A monthly Publication of Design for All Institute of India

January 2026 Vol-21 No-1
ISSN:2582-8304

Design for All

Guest Editor : Jani Nayar
Executive Director
The Society for Accessible Travel and Hospitality(SATH)

ISSN : 2582 – 8304

January 2026 Vol-21 No-1

ISSN : 2582 – 8304

Guest Editor:

Jani Nayar

In 1995, after a decade of running her own travel agency, Jani Nayar discovered her passion for accessible travel. Wanting to make a difference, she joined the Society for Accessible Travel & Hospitality (SATH), now the Society for Accessible Tourism & Hospitality.

Tour operations were just the beginning. This soon grew into a lifelong commitment. Jani served as Executive Coordinator and then Executive Director. In these roles, she represents SATH, advocating for accessible travel and connecting travelers, communities, governments, and industry leaders. Her focus is on ensuring travel is accessible to all abilities.

Throughout her career, she has contributed to international forums and workshops on inclusive tourism across the Americas,

Africa, Asia, and the Caribbean. Her impact goes beyond conferences; she works directly with community groups and organizations, leading projects that address both infrastructure and attitudinal accessibility.

Collaborating with governments, industry bodies, and local stakeholders, she has supported sustainable accessibility initiatives that help destinations become more inclusive. She is also an author on accessible tourism and has been featured in both broadcast and print media.

A graduate from the University of Kerala, Trivandrum, India, where she graduated first in her discipline, with a Bachelor of Science degree, earning the university's Gold Medal for Excellence.

ISSN : 2582 – 8304

Universal Design for Learning (UDL): Blueprints for Belonging: Designing Classrooms for All

Jani Nayar

Abstract

Universal Design for Learning (UDL) is a framework that enables all learners to access, engage with, and express their learning by anticipating variation in learners' needs and designing instruction accordingly. This article explores the principles of UDL, its theoretical foundations, practical strategies for implementation, and its benefits and challenges. Drawing on research and practice, it argues that UDL is key for cultivating inclusive, flexible, and equitable educational environments. The article concludes with recommendations for educators and institutions to adopt UDL more broadly.

Keywords

- **Universal Design for Learning**
- **Inclusive education**
- **Multiple means of engagement**
- **Multiple means of representation**
- **Multiple means of action and expression**

- **Educational equity**

Introduction

Education has the power to shape lives. To realize that potential for *all* learners, educators must account for the wide variety of ways in which people learn. Traditional one-size-fits-all models often leave some students behind—those who learn more slowly, those with learning differences, sensory or physical disabilities, or simply those whose preferred learning modes differ from the norm. Universal Design for Learning (UDL) responds to this diversity by offering a proactive framework to design teaching and learning that accommodates variability, rather than retrofitting accommodations after barriers emerge. This article examines what UDL is, its guiding principles, how it can be put into practice, what evidence supports its effectiveness, and what challenges must be addressed as educators adopt UDL.

Theoretical Foundations of UDL

UDL originates in cognitive neuroscience and disability studies. It draws on research about how people perceive, understand, and act. Key insights include:

- **People differ in how they engage with material (motivation, interest, attention).**
- **They also differ in how they perceive content (through vision, hearing, reading, etc.).**

- **And they differ in how they express what they know (writing, speaking, drawing, doing something hands-on).**

These differences are not exceptions; they are the norm. UDL's goal is to design educational environments and materials that recognize this variability from the start.

Core Principles of UDL

The UDL framework is built around three interrelated principles, each offering guidelines for practice:

1. **Multiple Means of Engagement**:
   This addresses *why* learners are motivated and how to keep them interested and invested. Strategies include offering choices in tasks; incorporating learners' interests; providing opportunities for collaboration; and using feedback that reinforces growth, not just performance.
2. **Multiple Means of Representation**:
   This addresses *what* learners receive as input. For example, providing content via text, audio, video, images, offering translations, using captions, giving advance organizers, using varied media to illustrate concepts, and ensuring information is accessible (e.g., readable fonts, good contrast, alt text for images).
3. **Multiple Means of Action & Expression**:
   This addresses *how* learners show what they've learned. Methods could include essays, presentations, projects, artwork, demonstrations, giving options for using assistive technologies,

permitting drafting and revision, and scaffolding tasks so learners can plan, monitor, and revise their own work.

Practical Implementation Strategies

To apply UDL effectively, educators and institutions can use a variety of strategies:

- **Curriculum Design**: **Plan materials and assessments with variability in mind from the beginning. Use backward design (define goals first, anticipate barriers, then plan supports).**
- **Flexible Materials**: **Use digital resources that can be adapted (e.g., adjustable font size, screen readers). Provide multiple formats for reading.**
- **Inclusive Learning Environment**: **Physical space matters—lighting, acoustics, layout. Also, ensure classroom norms support participation by all (e.g., encouraging peer interaction, establishing a safe space for different opinions or ways of learning).**
- **Assessment and Feedback**: **Offer options for assessment. Provide formative feedback often. Use rubrics that are transparent and allow different modes of expression.**
- **Technology and Tools**: **Use assistive tech, learning management systems, multimedia tools. Ensure they are accessible (captioned videos, transcripts, alt text, etc.).**

- **Professional Development**: **Teachers need training in UDL principles and support in implementation. Institutions should provide time, resources, and a culture that values inclusive teaching.**

Benefits of UDL

- **Greater Student Engagement**: **By allowing choice and varied means of learning, many students feel more motivated and invested.**
- **Reduced Need for Individual Accommodations**: **When learning environments are designed to be flexible from the start, fewer reactive accommodations are needed.**
- **Improved Outcomes for Diverse Learners**: **Research shows that UDL practices help students with disabilities, English language learners, those with learning differences, and often the general student population.**
- **Equity and Inclusion**: **UDL supports social justice by recognizing and valuing diverse learning styles and reducing systemic barriers.**

Challenges and Considerations

- **Time and Resources**: **Designing multiple paths of representation, engagement, and expression takes planning, materials, and sometimes additional technology.**

- **Institutional Constraints**: **Standardized curricula, rigid testing, limited budgets, large class sizes can hinder UDL implementation.**
- **Teacher Training and Mindset**: **Without buy-in and support, teachers may feel overwhelmed or unsure how to start. Changing mindset from "fixing students" to "designing learning" is a shift.**
- **Balancing Flexibility with Standards and Goals**: **Ensuring that while learners have choices, the learning goals remain clear and rigorous.**

Conclusion

Universal Design for Learning offers more than a set of best practices—it offers a vision of education built on inclusion, flexibility, and respect for learner variability. By adopting its three core principles (engagement, representation, action & expression), educators can create learning environments that work for many rather than designing for a few and adapting for the rest. While challenges in time, resources, and institutional support exist, the benefits—to students, to educators, and to society—are substantial. As education continues to evolve, especially considering technological change and increasing diversity in learner backgrounds and needs, UDL stands as an essential framework for equitable, effective teaching and learning. Institutions should invest in teacher training, supportive infrastructure, and policies that embed UDL in curriculum design. Teachers should start with small steps—

adding choices, varying formats, gathering feedback—and gradually build more inclusive, accessible learning experiences.

References

AST. (2018). ***Universal Design for Learning Guidelines version 2.2.*** **Retrieved from http://udlguidelines.cast.org**

Meyer, A., Rose, D. H., & Gordon, D. (2014). ***Universal Design for Learning: Theory and Practice.*** **CAST Professional Publishing.**

Rose, D. H., & Gravel, J. W. (2010). ***Universal Design for Learning.*** **In P. Peterson, E. Baker, & B. McGaw (Eds.),** ***International Encyclopedia of Education*** **(3rd ed.). Elsevier.**

Scott, S. S., McGuire, J. M., & Shaw, S. F. (2003). Universal Design for Instruction: A Framework for Anticipating and Responding to Disability and Other Diverse Learning Needs in the College Classroom. ***Equity & Excellence in Education,*** **36(1), 40-49.**

Tomlinson, C. A. (2014). ***The Differentiated Classroom: Responding to the Needs of All Learners.*** **ASCD.**

ISSN : 2582 – 8304

Debra Ruh

Debra Ruh is a global advocate and entrepreneur advancing disability inclusion, accessible innovation, and ethical AI. Founder of Ruh Global IMPACT and Executive Chair of Billion Strong, she advises corporations, governments, and NGOs worldwide. Debra's work turns inclusive values into scalable programs, products, and partnerships that uplift communities. For over three decades, Debra has worked with multinational corporations, governments, and NGOs to embed accessibility, inclusive design, and responsible innovation into strategy and operations. She is a sought-after advisor and speaker on human-centered AI, equitable digital transformation, and the business value of inclusion. Debra's work bridges advocacy and execution—amplifying community voices while shaping practical solutions and partnerships that scale. She

ISSN : 2582 – 8304

collaborates widely, including with Life for Relief and Development (LifeUSA), to connect inclusive practice with humanitarian impact. Based in Virginia, Debra continues to champion policies, products, and ecosystems that enable people of all abilities to thrive.

ISSN : 2582 – 8304

Blueprints for Belonging: Harnessing AI4Good and Tech4Good for Inclusive Classrooms

Debra Ruh

Abstract

Technology is no longer a neutral backdrop in education—it is a driving force that can either reinforce exclusion or unlock belonging. This article explores how AI4Good and Tech4Good, combined with Universal Design for Learning (UDL), are transforming classrooms into inclusive ecosystems where every learner can thrive. At the heart of this effort is collaboration: no single actor—educator, technologist, policymaker, or advocate—can achieve this vision alone. By joining forces and centering human inclusion, we can design education that supports learners across all life stages and in every direction their lives may take.

Keywords

AI4Good, Tech4Good, Universal Design for Learning, Inclusive Education, Human-Centered Design, Accessibility, Collaboration, Belonging

Introduction

Across the world, classrooms are microcosms of our societies. They bring together learners with diverse abilities, cultures,

languages, and lived experiences. Yet too often, educational systems are designed for the "average" learner—a concept that leaves many behind. Many classrooms remain physically, digitally, and socially inaccessible, and students with disabilities or unique learning needs are forgotten when decisions are made.

The promise of Universal Design for Learning (UDL) is to replace this outdated model with one that recognizes and values difference. Emerging technologies—particularly those within the AI4Good and Tech4Good movements—can accelerate this transformation. But none of this is possible in isolation. Only through cross-sector collaboration can we create learning environments that work for every human being.

1. The Role of Universal Design for Learning (UDL)

UDL provides a blueprint for designing learning environments that are flexible, accessible, and empowering for all. It emphasizes three core principles:
- Multiple means of engagement (the "why" of learning),
- Multiple means of representation (the "what" of learning), and
- Multiple means of action and expression (the "how" of learning).

Through UDL, educators can ensure that classrooms become spaces where every student—not just a select few—can participate fully and meaningfully.

2. AI4Good: Personalization Without Exclusion

Artificial intelligence, when designed responsibly, can serve as an engine of inclusion. For example:
- Adaptive learning platforms that adjust pace and content based on student needs.

- Speech recognition and translation tools that break down linguistic and cultural barriers.

- Predictive analytics that help identify students at risk of disengagement, allowing timely intervention.

AI4Good ensures that these innovations are not merely efficient but equitable—empowering students with disabilities, multilingual learners, and those in under-resourced schools.

3. Tech4Good: Accessibility as a Baseline

Tech4Good extends beyond AI to encompass the wider ecosystem of accessible technologies. Closed captioning, screen readers, tactile interfaces, and immersive AR/VR simulations are no longer "special accommodations" but essential components of inclusive learning design. Importantly, Tech4Good also recognizes the role of connectivity: bridging the digital divide ensures that rural and low-income students are not excluded from digital opportunities.

