# TOWARDS MORE INCLUSIVE ENGAGEMENTS: MAPPING THE EXPERIENTIAL REALITIES OF INCLUSIVITY IN ARCHITECTURAL EDUCATION

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# ABSTRACT

## TOWARDS MORE INCLUSIVE ENGAGEMENTS: MAPPING THE EXPERIENTIAL REALITIES OF INCLUSIVITY IN ARCHITECTURAL EDUCATION

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With the growing multi-layered and diverse structure of contemporary societies, the notion of *inclusivity* has become more influential and critical in shaping many fields, including the design of human environments. Based on the conceptual ground of *equity*, *diversity* and *accessibility*, the emphasis is on *equal opportunity* for diverse individuals to achieve their full potential in life. The complexity and plurality of related concepts and parameters in the studies of inclusivity - built environment relationship shows that the reality of the notion is a social construct; it is not inherent but fabricated through human interactions occurring in their social and physical environments. Architectural space is an agent defining interactions and the experiential dimension of inclusion. It is argued in the thesis that architectural education is an emergent field of discussion for inclusive design philosophy in this respect, as it is the first step for architects to develop their professional and social constructs and values. Accordingly, the thesis aims firstly to critically evaluate and map the interrelated conceptual framework of inclusivity to bring out its spatial and experiential dimension concerning the concepts of equity, human rights,

accessibility, diversity and participation. Secondly, the study presents the contextualization of inclusivity in the current discourse of architectural education to evaluate conceptual approaches to develop awareness of students about inclusive design philosophy. The educational milieu is examined based on how the notion is integrated into objectives of different courses in architectural education and how students' learning outcomes are shaped concerning the conceptual framework to unfold the potential of new engagements for designing more inclusive experiences for all. The findings from disclosing sample courses show that through more engagements in education, students can conceptually and methodologically develop the necessary knowledge, skills, and attitudes to design more inclusive environments by focusing on the experiential dimension of inclusivity.

Keywords: Inclusivity, Inclusive Design, Architectural Education, Engagement

# ÖZ

## DAHA KAPSAYICI ETKİLEŞİMLERE DOĞRU: MİMARLIK EĞİTİMİNDE KAPSAYICILIĞIN DENEYİMSEL GERÇEKLİĞİNİN HARİTALANMASI

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Günümüz toplumların büyüyen çok katmanlı ve çeşitli yapısıyla birlikte, *kapsayıcılık* kavramı, yaşam çevrelerinin tasarımı da dahil olmak üzere birçok alanın şekillenmesinde daha kritik ve etkili hale gelmiştir. *Eşitlik, çeşitlilik* ve *erişilebilirlik* kavramsal temeline dayalı olarak farklı bireylerin yaşamdaki tüm potansiyellerini gerçekleştirmeleri için fırsat eşitliği sağlanması üzerine yoğunlaşılmaktadır. Kapsayıcılık ve yapılı çevre ilişkisine yönelik çalışmalarda bu kavram ve parametrelerin çokluğu ve karmaşıklığı aslında kapsayıcılık kavramın gerçekliğinin sosyal bir inşaa olduğunu göstermektedir; genel bir kabul değildir, insanların sosyal ve fiziksel çevrelerindeki etkileşimlerinin bir sonucudur. Mimari mekan, bu etkileşimleri ve kapsayıcılığın deneyimsel boyutunu tanımlayan bir etmendir. Buna dayanarak tez mimarların mesleki ve etik değer ve yaklaşımlarını oluşturdukları birincil ortam olarak mimarlık eğitiminin kapsayıcı tasarım felsefesinin tartışılmasında öne çıkan bir alan olduğunu savunmaktadır. Bu doğrultuda çalışma öncelikle, eşitlik, insan hakları, erişilebilirlik, çeşitlilik ve katılımcılık kavramlarını bütüncül bir şekilde ilişkilendirerek kapsayıcılığın temel çerçevesini tartışmayı, ve bu anlayışının mekansal ve sosyal olarak deneyimsel boyutunun sosyal inşaasını

haritalamayı amaçlamaktadır. İkinci olarak, öğrencilerin kapsayıcı tasarım felsefesine dair farkındalıklarını geliştirmede bu kavramsal çerçeve ile ilişkilenmesi irdelenerek, mevcut mimarlık eğitimi söylemlerinde kapsayıcılığın nasıl bağlamsallaştırıldığını sorgular. Eğitim ortamı, farklı derslerin tanımlarına ve amaçlarına kapsayıcılık kavramının nasıl entegre edildiği ve herkes için daha kapsayıcı deneyimlerin tasarlanmasında yeni katılım modellerinin derslerin öğrenim çıktılarını nasıl şekillendirdiği üzerinden genişletilmiş kavramsal çerçeve üzerinden incelenir. Örnek kursların irdelenmesiyle elde edilen bulgular, eğitimde daha fazla katılım yoluyla öğrencilerin, kapsayıcılığın deneyimsel boyutuna odaklanarak daha kapsayıcı ortamlar tasarlamak için gerekli bilgi, beceri ve tutumları kavramsal ve metodolojik olarak geliştirebileceklerini göstermektedir.

Anahtar Kelimeler: Kapsayıcılık, Kapsayıcı Tasarım, Mimarlık Eğitimi, Katılımcılık

*to my family*

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# CHAPTER 1

## INTRODUCTION

*Inclusivity* refers to how individuals are included in everyday life, have access to sources and opportunities, and are treated equally without any discrimination. The emergence of the notion dates back to the 1950s civil rights movements, which were against growing marginalization and ethnic discrimination. This was followed and joined by disability rights and women's rights movements in the 1960s and 70s to promote equal treatment and challenge discrimination against those who have been disadvantaged and historically excluded. Today, inclusivity is not only limited to the social and political sphere: With the growing multi-layered and diverse structure of societies in the contemporary world, it started to become more critical and influential in shaping many fields like education, health, business, and everyday life including the design of human environments. The expanding agenda of inclusivity includes social, cultural, and behavioral aspects and the environment in which social relations occur and influences these (Zallio & Clarkson, 2021).

Since the world became predominantly urban more than a decade ago, increasing levels of inequality and exclusion are becoming persistent (UN-Habitat, 2020a). The existing inequalities have expanded, or new inequalities have occurred in recent years. This fueled the global scale discussions on inclusivity and its socio-spatial dimension based on the equal use of cities and promoting that all inhabitants should live in just, healthy, accessible, and sustainable cities without discrimination (UN-Habitat, 2020b). A strong human rights-based approach has been implemented with the principle of ‘the right to the city’, in order to foster holistic, balanced and multicultural urban development for all where mutual respect, democracy and social justice prevails (UN-Habitat, 2008). One of the main discussions in this respect, has

been on the disadvantaged groups' reach to resources, particularly the migrants and refugees. They continue to face inequalities in fully participating in the economic, cultural, social, and political spheres (Chacko & Price, 2012). There have been many attempts for the social and spatial inclusion of migrants and their equal participation in life based on universal human rights. However, equity remains a major aspect of inclusivity that is still questioned today regarding the discrimination of historically disadvantaged groups based on race, ethnicity, and gender particularly. One of the very recent occasions about inclusivity and equity is the Black Lives Movement. The protests raised awareness about inequality, racial discrimination, and social exclusion (UN-Habitat, 2020a) and showed that the socio-political dimension that roots inclusivity is still relevant and highly contested today. The movement also fostered the actors designing and planning the built environment towards searching 'design justice' for equal and inclusive cities (UN-Habitat, 2020a).

The discussions on inclusivity have also expanded in recent years to question health equity and accessibility due to the COVID-19 outbreak that started in early 2020. The pandemic also dramatically showed the prevailing inequalities of the world: While the pandemic itself created new inequalities, especially for under-developed, disadvantaged, and marginalized groups, pre-existing inequalities have also exacerbated its effects (UN-Habitat, 2020a; UN-Habitat, 2021). The ongoing outbreak also showed new dimensions and the potentials of spatial environments for more inclusive futures. There has been a shift in addressing health outcomes by pointing out the social determinants of health framework consisting of social, political, behavioral, and environmental factors (Kleinmann, 2021; WHO, 2021). While the built environment affects health inequalities (Pineo, 2020), it is also a crucial asset contributing to people's physical, social, and psychological well-being (Jian et al., 2021). These perspectives have brought new dimensions to inclusivity by positioning spatial justice, equity, and collaboration at the center of a new conceptualization of health. Inclusivity was related to the socio-political sphere and health, particularly with the movements of disabled and marginalized groups in its infancy in the early 60s and 70s. These new social movements and pandemics show

that the same conceptual ground is still relevant yet expanded to include new dimensions and a broader concept of diversity and equity for all (Figure 1.1). Thus, it is necessary to understand diversity and equity as crucial concepts of inclusivity in its current expanded agenda.

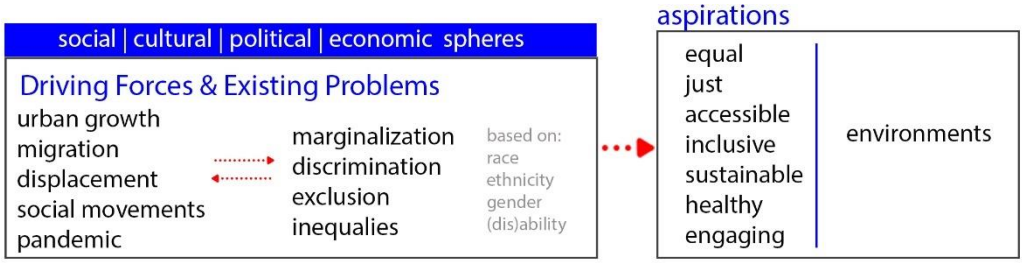



Figure 1.1 Multiple dimensions of inclusivity

Having a multi-faceted discursive space, diversity could be approached from social, political, cultural, and behavioral dimensions. On the one hand, from an individualistic perspective, people have changing and diverse characters and abilities in the course of their life. On the other hand, people from diverse backgrounds and cultures coexist today in the societal structure of cities. Therefore, people may conceive, experience, and behave differently in similar conditions, which necessitates understanding the concept of equity for these diverse conditions. The idea of 'equality' and 'equity' has gained significant importance worldwide in the second half of the twentieth century, following the civil rights movements. This added impetus to inclusivity discussions, especially in its legal aspects, yet the increasing inequalities and diversities in today's globalized world necessitate a broader understanding of equity. "The concept of equity recognizes that redistributive mechanisms are put in place for a fair and more efficient use of resources, skills, and opportunities to target the most vulnerable with the highest levels of support" (UN-Habitat, 2020a, p.158). Considering that people do not share equal conditions, the provision of equal opportunities parallel to diversities should be adopted as a central approach. *Equal opportunity* here refers to the state of fairness in which individuals are treated according to their abilities and conditions, without any discrimination, to provide an equal chance of participation for the desired

outcomes. Based on this fundamental ground of diversity, equity, and values of social justice, human rights, and freedoms, inclusivity emphasizes the equality of opportunity for diverse individuals to achieve their full potential in life by recognizing their dignity, diverse abilities, and necessities without any discrimination (Collins, 2003; DESA, 2009; Erkılıc, 2012; UNESCO, 2012; Heylighen et al., 2017) (Figure 1.2). Diverse individuals' full participation in life also implies a strong spatial dimension. Human experience and interactions occur in individuals' social and physical environments, and through the experiences, the reality of inclusivity is constructed. The environment itself becomes an actor that defines individuals' everyday experiences: it enables/ disables or includes/excludes. Thus, the notion of inclusivity and its spatial dimension has been discussed a lot in the research and practices of design-related professions since the 2000s.




Figure 1.2 Concepts grounding inclusivity

As the notion of inclusivity and related concepts have become more influential in national and global agendas, the studies also have expanded, going beyond the research on practices. Being a value-driven philosophy interrelated to societal issues, inclusivity spread into the field of education. While higher education institutions prioritize inclusivity as a vision, at the same time, they search for the methods to integrate it into the curriculum. For design-based departments dealing directly with human experience, these attempts reach another dimension: Rather than secondary approaches dealing with inclusivity as an 'issue' needing to be addressed, it is studied multidimensionally by accepting as a profound design philosophy. The plurality of attempts in education reflects focus areas and concepts in spatial studies of

inclusivity, which necessitates a further inquiry to break down the architectural education-inclusivity relationship.

## 1.1 Problem Definition and Background

Mainly after the 1980s and 90s, a great body of studies about the spatial dimension of inclusivity has emerged. Following the main objective of 'designing for the greatest extent of population possible equally, without exclusion,' different design approaches have been established like inclusive design, accessible design, universal design, and design for all (Van der Linden et al., 2016). These approaches present a variety of conceptions regarding human-space interaction based on positions towards the inclusivity's central concepts and enlarge the agenda of themes significantly, especially after the 2010s. Although they have been extremely important in bringing the issue of inclusivity to the table of architectural discussions, they pose major varieties with a little attention to conceptual formations of inclusivity. The fundamental conceptual framework of inclusivity consists of diversity, equity, human rights, and accessibility as key aspects. However, the studies -mostly earlier ones- remained to discuss the spatial dimension of inclusivity concerning physical accessibility standards and their effects on the physical experiences of users since the ideas on accessibilities pose a great potential to be transferred to the practical field easier. Although it is one of the essential parameters of inclusivity, accessibility primarily relates to the physical experience of users. Nevertheless, it generally does not take into account the broader socio-cultural context of diversities that people exhibit. Yet, understanding of inclusivity in spatial sense deserves a deeper awareness about accessibility. Beyond its physical implications, access to services, activities and information are crucial aspects of accessibility, which influences the intellectual and educational dimensions of inclusion.

Architectural space is more than a mere physical backdrop for people that can only be evaluated in terms of to what extent it is accessible physically. Space is an active agent that defines human interactions, and in return, space is produced from these

interactions. The reality of experienced space is not preconceived; it emerges out of relations and appropriations. Space is not just a 'frame' for the experiences; it is a social morphology that shapes the experiences: It is both a 'field of action' and a 'basis of action' (Lefebvre, 1991). Social space production is a shared enterprise; that is, others involve in the process. Based on this conception regarding space, every individual socially constructs his/her experiential reality of inclusivity through social interactions, which necessitates a deeper understanding of social, cultural, and behavioral aspects. Thus, it would be helpful to study inclusivity beyond these particular perspectives constructed upon accessibility by understanding its underlying conceptual frameworks and their social constructions through interactions defined by the social and spatial environments to extend its implications in the field of architecture.

The ambiguity regarding the conceptual grounds of inclusivity can be traced through the study themes. Some major themes are repeatedly studied in different years and combined with different approaches and methodologies, which will be evaluated detailly in the following chapters of the thesis. The earlier studies, which are products of highly social and political debates, mainly focused on disabilities from an ontological and right-based perspective (Mace et al., 1991; Imrie, 1997; Swain et al., 2004). The disabling character of space on disadvantaged groups is further elaborated and discussed regarding physical accessibility, its standards, and legislation in general (Peace & Holland, 2001; Imrie & Hall, 2001; Clarkson et al., 2003; Burton & Mitchell, 2006; Coleman et al., 2007; Vandenberg, 2008; Langdon et al., 2012). While accessibility has been the focal point of these studies, diversities are discussed as features of disadvantaged groups like disabled or aging population groups and the physical experiences of these groups. With the increasing knowledge about the Universal Design paradigm (UD), scholars attempted to study the inclusivity of the built environment by positioning diversities of all populations at the center and tried to benefit from user-based knowledge, especially in the early 2010s (Ostroff, 2001; Christophersen, 2002; Preiser & Smith, 2011; Steinfeld & Maisel, 2012; Erkılıç, 2011; 2012; Heylighen, 2013; Winance, 2014). The focus of

studies has shifted from mere physical accessibility to the user itself, and a more comprehensive understanding of diversity has emerged. Also, there emerges a concern to adopting this conceptual framework to design pedagogies of architectural studios. Yet, it seems that some unclarities are still present regarding users' social-cultural and behavioral dimensions, their own constructions of inclusivity, and how it is related to space. When looking at a more recent body of works, it can be seen that the social dimension has been dominant, with the notions of social justice, rights, equity, well-being, and engagement (Van der Linden et al., 2016; Bianchin &. Heylighen, 2017; 2018; Jian et al., 2020; Lim et al., 2021; Ferdous & Bell, 2021). Rather than designerly knowing the needs and experiences of diverse user groups, researchers and practitioners adopt new strategies based on the experiential reality of users themselves, their perceptions, and participation. As seen, there has been an evolving approach towards a more socially engaged, user experience-based understanding of inclusivity. The contribution of these works is valuable since they accentuate diversities not as specialized needs but as a shared universal characteristic that any human being or society possesses, which necessitates equal respect. However, there still exists unclarities in the conceptual ground of inclusivity. Especially the recent works present a significant body of knowledge regarding how users socially construct their experiences. However, they remain as separate works. Presenting these works together through a conceptual framework that grounds inclusivity might be helpful for future studies of researchers and practitioners.

Based on these points, the thesis attempts initially to answer the following questions:

1- *What does inclusivity mean for architecture and what is socially inclusive architecture?*
2- *What are the conceptual grounds of inclusivity, and what are their spatial implications?*
3- *How do social and spatial environments affect the experiences of inclusivity?*

These questions are open to discussion from various perspectives since the conceptual framework of inclusivity is multi-dimensional. Its philosophy, in essence,

questions the prevailing conventional notions of architecture and intends to form and enhance a new design approach constructed around the concepts of equity and diversity. So, the main aim of the thesis is to provide clarity on these conceptual grounds. It is necessary to understand and evaluate the contexts in which design approaches are developed and utilized to achieve this. Considering this, it can be deduced that architectural education is an emergent field of discussions for inclusivity. It is the first and foremost step to develop many of our professional and social constructs. The studies in recent years also support the idea that it is important to understand the relation between education and inclusivity through various points (Morrow, 2002; Altay & Demirkan, 2013; Altay et al., 2016; Mulligan et al., 2018; Scott et al., 2018; Rieger & Rolfe, 2021).

