: Are the methods of operation and use intuitive, clear, and unambiguous?

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The illustration features a bottle filling station and a dual-height drinking fountain providing clear, accessible, and comfortable use for individuals of different heights, as well as knee clearance for wheelchair users. The fixture design is easily recognizable as a drinking fountain, and the illustration of the bottle helps to identify the function of the bottle filling feature.

This design helps user to understand what they’re looking at and how to use it.

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The fifth goal is Wellness: Does the design contribute to health promotion, avoidance of disease, and protection from hazards?

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Simple strategies, such as painting and the use of vegetation to delineate walkways, bike lanes, and vehicular lanes are used to encourage a wider range of active and non-vehicular transportation. This simple organization helps to provide safer, friendlier, and more inclusive outdoor recreation to better support active lifestyles.

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The sixth goal is Social Integration: Does the design treat all groups of people with dignity and respect?

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When designing for community interaction, there should be opportunities for all to participate. Shown here are some design strategies that encourage integration and engagement, such as planter beds with varying heights, an accessible play area for children, and shaded seating, all enclosed by a low fence to provide added safety without obstructing views..

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The seventh goal is Personalization: Does the design have opportunities for choice and expression of individual preferences?

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By providing a variety of publicly available seating options, users are afforded seating with and without back support, the option to utilize shading devices, and of course a variety of seating locations with varying views.

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And lastly, the eighth goal is Cultural Appropriateness: Does the design respect and reinforce cultural values and the social and environmental context?

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The image shown illustrates Various languages and sign types utilizing a combination of text and infographics to support information comprehension by all groups.

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Now, let’s take everything we know about universal design, and the eight goals, and apply it to the real world. How do we do this?

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Well, our center has created the first ever Universal Design building Certification program, isUD, or innovative solutions for Universal Design. With more than 500 voluntary solutions guided by the goals of universal design, isUD’s objective is to promote and facilitate inclusivity in the built environment and transform the way buildings and communities are designed and maintained to make our world healthier, friendlier, and safer for everyone.

Let’s take a quick look at some of the first buildings to receive isUD Certification to see some of the Goals of universal design in use!

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Shown here: HANSA Workplace, a co-working space located in Buffalo, NY. Some universal design features that were implemented in this project include:

- All public building entrances and exits are at grade with level thresholds
- Oversized circulation paths connecting all program spaces
- Inclusion of biophilic design to increase visual comfort, decrease stress and create a healthier environment
- Flexible meeting rooms, offices and spaces that can be easily adapted to meet various functional needs
- management staff who are trained to assist members of all abilities.

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OK, now let’s see the Goals in use at the isUD certified Hampton Inn by Hilton Hotel. Such as:

- carpet color changes outside of rooms to increase visibility
- High contrast signage
- Increased room sizes.
- floating bedside tables that allow for ample storage space whether it be for a bag or a CPAP machine, which can be conveniently tucked away
- The lobby is equipped with personal nooks with sound barriers to improve acoustics and intelligibility in public spaces
- The inclusion of several styles of bathrooms with different features, including roll-in showers, shower doors as well as tubs with seats.

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The world is changing...buildings should too. As with any significant change, the most important catalyst is the demand for improvement; designers and builders can truly set a community’s framework in motion. Start using the *isUD* program today and become a leader in your industry on inclusive design practices! More information is available on our website at thisisud.com!

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And that concludes this video presentation on the 8 Goals of Universal Design created by the IDEA Center Team. More information on the Goals of Universal Design can be found in our textbook, Universal Design: Creating Inclusive Environments. You can also visit our website displayed on your screen now. From the University at Buffalo’s Idea Center, I’m Alexis Donnelly. Thank you again for watching and for your interest in the 8 Goals of Universal Design.