4. Supporting Teachers and Professors

In the past, teachers and professors had to become experts in assistive technology—a daunting task given how quickly tools evolve. Today, AI and Tech4Good solutions can guide educators and administrators through these complexities. Instead of being bogged down by technical details, teachers can rely on AI to recommend accessibility features, translate content into multiple formats, or highlight inclusive strategies.

This shift allows educators to focus on what matters most: human-to-human interaction, mentorship, and building relationships with students.

Example: In the United States, Microsoft's Immersive Reader tool has helped teachers present text in multiple accessible formats—supporting students with dyslexia, English language learners, and those who simply benefit from multimodal learning. Similarly, AI-driven platforms like Scribe for Education allow professors to automatically caption and transcribe lectures, reducing their workload while ensuring accessibility for deaf and hard-of-hearing students.

5. Extending Inclusion to Crisis and Disaster Contexts

AI4Good also has the power to support learning in the most challenging contexts. In refugee settlements, during natural disasters, or in humanitarian crises, AI-driven tools can rapidly deliver accessible educational resources, translate materials

into local languages, and create continuity of learning for displaced or traumatized children.

Example: UNESCO's Education in Emergencies initiative uses AI-enabled translation tools to support refugee children in camps across Africa and the Middle East, ensuring they can continue learning even when formal classrooms are disrupted.

6. Collaboration: The Only Way Forward

No single institution can create classrooms of belonging on its own. Collaboration is the engine of progress. Educators, students, families, technologists, disability advocates, corporations, nonprofits, and governments must all sit at the same table.

Examples of collaboration in action:

- In Kenya, Bridge International Academies partnered with disability organizations to adapt its digital curriculum for learners with visual and hearing impairments.

- In India, a collaboration between Google, NGOs, and local educators brought AI-powered translation and literacy apps to rural classrooms, empowering first-generation learners.

- In Europe, the Erasmus+ Inclusive Classrooms program has connected universities, policymakers, and accessibility experts to co-design inclusive teaching strategies across borders.

7. Human Inclusion: Beyond the Classroom

While technology and collaboration are transformative, belonging is ultimately a human experience. Designing classrooms for all means designing societies for all. We must revamp not only our schools but our broader systems so they work for humans at all life stages and in any possible direction their lives may take.

This vision goes beyond education—it is about reimagining our communities, workplaces, healthcare, and civic spaces so that they are built with, by, and for all of us.

Conclusion

The classrooms of the future are being built today. By embedding UDL principles, leveraging AI4Good and Tech4Good, empowering educators, and centering human inclusion, we can create educational environments where every learner belongs.

Collaboration is not an option; it is the only way forward. Together, we can revamp a world that works for humans across every stage of life, in every direction their journeys may lead—even in times of crisis.

ISSN : 2582 – 8304

Katie Novak, Ed.D.

Katie Novak, Ed.D., is the Founder and CEO of Novak Educational Consulting. An experienced educator, bestselling author of 16 books with more than 300,000 copies sold worldwide, adjunct instructor at the University of Pennsylvania, and global keynote speaker, she is one of the leading voices in Universal Design for Learning (UDL) and Multi-Tiered Systems of Support (MTSS). Katie partners with schools, districts, and organizations around the world to design inclusive and equitable systems.

ISSN : 2582 – 8304

From Barriers to Belonging: Universal Design for Learning in Accessible Classrooms

Katie Novak

Abstract

Inclusive design begins with a promise: what is necessary for some should be available to all. In classrooms, this means that spaces and instruction must be intentionally designed to remove barriers to access for students with disabilities as a matter of human rights, while simultaneously offering every learner opportunities to thrive. Universal Design for Learning (UDL) extends the principles of Universal Design in architecture into teaching, ensuring firm goals for learning are met with flexible means for engagement, representation, and action and expression. This article explores how designing classrooms through the lens of accessibility fosters independence, confidence, and belonging, creating environments where all students can learn and grow together.

Keywords

Universal Design, Universal Design for Learning, Accessibility, Disability, Inclusive Classrooms, Belonging

ISSN : 2582 – 8304

Introduction

For decades, the disability rights movement has made clear that access is not a privilege but a human right. The 1975 *Declaration on the Rights of Disabled Persons* and subsequent international instruments affirm that persons with disabilities are entitled to the same fundamental human rights and freedoms as others (United Nations, 1975). The proof of this principle surrounds us in everyday life. Ramps, closed captions, audio descriptions, and curb cuts remind us daily that when design starts with people with disabilities in mind, everyone benefits. Parents with strollers, travelers with rolling suitcases, and older adults with changing mobility all rely on curb cuts. Captions support not only Deaf and hard of hearing communities but also multilingual learners, multitaskers, and anyone watching video in a noisy environment. These examples demonstrate that inclusive design does not create "special" features for a few; it creates smarter, more sustainable systems for all. In education, the same truth applies: when classrooms are designed for students with disabilities, they become more engaging and more effective for every learner.

Designing classrooms for belonging and achievement begins with identifying and eliminating barriers that make learning inaccessible. This requires us to critically examine one-size-fits-all approaches, the "tried and true" practices of traditional education, and recognize how those practices can exclude students. Universal Design for Learning (UDL) ensures

that instructional goals remain rigorous and clear, while proactively removing the barriers that prevent students from engaging and showing what they know.

For example, relying only on printed text to introduce new concepts can exclude students who are blind, who process visual information differently, who are still building fluency with decoding, or who are multilingual learners developing proficiency in English. By providing digital texts that can be enlarged, read aloud, or translated, we ensure all students can access the content. Similarly, if instruction is delivered primarily through lecture, the absence of visual supports can create a barrier. Adding visuals and captions not only includes students who are Deaf or hard of hearing but also supports learners who process auditory information differently or who benefit from multimodal instruction.

When educators embrace the concept of "firm goals and flexible means," students with disabilities are fully included, and at the same time, all learners gain stronger comprehension, greater independence, and a deeper sense of agency.

Universal Design for Learning in Practice

Universal Design for Learning (UDL) was first conceptualized in the 1990s by researchers at CAST (Meyer, Rose, & Gordon, 2014). Inspired by the concept of Universal Design in architecture, which emerged to ensure physical spaces were accessible to people with disabilities from the start, UDL

extends that same philosophy into education. The framework is grounded in neuroscience and emphasizes that learner variability is the norm rather than the exception. UDL provides a way to make learning goals clear and rigorous while offering multiple pathways for students to access information, engage with content, and demonstrate their understanding. When instruction is designed with this variability in mind, students with disabilities are not asked to fit into a rigid classroom model. Instead, classrooms are proactively designed to be flexible enough to meet their needs, which in turn benefits all learners.

As an English/language arts teacher, I had to unlearn many "tried and true" practices to create a classroom where all learners could thrive. Handing out novels and expecting every student to handwrite a five-paragraph essay may meet the needs of some students, but it limits others. Just as stairs create barriers for some individuals, rigid instructional practices create roadblocks that prevent access to meaningful learning.

There is no standard that requires students to comprehend a hard copy of a novel or produce their thinking in a handwritten essay. Instead, the firm goals are more flexible. For example, consider the standard: *"Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot)."* Early in my career, I would give every student a paperback copy of *Lord of the Flies* and require them to write an essay in the same format to share what they learned about how the elements in the story interact. Yet the standard never required those conditions.

ISSN : 2582 – 8304

Over time, as I learned more about UDL, my design practices started to shift. Students could still choose the traditional novel, but they also had access to digital texts they could enlarge, listen to, or translate. Some preferred reading aloud together in small groups, while others read independently with annotation tools. To share their analysis, students had options: some wrote essays, others created multimedia projects like videos or infographics, and some recorded short podcast episodes.

In this way, all students worked toward the same rigorous goal. What changed was that every learner had an on-ramp, the opportunity to explore strategies that worked best for them, and the agency to make responsible choices about how to show their learning while I provided feedback, targeted instruction, and facilitated learning. This not only honored student variability but also built confidence, independence, and deeper engagement. And to be honest, it was much more engaging for me!

Designing Flexible Learning Spaces

Physical classrooms must mirror this philosophy. When spaces are designed with disability access at the center, they open possibilities for everyone. Many new school buildings are now being designed with Universal Design for Learning in mind. I recently had the amazing opportunity to present with a group of architects from a firm called Studio G about how the design of a classroom can support flexible instructional practices for teachers.

In these conversations, we explored how classrooms are increasingly being built with distinct zones that anticipate learner variability (Novak, 2024). There may be calming and quiet areas for students who need reduced stimulation, collaboration zones with flexible furniture that can be rearranged quickly, and teacher corners for targeted support. These physical elements create an environment where flexibility is embedded into the structure of the room itself.

Now imagine the lesson I described earlier about students closely reading an excerpt from a grade-level text and demonstrating understanding through a formative assessment. In a traditionally designed classroom, options might be limited and some students would encounter barriers that prevent full access. In a universally designed classroom, however, a student who is blind can access the text digitally with a screen reader, while a student with ADHD can move to a quiet zone that minimizes distractions. A student who learns best through discussion can join peers in the collaboration area, while the teacher provides scaffolds in a small group without removing students from the larger community.

In this kind of space, the goal remains the same for every learner: to access, comprehend, and demonstrate understanding of a grade-level text. The means are intentionally varied, ensuring that students with disabilities are included without stigma while at the same time giving all students choices that build agency, confidence, and independence. Classrooms

designed with flexibility at the core signal to students that they belong and that there are multiple ways to learn and succeed.

Conclusion

Belonging cannot be an afterthought. When classrooms are designed through the lens of accessibility for people with disabilities, they become environments where all learners can succeed. Universal Design and Universal Design for Learning together offer powerful frameworks for creating more accessible, more innovative, and more inclusive spaces. What is essential for some becomes empowering for everyone, reminding us that accessibility is not an accommodation but a foundation for equity, innovation, and belonging.

References

Meyer, A., Rose, D.H., & Gordon, D. (2014). ***Universal design for learning: Theory and practice.*** **Wakefield, MA: CAST Professional Publishing.**

Novak, K. (2024). ***Redefining learning spaces: A journey towards Universal Design.*** **Novak Education. https://www.novakeducation.com/blog/redefining-learning-spaces-a-journey-towards-universal-design**

United Nations. (1975). ***Declaration on the Rights of Disabled Persons*****. Resolution adopted by the General Assembly on 9 December 1975.**

ISSN : 2582 – 8304

Regina Cohen

She was a CNPq DTI A scholarship holder in the Assistive Technologies Project developed by the Pro-Access Center of UFRJ (2017-2018). Brazilian Representative at G3ict – the Global Initiative for Inclusive ICTs, Smart Cities for All (SC4A) and International Consultant on Accessibility ICAC-BE; Visiting Assistant Professor (FULBRIGHT/CAPES) Syracuse University, United States (2014). Elected Full Councilor to the Council of Architecture and Urbanism of Rio de Janeiro (CAU RJ) 2018-2020, Councilor of CAU RJ; Accessibility Committee of CAU RJ; Coordinator of the Pro-Access Center UFRJ; Accessibility Committee of the City of Rio; Manager of ACESSO SEM LIMITES. Visiting Assistant

Professor (FULBRIGHT/CAPES) at Syracuse University, United States (September-December 2014). Post-doctorate in Architecture (FAPERJ – PROARQ/FAU/UFRJ scholarship holder) with the theme "Accessibility for People with Disabilities to Museums" (2008-2013). Coordinator of the Research, Teaching and Project Center on Accessibility and Universal Design (UFRJ Pro-Access Center). Advisor to COMDEF Rio; member of the Permanent Forum UFRJ Accessible and Inclusive. She has a degree in Architecture and Urbanism from the Federal University of Rio de Janeiro (1981), a master's degree in Urbanism from the Federal University of Rio de Janeiro (1999) and a PhD in Psychosociology of Communities and Social Ecology from the Federal University of Rio de Janeiro (2006) and is a specialist in History of Art and Architecture in Brazil from PUC RJ (1992). She has experience in Architecture and Urbanism, with an emphasis on Architecture and Urbanism, working primarily on the following topics: accessibility and inclusion in higher education; accessibility and ethnography of the city; accessibility and inclusion of people with disabilities; and cultural aspects of spatial construction. She participated in the Pro-Access Nucleus team that developed the Technical Accessibility Manual for the Organizing Committee of the RIO 2016 Olympic and Paralympic Games. She is a consultant in the Accessibility and Social Inclusion Coordination (CAIS) of the National Organizing Committee of RIO+20. She received an international award from the Association Européene pour l'Enseignement de l'Architecture for the best architecture teaching methodology of the 2003-2004 biennium; she has won several award-winning publications; and received several motions of congratulations for her scientific work.