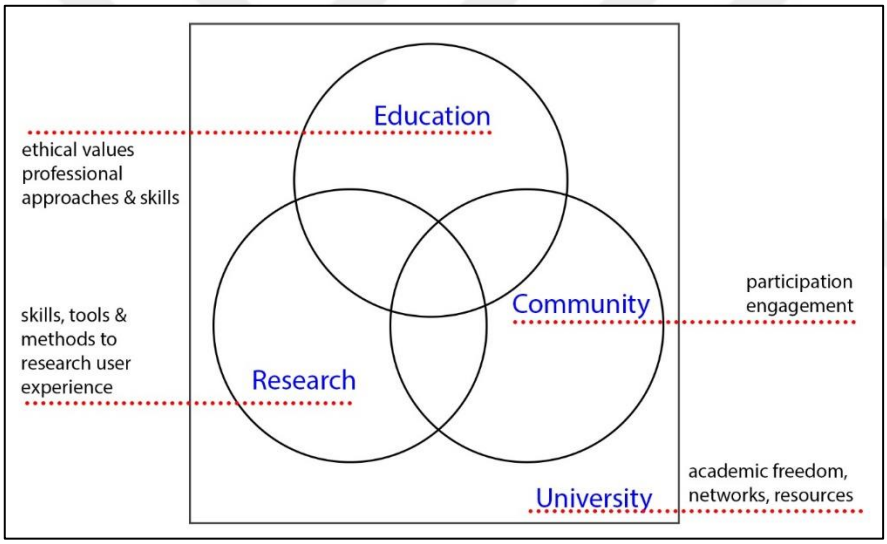



Figure 1.3 Architectural higher education system and its relation to inclusivity

As Morrow states, it is necessary to help students develop their own set of values formed around the ethical and philosophical framework of inclusivity as future built environment professionals (Morrow, 2002). The higher education environment presents many opportunities for equipping students with the necessary skills, methods, and knowledge regarding inclusivity in this respect (Figure 1.3). Whereas the professional environment consists of many parameters intertwined with real-life conditions and established design approaches, the higher education environment of

architecture provides many opportunities for students to think and practice free from time-value restrictions and explore the spatial experiences of inclusivity. Also, the higher education environment offers academic freedom and diverse skills to understand, engage and develop ideas on society and its challenges (Cortese, 2003). On this basis of educational environments, the inquiry of the thesis expands to include subsequent questions:

4- *How is inclusivity approached in architectural education?*
5- *What are the tools and engagement methods used in architectural education to understand the socially constructed experiential dimension of inclusivity?*

Based on these points of inquiry, the main research question of the thesis is formed as follows:

> *How different contextualizations of inclusivity in architectural education provides opportunities to discuss and understand its experienced realities, and how do they relate to fundamental conceptual grounds of diversity, equity, human rights, accessibility, and participation?*

Understanding the conceptual ground and how people socially construct their experienced reality through architectural education could open new perspectives towards more inclusive engagements for students, academicians, and practicing architects.

## 1.2 Aim of the Study

Although some of the concepts and/or parameters have consistently been at the center of inclusivity discussions, there seems to be limited, not comprehensive approaches towards how they are related to each other and their spatial responses. Thus, the main aim of the thesis is to critically evaluate the conceptual framework of inclusivity to bring out how it relates to its central concepts, which are equity, human rights, accessibility, diversity and participation, and provide a conceptual clarity based on philosophical and sociological discussions on these. Despite the limited

conceptual framework on inclusivity, a literature review suggests that studies about the spatial dimension of inclusivity present a great variety of themes and conceptions. However, they have not been discussed comprehensively and critically. Thus, a detailed mapping of the literature on the spatial dimension of inclusivity will be provided in the stduy accordingly. This mapping, firstly, is expected to show the prominent themes and approaches, especially between 2000-2022, and the current themes. Secondly, it is aimed to present the evolution of the concept throughout the years and answer how and why approaches have changed by linking them with the main concepts mentioned before.

The second aim of the thesis is to unfold the experiential dimension of inclusivity that can be traced through a holistic study of its conceptual ground in relation to the built environment through a social constructionist perspective, and trace its contextualization in architectural education. As Burr indicates, according to the social constructionist perspective, knowledge and reality are not taken-for-granted concepts, but they are fabricated through the social interactions between people. (1995) Based on its conceptual grounds, it is possible to look at the notion of inclusivity from a similar lens. Rather than being an objective, determined concept, inclusivity is an experiential reality shaped by our social and physical environment. The social dimension of experiences relates to discourses on social justice, diversity, and plurality formed through social norms, legislative approaches, and global socio-political discourses. Experiential realities are also shaped through the spatial environment. Space is an active agent that defines the experiential reality of inclusivity, and its effects on people are studied at various scales concerning several concepts, particularly in architectural education. Inclusive public spaces, inclusive housing, assistive& accessible design, inclusive& healthy urban spaces, participatory design, and community engagement can be listed as some of the most studied aspects of this spatial dimension. Although they relate to different aspects of inclusivity's conceptual grounds, the common approach traced especially in recent studies is that they focus on the socially and spatially experienced dimension with a human-centered approach. So, the study aims to present how spatial discussions in

the educational milieu relate to conceptual and theoretical frameworks of inclusivity and its experiential dimension through a critical evaluation.

There are three main reasons to focus on architectural educational examples to discuss the experiential dimension of inclusivity based on its conceptual ground. First of all, as previously mentioned, architectural education is the first step in developing design approaches and professional and social constructs. Thus, it is crucial to understand how inclusivity and related concepts can be taught as a design philosophy and how this could affect architects' professional constructs in the future. Secondly, architectural practice today is based on many real-time parameters. Economic and client-based issues highly affect the main design approaches, and the experiential dimension of inclusivity in design and post-occupancy stages is not considered thoroughly. On the other hand, free from time-value restrictions, university students can engage the built environment more through educational lenses (Mcclung, 2019). They can utilize several research methods for collecting data about the experiential dimension and develop more inclusive design approaches. Lastly, since higher education institutions provide a free and intellectual environment supported by several academic networks, students could be encouraged to think and design beyond conventional approaches and explore new design philosophies that position concepts like inclusion, diversity, equity, participation, and accessibility center. In this respect, the study attempts to analyze and evaluate several educational cases in diverse countries and schools that scrutinize inclusivity's conceptual framework based on the engagement models they utilized and projected learning outcomes. The recent literature focusing on inclusivity, its philosophy, and design education reveals that the experiential dimension is studied mainly through three engagement models, which will be evaluated according to how they contextualize the conceptual framework and experiential realities within an educational environment. These methods can be briefly listed as:

**(i)** **Empathic Models of Engagement:** This engagement model enables students to understand human-environment relationships by building empathy through simulation methods and ethnographic methods.

(ii) **Engagement through Co-design**: Students collaborate directly with a user group/ community representative to understand their needs and experiences, and design accordingly.

(iii) **Engagement through Community Projects:** Students are directly involved in a curricular or co-curricular community project together with non-profit organizations.

Each method described above is an extension of spatial concepts and approaches presented in current inclusivity literature, traced in the architectural educational field. Simulation-based methods dwell on the fact that the environment shapes **experiences beyond physical accessibility.** Ethnographic methods highlight the **psychosocial dimension** of inclusivity questioned today and how it could be utilized to develop more inclusionary architectural programs. Co-design brings forward the enhanced meaning of **participation** in relation to diversity and equity and shows how participation could create more inclusive experiences at different design stages. Lastly, by incorporating **spatial agency**, community project-based methods question the possibilities of a new definition of architects as social agents who mobilize community engagement.

## 1.3 Scope and Significance of the Study

Inclusivity is a comprehensive and multi-dimensional notion, and it has become an essential focal point in recent works. Increasing social movements, current situations like mass refugee problems, the post-pandemic era, and awareness of inequalities and problems that most people face in many parts of the world fostered the formation of international discourse on the notion. (See publications of United Nations on more inclusive, equal, and supportive environments, governance, systems, and legislations) It is evident that inclusivity has been an essential parameter in built environment studies, yet very few of the studies pursue to unfold the conceptual ground of the notion (Persson et al., 2015; Heylighen et al., 2016; Van der Linden et al., 2016; Ferdous & Bell, 2021; Zallio & Clarkson, 2021). Besides, works focusing

on the experienced reality of inclusivity are either limited or do not directly addresses this dimension. Thus, the thesis will be a part of an attempt to provide a detailed conceptual ground of inclusivity and utilize this to present a social constructionist perspective on the notion.

It is evident that the notion of inclusivity has many intersections with different subjects, which creates a vague discursive space. The thesis aims to provide a critical study on inclusivity based on its own conceptual ground to prevent this vagueness and provide a structured understanding of the notion that researchers and practitioners could benefit from in the future. The main body of inclusivity works studied in the thesis consists of research focusing directly on the notion between 2000 and 2021, where we observe most of the themes' emergence and evolution. The educational cases evaluated in the thesis are primarily part of this literature. However, they also involve issues such as social sustainability, social inequalities, discrimination, segregation, human-centered design, user experience, and environmental perception. So, the focal point of the studies is integrating inclusivity and inclusive design into the architectural design curriculum, framed within an educational context. While discussing different dimensions of experiential reality of inclusivity, the study approaches from a critical distance. It provides a social constructionist perspective on presenting their main ideas and conceptions through architectural educational cases. By doing so, it is expected to provide a comprehensive understanding of the notion that researchers, educators, and practitioners could utilize in different studies and projects.

## 1.4 Methodology and Structure of the Study

The methodology of the thesis has a duality in relation to the two aims of the study. First part is based on the critical evaluation of the concepts grounding inclusivity and unfolding their relations. This process of evaluation theoretically stems from philosophical and sociological discussions and conceptualizations. Based on this, the study reviews recent literature on the spatial dimension of inclusivity analytically in

a systematic way. Initially, a number of works (books and articles) are evaluated, and those related to inclusivity, its design philosophy, and main concepts are selected as the domain of review. In the review process, the works are mapped according to main themes and parameters to identify changes, trends, and shifts in literature, especially focusing on the emphasis on the experiential dimension. This experiential dimension of inclusivity is further critically evaluated, and how it corresponds to main grounding concepts (equity, human rights, accessibility, diversity, and participation) is disclosed through the theoretical lenses of social constructionism.

In the second part, contextualization of architectural education is discussed through the evaluation of approaches observed in the educational milieu based on the concept-based analytical survey of selected courses around the world and engagement models they used. The analytical survey consists of two integrated stages. Firstly, a group of courses and extracurricular programs on teaching, particularly inclusivity and its experiential dimension worldwide, are selected. They are mapped according to course levels, types, methodologies, learning objectives, and mainly emphasized concepts. These mappings unveil how far different curricular and instructional approaches in the world provide opportunities for students to comprehend inclusivity and its experiential dimension. In the second part of the analytical survey, some sample studies among those courses are further evaluated to disclose different engagement models utilized in teaching and their influence on students' development regarding inclusive design philosophy. Accordingly, course learning outcomes regarding students' development of related knowledge, skills, and attitudes towards inclusivity is critically studied within the conceptual framework presented before, particularly focusing on the contextualization of the experiential dimension of inclusivity and integration of different parameters into learning objectives.

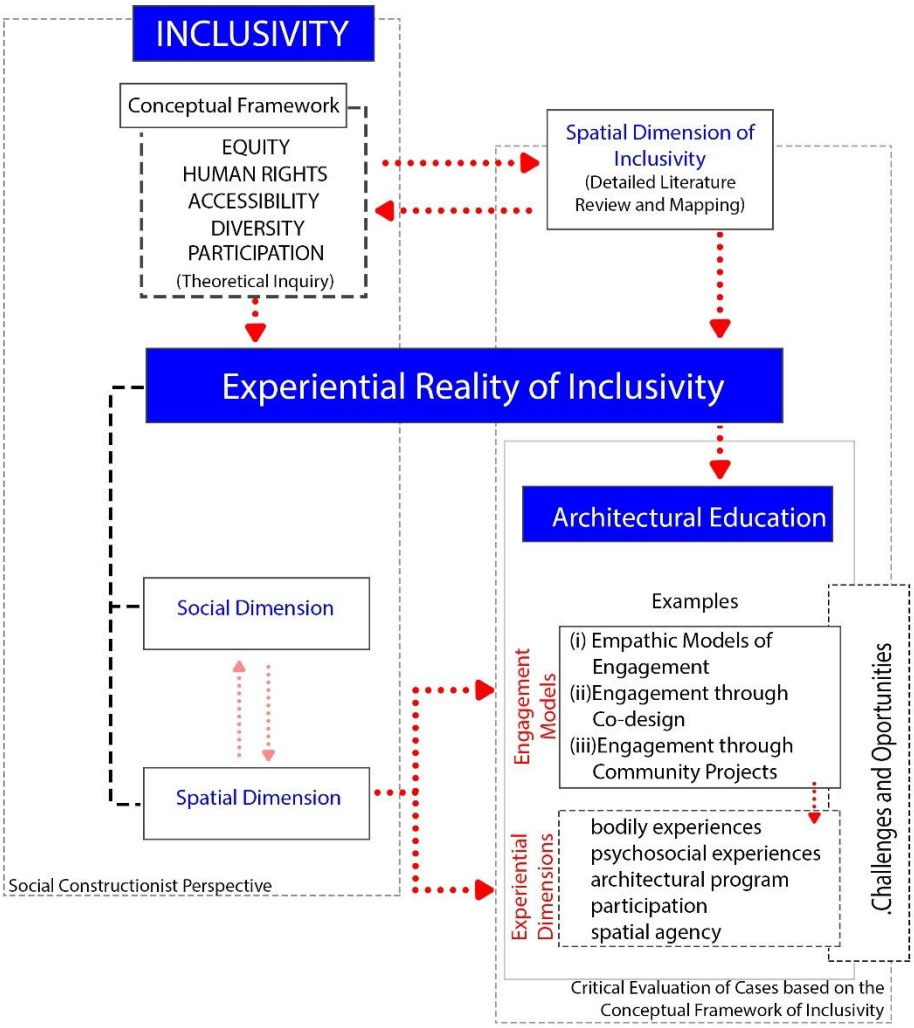



Figure 1.4. Diagram showing the thesis structure and methodology

The thesis consists of the following five chapters in which the conceptual ground of inclusivity is discussed together with the existing literature to bring out new dimensions of its experienced reality:

- The first chapter presents the current situation regarding inclusivity and explains the main aims and approaches of the thesis.
- The second chapter presents a detailed mapping of the studies focusing on inclusivity and built environment between 2000 and 2022 by relating a critical and systematic literature review with the theoretical and conceptual

framework presented in the previous chapter. By relating their frequencies, prominent themes, and methodologies, three main interrelated periods of studies will be evaluated, and how social constructionist ideas have emerged and changed throughout the years will be presented. Than, the main topics regarding inclusivity and architectural education will be presented to show how it corresponds to growing conceptual and experiential discussions.

- The third chapter provides a critical evaluation of the conceptual ground of inclusivity. How human rights, equity, accessibility, diversity and participation ground the spatial dimension of the notion are explained respectively. Then, this conceptual analysis will be combined with a social constructionist perspective to unfold the experiential reality of inclusivity based on its social and spatial dimensions.
- The fourth chapter elaborates on the contextualization of inclusivity in architectural education to map how the experiential dimension is approached. Accordingly, the first part of the chapter focuses on the example of courses worldwide to understand the main areas of spatial studies involving inclusivity and how its conceptual framework is incorporated into the educational process through a comparative study and mapping. The second part of the chapter is an analytical survey of selected courses as case studies based on new engagement models they implemented to understand the experiential dimension of inclusivity. Their approaches are examined based on learning outcomes and their effectiveness in integrating the conceptual framework of inclusivity into architectural education, and their projections on future professional environments.
- Chapter five presents the conclusions and future projections on how this study of the experiential reality of inclusivity could benefit researchers, educators, and practicing architects towards more inclusive engagements.

# CHAPTER 2

# MAPPING THE SPATIAL DIMENSION OF INCLUSIVITY IN RECENT LITERATURE

## 2.1 The Origins of Inclusive Design Philosophy

One of the central discussions for design-related disciplines has been the people's interactions with environments, products, and systems and enhancing their experiences. Although the human rights-based understandings of people having equal opportunities in social, cultural, and political spheres have been voiced since the enlightenment era, their impact on critically thinking about human-environment interactions and their inclusion dates back only to the mid-20$^{th}$ century. Still, it is possible to trace a growing interest in the notion of inclusivity, represented by a multitude of studies revolving around different approaches. Due to the human-oriented nature of inclusive design philosophy, many concepts exist, and they are discussed in varying degrees; thus, several approaches sharing similar and different aspirations have been developed over the years. We have a plurality of definitions rather than an absolute definition of inclusivity. So, before unfolding the paradigmatic shifts, evolutions, and expanding agendas of inclusive design philosophy, it is essential to discuss the emergence of these different approaches chronologically and interrelatedly.

