Inclusive Design & Accessibility

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Inclusive Design is a holistic process that involves consideration of various facets of human diversity including age, gender, race, religion, culture and experience. This process respects and acknowledges that within any given population there is a wide spectrum of individual abilities, needs and aspirations. Inclusive design principles and methods are applied across all design disciplines including communication, products, services and the built environment.

In North America, the development of inclusive design principles and processes emerged from the civil, veteran and
disability rights movements that started to gain momentum in the 1960s. One important outcome of these political actions is the shift from a medical to a social model of disability. The social model identifies societal barriers, negative perceptions and attitudes as the primary drivers of exclusion.

One common perception of “universal design” is that designs should be accessible to and usable by as wide a population as possible. Inclusive design recognizes that this goal is not always attainable or appropriate, thus
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the focus is to acknowledge diversity in populations and to be sensitive to specific contexts and parameters.

In 2012, Edward Steinfeld and Jordana Maisel from the Center for Inclusive Design and Environmental Access (IDeA), School of Architecture and Planning, University of Buffalo developed eight Goals of Universal Design. The first four goals are: **Body Fit, Comfort, Awareness,** and **Understanding** (These include research in ergonomics, human factors, sensory perception and anthropometrics). The fifth goal of **Wellness** focuses on how products,
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services and the built environment impact usability, health and well-being. The final three goals, Social Integration, Personalization and Cultural Appropriateness, draw on the social sciences to recognize socio-cultural diversity.

Key milestones in accessibility legislation such as The Americans with Disabilities Act (US, 1990), the Disability Discrimination Act (Australia, 1992, United Kingdom, 1995), the Disability Act (Ireland, 2005) and the Accessibility for Ontarians with Disabilities Act (Canada, 2005) are the result of evolving societal values regarding inclusion.
Learning Outcomes

Engage in an empathetic human-centered design process to foster a deeper understanding of the challenges and barriers impacting social inclusion.

Develop a sensibility towards the diverse range of capabilities and abilities within a given population and for specific contexts.

Develop an understanding of cultural differences within an inclusive design approach.

Apply sensitivity in use of language, terminology and methodologies when working with diverse populations.

Universal Symbols in Healthcare, Hablamos Juntos and SEGD
Learning Outcomes

- Research current and emerging adaptive strategies and technologies for people with various abilities.

- Integrate knowledge of relevant national and international accessibility legislation, professional standards and ethics throughout the design process.
Case Studies per practice area

Exhibition
Cooper Hewitt Smithsonian Design Museum, The Senses: Design Beyond Vision
Designers: Studio Joseph; David Genco
https://segd.org/senses%E2%80%94design-beyond-vision-both-feat-and-feast

Exhibition
U.S. National Park Service, Yellowstone National Park, Old Faithful Visitor Center
Designer: Christopher Chadbourne & Associates
https://segd.org/old-faithful-visitors-center-exhibitions-and-accessibility

Exhibition
U.S. National Park Service, World War II Valor in the Pacific National Monument at Pearl Harbor
Designer: AldrichPears Associates
Case Studies per practice area

Exhibition
Canada Science and Technology Museum, Artifact Alley
Designer: Reich+Petch Design International
https://www.rgd.ca/2018/01/24/accessibility-case-study.php

Exhibition/Placemaking
Gallaudet University, Maguire Welcome Center
Designer: C&G Partners
https://segd.org/deafspace-exhibit-design-gallaudet-university%E2%80%99s-maguire-center-0

Wayfinding
Interactive Wayfinding Maps
Designers: Center for Inclusive Design and Environmental Access (IDeA) at the University at Buffalo and Touch Graphics, Inc.
https://segd.org/interactive-wayfinding-visually-impaired
Case Studies per practice area

**Wayfinding**
Deloitte Montreal corporate offices
Designer: Reich+Petch Design International
https://segd.org/agile-wayfinding-deloitte-montreal

**Symbol Design/Wayfinding**
Accessible Icon Project/ International Symbol of Access
https://segd.org/blog/international-symbol-access-challenge-updating-icon

**Symbol Design/Wayfinding**
Universal Health Care Symbols
Project management: Hablamos Juntos and SEGD
https://segd.org/hablamos-juntos-universal-health-care-symbols
Case Studies per practice area

Interactive Experience
Canadian Museum of Human Rights
Designers: Gagarin
https://segd.org/designing-interactive-experiences-museum-human-rights

Digital Experience Content
Bill & Melinda Gates Discovery Center
Designers: Bluecadet Interactive
https://segd.org/bill-melinda-gates-discovery-center

Research & Education
Communication + Place journal: “An Eight Step Pedagogy for Teaching Social Design”
Neeta Verma
https://segd.org/eight-step-pedagogy-teaching-social-design
Research & Education