ISSN : 2582 – 8304

She has published several papers on inclusion and accessibility. CNPq Technological Development Scholarship (DTI-A) with the project "Accessibility and Universal Design in the 2014 World Cup facilities and their impacts on Inclusive Tourism".

ISSN : 2582 – 8304

Cristiane Rose de Siqueira Duarte

She holds a degree in Architecture from the Federal University of Rio de Janeiro (1981), a degree in Architecte DPLG from the École d'Architecture de Paris-La Villette (1983); a Master's degree from the Université de Paris XII (Paris-Val-de-Marne) (1985) and a PhD from the Université de Paris I (Panthéon-Sorbonne) (1993). Post-doctorate at the University of California Berkeley (2014). CNPq Researcher 1A. Scientist at Nosso Estado FAPERJ. She has been a tenured professor at UFRJ since 1983, having risen through a competitive exam to Full Professor at the Faculty of Architecture and Urbanism of the Federal University of Rio de Janeiro. She is retired and works in the Graduate Program in Architecture at UFRJ (PROARQ), where she created and coordinated the Habitat Research Group, the Pró-acesso Center and the Architecture, Subjectivity and Culture Laboratory. She has experience in Architecture and Urbanism, emphasizing the cultural and subjective dimensions of space, accessibility, and ethnography of/in the city. She received an international award from the

Association Européene pour l'Enseignement de l'Architecture for the best architecture teaching methodology of the 2003-2004 biennium; she has won several award-winning publications; and she has received numerous motions of congratulations for her scientific work. She was a member of the CNPq Advisory Committee for Applied Social Sciences (2009-2012); she is a member of the Equity, Diversity, and Inclusion Committee at FAPERJ; she is a member of the advisory committee and coordinator of the areas of Architecture and Urbanism, Urban Planning, and Design at FAPERJ. She has published several works and supervises graduate students (master's and doctoral) in Architecture and Urbanism.

ISSN : 2582 – 8304

NOTE: This article is the result of research activities developed by the Pro-Access Center of UFRJ, which were supported by the Research Support Fund in the State of Rio de Janeiro (FAPERJ) and the National Council for Scientific and Technological Development (CNPq).

* **Adapting Research into an Article**

ISSN : 2582 – 8304

ACCESSIBILITY RESEARCH IN SCHOOLS IN RIO DE JANEIRO:

ASSESSMENT METHODOLOGY IN TEACHING SPACES

Regina Cohen

Cristiane Rose de Siqueira Duarte

SUMMARY

Public education is the foundation of democracy, fundamental to overcoming social inequalities. Therefore, planning educational spaces must allow free access for all segments of society to all sectors and levels of learning. This access should not only mean enabling the poorest segments of the population to attend school, but also the elimination of physical and social barriers for people with disabilities (sensory, physical, intellectual, and mental, temporary or permanent). The research that served as the basis for this article managed to generate strategies to overcome the social inequalities experienced by children with disabilities (those in wheelchairs, visually and hearing impaired, etc.) in public educational spaces. When a single student cannot enter a classroom due to a barrier, the functions of education are immediately jeopardized. In this article, we present an adaptation of the tables Guimarães and Fernandino (2001) created to assess physical accessibility. These tables were adapted and applied to the realities of public schools in two case studies: the Federal

University of Rio de Janeiro (UFRJ) application schools and the State University of Rio de Janeiro (UERJ), both in Rio de Janeiro. Analyzing the results allowed the creation of parameters aimed at the spatial inclusion of people with disabilities (PWDs). This enabled the development of action strategies for creating accessible spaces and the actions to be taken by educational institution leaders and educators.

ABSTRACT

Nobody denies the importance of public education as a base for establishing democracy and weakening social differences. Hence, it is well understood that the purpose of planning educational spaces is to allow free access to all segments of society in every sector and field of study. We think that this access is not to be faced with as the possibility of the low-income population reaching school premises, but also as the elimination of every physical and social barrier to People with Disabilities and with Mobility Difficulty (be it sensorial, physical, intellectual, mental, temporary, or permanent disease). The research we outline in this paper has produced many tools which have generated strategies to diminish social differences suffered by children with disabilities and all kinds of people with any disability in public educational spaces (dependents on wheelchairs, blind and deaf people, and so on). We understand that if a single student is blocked from getting into a classroom because of any kind of hindrance, the social function of the educational realm is under target. This paper presents an adaptation of the many physical accessibility assessment charts (prepared by Guimarães and Fernandino,

2001). These charts have been adapted to the reality and living experience of two different public schools in Rio de Janeiro, which have become our case-studies: the School of Applicableness of UFRJ (CApUFRJ) and UERJ (CapUERJ). The analysis of the results allows us to create parameters that aim at the spatial inclusion of People with Disability or with Mobility Difficulty. In this way, it was possible to sketch up some working strategies either for the creation of accessible spaces or towards attitudes to be embraced by leaders and educators in educational institutions.

INTRODUCTION: ACCESSIBLE TEACHING SPACE TO OVERCOME INEQUALITIES

"A brilliant mind prevented from studying by the simple existence of a staircase... there is no crueler form of social segregation than barriers for people with disabilities!" **(Duarte & Cohen)**

The Brazilian Constitution states in article 208 that: *"...educational care for people with disabilities is guaranteed, preferably in the regular education system"*; and in article 58 § 3 that: "The *provision of special education, a constitutional duty of the State, begins in the age group from zero to six years, during early childhood education"*.

However, a large portion of the Brazilian population lacks access to education, particularly for people with disabilities. This is due to inadequate physical layouts, but also to a lack of awareness among professionals, planners, and managers about the access

needs of people with physical, motor, intellectual, and/or sensory disabilities. Schools are still not prepared to accommodate these physical differences among individuals.

The lack of coexistence between differences tends to perpetuate prejudice and the consequent situation of social inequality in which people with disabilities find themselves in our country. Throughout our research on accessible spaces, we have found that children are free from prejudice and naturally accept differences. Encouraging coexistence among "different" children in public schools can reduce inequalities and integrate people with disabilities socially and culturally into the panorama of Brazilian social development.

School is where children interact, far from the direct influence of family members already "contaminated" by prejudice. Many parents contribute to the consolidation of these prejudices because, in an effort to "protect their children from discriminatory gaze," they end up preventing their children with disabilities from playing with others, perpetuating the cycle of exclusionary culture. Even parents of children considered it "normal" to avoid socialization and the encounter of their children with physical and social diversity.

Photo 1 - ***source: assembly by the authors based on a photo available at http://pro.corbis.com/***

The development of projects that address physical and social inequalities in educational settings addresses the need to eliminate one of the cruelest forms of segregation we see across all social classes: the exclusion of people with physical, sensory, and/or mental disabilities.

If built spaces are essential in overcoming inequalities between people, we consider that spaces are particularly important at the elementary school level.

Thus, the research underlying this article focused on the power of coexistence without prejudice and the social function of public education as a strategy for integrating differences and overcoming inequalities for future generations.

THEORETICAL BASIS

The analysis in the baseline research for this work focused on user experience and social sustainability. To this end, our theoretical framework was based on the concepts of "Accessibility," "Universal Design," and "Accessible Route."

To allow for an understanding of the precepts of our analyses, we present an outline of these concepts and a basic bibliography on them.

Access and Accessibility: **The concept of Access was developed in a very comprehensive manner by Kevin Lynch as one of the elements to achieve a good city form; Françoise Choay (1988) gives a much broader and more holistic vision of accessibility in her 'Dictionary of Urbanism' and the works**

developed by Mettetal-Dulard (1994) and Guimarães (1991) also provide some subsidies for approaching the issue.

Accessibility presupposes the " *possibility and condition of using, safely and autonomously, buildings, space, furniture and urban equipment* " (ABNT, NBR 9050). Thus, accessibility to built space should not be understood as a set of measures that would benefit only people with disabilities - which could even increase spatial exclusion and segregation of these groups - but rather technical-social measures aimed at welcoming all potential users (Duarte and Cohen, 2004-b).

Universal Design and Inclusive Space **– The terms "inclusive architecture," "inclusive design," and "inclusive project" are already adopted in specialized literature, encompassing the concept and philosophy of "Universal Design" (accepted as a literal translation of Universal Design, which encompasses the broader notion of universal design and planning). The concept of "Universal Design" encompasses the idea of products, spaces, furniture, and equipment for a wider range of users. In our opinion, this concept represents a positive vision, as it is not restricted to the architectural object, largely transcending its boundaries, whether physically, culturally, or socially.**

Accessible Route **– The concept of "Accessible Route" refers to a path free of any obstacles from one point to another (origin and destination) and encompasses a range of accessibility measures. In other words, to consider a school accessible, it's**

pointless, for example, to indicate the existence of a "ramp" and a "library with shelves at an appropriate height" if there is a turnstile or revolving door between them. The "Accessible Route" has been considered a preponderant factor in classifying inclusive spaces.

Spatial Experience and Spatial Exclusion **- We pay special attention to the multiplicity of ways of apprehending space and the specificities that influence the different relationships of affection that people develop in relation to spaces, according to studies by Tuan (1983).**

The experience of spaces structures identification patterns between the individual and the environment. According to Tuan (1983: 10), *"to experience is to learn, to understand; it means to act on space and be able to create from i* ." Therefore, the cognitive process must develop through the perception and apprehension of space so the individual can know and act upon it.

The issue of affection for place is, therefore, clearly linked to the experience one can have in this space. Thus, we are interested in the capacity of the *educational space* to accommodate forms of spatial experience and the possibilities for people with disabilities to create emotional bonds and identify with the school where they study.

METHODOLOGY

When we began our studies on educational spaces, we already had instruments and a conceptual and methodological foundation built on previous research. This allowed us to go into the field confidently and with the correct methodology. This methodology included the following steps: a) conceptual design and literature review; b) study of spatial specificities and barriers for the visually impaired, hearing impaired, and various motor disabilities; c) data collection, completion of tables; d) route observation; e) interviews and questionnaires; f) iconographic survey and mapping; g) analysis of the data obtained in the previous steps based on the defined concepts; h) proposals for strategies to overcome inequalities for people with disabilities through access to education. Some of these methodological tools are described below.

Route Description Table

One tool that proved quite effective was the route description table. This table selects simple, viable routes and describes them further to verify accessible routes. The routes are numbered so they can be followed using schematic maps (floor plans of the building with the route marked). This tool proved useful for revealing the true state of routes, as there are often locations with easy access but without a truly accessible route between the point of origin and destination, making it impossible for users to operate independently.