The beginning of inclusivity discussions dates back to the 1950s. After World War II, a strong civil rights movement grew up in the United States to abolish racial segregation and discrimination, resulting in a precedent decision on inclusivity of the U.S Supreme Court's "separate is not equal" (Ostroff, 2011). Besides racial discrimination, during the post-war period, many soldiers returned to their countries injured and disabled in the U.S and many other European countries, and found themselves in spatial environments and services that were not disability friendly. The

success of civil rights movements acted as a model and a catalyst for disability rights movements challenging discrimination against disabled people (Mace et al., 1991; Coleman et al., 2003). These movements greatly influenced approaches and especially legislations between the 70s and 90s. An earlier approach to inclusivity based on disability developed during this period is called **barrier-free design**. Acknowledging the negative impacts of environments on the physical mobility of disabled people, the primary approach in barrier-free design was removing barriers. However, as there was not a holistic understanding of inclusion, the legislation and related solutions in barrier-free design mostly remained as specialized interventions, which prevented disabled people's integration into everyday life without exclusion to some extent. Another significant driving force for more inclusive approaches was legislative approaches. Starting with the first release of standards in 1961, following the strong campaigns led by disability rights groups, the need to remove architectural barriers was recognized legally by Architectural Barriers Act (1981), and accessibility guidelines are accepted entirely through the Americans with Disabilities Act (ADA) in 1990 in the U.S[1] (Coleman et al. 2003). Similar initiatives, legislations, and civil rights laws emerged during the same period in Europe.[2] A parallel approach to barrier-free design was developed as a result of these actions, which was **accessible design**. The conceptual ground for this approach was preventing individuals' discrimination because of their disability and providing equal access for all (Persson et al., 2015). While expanding the vocabulary of interventions for more

[1] Pioneering building standards were first released by American National Standards Institute (ANSI) in 1961, which was A117.1 "Standard Specifications for Making Buildings and Facilities Accessible to, and usable by, the Physically Handicapped'. In 1980 and 1986, it was revised and upgraded to include specifications for accessible dwellings and the needs of people with all types of disabilities. Also, later federal laws, including the Rehabilitation Act(1973) and the Fair Housing Amendments Act(1988), enhanced the elimination of barriers and discrimination against the disabled before the creation of the Americans with Disabilities Act (ADA) (Mace et al., 1991, Clarkson et al., 2003)

[2] While the earlier legislative actions focused on healthcare and welfare, in later efforts, human and civil rights have become dominant. In the UK, Disability Discrimination Act was enacted in 1995. United Nations has been a central figure since the Universal Declaration of Human Rights in 1948, which included the rights of disabilities. This was developed further, and a new human rights treaty was adopted in 2006, the United Nations Convention on the Rights of Persons with Disabilities (Mathiason, 2011).

physically accessible environments, the accessible design approach mostly focused on minimum criteria and needs of disabled people. The heavily legislative forces-driven nature of accessibility was limiting the creative potential of design for more inclusive solutions. This critique fostered the emergence of another understanding, **universal design**. The term was first used by Ronald Mace, who was a wheelchair user-architect in 1985 in the US, and defined as follows: "Universal Design is an approach to design that incorporates products as well as building features which, to the greatest extent possible, can be used by everyone*"* (Mace, 1985). Instead of separating and segregating the society as 'disabled' and 'others,' the essential conceptual ground was encouraging designers to consider largest possible population and their needs in the design of products, environments and services without the need of specialized solutions (Mace et al., 1991; Connel et al., 1997; Iwarsson & Stahl, 2003). Centralizing social integration of all without stigmatizing, seven principles of universal design were proposed to strengthen its philosophy and adaptation. While the universal design was a highly studied approach in U.S and Japanese contexts especially, similar approaches with different names emerged in European contexts. One of them was **inclusive design**, firstly being mainstream in the UK. Based on the idea that people's abilities and needs change over the course of their lives, inclusive design takes this broad character of populations into account and aims to improve products, services, and environments for the whole population (Coleman et al., 2003, Heylighen et al., 2017). A similar concept that emerged among other European countries was **design for all.** Defined by European Institute for Design and Disability (EIDD) as "design for human diversity, social inclusion, and equality," the design for all approach aims to provide equal opportunities for all to participate in every aspect of society (EIDD, 2004; Persson et al., 2015). Both understandings in European contexts essentially focused on reaching the widest possible population and their inclusion in the process and benefit from their diversities, rather than reaching a unifying result aimed at a universal design approach (Imrie & Hall, 2001; Imrie,2012; Winance, 2014). Besides these different approaches, we can trace the presence of inclusivity in several other design approaches that emerged in the same

periods, like user-centered and human-centered design. As Heylighen et al. (2017) explain, these approaches focus on micro and macro-level interactions and relations between people and designed products and environments. The latter approach also relates to participatory and cooperative design approaches with the importance of social values and attitudes. Also, especially in product design, the connections between disability and aging are put forward through transgenerational and life-span design approaches. These approaches support the philosophy of inclusivity in design by focusing on designing for and with people.

In inclusive design philosophy, it is possible to trace differences; however, similarities in approaches, concepts, and aspirations are more evident (Figure 2.1). Accordingly, inclusive design is both a philosophy and an approach to design focusing on concepts like equity, diversity, inclusion, and striving to reach the greatest possible application for all populations (Heylighen et al., 2017). So rather than breaking down the differences in approaches, this thesis chapter aims to unfold significant themes and concepts grounding inclusivity and how this design philosophy expanded and evolved over the years. Therefore, different approaches are denoted as *inclusive design* and *inclusive design philosophy* as a general terminology throughout the thesis study.

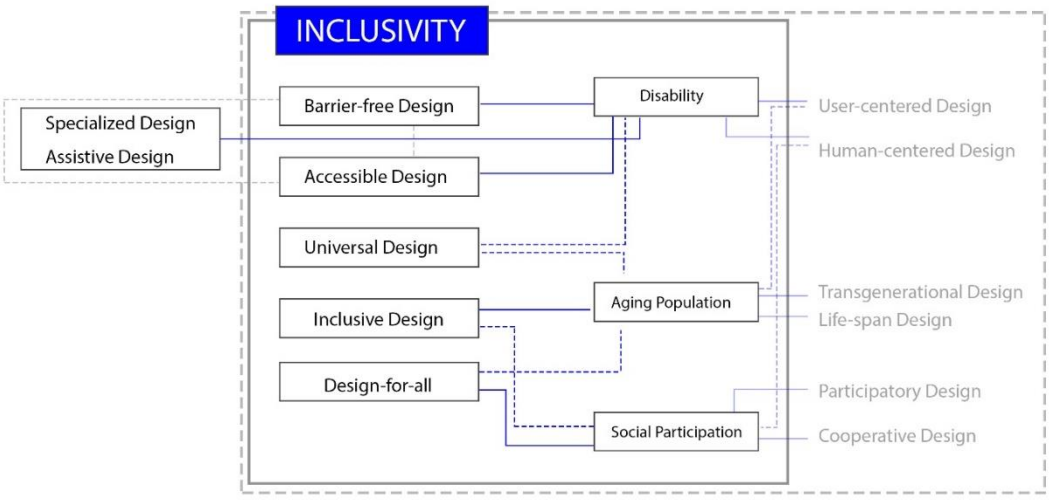



Figure 2.1 Different approaches in inclusive design philosophy

## 2.2 Mapping the Expanding Agenda of Inclusivity

With the plurality of definitions and approaches when discussed together throughout the years, it is possible to trace recurring themes, concepts, and parameters through a holistic mapping work (Figure 2.2). The literature on the spatial dimension of inclusivity in the last twenty years is mapped in the following procedure. Firstly, a number of studies are searched in the Google Scholar database with identified main keywords of 'inclusivity,' 'inclusive design,' 'inclusion,' and 'inclusive architecture. The search process is expanded by including other keywords on main concepts such as 'equity,' 'diversity,' and 'accessibility.' The accessed studies are evaluated according to their abstracts, main arguments, approaches to inclusivity, and their relation to the built environment and spatial issues in general. As a result, 99 studies are selected as mapping domains[3]. In the following phase, the main themes of the studies regarding inclusivity are examined, and the following eight themes are determined as central concepts:

- Disability and barriers
- Aging population
- Accessibility standards and legislation
- Universal design
- Participation and engagement
- Design pedagogy and education
- User knowledge and experience
- Social justice, equity, and well-being

In the mapping, the vertical lines depict a study in a particular year and which themes are dominant in that study. Moreover, blue rectangles along horizontal lines show

[3] The list of studies used for mapping can be seen in the appendix, according to their year of publication and central themes, concepts, and parameters

the number of studies in a particular year addressing the related themes. To differentiate the impact of books/edited books on the knowledge production on inclusivity, books and articles are given different thicknesses. As a result, the mapping shows i) the number of studies, ii) the distribution of study themes over the years, and iii) changing relations and distribution of themes. Accordingly, it is seen that the number of studies focusing on the inclusive design philosophy has increased dramatically, and dominant study themes also show varieties. Based on this variety, it is possible to discuss three phases of inclusive design philosophy roughly divided between 2000-2010, 2011-2015, and 2016-2021. Although this division might show differences in various contexts, and transitions might be blurred, their separate and combined analysis reveals many important dimensions and concepts. In order to construct a holistic understanding of the conceptual grounds of inclusivity and how it is particularly contextualized in architectural education, it is first necessary to unfold evolutions and expansions of approaches and how and why paradigmatic shifts occurred based on these three periods.

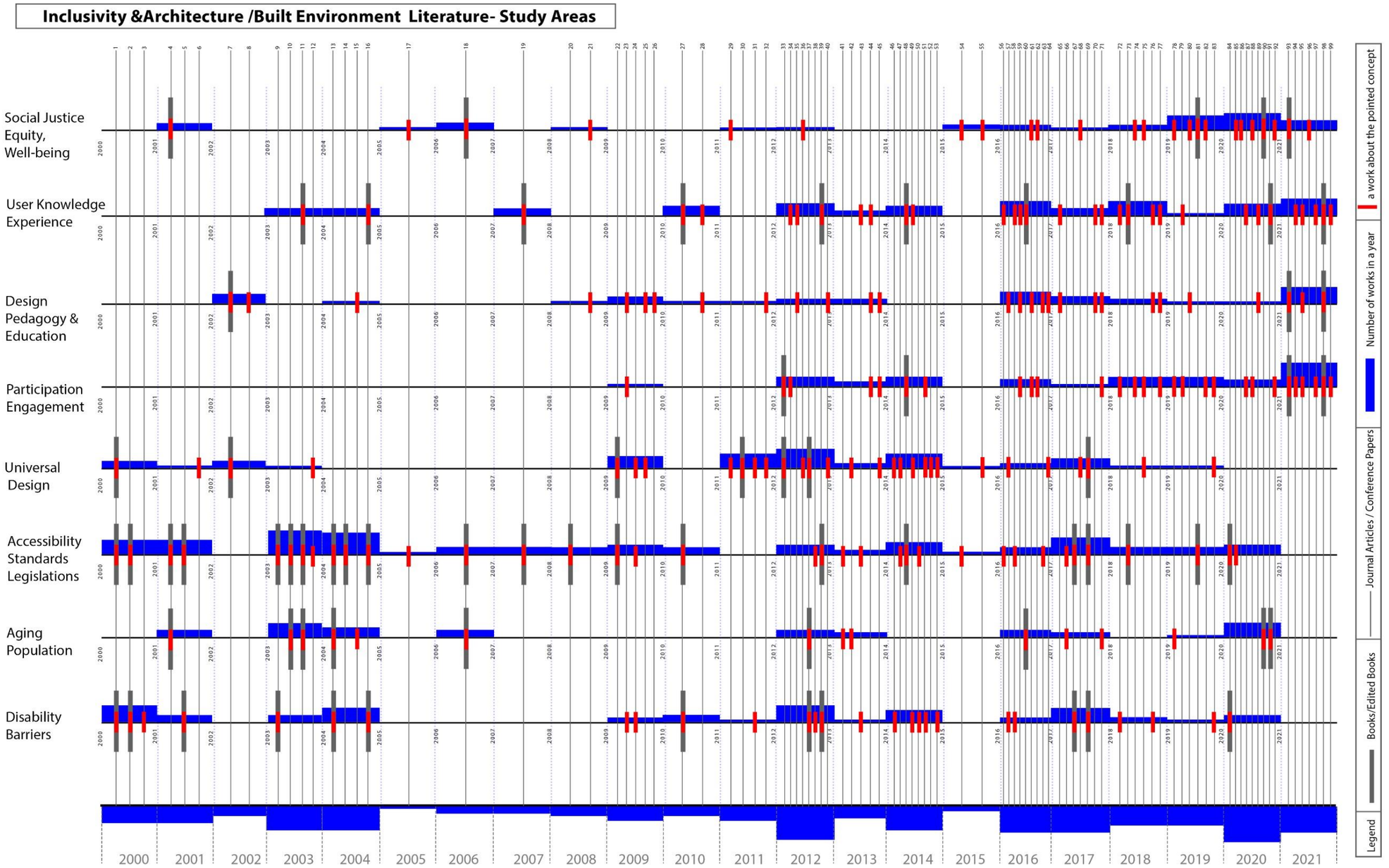



Figure 2.2 Mapping of the literature on the spatial dimension of inclusivity

### 2.2.1 1st Period: Constructing Approaches to Inclusivity

During the early periods when inclusive design philosophy was formed, the dominance of initial concepts can be clearly traced. The primary aspiration was to establish a structured design approach to inclusivity, primarily focusing on the notion of accessibility and barrier-free environments. The studies are mainly on the issue of disability and are heavily influenced by the newly emerging understanding of defining disability concept through the social model. According to this model, rather than the impaired body of the individual, the social and physical environment makes an individual disabled (Erkılıç, 2011). Such understanding of the environment as the key factor creating disabilities and fostering social exclusion is also stated by Hall and Imrie (1999), and they highlight the role of architects as essential agents in the production of the built environment. A proper conceptualization of disability and establishing values and attitudes for different user groups contribute to the content of the design process. Similarly, in their book, Swain et al. (2004) argues the existence of disabling barriers, but they do not limit this to the physical environment; these barriers also permeate the social environment, organization, institutions, and language. Thus, enhancing the experiences of disabled people has emerged as one of the initial goals of inclusivity.

As already mentioned, standards and legislations remained insufficient in achieving inclusion although fostering the idea of more accessible environments, and it was seen that specialized solutions for removing barriers created new segregations. All these critiques resulted in the emergence of a newer approach, universal design. Since its earlier conceptualization did not provide established design criteria, in later studies, a group of scholars worked on developing a set of principles to make the universal design more applicable in creating products, environments, and services that are inclusive for all (Connel et al., 1997; Preiser et al., 2001). The seven principles can be listed as *1) Equitable Use 2) Flexibility in Use 3) Simple and Intuitive Use 4) Perceptible Information 5) Tolerance for Error 6) Low Physical Effort 7) Size and Space for Approach and Use.* From these principles, it is possible

to illustrate concepts brought forward through universal design philosophy. Firstly, equity is stated as the foremost aim of inclusivity, and in order to provide equal opportunities for all users, designed assets are needed to be flexible for diverse abilities. Similarly, in some studies, accessibility is also presented as a broader framework of inclusivity beyond mere physical dimension and standards. Akkar (2005) explains four dimensions of accessibility by particularly focusing on the inclusivity of public spaces: physical access, social access, access to activities, and access to information. So, beyond physical accessibility, participation in urban environments and equal opportunities in experiencing the space becomes crucial.

| *Inclusive design* | *Non-inclusive design* |
|---|---|
| Concern with meaning and context | Concern with style and ornament |
| Participative | Non-participative |
| Human oriented | Corporate or institution oriented |
| Client re-defined to include users | Owner as exclusive client |
| Low cost | High cost |
| Grassroots design approaches | Top-down design approach |
| Democratic | Authoritarian |
| Seeking to change design attitudes | Acceptance of prevailing design attitudes |
| Use of appropriate technology | Use of high technology |
| Use of alternate models of the development process | Development process controlled by corporate interests |
| Heterogeneity | Homogeneity |

Figure 2.3 Inclusive and non-inclusive design comparison
(Hall and Imrie, 2001, p.19)

Although the establishment of universal design as an approach greatly supported the recognition of disabilities in design processes, criticisms were also voiced during the earlier studies on inclusivity. Universal design was considered apolitical in nature as it mainly focuses on the physical and technical qualities of products and environments rather than focusing on social and political dimensions of inclusion (Imrie and Hall, 2001). Also, a universal approach to the abilities of people totalizes

diversities. According to these critiques, another conceptual understanding was proposed named 'inclusive design,' defined by Hall and Imrie (2001) as being about the processes, social, attitudinal, and institutional relations that shape the practices of professions (Figure 2.3). While being supported by legislative actions, standards, and guidelines, a necessity to describe and encourage new attitudes and value systems for built environment professionals was stated to respond to the needs of disabled people inclusively.

Designing for the whole population has been another central aspiration in inclusive design (Clarkson et al., 2003, Keates & Clarkson, 2004). It is recognized that designing for disability and aging might create new exclusions. So, a shift from the technical and totalizing problem-solving approach in the margins of design practice towards achieving social inclusion for all through more inclusive and destigmatizing approaches is prompted, as stated by Coleman et al. (2003). The aging population is another strong theme that emerged parallel to this understanding and overall concepts of accessibility and disability. According to this understanding, peoples' abilities change throughout their lives, and they tend to become disabled by the physical environment as they get older, which creates exclusions. So, another approach for inclusive design has been to consider varying degrees of abilities, understand their experiences, and design accordingly. The aging population's living environment, houses, technologies, immediate surroundings, neighborhoods, and streets are particularly studied (Peace & Holland, 2001; Burton & Mitchell, 2006). Moreover, due to the growing number of aging populations in developed countries, a number of studies highlight the business potential of inclusive design philosophy rather than being perceived as a burden (Clarkson et al., 2003; Coleman et al., 2007).

### 2.2.2 2nd Period: Expanding Critiques, Inquiries and Shifting Perspectives

The start of the early 2010s could be regarded as the emergence of new tendencies in terms of inclusivity, where we observe that approaches expanded both in terms of

methodologies and conceptual frameworks and in terms of numbers. Although initial trends supported ideas of inclusion against the exclusionary practices, dominance of principles and legislation-driven proposals are discussed more critically. The need for a more precise conceptual framework becomes evident, and scholars and practitioners from various fields question several dimensions of inclusivity. A great part of inquiries aimed at defining and expanding central themes and concepts grounding inclusivity. Parallel to an enhanced understanding of the universal design paradigm, a deeper conceptualization of disability has been formed. In a study combining these recent attempts, Erkılıç (2011) states that earlier medical and social definitions of disability and impairment expand into the universality of disability. Considering that embodied identity of disability is different for all users, their experienced reality of inclusion emerges as a social construction. So, during this period, a shift away from a 'one-design-fits-all' understanding of the early universal design approach to an enhanced definition of diversity occurred. Similarly, Imrie (2012) and Winance (2014) argue that the notion of universality restricts the proper understanding of diversity epistemologically and leads to a vision focusing on functionality. Principles of universal design have also been criticized for lacking a conceptual unity of goals besides the notion of 'universality,' so Steinfeld and Maisel (2012) clarify the goals as follows: *1. Body fit 2. Comfort 3. Awareness 4. Understanding 5. Wellness 6. Social integration 7. Personalization 8. Cultural appropriateness* (Figure 2.4). These goals holistically represent the intent to enhance social participation as a key element of an inclusive society. Increasing diverse users' participation in social life was also emphasized by Erkılıç (2012), and multiuse diversity in spatial terms was explained as **i)** diversity of users, **ii)** diversity of facilities, and **iii)** diversity of spaces.