Humanizing the System: A Podcast
Justine Wang and Maddy Kelly, University of Notre Dame
Professor: Neeta Verma
https://atelierjustine.com/racism-divides
Resources

SEGD Resources
https://segd.org/mirtec-launching-nfc-accessibility-tags
https://segd.org/what-accessibility-and-ada
https://segd.org/2012-ada-white-paper-update
https://segd.org/what-legibility
https://segd.org/inclusive-high-quality-decisions-macromicro-design-impacts-within-our-everyday-experiences-0

Download the PDF of the full set of Disability Access Symbols, also known as Accessibility Symbols for use in your projects. This file can be opened in Illustrator for vector art usage.
https://segd.org/accessibility-symbols

Accessibility Legislation
Americans with Disabilities Act (ADA)
https://www.ada.gov

Accessibility for Ontarians with Disabilities Act (AODA)
https://www.ontario.ca/laws/statute/05a11

Equality Act (United Kingdom)

The Disability Discrimination Act (Australia)

The Disability Act/National Disability Strategy (Ireland)
http://nda.ie/Disability-overview/

United Nations Convention on The Rights of Persons with Disabilities
Resources

Publications


Hannington, Bruce and Bella Martin, eds. Universal methods of design: 100 ways to research complex problems, develop innovative ideas and design effective solutions. Rockport Publishers, 2012.


Resources

Online

AIGA Design for Democracy initiative
https://www.aiga.org/design-for-democracy

AIGA Diversity & Inclusion initiative
https://www.aiga.org/diversity-and-inclusion-initiative

AIGA Diversity & Inclusion task webcast series
http://www.aiga.org/diversity-and-inclusion-webcast-series

Americans with Disabilities Act (ADA)
https://www.ada.gov/

Automattic Design: Inclusive Design checklist
https://design.blog/inclusive/

Canadian National Institute for the Blind (CNIB) Foundation
http://www.cnib.ca/

Canadian Centre for Disability Studies (CCDS)
http://www.disabilitystudies.ca/

Center for Inclusive Design and Environmental Access, University of Buffalo, SUNY
http://idea.ap.buffalo.edu/

Centre for Accessible Environments, UK
http://cae.org.uk/

Centre for Disability Studies, University of Leeds, UK
http://disability-studies.leeds.ac.uk

Centre for the Study of Political Graphics
http://www.politicalgraphics.org/

Cooper Hewitt Smithsonian Design Museum, The Senses: Design Beyond Vision

Creative Reaction Lab
http://www.creativereactionlab.com/

Decolonising Design
http://www.decolonisingdesign.com

Design Council – Inclusive Environments, UK
http://www.designcouncil.org.uk/what-we-do/inclusive-environments

Design for All - Europe
http://dfaeuurope.eu/

DesignABLE
http://designable.ca/

Design Research Society, Inclusive Design Research Special Interest Group
http://www.designresearchsociety.org/cpages/inclusive-sig

Designing for People, University of British Columbia, Canada
https://dfp.ubc.ca/

Global Disability Innovation Hub, University College London, UK
https://www.disabilityinnovation.com/

Helen Hamlyn Centre for Design, Royal College of Art, UK
https://www.rca.ac.uk/research-innovation/helen-hamlyn-centre/

IDEO: Facilitator’s Guide to Human-Centered Design
https://www.plusacumen.org/courses/facilitator%E2%80%99s-guide-human-centered-design

IDEO Human-Centered Design Field Guide
http://www.designkit.org/resources/1

“Inclusive Washrooms: A Solution Through Signage”, Entro Communications
https://segd.org/entro-produces-inclusive-washroom-paper
Resources

Inclusive Design Institute, OCAD University, Canada
https://inclusivedesign.ca/research/design/

Institute for Human-Centered Design
https://humancentereddesign.org/

Disability Arts International, UK
Tate Museum “Two approaches to developing access in galleries & museums”

Interaction Design Association, Accessibility: Usability for all
https://www.interaction-design.org/literature/article/accessibility-usability-for-all

Lighthouse International
http://li129-107.members.linode.com/

Mapping Access project, Critical Design Lab
https://www.mapping-access.com/

Registered Graphic Designers of Ontario (RGD) Accessible Design
http://rgd-accessibledesign.com

Smithsonian Guidelines for Accessible Exhibition Design
https://www.si.edu/accessibility/sgaed
https://www.si.edu/Accessibility

The Center for Universal Design, North Carolina University
https://projects.ncsu.edu/ncsu/design/cud/

The Centre for Excellence in Universal Design, Ireland
http://universaldesign.ie/

Web Content Accessibility Guidelines (WCAG) 2.0
https://www.w3.org/TR/WCAG20/