NÚCLEO PRO-ACESSO

Descrição das Rotas

Planilha de descrição das rotas internas às escolas para avaliação de acessibilidade (desenvolvida pelo Núcleo Pro-acesso)

Pesquisador:
Data:
Local:
assinatura

rota	origem	destino	descrição	qualidade	principais dificuldades
A1	*estacio-namento*	*biblioteca*	*estacionamento com vaga especial, porta de acesso ampla; rampa com 8% sem marcação no piso; corredor menor que 15m, sinalização visível, catraca na porta da biblioteca (porém passagem lateral); estantes altas; ausência de computadores com sistema dos-vox.; um dos funcionários tem noções de libras.*	☺	

Legenda:

QUALIDADE DA ROTA:
- ★ = rota plenamente acessível;
- ☺ = encontradas barreiras fáceis de serem removidas;
- 😐 = encontradas dificuldades, necessidade de ajuda de terceiros;
- ☹ = encontradas barreiras graves e difíceis de serem removidas ;
- 💣 = condições de acesso muito ruins.

PRINCIPAIS DIFICULDADES PARA:
- = restrições visuais;
- = restrições mototoras;
- = restrições auditivas;
- = restrições múltiplas ou combinadas

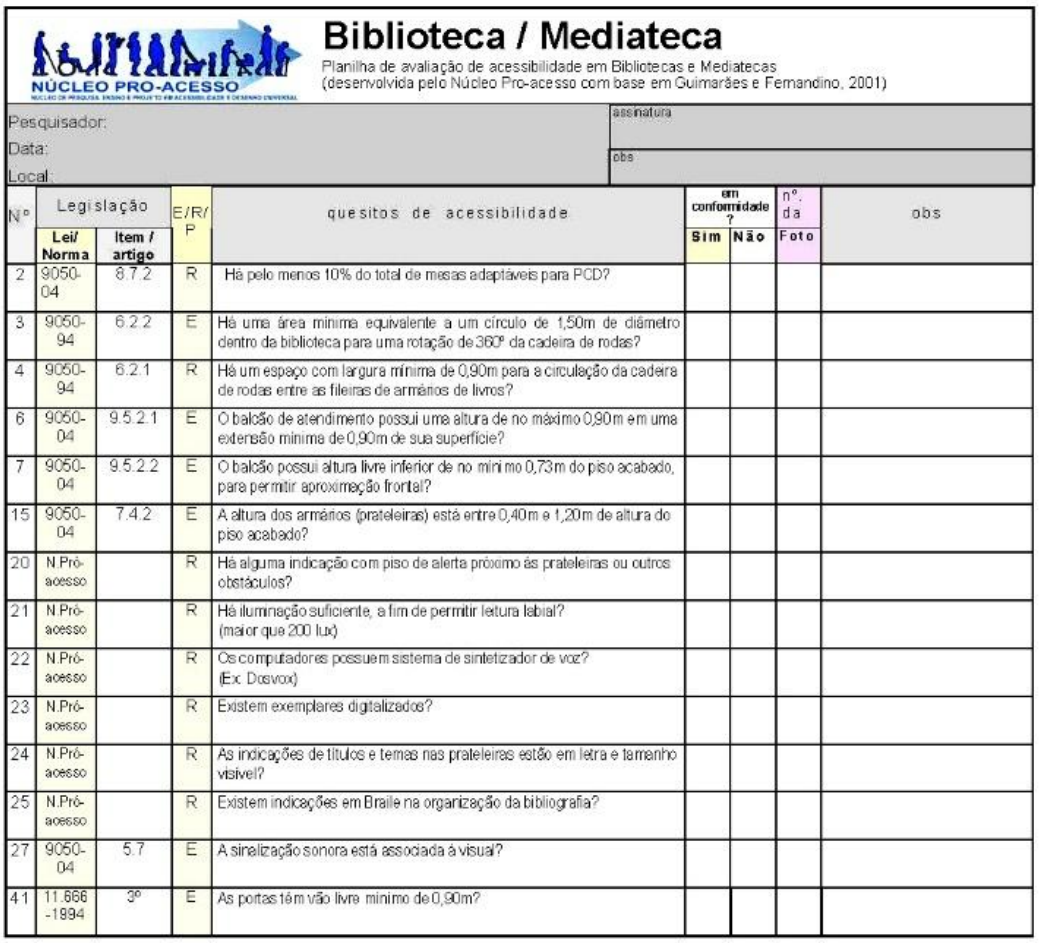
Figure 2: Example of a route description table. On average, 7 tables were created per building.

Accessibility assessment tables

Based on the Accessibility Assessment Criteria table created by Guimarães and Fernandino, another important assessment tool for our research was established. The tables were adapted to the school environment and applied in different schools to adjust them to the needs of the object of analysis.

The tables, after adaptation, were directed to the evaluation of the following school spaces (one table for each type of space): a) classrooms; b) library/media library; c) recreation area and passive leisure area; d) administrative sectors/pedagogical coordination/management; e) kitchen and canteen; cafeteria; f) art and music rooms; g) laboratories; h) theater/conference

room/presentation room and annexes; i) restrooms/changing rooms; j) vertical circulation (ramps/stairs/elevators); l) internal circulation; external circulation and surrounding routes. The figure below exemplifies one of the several tables we used in the research.



NÚCLEO PRO-ACESSO

Biblioteca / Mediateca

Planilha de avaliação de acessibilidade em Bibliotecas e Mediatecas
(desenvolvida pelo Núcleo Pro-acesso com base em Guimarães e Fernandino, 2001)

Pesquisador: | assinatura
Data: | obs
Local:

Nº	Legislação		E/R/P	quesitos de acessibilidade	em conformidade?		nº. da	obs
	Lei/ Norma	Item / artigo			Sim	Não	Foto	
2	9050-04	8.7.2	R	Há pelo menos 10% do total de mesas adaptáveis para PCD?				
3	9050-94	6.2.2	E	Há uma área mínima equivalente a um círculo de 1,50m de diâmetro dentro da biblioteca para uma rotação de 360º da cadeira de rodas?				
4	9050-94	6.2.1	R	Há um espaço com largura mínima de 0,90m para a circulação da cadeira de rodas entre as fileiras de armários de livros?				
6	9050-04	9.5.2.1	E	O balcão de atendimento possui uma altura de no máximo 0,90m em uma extensão mínima de 0,90m de sua superfície?				
7	9050-04	9.5.2.2	E	O balcão possui altura livre inferior de no mínimo 0,73m do piso acabado, para permitir aproximação frontal?				
15	9050-04	7.4.2	E	A altura dos armários (prateleiras) está entre 0,40m e 1,20m de altura do piso acabado?				
20	N.Pró-acesso		R	Há alguma indicação com piso de alerta próximo às prateleiras ou outros obstáculos?				
21	N.Pró-acesso		R	Há iluminação suficiente, a fim de permitir leitura labial? (maior que 200 lux)				
22	N.Pró-acesso		R	Os computadores possuem sistema de sintetizador de voz? (Ex: Dosvox)				
23	N.Pró-acesso		R	Existem exemplares digitalizados?				
24	N.Pró-acesso		R	As indicações de títulos e temas nas prateleiras estão em letra e tamanho visível?				
25	N.Pró-acesso		R	Existem indicações em Braille na organização da bibliografia?				
27	9050-04	5.7	E	A sinalização sonora está associada à visual?				
41	11.666-1994	3º	E	As portas têm vão livre mínimo de 0,90m?				

Figure 3: This table is for illustrative purposes only. In this example, several evaluation items (46 in the library table, for example) have been removed for readability.

Using the Commented Path Method

To study the UFRJ Application College, the "COMMENTED ROUTE METHOD" (méthode des parcours commentés) developed by Jean-Paul Thibaud was used, with the participation of two wheelchair users, an elderly lady, and a student with low vision.

Thibaud's method involved following students' paths both within and around the school itself. Students with disabilities were invited to walk a specific route, recording everything they saw in terms of physical characteristics and what they felt as they moved. All senses were required to be activated, and in addition to kinesthetic descriptions, sounds and smells were also required . The researchers simply followed the informants, silently recording their reactions. A conversation then ensued between researchers and informants, which proved quite fruitful in obtaining perceptual results. Interviews were then conducted to obtain details about what was perceived while walking.

In this way, we were able to understand better the movement perception of children with disabilities, or the three basic activities of the method: walking, perceiving, and describing. Following Thibaud's methodology, the aim was to investigate perception within a given physical, social, cultural, and temporal context.

Interviews

Research was conducted *with some people with disabilities,* which provided a more detailed understanding of their perceptions of the spaces. The informants invited to participate

in the CAp/UFRJ evaluation considered the situations they are subjected to in the school spaces to be embarrassing.

We also interviewed several architects involved in the renovation and maintenance departments at UFRJ (to which CAp is affiliated). This allowed us to assess their awareness levels and the measures being taken to incorporate accessibility into their plans and projects. These interviews revealed a combination of factors, ranging from a lack of in-depth technical training on accessibility and commitment from administrators at all levels of the university to a lack of genuine political will to address these issues.

ACCESSIBILITY ASSESSMENT AT THE UFRJ APPLICATION COLLEGE

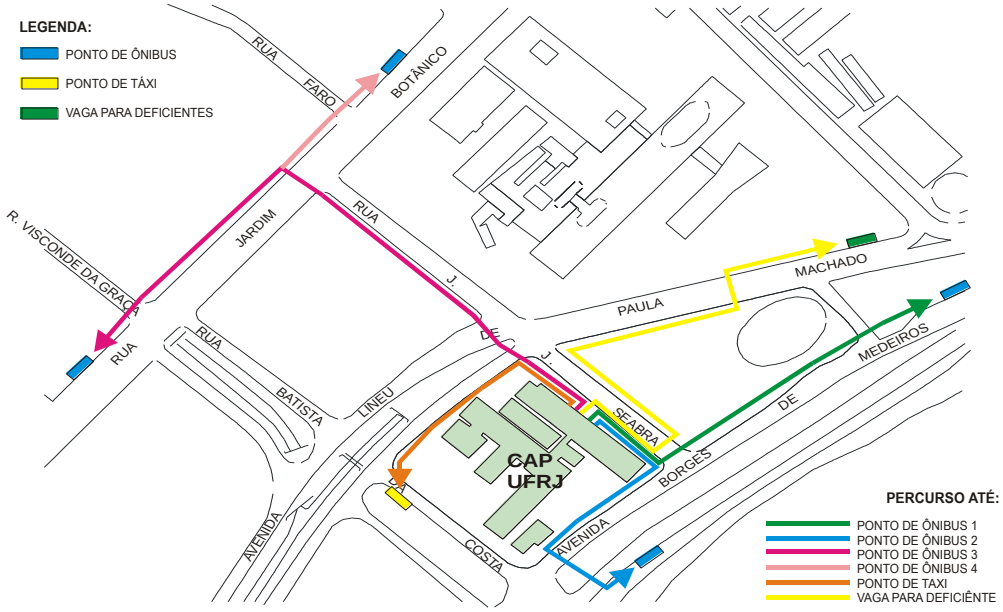
We chose the UFRJ Application College (CAp/UFRJ) and the UERJ Application College (CAp/UERJ) to study elementary school settings. This choice is due to their public nature and the diversity of programs offered at these schools. In this article, we will present only the case of the UFRJ Application College.

CAp/UFRJ is located in an interesting location for analyzing the surroundings, since it is located next to a church, behind a public hospital, a square, and a theater school.