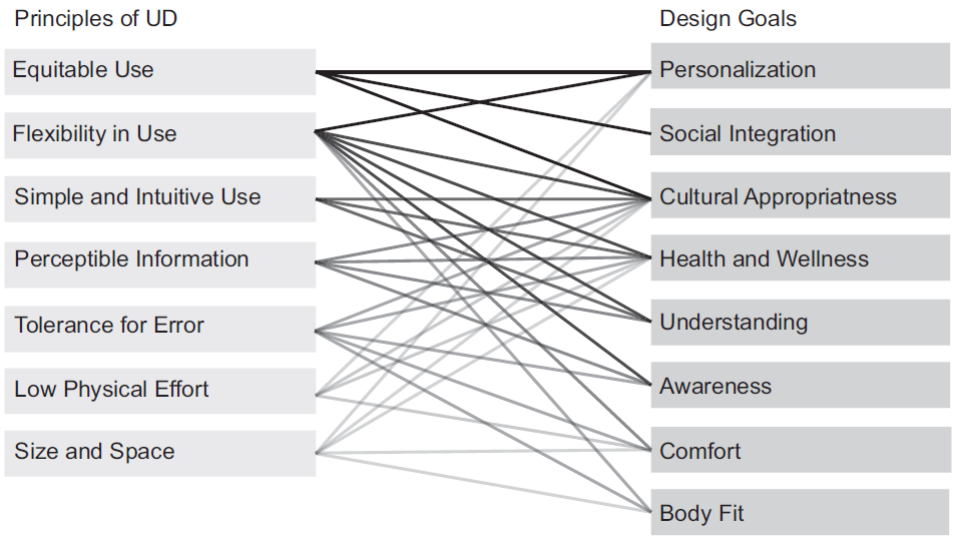



Figure 2.4 Crosswalk between the principles and goals of universal design (Steinfeld and Maisel, 2012, pp.90)

The conceptual inquiries also bring forward another notion: user experience as an extension of diversity and disability discussions. Inclusive design philosophy emerged based on enhancing people's experiences, but the growing standards and principles-oriented understanding led to approaches undermining their experiences. Heylighen and Bianchin (2012) address this issue and explain inclusive design as a deliberative enterprise involving designers and users. Transferring experiences of diverse users, especially disabled users, are highlighted as a valuable source of design for inclusion and diversity, particularly by studying such actions (Heylighen et al., 2013; Heylighen et al., 2016). This emerging agenda was supported by conceptual discussions on bodily engagement with the environment, and besides inquiries, case studies are also presented showing interdisciplinary collaborations combining theoretical knowledge of inclusivity, human body, the spatial environment, and technological resources (Langdon et al., 2012; Langdon et al., 2016).

While conceptual grounds of inclusive design philosophy have been discussed a lot, another point of inquiry concentrates on transferring the existing knowledge into practice. Although principles and standards led to the mere provision of minimum

criteria, they were relatively applicable to practice. Transferring expanded inclusivity ideas into practices also brings many issues together. The plurality of definitions creates unclarities, so many studies focus on reaching a more holistic understanding of inclusive design philosophy by tracing parallels between concepts and actions (Heylighen, 2008; Gosett et al., 2008; Persson et al., 2015; Heylighen et al., 2017). Their central argument is that presenting inclusive design as a completely new field with a complex conceptual background may result in disengagement for practicing architects and designers, although, in its essence, inclusive design relates to good and sustainable design. Also, they illustrate the disconnections between two architectural knowledge production domains: higher education institutions and the practicing field (Watchorn et al., 2014, Wauters et al., 2014). So, the importance of architectural education for properly applying inclusive design philosophy starts to become more evident during this period. Particular studies of such efforts will be discussed in the following sections, which present an integrated understanding of the relationship between education and inclusivity.

### 2.2.3 3rd Period: Moving towards Experience and Engagement

In recent years, the growing social, cultural, political, and spatial problems on a global scale have directed and expanded the studies focusing on inclusivity. As a result of the increasing heterogeneous character of societies in urban environments expanded further by migration and displacement, notions of equity and socio-spatial justice have emerged as dominant concepts for inclusion. Many of the inquiries focus on clarifying what justice means for inclusivity. Highlighting the importance of democracy and justice to address social and ethical issues arising from design, Bianchin, and Heylighen (2018) unfolds the paradoxical situation in the conceptual roots of inclusivity through Rawlsian understanding of justice as fairness, which is between aiming universal solutions accessible for all but impossibility of taking into account everyone in the design process. While justice can be defined as a universal principle of providing equal distribution of resources and opportunities, inclusivity

concerns the deliberation process on applying this principle with users' participation. So, as they suggest, rather than equal use of resources and environments, equal right to participate in deliberation enterprise becomes the key to inclusion. In many recent studies, such conceptualizations of participation and engagement are dominant determinants of inclusivity. These are roughly divided into two scales, one focusing on community-level engagements and the other on user involvement. Against the problems communities face in urban environments, Ferdous and Bell (2021) express the need to transform cities into the infrastructure of social inclusion and integration and expand this process beyond spatial interventions to include constructing processes that present existing inequalities and developing a programmatic framework for the reorganization of institutional protocols and knowledge. As an instrument for such initiatives, they introduce inclusive engagements in architecture as a catalyst for social change towards more equal and just spaces. Understanding inclusivity in line with engagement is interpreted in two dimensions; while participatory and community-based practices focusing on user engagement are significant, another engagement at the pedagogical level is brought forward based on constructing more comprehensive conceptual and methodological frameworks for educational platforms to foster inclusivity. Similar studies focusing on the importance of education for more inclusive environments exist in recent literature, which necessitates a separate and detailed inquiry.

Another dimension of community engagement is voiced through the notion of spatial justice, following the growing populations, and urban issues like equal rights on housing, migration, and poverty. Though this notion has been studied separately in detail, understanding physical space as a background defining and supporting the realization of social justice through its impact on social interactions is particularly important for discussions on inclusivity (Jian et al., 2020). With the expanding understanding of justice and equity, we trace the patterns of a transition in literature. Earlier studies on inclusive design from an ontological perspective focused on the single body through notions of disability and the aging population, putting the emphasis on assistive healthcare through physical accessibility standards. However,

cities' current situation shows new dimensions of impacts that environments have on people as communities, especially on their psychological and mental well-being. The correlation between inclusivity and well-being has been brought forward more in recent years following the severe effects of the Covid-19 pandemic on people. While some studies focus on the impacts of environments on exacerbating health problems and inequalities and emphasize the necessity to develop tools for healthy urban development based on concepts of sustainability, equity, and inclusion (Pineo, 2020; Jian et al., 2021), others also stressed the importance of engaging communities in the process to create more healthy and inclusive environments (Kleinmann, 2021).

In recent studies, understanding user experience and involvement have expanded significantly as another form of engagement. Experiences are not limited to the physical dimension, but psychological and social dimensions are accepted as essential determinants of experienced realities of inclusion. In their works, Lim, Giacomin and Nickpour aim to define the psychosocial dimension of inclusivity as "The provision via design interventions of equal or equitable opportunities for a better quality of life for as many people as possible, considering both psychological and social factors" (2021, pp.17) and identify its four constructs: cognitive, social, emotional and value (Figure 2.5). One of their key arguments is the limited understanding of the broader scope of experience, as they are perceived as not explicit and visible. Similar studies also stressed this issue regarding the reality of experiences in different contexts. Van der Linden, Dong, and Heylighen (2016), in their study conducted with practitioners, reveal that accessibility and target group-based approach is still prevailing in the inclusive design works in the field, yet they point out the growing interest from accessibility to broader understanding of user experiences. In an attempt to develop tools to transfer user experience into the practicing field, Zallio and Clarkson (2021; 2022) construct a more structured conceptual framework of experiences based on the notions of inclusion, diversity, and equity, and utilize this framework in post-occupancy evaluations as an important method to direct future inclusive design practices.

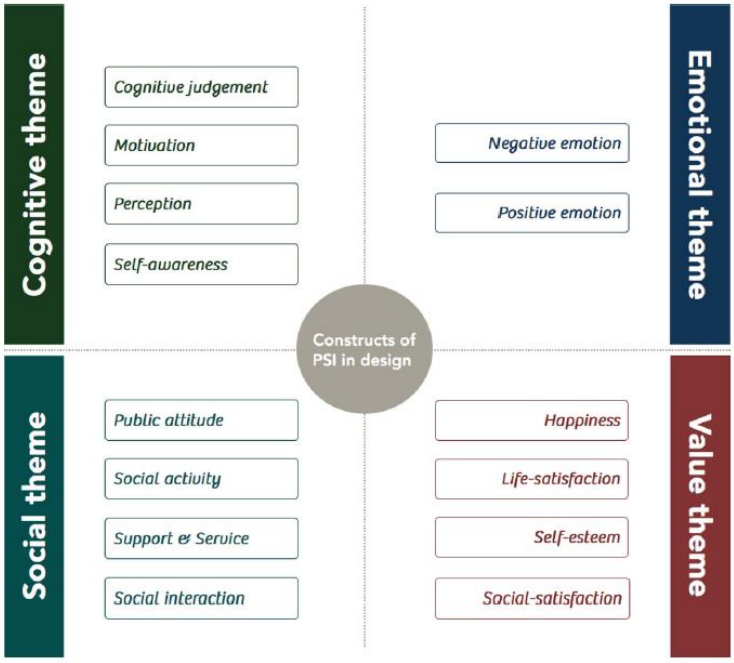



Figure 2.5 Four constructs of psychosococial inclusivity in design
(Lim et al., 2020, p.14)

As discussed, we can trace how approaches have expanded and shifted over the last twenty years through an integrated literature review. When inclusivity was first emphasized, concepts such as accessibility, disability, and aging were at the center. In the following periods, many other parameters and notions have also become key terms for inclusion. Also, as Figure 2.6 shows, the dominance of some themes in early periods dissolves in recent years and transforms into a multi-layered, branched, and interconnected series of studies focusing on many dimensions. While accessibility is the central theme of the first period with a strong link to disability, In the second period, it is observed that expanded understanding of universal design becomes dominant. Passing to the third period, participation/engagement and user experience emerge as more emphasized themes, together with the growing interest on educational approaches and new definitions on equity. This change is further supported by the increase in the number, which clearly shows the growing interest in inclusivity and why expanding existing discussions on inclusivity is particularly important. A holistic review of works reveals that a continuous effort exists to

question fundamental notions and develop a structured conceptual framework. While during the first period, concepts like accessibility, diversity, and equity were discussed mainly in a different manner by focusing on physical aspects primarily, in following years, they are approached interrelatedly. This illustrated that inclusive design philosophy is multidimensional and highly variable and could be framed differently in varying contexts. Throughout the years, we can observe this shift in framing, starting with more pragmatist and principles-led approaches to understanding inclusivity as an experienced reality produced through social relation with the direct influence of spatial environments. This perpetuating effort on conceptual inquiries also shows that defining an ever-expanding continuity of notions is critical for designers to make inclusive design philosophy more mainstream.

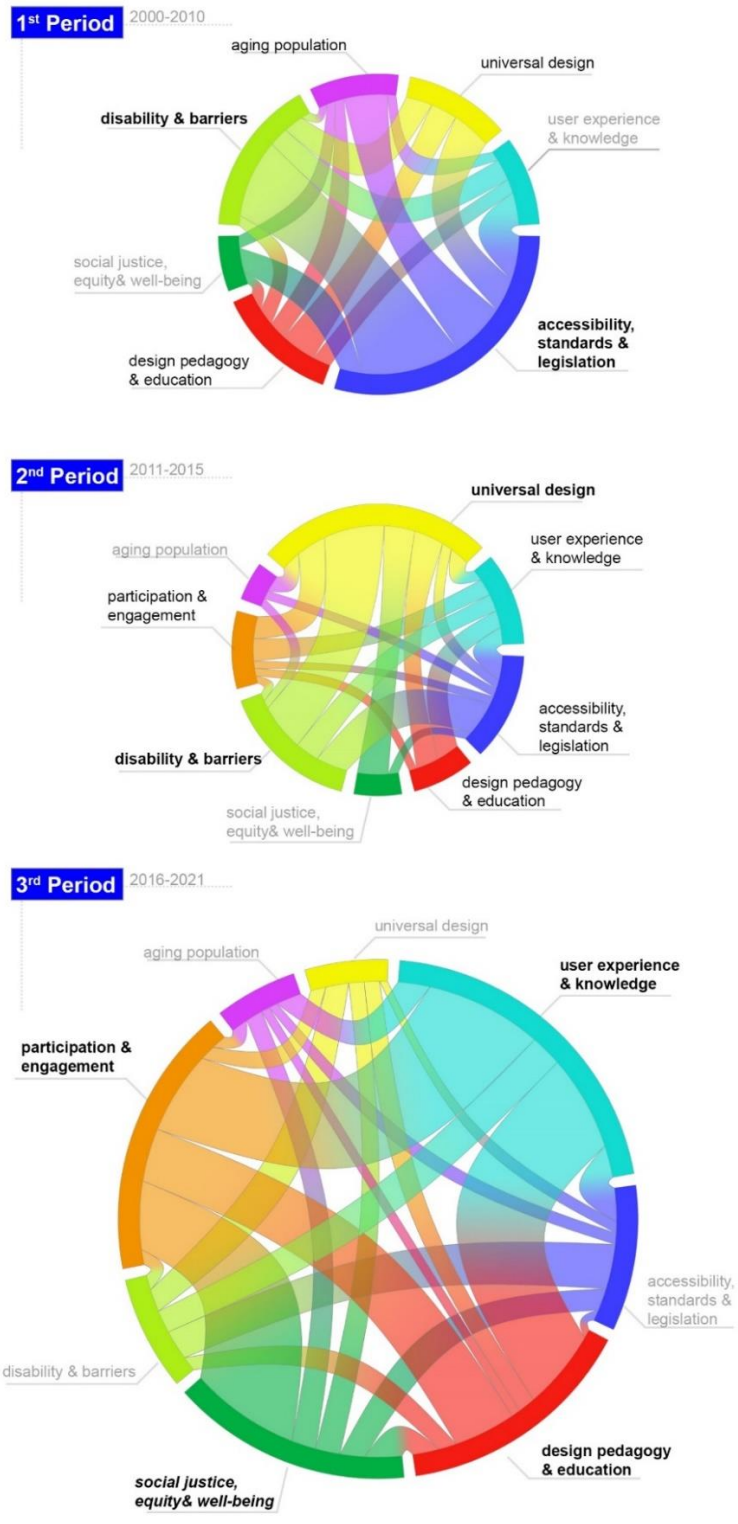



Figure 2.6 Relations of dominant concepts of inclusivity literature in different periods

While new approaches have emerged and deeper conceptual inquiries have been presented, studies also refer to the field of education as the ground of application for new ideas. Moreover, many of the works focusing on implementing inclusive design philosophy into practice implicitly or explicitly mention the disconnections with educational platforms and question whether inclusivity is taught adequately and students gain the necessary awareness of the concepts. As conceptual studies illustrate, developing a structured framework for inclusive design philosophy and sustaining its application in future projects depends on forming an early awareness of inclusivity and equipping students with corresponding values and tools. Thus, in all three stages of inclusive design literature, there are plenty of studies, particularly on architectural or general design education. A holistic study of these various attempts and unfolding their similar and diverse aspects is essential to present the contextualization of inclusivity in architectural education and to what extent it relates to conceptual grounds.

