

# Understanding the Differences between Universal Design and Inclusive Design implementation: The Case of an Indonesian Public Library

GUNAWAN TANUWIDJAJA,

Petra Christian University, Surabaya, Indonesia, and Queensland University of Technology, Brisbane, QLD, Australia

JANICE RIEGER,

Queensland University of Technology, Brisbane, QLD, Australia

JILL FRANZ

Queensland University of Technology, Brisbane, QLD, Australia

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The promotion and protection of the rights of Persons with Disabilities (PwDs) are central to the UN Convention on the Rights of People with Disabilities (UNCPRPD), which is adopted in the Republic of Indonesia. Following the recommendation of UNCRPD, several Indonesian national regulatory policies advocate for the rights of PwDs and Universal Design (UD) implementation. The legislation operates over three jurisdiction levels adding complexity to disability policies in the country. In the case of buildings such as public libraries this is particularly problematic.

Recognising that the public library's role is in PwDs education and of the educational facilities improvement in previous research, this paper reports on a study to identify the barriers and opportunities for the Universal Design (UD) or Inclusive Design (ID) of Public Libraries in Indonesia.

A concept that is often used interchangeably with ID is Universal Design (UD). As described by Mace (1985), Universal Design (UD) can be defined as "The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design." Therefore, UD recommends a standardised design that can be used by every user. Connell et al. (1997) prescribe seven UD principles, including: Equitable Use; Flexibility in Use; Size and Space for Approach and Use; Low Physical Effort Tolerance for Error; Simple and Intuitive Use; and Perceptible Information. One achievement of the UD field is the American Disability Act (ADA) 2010 (United States Access Board, 2010) regulating the minimum standards for building accessibility for various building functions.

Despite this positive contribution, the UD concept is often criticised such as by Imrie & Hall (2001) for its utopian view that, in the end, fails to deliver on its goal of catering to all users' needs. In addition, the implementation of UD in conventional design practice has not been effective because of weak ADA 2010 implementation, limited UD education, and the weak role of the American Institute of Architects in UD education and professional development. Firstly, the ADA 2010 (United States Access Board, 2010) does not require the stakeholders such as architects, engineers, and building owners to consider additional users' needs contributing to frequent neglect of users' needs. For many stakeholders their primary concern is profitability, subsequently PwDs are not considered or involved in the design process (Fletcher et al., 2015). Hamraie (2016) also draws attention to incompatibility between PwD's

needs and UD regulation confirming that accessibility issues for PwDs are often neglected in mainstream design practice.

In contrast, in ID development, there are several definitions of ID, ranging from the micro-level (product design) to the macro-level (interior design, architecture, landscape, and urban planning). ID in product and service design is defined as “The design of mainstream products and services that are accessible to, and usable by, as many people as reasonably possible ... without the need for special adaptation or specialised design.” (The British Standards Institution, 2005). In Architecture, ID is described in the Commission for Architecture and the Built Environment (CABE) as “a process of designing, building, managing and populating places and spaces that ensures that they work for as many people as possible, not just some groups. It encompasses where people live and the public buildings they use, such as health centres, education facilities, and libraries; and how they get around—neighbourhoods, streets, parks, and green spaces and transport” (CABE 2008:12). The BS 7000-6 guideline (The British Standards Institution, 2005) has promoted the ID application in the United Kingdom (UK). It is also a part of the BS 7000 series on Design Management Systems for ID implementation to every category of services and products. In addition, ID is equated with dignity, treatment and assistance of PwDs in response to the specific needs of PwDs. Therefore, from an ID perspective, building designers are compelled to consider users’ needs current and future (CABE, 2008:12).

Recognising the need for resources in this area, the University of Cambridge (2018) proposed various practical tools and design guidelines for managers and designers to implement within the business context. The ID toolkit is proposed to include stakeholders' inputs in the design process and embrace users' diversity. Meanwhile, the ID process involves the life-cycle of stages, such as (University of Cambridge, 2018, par.2): Manage, Explore, Create, and Evaluate.

Despite this work and the availability of these resources, in the Indonesian context, the USA’s UD concept is more accepted than the UK understanding of ID. It is reflected in the adoption of the Americans with Disabilities Act (ADA) into Indonesian regulation in the Act no 4, Year 1997 on Disabled Persons without social consideration. The ADA is also further reflected in the Act no 8, Year 2016 on People with Disabilities that subsidizes the Act no 4, Year 1997. An exception in Indonesia is recognition of the ID concept which was vaguely adopted after the United Nations Habitat 3 of the Inclusive City and which advocated the need for inclusive engagement which must consider social inclusion, gender and other social equality issues. Unfortunately, many ID recommendations remain misunderstood and are not implemented by stakeholders causing poor accessibility in public spaces (Edwards, 2014). In response, Kusumastuti, Pradanasari & Ratnawati (2014) recommend increasing the educational level of PwD to create inclusive employment and generally increase public awareness of the need for disability inclusion. Adioetomo, Mont & Irwanto (2014) also support the argument for developing an inclusive education system and facilities.

This paper reports on a case study of a selected Indonesian Public Library. In particular, the study aims to investigate the barriers and critical success points of implementing ID in public libraries through Indonesian stakeholders' perspectives. The study uses a Grounded Theory (GT) methodology supported by Case Study Research (CSR), and a Post Occupancy Evaluation (POE) framework. It involves document evaluation, stakeholder interviews, and walkthrough evaluations of the public library environments.

Keywords: Inclusive Design, Disabilities, Universal Design, Public Library, Architecture, Built Environment