The Surroundings

We evaluated the school's surroundings based on potential user routes, plotting from the school's main exit to the four

nearest bus stops, the taxi stand, and the only nearby disabled parking space. All routes studied were based on the concepts of Accessible Routes, Accessibility, and Universal Design, as described above.



The area surrounding the CAp proved inaccessible, presenting, among other problems: damaged and poorly maintained sidewalks, often cobblestone, with an uneven surface. In several sections, the sidewalk has been destroyed by tree roots. We found bollards that make it difficult to pass, and in other spots, the sidewalk is taken over by restaurant tables and potted plants. There are no guide or warning surfaces, and traffic signals are silent. Pedestrians often must cross a median, which is used for illegal parking. On the other hand, we found corners without ramps, and when there are ramps, they are sometimes blocked by posts or signs.

The closest designated parking space to the school entrance is located on Av. Lineu de Paula Machado, more than 600 meters away. Furthermore, the space is marked only by a sign, with no markings on the ground or a nearby ramp.

Figure 5 (above) sidewalks with holes and tree roots in CAp;

Figure 6 (beside) parking blockers on the sidewalks in front of the bus stop used by students;

Figure 7 (right) – narrow sidewalks, only 45 cm wide in some sections.

The CAp/UFRJ Building

The building housing the UFRJ Application College has two floors. The first floor houses the recreation area, cafeteria, laboratories, and administration, and the second floor houses the classrooms and library. Access to the second floor is via a staircase and a ramp that do not meet accessibility standards, making it impossible for people with disabilities and those with mobility difficulties to access the upper floor.

Although the doors are sized according to accessibility standards (minimum 80 cm wide), so everyone can move freely and independently, most have steps at the entrance, preventing access for people with disabilities.

Cases requiring more basic modifications were evaluated and catalogued, such as: poorly adapted restrooms, narrow access points; non-existent special parking spaces or spaces with irregular access points; uneven paving, high counters; lack of guide floors and/or warning floors for the blind; access points to libraries with turnstiles, elevators without Braille information or without sounders indicating the stopped floors; fire alarms that only sound (which are one of the greatest fears of the deaf), and lack of bibliography consultation systems with voice synthesizers.

Another obstacle encountered is access to the second floor. The ramp, which connects the lower to the upper floor, lacks adequate signage and begins with a step about ten centimeters high, making the accessible route impossible and hindering autonomy.

FINAL CONSIDERATIONS

Since the results we obtained are too extensive to be covered in detail in this article, we believe the most important thing to note is that no route is categorized as fully accessible. Without accessible routes, the building does not allow for accessible circuits from the arrival point to the desired destination within the school. In other words, there is always a need for assistance at some point along the route, and students cannot act independently or autonomously.

When analyzing the school's spaces, we realized that its accessibility is deficient, a legacy of a building constructed in a time When people with disabilities were not considered as users of such spaces, many teachers, when interviewed, emphasize the lack of funding and tend to justify the lack of importance given to accessibility by the fact that " *there are few students with disabilities enrolled at the school* " (sic.). This doesn't mean we should postpone the implementation of measures such as adapting bathrooms, lowering counters, or building ramps in areas with uneven surfaces. Users with physical and sensory limitations go far beyond wheelchair users: would a student with a broken leg, for example, be unable to access the institution until their recovery because they feel discouraged climbing steps several times a day?

To overcome bureaucratic and attitudinal barriers, the measures to be taken must comply with accessibility standards, be monitored by professionals, and embrace the notion that adaptations must be considered for future users with physical and sensory limitations who enter the school. When accessibility is considered from the beginning of the project, there is no risk of encountering intractable problems later.

The accessibility assessment tools used in the research proved effective not only for understanding the physical conditions of the school building but also for understanding the school's operations more holistically. Once mapped, access points and

routes provided important clues about spatial preferences and the social mechanisms that operate within a school building.

Based on the adopted methodology, the CAp analysis allowed for an assessment of perspectives for action in the urban and architectural fields. The conceived space, its understanding, and its appropriation were emphasized as having a preponderant role in the construction of the identity of the professional working in education.

On the other hand, in order to support teaching projects that integrate space and society, contributing to the processes of building full citizenship for all users, as well as supporting the creation of new inclusive urban and architectural design paradigms, we seek to suggest some measures that, briefly, we transcribe below:

1. In a learning space that needs to be adapted, never just check whether the classroom is adapted, but also consider the "accessible route." To accommodate wheelchair users, it is necessary to investigate the existence of desks that allow for accommodation and the layout that does not segregate "special spaces";

2. As a readjustment strategy for everyone, it is important to be concerned about the noise level and ensure sufficient and

constant lighting for students with hearing sensory impairment, to allow them to view classes clearly.

3. Suggest that school principals offer awareness-raising and information courses for teachers. Simple actions by more informed teachers can make a huge difference for students with disabilities, such as facing students when speaking to them and not turning away so that a very bright light source might allow people with hearing impairments to lip-read, etc.;

4. Faculty should be instructed to prepare materials that can be transcribed into a medium other than traditional ones. It can take some time to transcribe a book into Braille, but speech synthesizers now allow files to be read in text editors.

5. Facilitate access to all teaching, research, and extension spaces, such as level-controlled classrooms, auditoriums with ramps, accessible restrooms with grab bars, cafeterias, and other services. This will facilitate the daily lives of people with any mobility impairment and enable their integration into academic life.

6. Definitively and effectively insert a mandatory discipline on accessibility in architecture teaching, direct interdisciplinary research, including broad publication of its results with a view to disseminating these ideas.

7. Access to teaching spaces must be ensured, as far as possible, without discrimination or exclusion, for all categories of users (students, teachers, and staff), and it is necessary to consider the characteristics and requirements of citizens with special needs.

In the case of elementary school settings, we see that schools play a socializing role, fostering mindsets with the power to multiply. School architecture itself plays a role in this socialization, since, by uniting differences, it allows contact with diversity and knowledge of the Other. Thus, if children with disabilities have easy access to the educational space, they will understand that not all children have the same aptitudes, physical, mental, or sensory abilities, but all have the need to be integrated into school and recreational activities, studying and playing with other children, and feeling like one of them.

We know that the inability to experience a space in the same way as another student represents a barrier to relationships. This barrier can, in many cases, be considered greater than the physical obstacles of the school building. This impacts academic performance and distances PWDs from ideal learning and socialization conditions. This idea underpins the concept of Spatial Exclusion (Duarte and Cohen, 1995): spaces become the materialization of segregationary practices and society's worldview. These inaccessible spaces thus act as actors in a silent

apartheid that ultimately generates, among people with physical limitations, the awareness of belonging to a minority excluded from society.

In this context, all educational spaces must be democratized so that they can be understood and used by citizens with special needs. It is up to those responsible for educational spaces to determine whether appropriate technical solutions are adopted to achieve this goal.

BIBLIOGRAPHY

AMARAL, Lígia A. Thinking about Difference/Disability. Brasília: CORDE, 1994.

ARAUJO, Luiz Alberto David. The Constitutional Protection of Persons with Disabilities. Brasília: CORDE, 1994.

BRAZILIAN ASSOCIATION OF TECHNICAL STANDARDS. NBR 9050: Accessibility for People with Disabilities to Buildings, Spaces, Furniture and Urban Equipment. Rio de Janeiro: ABNT, 2004.

BACON, Edmund N. Design of Cities: a superb illustrated account of the development of urban form, from ancient Athensto modern Brasília. London: Thames and Hudson, 1978.

BAHIA, Sergio Rodrigues (Coord.); COHEN, Regina; VERAS, Valéria. Municipality and Accessibility . Rio de Janeiro: IBAM/CORDE, 1998.

BINS ELY, Vera Helena Moro. Orienting yourself in space: an indispensable condition for accessibility. In: Proceedings of the Seminar Accessibility in Everyday Life [CD-ROM]. Rio de Janeiro: Núcleo Pro-acesso/UFRJ, 2004

COHEN, Regina. Urbanism and Accessibility. In Jornal Superação, Year VII, No. 6, Rio de Janeiro, Oct./Dec., 1993.

. University Education: the architecture of the future. In Proceedings of the VI Seminar on Accessibility to the Physical Environment (VI SIAMF). Brasília: National

Coordination for the Integration of Persons with Disabilities (CORDE), 1994.

COHEN, R & DUARTE, Cristiane Rose. Brazil: ideas into action for the accessibility rights in a developing country In. Proceedings of the 7th International Conference on Mobility and Transport for Elderly and Disabled People, Reading, Berkshire, United Kingdom, Jul. 1995.

CORDE. The Rights of Persons with Disabilities. Brasília: CORDE, 1994.

DISCHINGER, Marta. Where is everything we didn't draw? In: Proceedings of Projetar 2005 – II Seminar on teaching and research in architectural design. PROARQ/FAU/UFRJ. Rio de Janeiro, 2005

DUARTE, Cristiane Rose & COHEN, REGINA. Socio-Spatial Segregation and Exclusion: The Issue of People with Physical Disabilities. In: IV NATIONAL MEETING OF ANPUR-UNB, 1995, Brasília. Proceedings of the IV National Meeting of ANPUR. 1995.

_____. People with Mobility Difficulty and the Space Experience in the Cities In: IAPS's 2002 Conference Proceedings. A Coruña, Spain, 2002

_____. Teaching Inclusive Architecture as a Tool for Improving the Quality of Life for All . In: Marques, S. and Lara, F.: Designing: Challenges and Achievements of

Design Research and Teaching. Rio de Janeiro: Editora Virtual Científica, 2003. pp. 159-172

_____. Methodology for assessing accessibility in elementary schools. Research report sent to Faperj. 80p. Pro-acesso Center/UFRJ. Rio de Janeiro, 2004 (a)

_____. Accessibility to Teaching and Research Spaces: Universal Design at UFRJ - Possible or Utopian?. In: Proceedings of NUTAU 2004, São Paulo. NUTAU/USP, 2004 (b)

_____. Research and Design of Public Spaces, Repercussions and Possibilities of Including Physical Diversity in City Planning. In: Proceedings of Projetar 2005 – II Seminar on Teaching and Research in Architectural Design. PROARQ/FAU/UFRJ. Rio de Janeiro, 2005

GUIMARÃES, Marcelo Pinto e FERNANDINO, Sandra Fagundes. Collection of Criteria for Accessibility, In: Gradual Accessibility Scale Project, sponsored by CORDE / Ministry of Justice. ADAPTSE EA UFMG, April 2001.

GROSJEAN, M. et THIBAUD, JP. L'Espace Urbain en Méthodes. Ed. Parenthèses, Marseille, 2001

KOHLSDORF, Maria Elaine. Brasília em Três Escalas de Percepção. In DEL RIO & OLIVEIRA, (Org.). Environmental Perception: the Brazilian experience. São Paulo: Studio Nobel, 1996.

LANCHOTI, JA. Teaching the Elimination of Architectural Barriers in Architecture and Urban Planning Courses.

Master's Dissertation, São Carlos School of Engineering, USP, 1998.

METTETAL-DULARD, Lucile. Les personnes handicapées physiques et la ville des autres . Master's thesis, DEA, Urbanisme et Aménagement, Politiques urbaines, Aménagement et gestion de l'espace, Institut d'Urbanisme de Paris, Université Paris XII, Val-de-Marne, 1994.

UNITED NATIONS (UN). Declaration of the Rights of Disabled Persons. 1975 and the World Programme of Action Concerning Disabled Persons. December 3, 1982

RIBAS, João B. Cintra. What are disabled people? First Steps Collection, São Paulo: Nova Cultural/Brasiliense, 1985.