## 2.3 Contextualization of Inclusivity in Architectural Education

Since the beginning of the 2000s, there has been a growing interest in integrating inclusive design philosophy into design education through several methods. Many points are stated for such effort, but as one of the pioneering works in this field, Morrow (2002) explains the main aspirations for teaching inclusive design. She identifies five arguments, the first and foremost being the moral one. Inclusive design is a value-based process, and there is a need to assist students in developing their own set of values. Other arguments are related to sustainability and the economy. It is emphasized that inclusivity enhances the quality of designs both in social and economic spheres, and students can encourage future clients to utilize inclusive design as an opportunity to expand profitability rather than perceive it as a burden. Lastly, professionally and legally, students need to develop ethical sensitivity as agents defining the built environment and understand legislations prioritizing equality. Morrow discusses universities and institutes across Europe, the USA,

Japan, and many others regarding the integration of inclusive design into the curriculum, and identifies key elements for inclusive design teaching, as shown in Figure 2.6. These strategies involve both course content and inclusivity's conceptual framework relationship and course context, which is general curriculum development and the role of instructors. In another study, Christophersen (2002) also mentions similar aspects of inclusivity and emphasizes three areas of focus that are important for thinking and teaching universal design: understanding the theory, involving users in the process, and developing effective evaluation and assessment methods.

| COURSE CONTENT |
| --- |
| The interrelationship between design quality, best practice and inclusive design are drawn and emphasised. |
| Students come into direct contact with a varied range of user groups. |
| Students are able to source and apply quantitative and qualitative information regarding the fit between humans and the built environment |
| Students are encouraged to develop inclusive methods of representation. |
| The pragmatics of inclusive design are supported by a theoretical and critical framework |
| Personal experience is valued role and positive attitudes towards all people in society are fostered. |
| Students are aware of both benefits and obstacles of inclusive design The complexity of inclusive design is understood and accepted. |
| COURSE CONTEXT |
| Inclusive design principles are integrated from an early stage and are a substantial part of the curriculum. |
| Courses adopt an interdisciplinary and multiprofessional approach. |
| Inclusive design is supported by alternative pedagogies and explicitly valued by appropriate modes of assessment. |
| Continual Professional Development (CPD) is understood as essential to sustaining inclusive design practice. |
| Courses are delivered by people who are fully aware of inclusive design principles |

Figure 2.7 Key elements for teaching inclusive design, adapted from Morrow, 2002

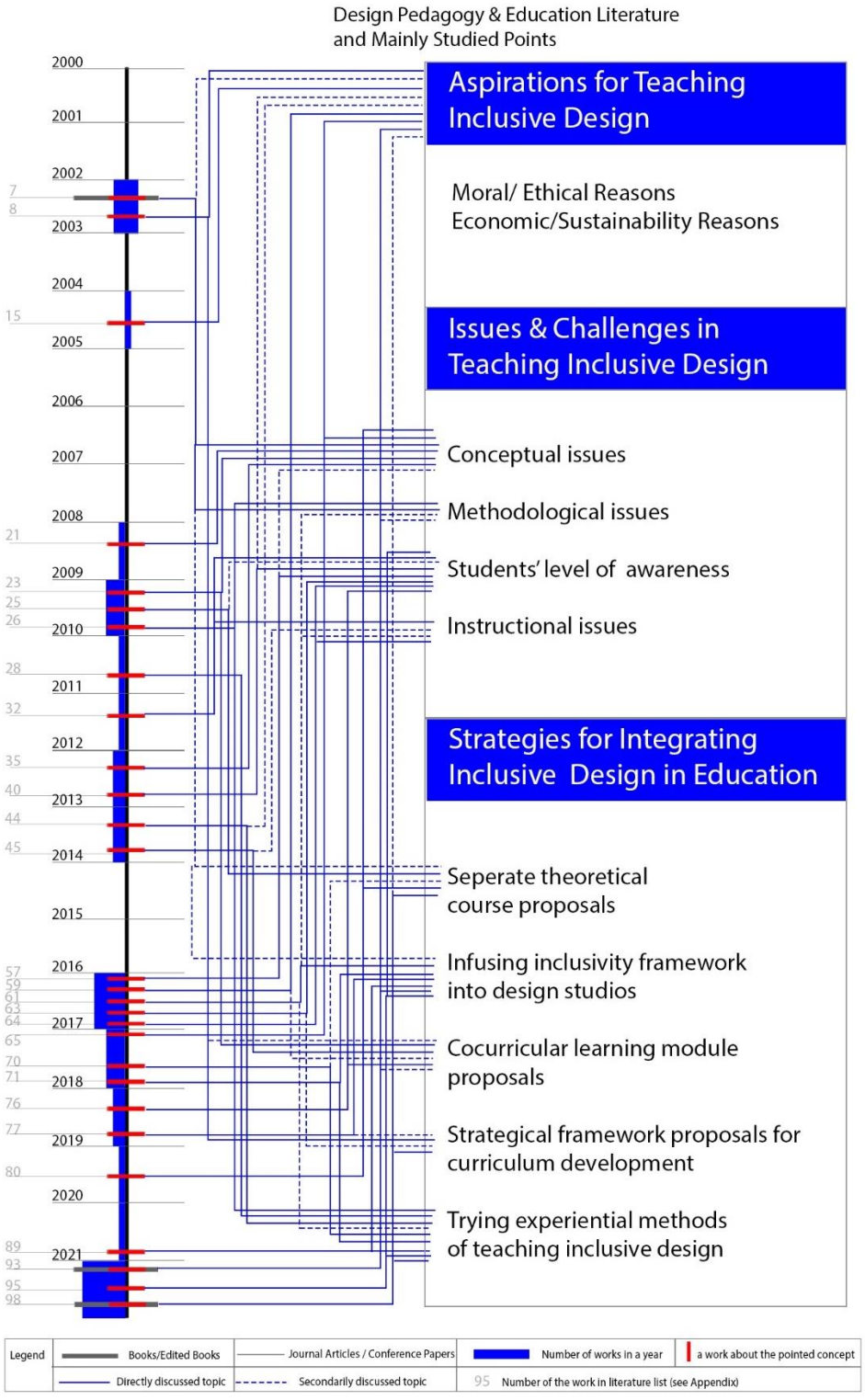



Figure 2.8 Main issues mentioned in the literature regarding inclusivity and design education

The detailed literature review on inclusive design philosophy reflects the ongoing and crucial issue: the difficulty of integrating this design philosophy into applied practices in specific contexts. An essential reason for this is answered as the lack of adequate formation of awareness of the notion during the earlier period of education. So, many of the studies in the field of education assess and evaluate students' level of awareness of inclusivity and its related concepts. Several studies conducted among architecture and interior architecture students show that they are mostly unaware of inclusive/universal design (Afacan, 2011; Helvacıoglu & Karamanoglu, 2012; Sungur Ergenoglu & Bayraktaroglu, 2016). Hitch et al. (2016) also show that students who are introduced to the concepts beforehand are more sensitive and have a positive attitude toward disability and other related notions. Similarly, in a study among interior architecture students, Afacan (2011) states that students' awareness affects the integration of inclusive design philosophy into their design proposals and highlights the importance of including these concepts in project briefs of studios. This also shows another crucial dimension of teaching inclusivity in design education, deeply related to different pedagogical approaches that are special to these disciplines. The inclusive design philosophy is a highly conceptual and philosophical issue on the one hand, but on the other hand, it directly refers to the betterment of environments/products for people, so very much related to practices and applications. Olguntürk and Demirkan (2009) discuss the effects of teaching this understanding as a separate course or as infused into the design studio process and highlight the importance of teaching inclusive/universal as a separate course. In particular, they emphasize that learning inclusivity is a process, and supporting it with a separate course increases students' skills to evaluate spaces & products for more inclusive alternatives. The limited level of integration of inclusive design

philosophy into the curriculum is reported to be a crucial factor in the lack of adequate knowledge on the issue in many countries and also in Turkey notably.[4]

Many studies on teaching inclusive design highlight several challenges that are generally applicable to all design-related disciplines, and they propose alternative teaching methods for inclusivity. Diversity and user involvement are key elements for teaching inclusive design philosophy, but as Dong (2010) states, they remain limited due to the high number of students and ethical procedures. Moreover, using stereotypical notions of human diversity through fake personas and anthropometric data is seen as a barrier to understanding the reality of experiences essential for more inclusive and engaging designs. As a critique of such an approach, Natu (2020) and Rieger and Rolfe (2021) highlight the importance of observing and understanding the dialectic relationship between human behavior and the environment and propose integrating behavioral knowledge into the inclusive design process through varying degrees of ethnographic research. Similarly, a limited level of understanding of disability and other bodily and social experiences is emphasized by many studies, and several approaches to simulating these are discussed to enhance students' attitudes and empathy (Bernardi & Kowaltowski, 2010; Watchorn et al., 2013; Altay & Demirkan, 2014; Altay et al., 2016; Altay, 2017; Mulligan et al., 2017). Another challenge is related to integrating the conceptual framework of inclusivity into practice, especially for undergraduate students. This argument is further expanded by MacLaren (2016) and Orlowski (2021) as the adverse effect of a controlled studio environment. Architectural education is traditionally provided in sterile studio

[4] In 2008, a survey was conducted in Turkey involving the departments of architecture, city and regional planning, landscape architecture, and interior architecture to understand the current status of 'universal design, 'inclusive design,' and related concepts within the curriculum. The survey report reveals that 86% of the participating 45 universities do not have a course related to inclusivity, and among those that have, only twelve graduate and nine undergraduate courses are available (Mischenko, 2008). When looking at the current situation following the increasing interest in the last 15 years, the level of integration of inclusive design into architectural education is expected to increase, which could be another research topic. Within the scope of the thesis, rather than focusing on Turkey, a general picture of educational approaches worldwide is presented to evaluate new methodologies and approaches to teaching inclusivity.

settings with a focus on reaching the highest levels of representation of ideas that are only understood and justified by other architects. Accordingly, several studies highlight the importance of real-life projects and involving the end-users in the design projects (MacLaren,2016; Scott et al., 2017; Stott & Waren, 2021). Other works also discuss the co-design approach as a key to achieving more inclusive and equitable results (Scott, 2016; Cifter et al., 2021).

## 2.4 Towards Conceptualization of Inclusivity as a Socially Constructed Reality

This chapter presents a holistic mapping of literature on inclusive design philosophy, particularly over the last twenty years, which shows the theoretical and conceptual themes and trends. Aiming to alter the constant hegemony of exclusion, discrimination, and normalization that has been prevailing for centuries, the emergence of inclusive design as a spatial solution is followed by the plurality of definitions, notions, and parameters. The evident trend crucial for future studies is the increasing emphasis on the transition towards a more experiential understanding of inclusivity, which is not limited to the physical and social dimensions. This is also reflected in the conceptual reframing around sociospatial participation and engagement. A great body of works that consider inclusivity as a socially constructed reality rather than a predetermined notion reflects their conceptual inquiries and case studies on the field of design education. Therefore, it is evident that there is a need to critically evaluate and unfold how inclusivity is contextualized in current educational environments to determine in relation to its conceptual grounds. Such an evaluation could be done based on scrutinizing students' learning outcomes concerning inclusive design philosophy, but it is first needed to provide a more apparent conceptual foundation that supports a methodological framework for such evaluation. This also enhances students and practicing and teaching architects' attitudes and knowledge concerning inclusivity. Accordingly, the following chapter of the thesis will unfold the social construction of inclusivity and its experiential

dimension through the interrelated study of foundational concepts: human rights, equity, accessibility, diversity and social participation.

# CHAPTER 3

## CONCEPTUAL MAPPING OF INCLUSIVITY AND ITS SOCIAL CONSTRUCTION

Inclusivity is a broad philosophy voiced in many fields, which necessitates specific contextual definitions. However, some common aspects can be traced when looking at the different dictionary definitions. In general, it is defined as “the practice or policy of including and providing equal opportunities for people who have historically been excluded or marginalized” (Collins Dictionary, n.d.; Merriam-Webster, n.d.). An essential point observed in definitions is that the inclusivity notion emerges as a contrasting practice against existing exclusions and marginalizations. This is also reflected in its emergence in the 1950s and 60s, following the disability and civil rights movements mainly in the US, Europe, and other parts of the world. The critical debates stemming from these movements influenced the international agenda of inclusivity based on the right of universal access to goods, services, and environments (Erkılıc, 2011). It is evident that the foundations of the inclusivity phenomenon are highly related to human rights; thus, discussing its conceptual grounds with the contemporary discussions on human rights seems necessary. Legal and philosophical approaches to the foundation and the scope of human rights can be projected on the basic arguments and paradigmatic shifts constructing inclusivity traced throughout the years, which also help to construct a conceptual framework with other notions, particularly equity and equality. In light of this, this chapter of the thesis firstly unfolds the philosophical background of inclusivity through an interrelated study of notions such as human rights, equality, equity, and social justice. Then based on this inquiry, the notion of inclusivity will be reconceptualized as a social construction, which leads to expanding the conceptual discussions on accessibility, diversity, and social participation from sociological and spatial perspectives.

## 3.1 Inclusivity and Human Rights

Although human rights have been at the center of many discussions for centuries, the term itself is started to be used in recent history. Before modern human rights arguments emerged in the latter half of the twentieth century, the central discourse the concept formed around was natural law and natural rights, which are beyond any particular government or cultural laws. The foundation of a legal framework for human rights dates back to 1948, the Universal Declaration of Human Rights (UDHR), adopted by the United Nations General Assembly. According to this declaration, “recognition of the inherent dignity and the equal and inalienable rights of all members of the human family is the foundation of freedom, justice, and peace in the world” (UN, 1948). It is remarkable that the discussions on inclusivity as it emphasizes the universality and equality of human rights. Though legal rights are important, it is critical to understand human rights' moral basis to grasp the foundation and changes in inclusivity. The positions regarding the moral ground of rights are particularly influential in social practices, and architecture is a part of this. Thus primary contemporary philosophical justifications should be discussed concerning inclusivity discourse.

Philosophers have sought different and sometimes opposing justifications for the grounding of human rights. The first approach, also reflected in the Universal Declaration, regards human dignity as the foundation. Human rights are understood as “rights that all human beings have simply in virtue of being human” (Cruft et al., 2015, p.10). Emphasizing their inclusionary nature, rights are thought to be protecting specific differing characteristics of humanity. Various grounds are proposed based on these differences. Firstly, some theories justify the existence of human rights by referring to the protection and promotion of goods necessary for well-being. Finnis' (1980/2011) arguments are valuable in understanding such grounding of rights. He identifies seven primary forms of human good that provide the basis for human rights: life and development; knowledge; play; aesthetic; experience; sociability; practical reasonableness; and lastly, religion, or spiritual

experience. This approach to human rights also reflects a critical point in discussions on inclusivity. As stated initially, as a phenomenon, inclusivity first emerged as part of disability discourse; thus, the early views focused on physical accessibility and legal adjustments to create equal opportunity to participate in everyday life. However, with the example of Finnis, the shift from physical accessibility to a greater social context can be grounded. The built environment is not only material reality; it might also affect our degree of access to varying forms of basic goods, either concrete or abstract, which defines the experiences.

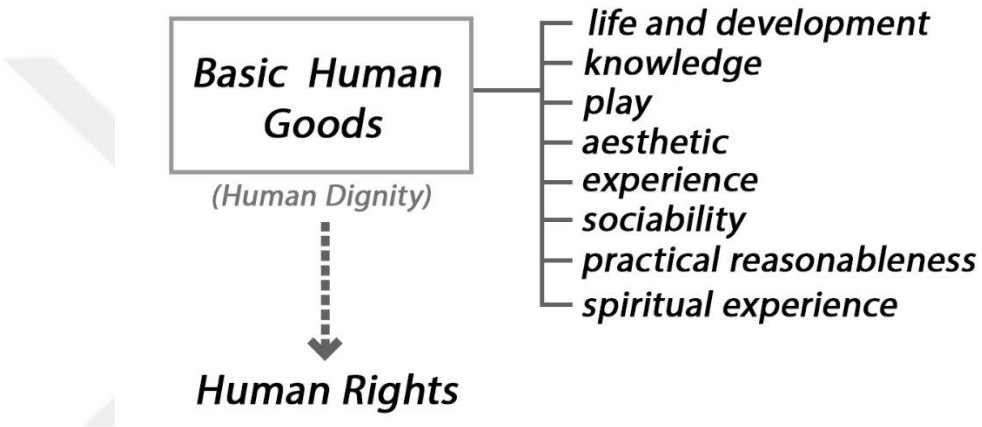



Figure 3.1 Diagrammatic representation of Finnis' conceptualization of human rights

Another similar understanding highlights agency or action as the primary and distinguishing feature of human beings and states that human rights protect the fundamental freedom and well-being of human agency. Rather than having an independent ontological status, human rights are agent-relative and dialectically normative – should be accepted by all agents (Gewirth, 1985). Similarly, Griffin brings forward the concept of normative agency. The dignity of human beings is due to their capacity to form a conception of the good life and pursue this accordingly (Griffin, 2008; Cruft et al., 2015). Rights protect our status as normative agents, and this feature is based on autonomy, liberty, and welfare (Griffin, 2008). Such normative and relational understanding of human rights might illustrate that there cannot be an absolute condition of inclusivity in an architectural sense; it is limited

by human's own capacity and degree of engagement with space and other actors socially and physically.

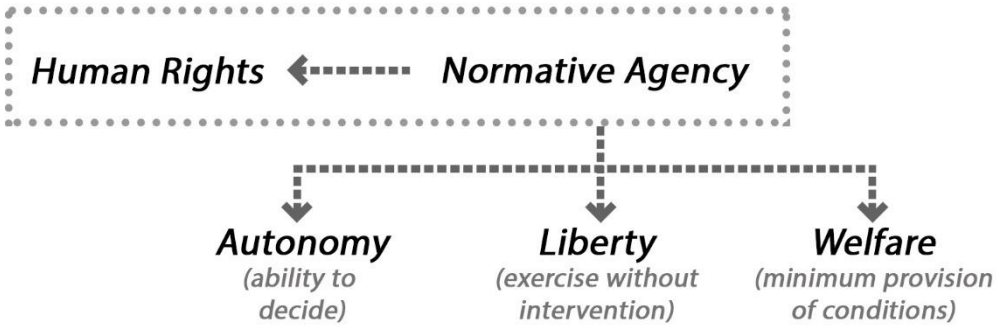



Figure 3.2 Diagrammatic representation of normative agency concept of Griffin on human rights

Rather than the instrumentalist approaches discussed above, which explain rights as means to realize valued features of human lives (Cruft et al., 2015), there are approaches pointing out equality for the legitimacy of human rights. Ronald Dworkin is one of the most influential philosophers in this respect. According to him (1978), as the basis of rights, citizens have a right to equal concern and respect; both have 'the right to equal treatment in the distribution of resources and 'the right to treatment as an equal in the process of deciding distribution. This seems to resonate with the principle of equal opportunity and/or participation in the definition of inclusivity. Rather than identical equality among the whole spectrum of society, people should be treated following their diversities to have equal opportunity. Such understanding emerges out of the insufficiencies of early applications of inclusive design approaches. Generalizing standards, codes, and legislations lead to a limited field of operation that provides equal opportunity for all to participate in life by providing incremental solutions.

The legitimacy of human rights through equality can also be discussed differently than the distribution of resources. One of these approaches is established through the idea of capabilities, which shifts the focus from means (the accessible resources) to

ends (what a person can do with these resources (Robeyns and Byskov, 2020). Firstly used by Sen and enhanced by Nussbaum, capabilities are an individual's real opportunities to choose and to act to achieve (Sen, as cited in Robeyns and Byskov, 2020). Whereas it is mostly abstract and open-ended in Sen's arguments, Nussbaum relates capabilities to human rights: Capabilities are people's entitlements due to their dignity, similar to previous approaches, and human rights guarantee the realization of these capabilities(functionings) (Nussbaum, 2011). As a more concrete conceptualization, she lists basic capabilities as such: Life; bodily health and integrity; senses, imagination, thought; emotions; practical reasoning; affiliation; other species; play; control over one's environment (Nussbaum, 2011). The crucial aspect that should be emphasized in such grounding is that human diversity is one of the central theoretical driving forces, similar to inclusivity. Accordingly, even when human beings are presented with equal opportunities, their realization of capabilities differs due to personal, social, and environmental factors. Looking closer to environmental factors, architecture could be counted as a significant factor delimiting human capabilities and the degree of inclusivity. From the perspective of inclusivity, equality is socially constructed through people and affected by the physical environment.

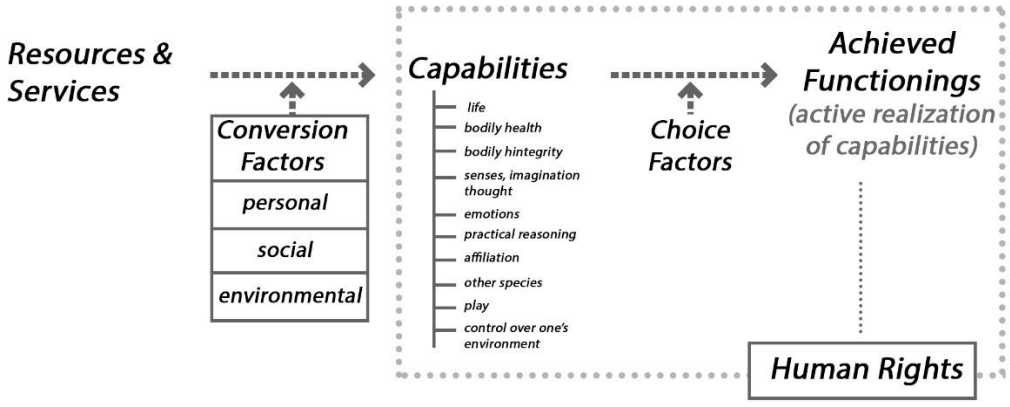



Figure 3.3 Diagrammatic representation of capabilities approach and human rights relation

As discussed, many different philosophical perspectives regarding the justification of human rights exist. The issue's complexity also shows why inclusivity is a critical concept and why there have been several standpoints and shifts in its understanding. Yet, one more point should be highlighted from the amalgam of perspectives. The philosophical justifications for human rights are mainly constructed on the idea of universality, as reflected in the United Nations' declaration. However, some scholars -cultural relativists- argue that there cannot be a universally valid moral doctrine on human rights; they are socially and historically contingent and differ between cultures. The emphasis here should be that universality includes diversities, which is also a critical aspect of inclusivity (Preiser & Smith, 2001; Erkılıc, 2012; Winance, 2014; Heylighen et al., 2017; Bianchin & Heylighen, 2017). Thus, the discussions between human rights and inclusivity should also question whether there can not be a single prescribed definition and practice, but rather a framework or understanding of this issue can be constructed. In this regard, how equity for diverse groups could be achieved through inclusive design should also be scrutinized from a philosophical perspective on what equity, equality, and justice mean for spatial studies.

## 3.2 Inclusivity and Equity

Human rights-based understanding of inclusivity also necessitates a critical approach to the notions of equality and equity. As stated in the Stanford Encyclopedia of Philosophy, equality is a highly contested concept in political philosophy, and "(Equality) signifies correspondence between a group of different objects, persons, processes or circumstances that have the same qualities in at least one respect, but not all respects" (Gosepath, 2011). So it does not necessarily mean sameness but instead being treated relatively the same in specific points. Nevertheless, this idea of 'equal treatment' could be problematic considering the question of 'equal in what respect?' It might be beneficial to dwell on two types of equality described by Aristotle to understand the situation better.

The formal equality principle Aristotle formulated in reference to Plato is based on treating persons equally in normatively relevant respect that they have equal status (Gosepath, 2011). Such an approach does not necessarily provide an equal opportunity to both because they are treated equally regardless of their differences. Still, the extent to which they benefit from this treatment most likely differs from their diversities. He then formulates another principle: proportional equality. Rather than treating all identically based on rationality, treatment or distribution is proportional; all persons are treated in relation to their due to be relatively equal (Gosepath, 2011). Many scholars further conceptualize this idea in contemporary political philosophy through distributive equality. The essential point here is that diversities are brought to the table of equality discussions, which leads to equity and equality discussion of inclusivity. To achieve equal opportunity, Rawls brings forward his theory of social justice as governing principle for the distribution of benefits of social cooperation among the agents with different capacities (Rawls, 1971; Bianchin & Heylighen, 2017). This also converts equality into o deliberative problem where the principles maximize the opportunities of the most vulnerable while protecting individual freedom. In this understanding of fairness as justice, the participatory and deliberative dimension that depends on personal and interpersonal interactions and relations is vital for conceptualizing inclusivity as providing equal opportunities for all.

Although terms equity, equality, justice, and fairness are used interchangeably, they have differences in meaning. As discussed, formal equality based on treating everyone the same to a great extent disregards diversities, creating new inequalities. Thus, as traced in Rawls' theorization, inclusivity also necessitates equity, based on treating all differently depending on their need to achieve equal opportunity for all. A similar point is also mentioned in Dworkin’s human rights discussion. He shifts the focus from treating citizens equally in distributing resources to treating them as equals who have the right to equal concern and respect. (1978) This kind of contemporary approach that brings equality within a human rights framework

highlights dignity, universality, indivisibility, and inter-relatedness of all human rights (Clifford, 2008) which are also at the center of inclusivity.

### 3.3 Social Construction of Inclusivity

Notions of equality and equity are embodied in inclusivity, which becomes evident through a right-based approach. It is constructed upon the philosophy that all human beings have equal rights universally. However, equality can be defined differently from various perspectives; it has many ambiguities. Looking at approaches in political philosophy, one can understand the reasons for this vagueness. Although the foundational question sought to be answered is "What is equality?" different perspectives are constructed through the subsequent questions. These are: "Equality of what?", "Equality of/between whom?", "Equality when?", "Equality why?" and "How to reach equality?". Considering the broad spectrum of answers found within the framework of inclusivity, it is possible to say that equality and inequality are, in fact, socially constructed phenomena.

Introduced by Berger and Luckmann in 1966, social constructionism dwells on social interaction and language (Erkılıc, 2011). Against the taken-for-granted ways of understanding the world, the social constructionist approach insists on the idea that knowledge and reality are fabricated through the social interactions between people, and this process is highly historically and culturally relative (Burr, 1995). From this perspective, equality, and therefore, inclusivity, emerges as social constructions. It is not possible to define an objective, universal form of inclusivity because it is strongly created through interactions within the course of social life. The self is particularly important in this construction process; thus, it is also beneficial to study the socially constructed reality of equality through the symbolic interactionist theory, as S.R. Harris proposed (2006).

Developed by sociologist Herbert Blumer, this theory advocates that meaning is not inherent but created through social interactions (Blumer, 1969, Harris, 2006). According to Blumer, it is based on three premises: (i) Individuals act towards things

according to the meanings that things propose. (ii) These meanings are derived from social interactions. (iii) These meanings are modified through an interpretive process. Projected on the concept of equality, these premises generate parallel premises as Harris (2000) explains: Equality and inequality are not inherent but defined through interactions, and people act according to their perception of equality, if and when it concerns them. This interpretive and interaction-based process is highly associated with the self. Seeking to explain human behavior through understanding the experiences, the stress is put on how the self constructs the identity, both from individualistic and social perspectives (Steinfeld & Maisel, 2012). Thus, besides the natural law perspective that all humans have the same rights, inclusivity should be approached from the perspective that equity, equal opportunity, and participation are constructed social reality, and this "world of reality exists only in human experience" (Blumer, 1969).

From an interactionist perspective, human experience and interactions occur in individuals' social environment, and through the experiences, the reality of inclusivity is constructed. However, it should also be noted that interactions are also manifested through a physical environment. As Smith and Bugni assert: "…the search for constructing, knowing, and performing the self often occurs in relation to designed physical environments" (2006, p.126). However, the built environment is more than merely a setting for activities. Besides the interactions among each other, humans also interact with space, and they are able to assign agency to the physical space (Smith &Bugni, 2006). While they experience the space, it exercises an influence on people through its spatial organization, form, and atmosphere (Steets, 2015). Thus, space cannot be separated from human interactions: It affects the interactions, and in return, space is produced from these experiences; there is a reflexive relationship. Considering the diversity of contemporary societies, these relations become more influential as social interaction patterns evolve into more fluid and complex ones; people can engage in several different social and spatial worlds. (Steinfeld & Maisel, 2012) Physical environments consisting of settlements and environments are influential on the relations, thus the social construction of

experiences, as they embody the values and attitudes of the society. (Rapoport, as cited in Steinfeld & Maisel, 2012) They act as agents transmitting the values and forming social relations.

Henri Lefebvre proposes a similar understanding in his book “The Production of Space” (1991). According to him, space is a social product, it contains a great diversity of natural and social objects, but these are not only things but also relations. Being polyvalent, space is firstly a formal and material reality. It is also a 'conceived' or 'mental' field, including logical-mathematical abstractions mainly concerned by the architects. The reality of experienced space is not preconceived; it emerges from relations and appropriations. Space is not just a 'frame' for the experiences; it is a social morphology that shapes the experiences: It is both a 'field of action' and a 'basis of action.'(1991). The production of social space is involved in the constitution of the self. (Simonsen, 2005) Once the self occupies the space, the relations are formed; these relations are not simply juxtaposed, they may be intercalated, combined, and superimposed, as Lefebvre said. The relations are produced through two forms: The physical experience of the body in the practico-sensory realm of space through senses and the individual's social experience with society via the materiality of the space. Awan, Schneider, and Till (2011) further elaborate on this definition of social space and present the production of space fundamentally as a shared enterprise that is dynamic and temporal. Consequently, spatial practices can catalyze social change and empowerment through more inclusive engagements. From this perspective, it is necessary to scrutinize how notions of accessibility, diversity, and social participation correspond to inclusive engagements from a social constructionist lens on spatial practices.

### 3.4 Inclusivity and Accessibility

Another fundamental notion for the emergence of inclusive design philosophy besides the human rights-based approach and equity has been accessibility. Accessibility is defined as “the quality or characteristic of something that makes it

possible to approach, enter, or use it" (Cambridge Dictionary, n.d.). Similarly, it is defined by the UN as "the provision of flexibility to accommodate each user's needs and preferences" (UN, 2013). In both definitions, it is observed that accessibility is related to usability and the availability of services, products, or environments for all. Compared to its basic definition, the definition of accessibility and approaches to the notion have constantly changed and expanded. When the inclusivity discussions first occurred in the 1950s, accessibility was prominent under the influence of a democratic tone related to the hardships and exclusion of disabled people. In this period, a central discussion was on providing accessible environments for disabled people, aligned with the social model of disability. Accordingly, disability was located within the interaction of the person with the environment as a construction result of the barriers (Iwarsson and Stahl, 2003; Gosett et al., 2009). Therefore, early approaches to inclusivity were heavily influenced by the idea of removing physical barriers for the disabled and providing accessibility codes and standards to regulate the design of environments. In the following years, as also traced to changing research topics, the limited understanding of accessibility has expanded. A key factor for the widening of the notion was the critique of codes and legislation-driven accessibility approaches for restricting the creative dimension of design with implications lacking in social integration and social innovation but fostering existing exclusions and discriminations.

Following the increasing critiques on physical accessibility limited to the needs of disabled people, new and more integrated conceptualizations are developed, which define different dimensions of accessibility. This also corresponds to the experiential dimension of inclusivity and its socially constructed nature. Besides physical accessibility, access to services, access to activities, and access to information are asserted as crucial dimensions for accessibility and inclusive design philosophy. This is also reflected in disability-related definitions of accessibility, as the UN (2013) explains the notion comprehensively as "any place, space, item or service, whether physical or virtual, that is easily approached, reached, entered, exited, interacted

with, understood or otherwise used by persons of varying disabilities, is determined to be accessible."

Akkar (2005) mainly focuses on the relationship between accessibility and inclusivity in public spaces from a similar perspective and defines four mutually supportive qualities of access: i) physical access, ii) social access, iii)access to activities and discussions, or intercommunications and iv) access to information. Although they are particularly explained for public spaces, the underlying philosophy for each dimension is essential for conceptual discussions on inclusivity and its experiential dimension. Physical access could be regarded as the continuation of the traditional understanding that is still relevant for directly observed experiences of spatial environments. On the other hand, the following three dimensions imply a significant point from a socially constructed perspective. People's interactions with and within the environment define their constructed and experienced reality of inclusion and social accessibility in terms of symbolic presence in the environment, and access to activities and discussions are important determinants of our interactions. Social construction is an internally engaging and communicative process, so access to information is also an important dimension of accessibility regarding the expanded conceptual understanding of inclusivity. As mentioned in the equity-inclusivity relationship, for more inclusive experiences, it is also essential to actively participate in deliberative processes or reach for information regarding the use of environments. By doing so, people's experiences could be more inclusive. In addition to these dimensions, Iwarsson and Stahl (2003) describe another sociological perspective on different dimensions of accessibility at micro, meso, and macro levels. While micro-level is related to the immediate environment, meso-level accessibility concerns the public environment and facilities. At the macro level, accessibility issues encompass society and the interrelated interactions as a whole. Such perspective is based on the relational understanding of accessibility, expressed as a person-environment relationship at various levels. This also supports the necessity to understand accessibility and inclusivity as a social construct and deal with them accordingly.

As seen, the conceptual plurality and unclarity for inclusivity are deeply rooted in the central notions defining it. Persson et al. (2015) highlight such conceptual plurality for accessibility at various levels and try to unfold this situation to reach a more precise definition to promote awareness. Accordingly, they trace the evolution of accessibility from its emergence in the 1950s to today concerning the international conventions, standards' definitions, and poststructuralist philosophies. Considering that people have varying abilities, accessibility is proposed to be defined in relation to the flexible and everchanging gaps between a person's ability and potential activities in diverse contexts. So, rather than a deterministic condition, accessibility issues emerge at the constant intersection between the context and the user, which corresponds to the social constructionist perspective. Such understanding of the changing characteristics of users and their degree of participation in activities necessitates another conceptual inquiry concerning *diversity* and *social participation*.

## 3.5 Inclusivity, Diversity, and Social Participation

As explained by symbolic interactionism and social construction theory, understanding the human experience in relation to individuals and groups is essential, putting stress on identity at individual and societal levels. (Steinfeld & Maisel, 2012) Diversity emerges as the key concept in this respect, defining the patterns of social interactions and, eventually experiential dimension of social inclusion/exclusion. Thus, it is essential to understand philosophical and sociological dimensions of diversity in relation to other concepts grounding inclusivity. As the 'self' is an important determinant of social interactions, it is possible to break down two definitions of diversity; one is individual, and the other is social diversities influencing the development of the 'self' through interactions. Every individual has unique diversities because of a broad spectrum of demographic, social, cultural, behavioral, and political differences. However, earlier understanding of diversity and inclusivity was particularly associated with disability and the aging population.

Following the increasing critiques and the growing emphasis on socially constructed understanding of disabilities by the environment, a broader perspective on diverse abilities for all has become more prominent. Accordingly, diversities are approached as fluid characteristics that can change in different contexts and throughout one's individual life, rather than specifically associating only with aging populations. Accepting that individual psychosocial and physiological needs, abilities and experiences constantly vary also implies changing forms of interactions affecting the experiential dimension of inclusivity.

Another dimension of diversity is the societal one based on the pluralistic, multicultural, and heterogeneous structures being influential in contemporary urban environments. Many communities posing sociocultural and political diversities live together in cities. Although this diverse structure is considered potential, the risk for existing inequalities and marginalizations persist according to how they are considered in socio-spatial practices. Therefore, as an integral part of people's interactions, it is essential to unfold the sociological dimension of social diversity in constructing experiential realities. Iris Marion Young (2000) explains the diversity in socio-political context through social groups of difference and defines inclusivity with diversity as "explicitly acknowledging social differentiation and divisions and encouraging differently situated groups to give voice to their needs, interests, and perspectives on the society in ways that meet conditions of reasonableness and publicity" (p.119). While discussing diversities concerning the social groups, he differentiates individual identity and emphasizes that although individual subjectivity and thus identity is conditioned by the social relations and interactions, individuals as agents constitute their own identities. This means that, in line with the conceptual standing of inclusive design philosophy, understanding how individuals construct their identity and experiences is essential rather than accepting a fixed and shared group identity. This distinction is also represented in constructive strategies introduced in socio-political discourse like social inclusion, integration, and cohesion against assimilation (DESA 2009; Erkılıc 2012). However, social inclusion is differentiated from other strategies with the primary emphasis on understanding

the individual and societal diversities, fostering the opportunities for full participation in a democratic and engaging environment. Integration might imply adaptation and homogenization; thus, not everyone would be eager to be integrated, but they all strive to be included (Young 1990; DESA, 2009).

The issue of assimilation versus inclusion, and the coexistence of individual and social diversities, as discussed by Young and others, corresponds to a critical and highly debated paradox in inclusive design philosophy: The impossibility of taking into account every difference in all varieties seriously while intending to design for the widest audience possible, which is inevitably restricted. This paradox of inclusivity is tried to be justified both from moral and epistemic perspectives. Morally, designing for all and universality does not necessarily mean rejecting individualities but embracing them to reach a common good for the widest possible audience (Durak, 2010). Epistemically, inclusion not necessarily means reaching for absolute truth, but including diverse groups provides a better chance to reach meaningful results than excluding them. So, the fundamental point of inclusion is not reaching equal provision of environments for all but rather to benefit from diversities in the decision-making process and provide equal opportunities for all to participate. Similarly, Bianchin and Heylighen (2017) seek to resolve this contradiction through a Rawlsian definition of social justice as fairness. Accordingly, they propose a procedural shift in understanding what is 'universal' and 'inclusive' with a new relational reading of equity, diversity, and inclusivity concepts. Rather than all having the equal rights to use an artifact – or environment for spatial studies-the essential point for inclusive design is having the equal right to participate in deliberative processes about the design and the use of that artifact and environment. So, social participation in the design process and accessibility becomes another concept to define the experiential dimension of inclusivity.