SASSAKI, Romeu Kazumi. Prejudice, Discrimination, Stigma, and Stereotype in relation to People with Disabilities. mimeo a, 1993.

SAVATER, Fernando. Las Ciudades Inaccesibles. En Accessibilidad y Barreras Arquitectónicas, Revista de Serveis Socials de la Generalitat Valenciana, N. 20/21, 1992.

STEINFELD, Edward. Towards a Responsive Environment: The Psychological Effects of Inaccessibility. In M. Bednar (Ed.), "Barrier-Free Environments Community Development Series, V. 33, Stroudsburg, PA: PADowden, Hutchinson & Ross, 1977.

THIBAUD, JP. and CHELKOFF, G. L´espace Public, Modes Sensibles. Les Annales de la Recherche Urbaine.Paris, 57-58, 1993

THIBAUD, JP. and CHELKOFF, G. Ambiances Under the city. Grenoble, Cresson, Plan Urbain, 1997

THIBAUD , JP. Movements and Perception of Underground Ambiences. Les Annales de la Recherche Urbaine. Paris. 71, June, 1996

USP. USP LEGAL. Available at www.cecae. usp .br/ usplegal /default.htm

WERNECK, Claudia. No One Will Be Nice Anymore in the Inclusive Society. Rio de Janeiro: WVA, 1997.

ISSN : 2582 – 8304

Shamin Mehrotra ***has been an integral part of Ummeed Child Development Center's journey since 2003. As Chief Officer School Ecosystem., Mental Health and Awareness and member of the Ummeed Leadership Team, she brings with her over two decades of experience working with children, families, schools, and systems. As she prepares to lead the organization into its next chapter as CEO, Shamin continues to carry forward its foundational vision of inclusion and hope.***

At the heart of her work lies a deep belief in inclusion. Over the years, Shamin has built and led long-term programs that empower schools to welcome children with diverse learning needs. Under her leadership, Ummeed's School Services team works with educators to create safe and supportive learning environments where every child can thrive both academically and socially.

As a Senior Mental Health Therapist, she also guides Ummeed's Mental Health Services, ensuring family-centered and strengths-

based care for children with disabilities and their caregivers. Shamin has been instrumental in shaping Ummeed's approach to mental health, grounded in empathy, sensitivity, and clarity—whether through direct therapy, training professionals, or supporting caregivers.

Her leadership also extends to Awareness efforts at Ummeed, where she and her team focus on shifting mindsets around developmental disabilities. From campaigns and conversations to capacity-building initiatives, her work has consistently centered early intervention, inclusion, and self-advocacy, challenging stigma and inviting society to see and support every child's journey.

Shamin's career reflects Ummeed's philosophy of "walking alongside families." She is not only a mentor and therapist but also a changemaker, creating spaces within schools, communities, and systems where children with developmental disabilities are seen, heard, and celebrated. This unique combination of deep institutional knowledge and a forward-looking vision makes her the ideal leader for Ummeed's journey ahead.

She holds a Master's degree in Applied Psychology from the University of Mumbai and a Master's in Psychological Services from the University of Pennsylvania.

ISSN : 2582 – 8304

UNIVERSAL DESIGN FOR LEARNING: PATHWAY TO INCLUSIVE EDUCATION

Shamin Mehrotra

Abstract

Inclusion in education is not a destination—it is a mindset, a journey, and a collective responsibility. In India, over 50 million children live with disabilities, and many of these disabilities are often invisible and misunderstood. Universal Design for Learning (UDL) offers a transformative framework to create inclusive, empowering learning environments that support every student. By designing for diversity from the outset, UDL fosters independence, confidence, deeper engagement, and lifelong learning. It shifts the focus from teaching to learning, ensuring that all students have equitable opportunities to thrive.

Keywords

Universal Design for Learning (UDL), Inclusive Education, Accessibility, Empowerment, Student Engagement, Lifelong Learning, Diversity, Collaboration, Equity, Good Pedagogy

Introduction

In an era of increasing diversity in classrooms, educators face the challenge of meeting the needs of all learners—regardless of ability, background, or learning style. Traditional teaching

methods often fall short in addressing this variability, leading to disengagement, inequity and exclusion. Universal Design for Learning (UDL) offers a powerful and strategic approach to education—one that anticipates learner diversity and builds flexibility, accessibility, and equity into the very foundation of the learning environment, ensuring every student has the opportunity to thrive.

In India, where being different often leads to marginalization—especially for children with invisible disabilities—the need for inclusive systems is urgent. These children are often misunderstood as lazy or disruptive, and as a result, they don't receive the support they need. Inclusion is not just about physical presence in a classroom; it is about meaningful participation, emotional safety, and equitable access to learning. It is a mindset that values every learner and recognizes that diversity extends beyond disability to include gender, economic status, religion, and more.

Inclusion begins from the heart. It is not a checklist or a destination—it is a journey of collaboration, empathy, and continuous learning. There is no perfect student, teacher, or school. What matters is the commitment to create spaces where every child feels seen, heard, and valued.

What is UDL?

Universal Design for Learning (UDL) is a proactive educational framework that recognizes learner variability and designs

learning environments to be accessible, engaging, and empowering for all students.

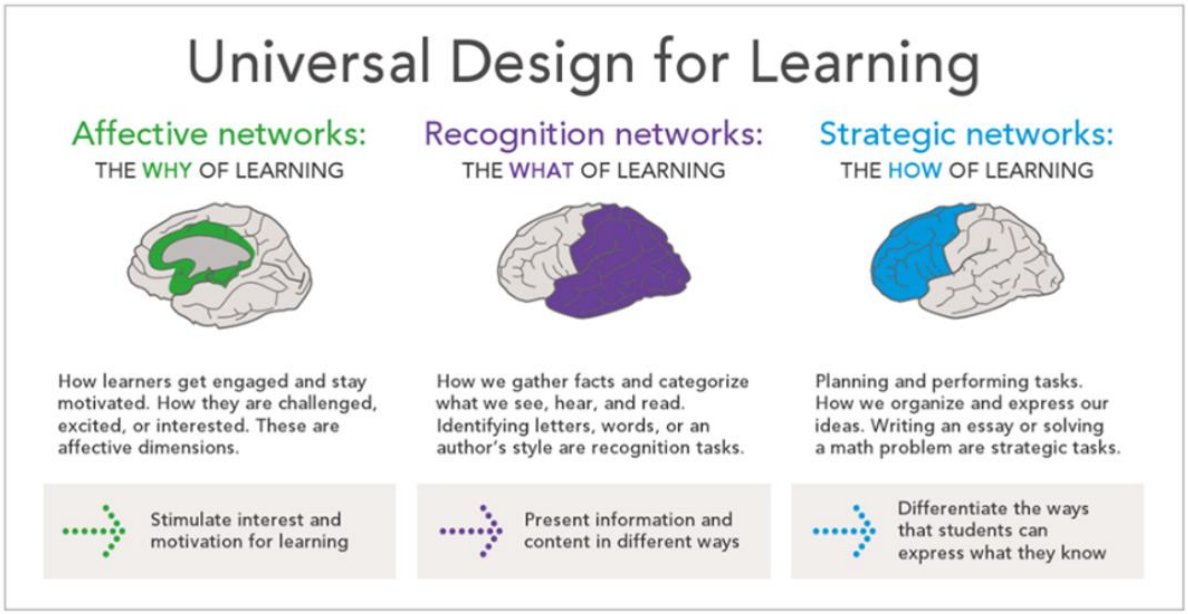


FIG. 4.5. The brain networks ©2013 CAST, INC.

It is built on three core principles, each rooted in how the brain processes learning:

1. Multiple Means of Representation

What we teach and how we present it

This principle focuses on how information is delivered to students. Since learners perceive and comprehend information in different ways, UDL encourages presenting content through multiple formats—text, visuals, audio, tactile materials, and real-life objects.

Practical Tips for Educators:

- **Use diagrams, videos, and infographics alongside written text.**
- **Provide captions and transcripts for audio-visual materials.**
- **Allow students to adjust font size, background colour, or layout for readability.**
- **Use real-world examples that reflect diverse cultures and contexts.**

Think of this like preparing a meal for guests with varied tastes and dietary needs. You wouldn't serve only one dish—you'd offer a spread that includes vegetarian, non-vegetarian, spicy, and mild options. Similarly, representation in UDL ensures every learner finds something they can digest.

2. Multiple Means of Action and Expression

How students show what they know

This principle emphasizes flexibility in how learners demonstrate their understanding. Not all students express themselves best through writing—some may prefer speaking, drawing, building, or using technology.

Practical Tips for Educators:

- **Allow students to choose between writing an essay, creating a video, or presenting a poster.**

- **Use assistive technologies like speech-to-text or typing tools.**
- **Offer flexible seating arrangements to support different working styles.**
- **Encourage peer collaboration and alternative formats for assignments.**

Imagine asking every guest at your party to sing a song to show they had a good time. Many of them may not be comfortable singing- some might sing, others may want to dance, some may want to write a thank-you note. The goal is to let them express joy in their own way—just like students should be able to express learning in ways that suit them.

3. Multiple Means of Engagement

Why students learn and stay motivated

This principle addresses how to spark interest and sustain motivation. Engagement is deeply personal—it depends on relevance, emotional connection, and autonomy. UDL encourages designing learning experiences that are meaningful and culturally responsive.

Practical Tips for Educators:

- **Offer choices in topics, tools, and partners for projects.**
- **Connect lessons to students' real-life interests and goals.**
- **Use storytelling, humour, and play to make learning enjoyable.**

- **Create opportunities for self-reflection and goal setting.**

Inclusion isn't just being invited to the party—it's being asked to dance. Engagement is the music that makes students want to participate. If the music doesn't resonate, they won't dance. UDL ensures the rhythm of learning is one they can connect with.

Because of the natural diversity, classroom instruction that assumes all students learn in the same way simply is not effective. There is no such thing as a "one-size-fits-all" lesson. At the same time, it is not practical for educators to create an individualized lesson for every student, every day. This is where Universal Design for Learning (UDL) becomes essential. UDL is not a reactive accommodation—it is a proactive design philosophy. Rather than lowering academic standards or catering to every individual preference, UDL focuses on anticipating learner diversity and embedding flexibility and accessibility into instruction from the start. By providing multiple means of engagement, representation, and expression, educators can design learning experiences that are inclusive, challenging, and effective for all students.

It is important to call out that UDL differs from another commonly used term, differentiation. While differentiation responds to known individual needs, UDL designs for anticipated diversity. Differentiation is reactive; UDL is proactive. UDL doesn't require knowing every student's background in advance—it creates a flexible structure that supports all learners.

For example, let's use the ramp vs. stairs situation: If a student in a wheelchair can't access a classroom because there are only stairs, the problem lies in the design—not the student. UDL removes these barriers by building ramps for all learners. Having a ramp doesn't just help the person in a wheelchair—it helps everyone. Similarly, designing for accessibility benefits all students, not just those with identified needs.

Empowering Students Through Thoughtful Design

Thoughtful design under UDL does more than make learning accessible—it empowers students to take charge of their education.