Participation is fundamentally described as the engagement of related practice stakeholders in the process. The vital point is not reduced to the literal participation of users but transforming the architectural practice from an authoritarian act to a process, starting with discovering users' needs and continuing with inclusive

formations (De Carlo, 2005). In this respect, the notion of participation is vital for both pedagogical and practical approaches to inclusivity. Traditionally, designers act in an abstract thinking process detached from real users. Parallelly, the early implications of the inclusive and universal design remained to focus on standards, legislations, and principles with preconceptions on diversities of users but eventually distanced from real-life experiences of users.

Heylighen (2013) questions this aspiration of inclusivity and states that naming a design suitable for all people is practically impossible due to the nature of design in general. So, it is also misleading to believe that designers have the absolute objective normativity to decide on good design. Consequently, the 'good' or 'inclusive' design possibly turns out to be the cooperation of the designer in a democratic and engaging ground in the design process (Heylighen & Bianchin, 2012). Reconceptualization of inclusivity from a social constructionist perspective also strengthens this understanding. Individual interactions with the environments and among people define experiences, and it is limited to unfolding constructed realities of experiences from a distant, top-down perspective. Conceiving these realities becomes easier with the use of more engaging methods of observation and cooperation. In this respect, the widened definition of accessibility explained previously becomes a fundamental notion. More inclusive spatial practices could be achieved if the processes become more engaging with the provision of access to information about the processes, as well as access to practices, services, and discussions (DESA, 2009)

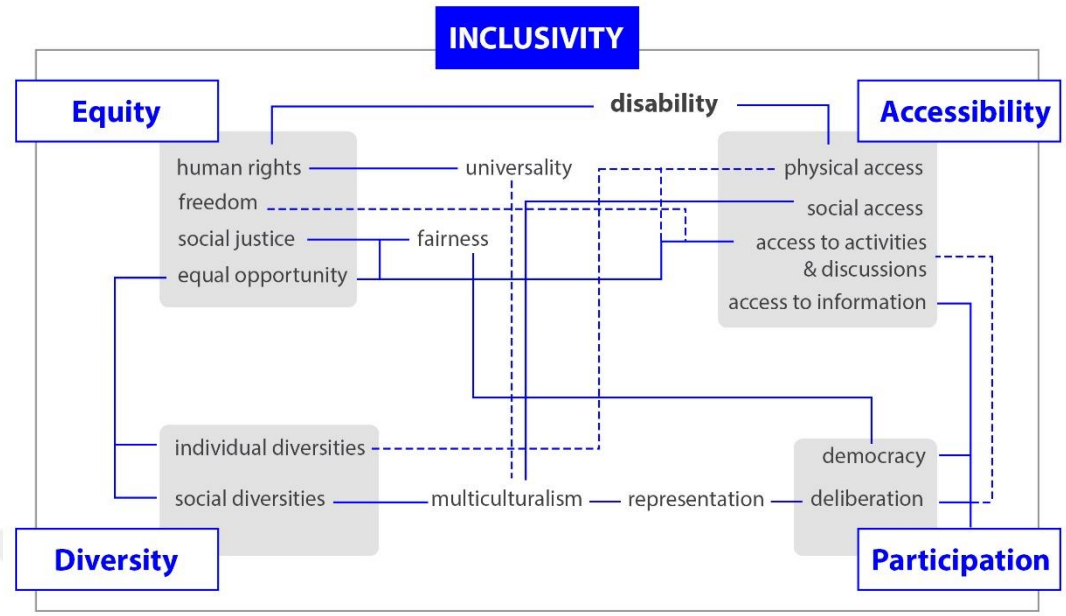



Figure 3.4 Conceptual mapping of inclusivity

In this chapter, notions grounding inclusivity- equity, human rights, accessibility, diversity, and participation- are discussed critically from a social constructionist perspective (Figure 3.4). It is observed that a holistic and relational understanding of these concepts based on how people's experiential realities regarding inclusion are constructed is highly important to foster the adoption of more inclusive approaches in spatial practices. Accordingly, the significance of engagement and scrutinizing diversity concerning varying experiences emerge as a critical field of discussion. This also corresponds to the traced shifts in literature from a more conventional understanding of inclusivity in relation to disability and accessibility standards to a more experiential definition combined with concerns for social justice, well-being, and engagement. Through more inclusive engagements and democratization of knowledge in a vertical relationship, it is possible to transfer universal ideals of inclusive design philosophy into spatial practices (Cruz and Forman, 2021). Thus, understanding this experiential dimension of inclusivity formed by interactions, both its conceptual position and practical implication, is critical to encouraging the adoption of inclusive philosophies. A primary objective in this respect is to teach design students how to be critical and interdisciplinary thinkers with skills to

communicate and collaborate with diverse partners within the educational milieu. In light of this, the following chapter will firstly dwell on how inclusivity is conceptually contextualized in architectural education through critical evaluation of programs and courses within the framework of the presented conceptual ground. Then, learning objectives and outcomes of particular novel examples in the educational milieu will be analyzed in terms of how engagement is reflected conceptually and methodologically in relation to inclusivity.

# CHAPTER 4

# MAPPING THE CONTEXTUALIZATION OF INCLUSIVITY IN ARCHITECTURAL EDUCATION

As discussed in previous chapters, inclusive design philosophy developed in the last twenty years evolved into a multidimensional discursive space with many interrelated concepts. Accordingly, its conceptual framework and related basic parameters have been scrutinized through philosophical and sociological inquires. The complex network and broad concepts show that inclusivity is not a taken-for-granted concept, but it is fundamentally a social construct. The spatial and experiential reality of inclusivity is fabricated through interactions between people and the environment. In order to implement inclusivity as a new design philosophy and a design approach to the human-environment relationship, it is essential to understand its conceptual ground and how its different concepts and parameters shape different forms of social constructs. As already mentioned, architectural education is one of the major stages in which professional and design approaches are formed, including the earlier conceptualizations of the notion of inclusivity. Thus, the educational environment, approaches, and methods highly affect our understanding of inclusivity and how it is socially constructed, which, in return, influences the integration of inclusivity as a design philosophy. Thus, this chapter of the thesis will elaborate on the current contextualization of inclusivity within architectural education and critically search for approaches to the conceptual framework of inclusivity, which could enhance understanding of its experiential and socially constructed dimensions in conceptual, social, political, ethical and practical senses. In the first part of the chapter, a detailed mapping of the current status of inclusivity in architectural education will be presented, with critical reflections on general approaches and conceptions. Secondly, parallel to the points highlighted, particular examples will be critically evaluated regarding their learning methods,

objectives, and expected outcomes in architectural education related to inclusivity. Then, the study will present the reflections on how and to what extent the conceptual framework of inclusivity is integrated into architectural education and its implications on grasping its experiential dimension.

## 4.1 The Critical Review of Contextualization of Inclusivity in Architectural Education

The primary aim of the initial research and mapping studies is to explore the contextualization of inclusivity in architectural education, how its conceptual framework is integrated into the design curriculum, and unfold the general approaches in the world and their distinctive qualities. Diverse courses in architectural education contextualize inclusivity in different dimensions like conceptual-theoretical, political-ideological, social-behavioral or practical contextualizations. So, understanding these various attempts in the educational milieu is essential to construct a framework of evaluation for the integration of inclusivity and its socially constructed experiential dimension in educational methods. Accordingly, 45 curricular or co-curricular courses/ programs from 41 universities in 14 countries are accessed at undergraduate or graduate levels. Their learning objectives, methods, and outcomes are scoured. The first determinant of the selection process is to include courses with accessible syllabi, course descriptions, and learning outcomes. Then, courses that either developed on inclusive design or related concepts and other related courses in which those concepts are mentioned and studied are selected as the primary domain of the study. Also, it is intended to present a diverse and rich group of courses from different countries, universities, and departments at different levels to trace different approaches to inclusivity to the greatest extent possible. It should be indicated that the scope of the study could be enlarged to include more courses, which might provide slight changes in mapping. However, it is observed from the body of courses that there are highly distinctive relations that correspond to concepts, trends, and shifts discussed in the second

chapter, which occurred in academic studies over twenty years. To provide a detailed mapping of the general status of inclusivity, four relational information areas are traced, and results are listed for each course:

1- Course /program level (undergraduate or graduate) and type (studio-based, or lecture-based)
2- The basic concepts and parameters related to inclusivity focused on learning objectives and outcomes.
3- The architectural focus area of courses and their relation to inclusivity
4- The methodologies/ approaches utilized in the course to understand different spatial dimensions of inclusivity

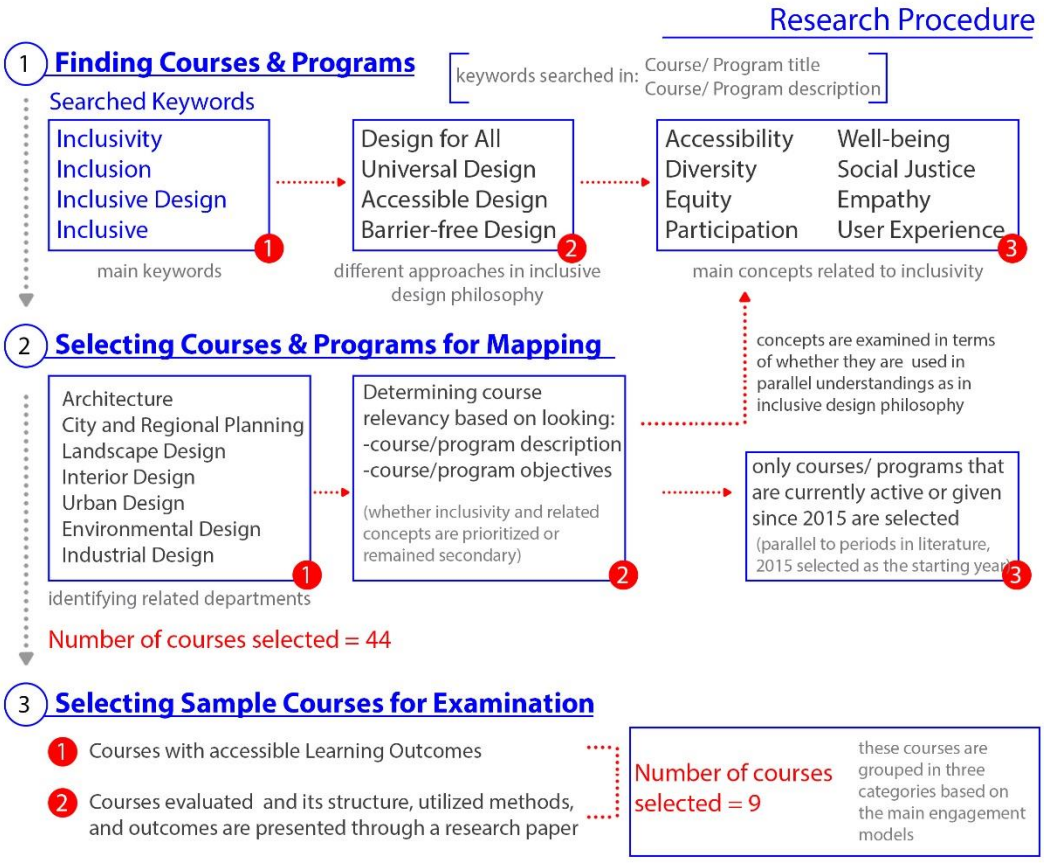



Figure 4.1 Research procedure for mapping the contextualization of inclusivity in architectural education

Table 4.1 List of some of the courses in the world focusing inclusivity

| | Course/ Program Name | University | Country | Department/s | Type | Level | Focus Area | Concepts & Parameters Relating to Inclusivity | | Course Methodology |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DIP5-Public Porous Placed | AA School of Architecture | United Kingdom | Architecture | Studio-based | Graduate | Public space | Openness & Freedom Spatial Agency Diversity | social | Conceptual Visionary |
| 2 | ARK-E2012 Basics of User Oriented Space Design | Aalto University | Finland | Architecture | Lecture-based | Graduate | Existing built environment | Accessibility Participation | social-behavioral | Pragmatic Descriptive |
| 3 | DHH3012-Inclusive Design | Boston Architectural College | USA | Architecture | Lecture-based | Graduate | Human abilities & experience | Well-being & Health Age Friendliness Accessibility | social-behavioral | Conceptual |
| 4 | Inclusive Urban Planning | CEPT University | India | Urban Planning | Studio-based | Graduate | Housing Urbanism | Equity & Social Justice Well-being & Health | political | Conceptual Visionary |
| 5 | Design and Planning for Social Inclusion | Chalmers University of Technology | Sweden | Architecture | Studio-based | Graduate | Urbanism | Equity & Social Justice Participation | social | Conceptual Experiential |
| 6 | ARCH UN3312 Special Topics: Environments for Inclusion | Columbia GSAPP | USA | Architecture Urban Design | Lecture-based | Graduate | Human abilities & experience | Diversity Openness & Freedom | behavioral | Conceptual Pragmatic |
| 7 | DEA 5700-Designing Age Friendly Environments | Cornell University | USA | Design + Environmental Analysis | Lecture-based | Graduate | Urbanism | Well-being & Health Age Friendliness | social | Conceptual Descriptive |
| 8 | Mobility, Mood and Place | Edinburgh School of Architecture and Landscape Architecture | Scotland | Architecture Landscape Architecture | Studio-based | Graduate | Age-friendly neighborhoods | Age Friendliness Participation Accessibility | social-behavioral | Visionary |
| 9 | Civic Fabrication: Socially Responsible Design | Edinburgh School of Architecture and Landscape Architecture | Scotland | Architecture Landscape Architecture | Studio-based | Fourth Year | Neighborhoods | Spatial Agency Participation Equity & Social Justice | social | Conceptual Visionary |
| 10 | Atelier 1 - Architecture as an Emancipating Ground | Gazi University | Turkey | Architecture | Studio-based | Third Year Fourth Year | Public space | Openness & Freedom Accessibility | social | Conceptual Visionary |
| 11 | Making Participation Relevant to Design | Harvard University Graduate School of Design | USA | Landscape Architecture Urban Planning and Design | Lecture-based | Graduate | Design philosophy | Participation Equity & Social Justice | ethical-social | Experiential conceptual |
| 12 | HFE - Human Factors/ Ergonomics | I. D. Bilkent University | Turkey | Interior Architecture and Environmental Design | Lecture-based | Second Year | Human abilities & experience | Diversity Empathy | behavioral | Experiential |
| 13 | ARCH 571 Design for All People | Iowa State University | USA | Architecture | Lecture-based | Graduate | Existing built environment | Diversity Accessibility Disability | social-behavioral | Pragmatic Descriptive |
| 14 | MTS 620E Inclusive Design &Well Being | Istanbul Technical University | Turkey | Architecture | Lecture-based | Graduate | Housing | Well-being & Health Disability | social | Conceptual Descriptive |
| 15 | ELB2-Altering Practices for Urban Inclusion | KU Leuven | Belgium | Architecture | Lecture-based | Graduate | Urbanism | Spatial Agency Participation Equity & Social Justice | political-social | Conceptual Visionary |
| 16 | AAD - The Activist Architecture and Design Studio | Lawrence Technological University | USA | Architecture | Studio-based | Graduate | Neighborhoods | Empathy Equity & Social Justice Participation | political | Experiential |

Table 4.1 Continues

| | Course/ Program Name | University | Country | Department/s | Type | Level | Focus Area | Concepts & Parameters Relating to Inclusivity | | Course Methodology |
|---|---|---|---|---|---|---|---|---|---|---|
| 17 | Project Office | Leeds Beckett University | United Kingdom | Architecture<br>Landscape Architecture<br>Industrial Design<br>Graphic Art & Design | Studio-based | Graduate | Neighborhoods | Spatial Agency<br>Participation<br>Equity & Social Justice | political-social | Experiential |
| 18 | ARCH17 - The Evolving Paradigm of Universal Design | Middle East Technical University | Turkey | Architecture | Lecture-based | Graduate | Design philosophy | Diversity<br>Equity & Social Justice<br>Disability | ethical-social | Conceptual |
| 19 | ARCH301-ARCH302 | Middle East Technical University | Turkey | Architecture | Studio-based | Third Year | Neighborhoods<br>Public Space | Openness & Freedom<br>Equity & Social Justice | social | Conceptual<br>Visionary |
| 20 | MFA 300 - Social Responsibility Practices | Mimar Sinan Fine Arts University | Turkey | Architecture<br>City Planning<br>Industrial Design<br>Interior Design | Lecture-based | Third Year | Human abilities & experience | Participation<br>Disability<br>Diversity | social | Pragmatic<br>Conceptual<br>Experiential |
| 21 | DTB 301 & DTB 401 - Design Studio | Queensland University of Technology | Australia | Architecture<br>Interior Design | Studio-based | Second Year | Housing | Empathy<br>Participation<br>Diversity | social-behavioral | Experiential |
| 22 | Introduction to Successful Accessible Design | Royal Architecture Institute of Canada | Canada | | Lecture-based | Graduate | Human abilities & experience | Accessibility<br>Disability | behavioral | Descriptive<br>Pragmatic |
| 23 | Helen Hamyln Centre for Design | Royal College of Art | United Kingdom | | Studio-based | Graduate | Age-friendly neighborhoods | Age Friendliness<br>Diversity | social-behavioral | Pragmatic |
| 24 | Design Studio | Savitribai Phule Pune University | India | Architecture<br>Landscape Architecture | Studio-based | Second Year | Housing<br>Public space | Diversity<br>Equity & Social Justice<br>Age Friendliness | social | Experiential<br>Conceptual |
| 25 | ID 4210 / Arch 4843 - Intro to Universal Design in the Built Environment | The Georgia Institute of Technology | USA | Architecture<br>Industrial Design | Lecture-based | Fourth Year | Human abilities & experience | Accessibility<br>Disability | behavioral | Conceptual<br>Descriptive |
| 26 | ID 6800/Arch 8843 – Advanced Universal Design: Investigations in the Built Environment | The Georgia Institute of Technology | USA | Architecture<br>Industrial Design | Lecture-based | Graduate | Existing built environment | Diversity<br>Accessibility<br>Disability | social-behavioral | Descriptive<br>Pragmatic |
| 27 | LARCH 375 Human Dimensions of Design | The Pennsylvania State University | USA | Landscape Architecture | Lecture-based | Third Year | Human abilities & experience | Accessibility<br>Diversity | social | Conceptual |
| 28 | ARCH 621 Empathy and Difference | The University of Buffalo | USA | Architecture | Lecture-based | Graduate | Human abilities & experience | Empathy<br>Diversity | political-social | Pragmatic<br>Experiential |
| 29 | ARC211EC-American Diversity and Design | The University of Buffalo | USA | Architecture | Lecture-based | Second Year | Design philosophy | Diversity<br>Equity & Social Justice | political | Conceptual |
| 30 | ARCH 372 Designing for Wellbeing | The University of Illinois at Urbana-Champaign | USA | Architecture | Studio-based | Third Year | Urbanism<br>Housing | Well-being & Health<br>Accessibility | social | Visionary<br>Pragmatic |
| 31 | ARCH563 - Diversity and Equity in Design | The University of Louisiana at Lafayette | USA | Architecture | Lecture-based | Graduate | Design philosophy | Diversity<br>Equity & Social Justice | political-social | Conceptual |
| 32 | Inclusive Cities (ABPL90266) | The University of Melbourne | Australia | Urban Planning | Lecture-based | Graduate | Urbanism | Diversity<br>Equity & Social Justice | political | Conceptual |