- **Fostering Independence**: **UDL nurtures autonomy by offering choices in how students learn and express themselves. Students become active participants in their learning journey**.
- **Building Confidence**: **Personalized pathways allow students to experience success, reinforcing a positive self-image and belief in their abilities.**
- **Enhancing Engagement**: **In a UDL classroom, the focus shifts from trying to "fix" students to rethinking the design of curricular goals, assessments, methods, and materials. UDL connects learning to students' interests, cultures, and personal goals, making content more relevant—and relevance increases both motivation and persistence.**

- **Supporting Lifelong Learning**: **UDL equips students with strategies to learn independently and adaptively. They become resilient, curious, and capable of navigating future challenges.**

When learning is designed with universal access in mind, the benefits ripple outward: students with disabilities gain meaningful entry into the learning process, while their peers without disabilities often experience accelerated growth. Teachers find deeper engagement and flexibility in their practice, and classrooms evolve into inclusive communities where every learner feels a sense of belonging. Research affirms that when we design for the margins, we uplift the center—clearing the path for one ultimately clears it for all.

Conclusion

Universal Design for Learning is more than a framework—it is a philosophy of inclusion, empowerment, and possibility. It challenges educators to design with intention, anticipate diversity, and create environments where every student can thrive. UDL is not about perfection—it's about progress. It's not about teaching all students the same way—it's about ensuring all students can learn in their own way. When we design for inclusion, we design for dignity, equity, and lifelong success.

References

UDL guidelines. (n.d.). Retrieved from CAST: https://udlguidelines.cast.org/

The IRIS Center UDL module—Universal Design for Learning. (n.d.). Retrieved from http://iris.peabody.vanderbilt.edu/module/udl/

Allison Posey, M. C. (n.d.). https://www.understood.org/en/articles/lesson-planning-with-universal-design-for-learning-udl. Retrieved from understood.org.

Seeing UDL in action in the classroom. (n.d.). Retrieved from understood.org: https://www.youtube.com/watch?v=B7qYJY62X2s&t=4s

UDL to change the world. (n.d.). Retrieved from cast: https://www.youtube.com/watch?v=shgJYEmD1_A&t=4s

ISSN : 2582 – 8304

Letter from the Chairman's Desk

By Sunil Bhatia PhD

Happy and Prosperous New Year 2026

What I am trying to establish is that the theory is not new; it has been in practice since primitive times. The best example is the accidental discovery of herbs with intoxicating effects on human life, such as *bhang* (the cannabis plant). After consumption, such products direct users to behave according to their designed effect.

The first man-made product was alcohol, which creates a unique mental state under its influence after consumption. Similarly, medicinal plants and, in modern times, synthetic medicines cure the body by sending signals to guide repair of affected parts — either by directing the user to apply external support (as in broken bones), or by creating conditions such as immobility that allow natural healing to occur.

Another example is when the body is affected by a cold. The body attempts to clear a blocked nose or throat by producing mucus, sneezing, or spitting — all inbuilt defense mechanisms against

infection. Our survival has been possible because our bodies react to counter external disturbances for safety.

All medical science and medicines are designed to guide the user's body. The phrase *"prevention is better than cure"* is essentially advice that products have the power to guide the body — therefore, it is better to avoid harmful influences. What we eat, drink, and even breathe has the power to guide our bodies.

Hair growth is natural, yet we experience and manage different hair styles — long or short, tied or untied — which affect our appearance and social perception.

If we look at the progress of human development, we find that products guiding human behavior appear at almost every stage. Before the management of fire, humans consumed raw food and had a higher chance of disease from fish or hunted animals. The invention of cooking by roasting reduced the risk of foodborne disease.

In modern times, sensitivity has reached a level where certain groups avoid eating food that grows underground, believing it contains harmful bacteria. Many people choose vegetarian diets to avoid animal-based foods and products.

The design of clothes for different seasons, and mattresses for sleep, guides users toward comfort and increases productivity.

Sunlight, moonlight, and man-made lighting have all played significant roles in guiding human activity. Without water, life was harsh, but reservoirs transformed lifestyles. The design of water transport systems — wells, trenches, pipelines, and overhead tanks — shaped human settlements.

Transportation evolved from walking to the wheel, from sailing with wind power to rowing with oars, from steam engines to automobiles, and finally to airplanes, beginning with the Wright brothers. Each invention reshaped human life.

Boats initially moved with water currents, but the invention of the oar allowed humans to reach desired destinations. Similarly, earlier flying depended on wind, but the airplane enabled controlled travel. Design enables direction.

Even personal objects guide us. My shoe, when biting my foot, guided my stride by causing pain. When the pain became unbearable, I removed it and walked barefoot. Colors influence people differently; preferences and dislikes guide behavior. Thus, color itself becomes a guiding product.

Soap and detergent guide cleanliness by removing dirt from our bodies and clothes. Moisture causes rust, so anti-rusting coatings guide materials toward durability. Water extinguishes fire, while petrol fuels it — showing that different elements guide outcomes in different ways.

Thus, products, designs, and natural elements constantly guide human behavior, choices, and survival.

I am thankful to Executive Director Jani Nayar of *the Society for Accessible Travel & Hospitality (SATH)* for making this special issue of beginning of New year 2026 a special one with theme of 'Design of Classrooms'.

Enjoy Reading.

With Regards

Dr. Sunil Bhatia

Design for All Institute of India

www.designforall.in

dr_subha@yahoo.com

Tel:91-11-45793470(R)

91-11-27853470®

ISSN : 2582 – 8304

Forthcoming Issues

February 2026 Vol-21No-2

Dr. Ravindra Singh, B. Tech, M. Des, Ph. D

Assistant professor, Department of Design, Delhi Technological University, Delhi, India

Specialization in Mechanical Engineering, Product Design, Universal Design

Sh. Partha Pratim Das , B.E, M.Tech, M.Des, Ph.D(Pursuing)

Assistant professor, Department of Design , Delhi Technological University, Delhi, India

ISSN : 2582 – 8304

March 2026 Vol-21 No-3

Francesc Aragall

Expert in Design for All / Universal Design, with 30 years of experience as an international consultant in the areas of urban planning, mobility, ICT, industrial design and building.

Born and living in Barcelona, he began his professional career in the field of ergonomics and biomechanics. With early experience as a dancer and choreographer, he developed a deep, embodied understanding of the human body, movement, and human diversity as a lived reality rather than an abstract concept.

Throughout his career, he has promoted inclusive approaches that place people at the centre of design, education, and social development. As a pioneer of Design for All and universal accessibility, he has worked internationally to ensure that environments, services, and systems respect human diversity across age, ability, culture, and social background. His work emphasizes that inclusion is not an add-on, but a core value that strengthens social cohesion and long-term sustainability.

He founded the first ergonomics company in Spain and the Spanish Ergonomics Association.

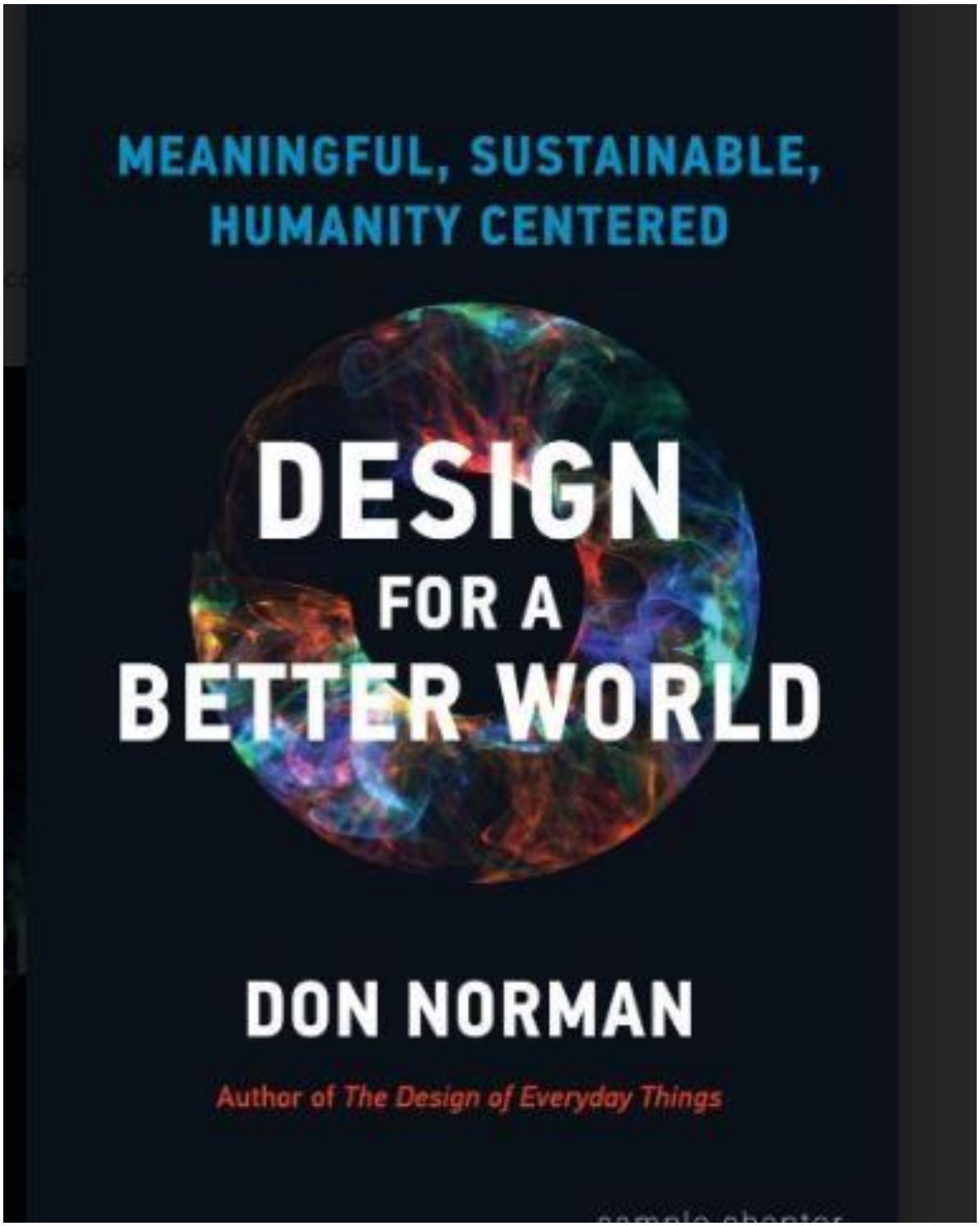
ISSN : 2582 – 8304

New Books

https://www.morebooks.shop/shop-ui/shop/book-launch-offer/74414a1df61c3d2ea8bf46ae7e3c0cf31769f261

it is available on www.morebooks.de one of the largest online bookstores. Here's the link to it:
https://www.morebooks.de/store/gb/book/design-for-all/isbn/978-613-9-83306-1

ISSN : 2582 – 8304



ISSN : 2582 – 8304

News

1 Inclusive event design makes for good business, better delegate participation

Event design and planning should be inclusive and cater to people with special needs in order to attract delegate participation and ensure that no segment of the audience is unintentionally excluded.

Autism advocate, gender-disability activist as well as founder of Autism Inclusiveness Direct Action Group (AIDA), Beatrice Leong, said many individuals with both visible and non-visible disabilities routinely avoid events because the environments are inaccessible or overwhelming.

Conference Partners Asia's Dee Dee Quah (moderator); and Autism Inclusiveness Direct Action Group's Beatrice Leong

"When we build events and ask people to come, have you ever thought about who's not coming? Many stay away not because they don't want to, but because the space is not designed for them," she said.

Leong was speaking at BE@Penang organised by Penang Convention & Exhibition Bureau early this month, on the *Accessibility: It is good business* session.

With South-east Asia rapidly becoming an ageing region, she noted that more people will experience mobility, sensory, or cognitive limitations as they grow older.

"Inclusivity is not only a moral obligation but a growing market segment that event organisers cannot afford to ignore," Leong stressed.

She urged organisers to adopt universal design principles, such as barrier-free layouts, quiet or low-stimulus areas, multiple

formats for information delivery, streamlined registration and queuing systems, and accessible technologies including captioning, assistive listening tools and screen-reader-compatible platforms.

"These measures create environments where all delegates can participate fully and comfortably, regardless of age, ability or neurodiversity," she explained.

She warned that overlooking accessibility carries reputational and commercial risks.

Delegates today are highly aware of whether an event feels safe, welcoming and inclusive, and negative experiences are quickly amplified online.

Citing AIDA's analysis of public complaints found across social media in 2024, Leong said 60 per cent involved accessibility barriers which is a clear indication of unmet needs that translate into lost attendance and revenue.

Leong also called on venues and organisers to collaborate with disability communities from the planning stage, stressing that co-creation leads to more meaningful accessibility solutions that reflect real user needs and ultimately enhance the overall event experience for all attendees.

(Courtesy: TTGmice)

ISSN : 2582 – 8304

2. Get Ready to Meet Your New PPNs

Professional Practice Networks at the ASLA Conference on Landscape Architecture / image: ASLA.

In a field as adaptive, fluid, and broad in scope as landscape architecture—a field where projects themselves are never truly complete: they just keep growing and shifting with each passing season—it makes sense that any attempt to provide outlets for landscape architects to convene must change, also.

Through many months of collecting input from PPN leaders, members, survey data, and collaborative discussions with the ASLA PPN Restructuring Task Force, the aim was never to achieve comprehensiveness, or to pick out the 'top 10' of

landscape architecture practice areas. Instead, we are strengthening, streamlining, and evolving our current PPN structure into new, more inclusive networks.

If you are familiar with the previous set of PPNs, take a deep breath—we know these haven't changed in a while, with some groups dating back to the 1970s (and who remembers when the PPNs were lovably chonky PIGs, i.e., Professional Interest Groups?). Check out the new networks below and find your new niche. You'll note each network is broader in scope, and there may be a few possibilities where you see yourself fitting in. Good news: in 2026, when things are ready to go in the ASLA membership system, you'll be able to select up to three PPNs (no additional fee) as part of your overall ASLA membership!

Be on the lookout in the new year for invitations to select your network(s) to join as a member. And if this announcement already has you excited and ready to step up, you can volunteer as a PPN leader right now!

Public Practice & Service

This network is for: Practitioners working at the local, state, and federal levels; faculty at public universities; and professionals employed by community organizations and nonprofits.

Supporting landscape architects working in the public and nonprofit sectors, this network champions design excellence, environmental stewardship, and community impact in civic spaces. Members work at all levels of government, in public universities, nonprofits, and community-based organizations—

shaping parks, campuses, streetscapes, and public infrastructure. The group explores the unique challenges and opportunities of public service, from navigating policy and funding to leading inclusive planning and long-term landscape management.

Small Practice

This network is for: ASLA members working at small firms with fewer than ten team members, including sole proprietors (over 40% of ASLA membership) and those working in residential design, planting design, and design-build practices.

Managing or working at a small landscape architecture or planning practice comes with unique challenges—and meaningful opportunities. Nearly 95% of landscape architecture firms have fewer than 20 employees, with 70% consisting of four or fewer team members. Firms with smaller annual revenue are also more likely to generate a higher percentage of their income from private homeowners—an important market segment that many small firms serve. This network is a place to connect with fellow small firm professionals to share experiences and support one another in navigating everything from project and office resource management to business development and long-term growth.

Leadership & Mentorship

This network is for: Landscape architects committed to fostering workplace inclusion, advancing equity, supporting mentorship, and growing as leaders within the profession.

This professional network is dedicated to advancing equity, inclusion, and leadership development within the field of landscape architecture. The group provides a platform for members to explore workplace experiences, build supportive professional relationships, and promote a more inclusive and representative profession. Open to all, the network encourages dialogue around career development, work-life integration, and the systemic barriers that impact advancement and participation in the field.

Technology in Practice

This network is for: Landscape architects, academic practitioners, industry partners, and tech leaders focused on advancing tools and systems in landscape architecture.

The Technology in Practice network explores how digital tools and innovative technologies are shaping the future of landscape architecture. This includes not only design software, but advances in AI, water conservation, smart infrastructure, sustainable materials, data collection, and climate adaptation strategies.

Members share knowledge on how technology supports each phase of a project, from design and visualization to construction, maintenance, and long-term performance. The network helps landscape architects stay informed and equipped to integrate technology in ways that enhance resilience, efficiency, and environmental impact across built and natural systems.

Materials, Methods, Sourcing

This network is for: Landscape architects specializing in planting design, landscape maintenance, design-build practices, and residential projects—collaborating closely with nurseries, materials suppliers, and other industry partners.

This network connects landscape architects and allied professionals who are passionate about the details that bring design to life, from plant selection to material sourcing, maintenance strategies, and beyond. We explore how thoughtful choices in materials, planting design, and implementation methods shape the performance, longevity, and beauty of landscapes. Members share knowledge on working with nurseries, fabricators, and industry partners, as well as insights from residential and design-build practices. Whether you're refining specifications, navigating sourcing challenges, or rethinking long-term maintenance, this network is a space to exchange practical solutions and lessons learned. Together, we aim to strengthen the connection between design intent and real-world application.

Parks, Outdoor Play & Outdoor Recreation

This network is for: Landscape architects working in parks and recreation—including trails, multigenerational play and recreation, schoolyards, and outdoor environments for children.

This network brings together practitioners focused on creating inclusive, equitable, and resilient parks and recreation spaces for all ages. This community shares best practices for designing accessible parks, trails, schoolyards, and play areas that

promote play, learning, and connection to nature. Members collaborate on topics like universal design, safety, sustainability, and activating outdoor spaces to serve diverse communities. The network supports professionals in advancing innovative park and recreation design that enhances quality of life and fosters lifelong stewardship of the natural environment.

Urban Environments

This network is for: Landscape architects specializing in urban design, mobility and transportation, community-driven design, historic preservation in urban contexts, and advancing environmental justice.

Landscape architects shaping equitable, connected, and resilient urban environments come together in this network to explore the intersections of urban design, transportation and mobility, community-driven planning, and historic preservation. The focus is on creating inclusive, people-centered places that honor both the past and future.

Members share innovative strategies for designing streetscapes, transit corridors, public spaces, and neighborhoods that prioritize accessibility, safety, social connection, and cultural continuity, advancing the role of landscape architecture in shaping the urban public realm.

Rural & Small-Town Communities

This network is for: Landscape architects working in rural and small-town—focused on improving transportation access,

supporting historic preservation in smaller settings, and guiding thoughtful development.

This network serves as a forum for landscape architects and allied professionals working in rural areas and small towns—places that often face distinct challenges related to design, infrastructure, mobility, and growth.

Members focus on improving transportation access, public space design, ecological resilience, and overall quality of life in non-metropolitan areas. The network also recognizes the critical role of historic preservation in maintaining cultural identity and supporting place-based design solutions that honor community heritage while planning for the future.

Master Planning & Development

This network is for: Landscape architects engaged in land-use planning, large-scale transportation and infrastructure projects, master planning, international practice, and global hospitality and resort development.

This network connects landscape architects involved in large-scale projects that shape regions, cities, and global destinations—from expansive land-use plans and major transportation systems to international hospitality, entertainment, and infrastructure development. Members share strategies for addressing the complexity of working across jurisdictions, disciplines, and cultural contexts. Through collaboration and knowledge exchange, the network supports innovative, resilient, and inclusive solutions for planning and design at scale.

Institutional & Campus Environments

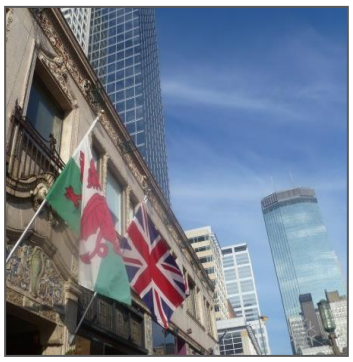
This network is for: Landscape architects involved in institutional and campus environments—ranging from traditional academic campuses to broader institutional, corporate, and cultural campuses.

This network connects practitioners involved in the planning, design, and stewardship of campus-scale environments—including academic institutions, company headquarters, hospitals, public gardens, and historic estates.

The network fosters dialogue among consultants, institutional clients, faculty, and students to share knowledge, highlight emerging trends, and promote collaborative strategies that support campuses as sustainable, inclusive, and inspiring places for learning, healing, and gathering.

(Courtesy: American Society of Landscape Architects)

ISSN : 2582 – 8304



Programme and Events

Spark Student Design Awards: Any current University-level (or above) student, in any design category. (All entries in this competition must be student work, not professional work. Entries may be submitted from any time period of the student's study –could be a piece from last year).

ISSN : 2582 – 8304

Best of KBIS Awards Now Open for 2026 Entries

Best of KBIS Awards Now Open for 2026 Entries.jpg

The Kitchen and Bath Industry Show (KBIS) has opened applications for the premier awards program, Best of KBIS, that will spotlight industry excellence in 2026.

ISSN : 2582 – 8304

ISSN : 2582 – 8304

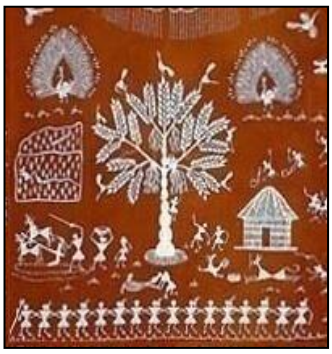
ISSN : 2582 – 8304

RC21 VIENNA 2026

INEQUALITIES AND THE CITY

📣 CALL FOR ABSTRACTS:

ISSN : 2582 – 8304



Job Openings

ISSN : 2582 – 8304

Contact

Design for All Institute of India

Advertising:

To advertise in digital Newsletter

advertisement@designforall.in

Acceptance of advertisement does not mean our endorsement of the products or services by the Design for All Institute of India News and Views: Regarding new products or events or seminars/conferences/ workshops.

News@designforall.in

Feedback: Readers are requested to express their views about our newsletter to the Editor

Feedback@designforall.in

Forthcoming Events and Programs:

Editor@designforall.in

The views expressed in the signed articles do not necessarily reflect the official views of the Design for All Institute of India.

ISSN : 2582 – 8304

ISSN : 2582 – 8304

Editorial Board:

Prof Dr.GauravRaheja, Indian Institute of Technology, Roorkee,
India Email:gr.iitroorkee@gmail.com

Prof Dr. Sugandh Malhotra, Indian Institute of Technolgy, Mumbai, India
Email: sugandh@iitb.ac.in

Prof Dr Ravindra Singh, Delhi Technological University, India
Email: ravindra@dtu.ac.in

Special Correspondent:
Ms. Nemisha Sharma,
Mumbai, India
Nemisha98@gmail.com
Address for Correspondence:
13, Lodhi Institutional Area,
Lodhi Road, New Delhi-110 003India.

ISSN : 2582 – 8304

This journal is published monthly for free for benefits for readers, by Design for All Institute of India,/ 70 Sector-18 Rohini, Delhi110089 (INDIA) and publisher name Dr. Sunil Kumar Bhatia, address A/2/70 Sector-18 Rohini, Delhi-110089 Tel: +91-11-27853470 ,E-Mail: dr_subha@yahoo.com

This publication is completely free .We do not charge anything for published items in this journal from contributors .

Web site:www.designforall.in

Special request should be addressed to Dr_subha@yahoo.com

ISSN: 2582-8304