Table 4.1 Continues

| | Course/ Program Name | University | Country | Department/s | Type | Level | Focus Area | Concepts & Parameters Relating to Inclusivity | | Course Methodology |
|---|---|---|---|---|---|---|---|---|---|---|
| 33 | Human Environment Design | Toyo University | Japan | Architecture Industrial Design | Lecture-based | Graduate | Human abilities & experience | Disability Diversity | behavioral | Pragmatic Descriptive |
| 34 | AR0095 Social Inequality in the City, Diversity, and Design | TU Delft | Netherlands | Architecture Urban Design | Lecture-based | Graduate | Neighborhoods | Diversity Equity & Social Justice | political-social | Experiential Conceptual |
| 35 | Health and Wellbeing in Cities: Theory and Practice | UCL Institute for Environmental Design and Engineering | United Kingdom | Architecture | Lecture-based | Graduate | Neighborhoods | Well-being & Health Participation | social | Experiential Conceptual |
| 36 | Urban Design for Healthy Cities | UIC Barcelona | Spain | Architecture Urban Design Urban Planning Landscape Architecture | Studio-based | Graduate | Urbanism | Well-being & Health Diversity | political-social | Conceptual Descriptive |
| 37 | Design for Social Innovation and Sustainable Futures | University of Arts London | United Kingdom | Architecture Landscape Architecture City Planning Graphic Art & Design | Studio-based | Graduate | Design philosophy | Participation Openness & Freedom | social | Experiential Conceptual |
| 38 | Dotte Agency | University of Kansas | USA | Architecture | Studio-based | Graduate | Neighborhoods Public space | Well-being & Health Spatial Agency Equity & Social Justice | political-social | Experiential Visionary |
| 39 | ARCH 506 – Design Activism + Social Justice | University of Michigan | USA | Architecture Urban Planning | Lecture-based | Graduate | Urbanism | Equity & Social Justice Spatial Agency | political | Conceptual Visionary |
| 40 | Experiential Learning Module | University of Otago | New Zealand | Architecture | Lecture-based | Second Year | Human abilities & experience | Disability Accessibility | behavioral | Descriptive Experiential |
| 41 | CE3CIE-Inclusive Environments | University of Reading | United Kingdom | Architecture | Lecture-based | Graduate | Human abilities & experience | Accessibility Disability | social-behavioral | Conceptual Descriptive Pragmatic |
| 42 | UDES 3552: Urban Design Studio II | University of Texas Arlington | USA | Urban Design | Studio-based | Graduate | Neighborhoods | Equity & Social Justice Diversity Accessibility | social | Visionary Descriptive |
| 43 | Race, Class and the Just City: A Seminar& Practicum in Social Justice Practice | University of Wisconsin-Milkwaukee | USA | Urban Planning | Lecture-based | Graduate | Design philosophy | Equity & Social Justice Participation | political | Conceptual Experiential |
| 44 | ARCH 327 Difference and the City | Yale School of Architecture | USA | Architecture | Lecture-based | Third Year | Design philosophy | Diversity Equity & Social Justice | political-social | Conceptual |
| 45 | MIM3142 Barrier-Free Architecture | Yıldız Technical University | Turkey | Architecture | Lecture-based | Third Year | Human abilities & experience | Accessibility Disability | ethical-social | Pragmatic Descriptive |

The first mapping (Figure 4.2) unfolds the relation between different spatial scales and focuses on areas in courses and how they relate to concepts and parameters of inclusivity and diverse methodologies. It includes the distribution of different architectural focus areas, information on the course level and type, and their distribution, concentrations on specific concepts and parameters respectively, their changing methodologies and basic shared learning objectives. As a result of the study, parallel to themes that emerged in literature in recent years, ten main concepts and parameters are repeated in course descriptions, objectives, and outcomes. These are 1-diversity, 2-equity & social justice, 3-accessibility, 4-participation, 5-disability, 6-health& well-being, 7-openness& freedom, 8-spatial agency, 9-age friendliness, and 10-empathy. These concepts show significant variations among seven focus areas determined according to spatial dimensions and scale. When the learning objectives of the courses dwelling on similar architectural study areas are examined, it is possible to trace some major recurring objectives related to inclusivity and the dominant concepts referred in the courses, as listed in the mapping. Through these objectives, we can identify various ways of contextualizing inclusivity in architectural education according to diverse and interrelated goals. Parallel to these objectives, every course defines sets of learning outcomes focus on students' development of necessary knowledge, skills, and attitudes regarding inclusive design philosophy. Evaluating and understanding these outcomes are crucial to illustrate strength and weaknesses of current approaches in educational philosophies to teach inclusivity, and deserve a deeper analysis to scrutinize how experiential dimension is taught. So, following a relational reading of focus areas, concepts, main learning objectives and applied methodologies, the results of a deeper survey on learning outcomes and experiential methodologies focusing on different engagement levels of particular cases will be presented.

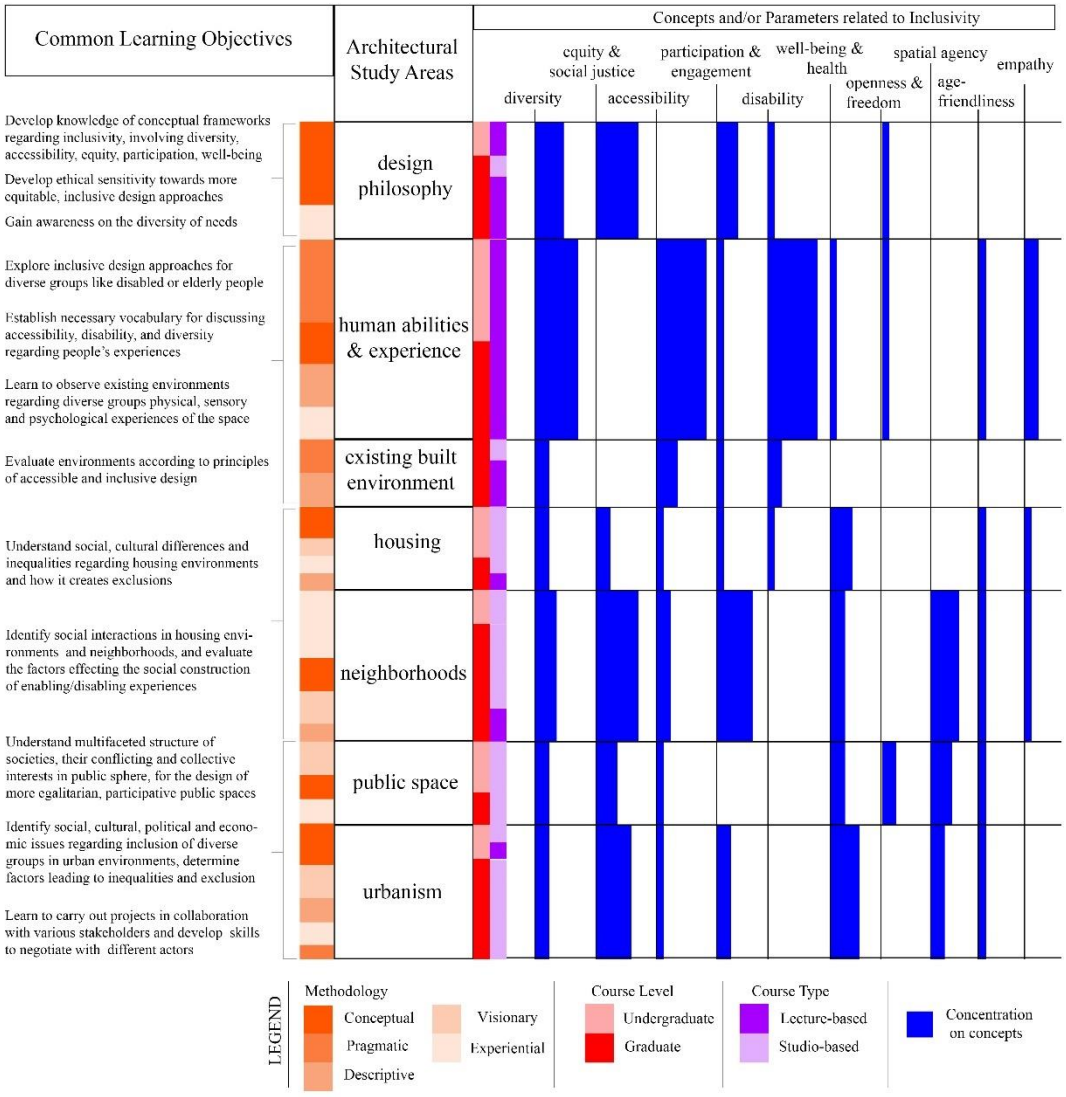



Figure 4.2 Mapping of architectural focus areas and concepts of courses related to inclusivity

Most of the courses focus on human abilities, physical and psychosocial experiences, and the singular studies of existing built environments concerning experiences. The discussions of inclusivity mostly revolve around the concepts of diversity, accessibility, disability, and empathy since the main aim is to conceptualize the existence of individual differences and their effect on spatial experiences. Disabled and disadvantaged user groups are highly emphasized, and the primary learning objective emerges as creating awareness of these diversities and searching for design

solutions for more accessible environments for all. The dominant learning methods are shaped accordingly because awareness and empathy-building are mainly formed through physical differences and related accessibility criteria. Inclusivity-related concepts and parameters are approached from a more pragmatist perspective. Diversity and accessibility concepts are discussed descriptively, mainly concerning legislative aspects, principles, and norms with the aim of evaluating the disabling factors of existing built environments. Accordingly, developing sensitivity towards diverse range of people, and establishing the necessary vocabulary to define and adress these issues are defined as other major objectives in learning inclusive design. Still, there are also attempts to present new methods to understand the experiential dimension of inclusivity, form empathy towards how diverse users socially construct their inclusive experiences and acquire the skills and knowledge for a more inclusive design philosophy.

The main focus of the human experience is expanded to include the living units and their immediate environment as another focus area. These courses mainly dwell on housing and neighborhoods. While how personal and cultural diversities shape inclusive experiences are questioned, a great emphasis is put on the concepts of equity and social justice in the issue of housing. Since there exists a great level of inequalities for disadvantaged, underdeveloped societies, immigrants, refugees, and marginalized groups, the main aim is to search for the development of more inclusive housing and neighborhood design based on an inquiry on social justice and equal access and opportunities for these groups. This inclusivity approach also brings forward the concepts of community engagement and participation. The learning objectives of the courses include improving the living conditions of different groups through the power of architectural agency and the related learning outcomes associated with providing awareness to architects as agents of social change. The dominant concepts mentioned here also influence the methodologies utilized. Constructed on the concept of participation, experiential and codesign-based approaches benefitting from the user experience and engagement are primarily utilized in identifying how social interactions are formed in immediate environments

and how they impact the social construction of experiences. Moreover, the power of architectural agency enhances the visionary perspectives toward more inclusive neighborhoods.

Just beyond the personal and communal living environment, another group of courses focuses on the public space and public realm, which consists of places of conflicts, confrontations, and coexistence. Through mapping, it is understood that the highly-complex and multifaceted discourse on public space shapes the dominant concepts and parameters of inclusivity. Besides sufficient living environments, the issue of representation, complex and juxtaposing programs of different user groups, and spatial freedom emerge as key points in course objectives and discussions. The plurality of programs and freedom brings forward the concept of openness and porosity in relation to equity: The central inquiry of the courses is free and inclusive public spaces that are accessible to all and provide equal opportunities for spatial experiencing. As a result, the dominant methodologies consist of conceptual and visionary perspectives toward more egalitarian, open, and inclusive public spaces.

At the other end of the spectrum, starting with individual human experiences & abilities, we observe a significant body of courses focusing on urbanism. Within an interdisciplinary environment consisting of architects, urban designers, planners, and landscape architects, the current problems of cities and attempts for more inclusive cities are discussed. A major learning objective is identifying factors leading to inequalities and exclusions and carrying out community-engaging projects to negotiate between various stakeholders to determine more inclusive strategies for all. Besides the recurring theme of inequalities and social justice are prevailing on the city scale, a new study area and a related conceptual understanding have emerged in recent years. The rapidly increasing urban populations, depletion of resources, and pandemics fueled a new conceptualization of healthy cities and environments fostering well-being in recent years. Accordingly, urban environments are dealt with as determinants of psychosocial experience and physical and mental health.

Although a rich variety of different spatial environments are prioritized in courses, inclusive design philosophy holds the central point in many courses. Leaning toward more conceptual discussions and inquiries, the primary learning objective of these courses is to unfold concepts like diversity and equity in different contexts. Within their scope, how the built environment generates and exemplifies difference is discussed in relation to disability, ethnicity, race, gender, and culture. Another fundamental objective of these courses is to develop students' awareness and ethical senstivity regarding diverse people's needs and inclusivity, in order to foster integrating this approach in their future studies.

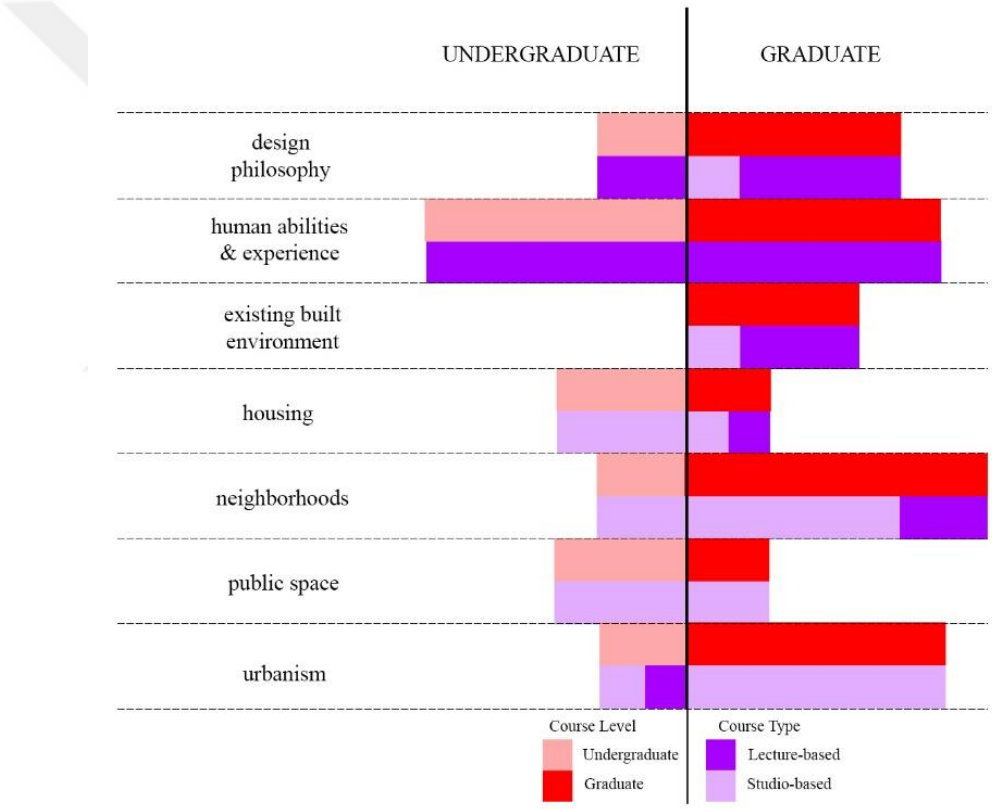



Figure 4.3 Distribution of courses in terms of level, type and focus areas

The relational mapping and reading of architectural focus areas and recurring concepts and parameters show that inclusive design philosophy encapsulates many interrelated layers of operation on the interaction between people and the environment. Nevertheless, when examining the distribution of course levels and

types, it is hard to observe the same level of variety (Figure 4.3). Firstly, it is seen that inclusive design philosophy is mostly studied at the graduate level. However, earlier levels of architectural education are critical as it is a fundamental stage of forming general professional approaches, whereas graduate studies focus on specialization in specific fields. Looking closer at undergraduate courses, it is observed that understanding human abilities and experiences is one of the major learning objectives and outcomes. In order to grasp inclusive design philosophy, it is essential to first learn about individual differences and their implications on the design process. Yet, the undergraduate courses mostly remain lecture-oriented, generally offered as elective and supporting design studies. The graduate courses, on the other hand, are usually studio-based. This is also reflected in dominant methodologies applied in the courses. The gap between graduate and undergraduate courses as lecture or studio-based might be interpreted as a potential development area for further studies. Beyond remaining at a conceptual level, undergraduate students should be taught ways of transforming their conceptual knowledge on inclusivity to design strategies at various levels. Some of the courses listed in the table are developed according to this vision and they utilize new engagement models in teaching to transfer conceptual knowledge of inclusivity into practices impacting the future social constructions of experiences. These engagement models are grouped as i) empathic models ii) co-designing and iii) community projects in the thesis, and they will be disclosed further in relation to learning outcomes in the following section.

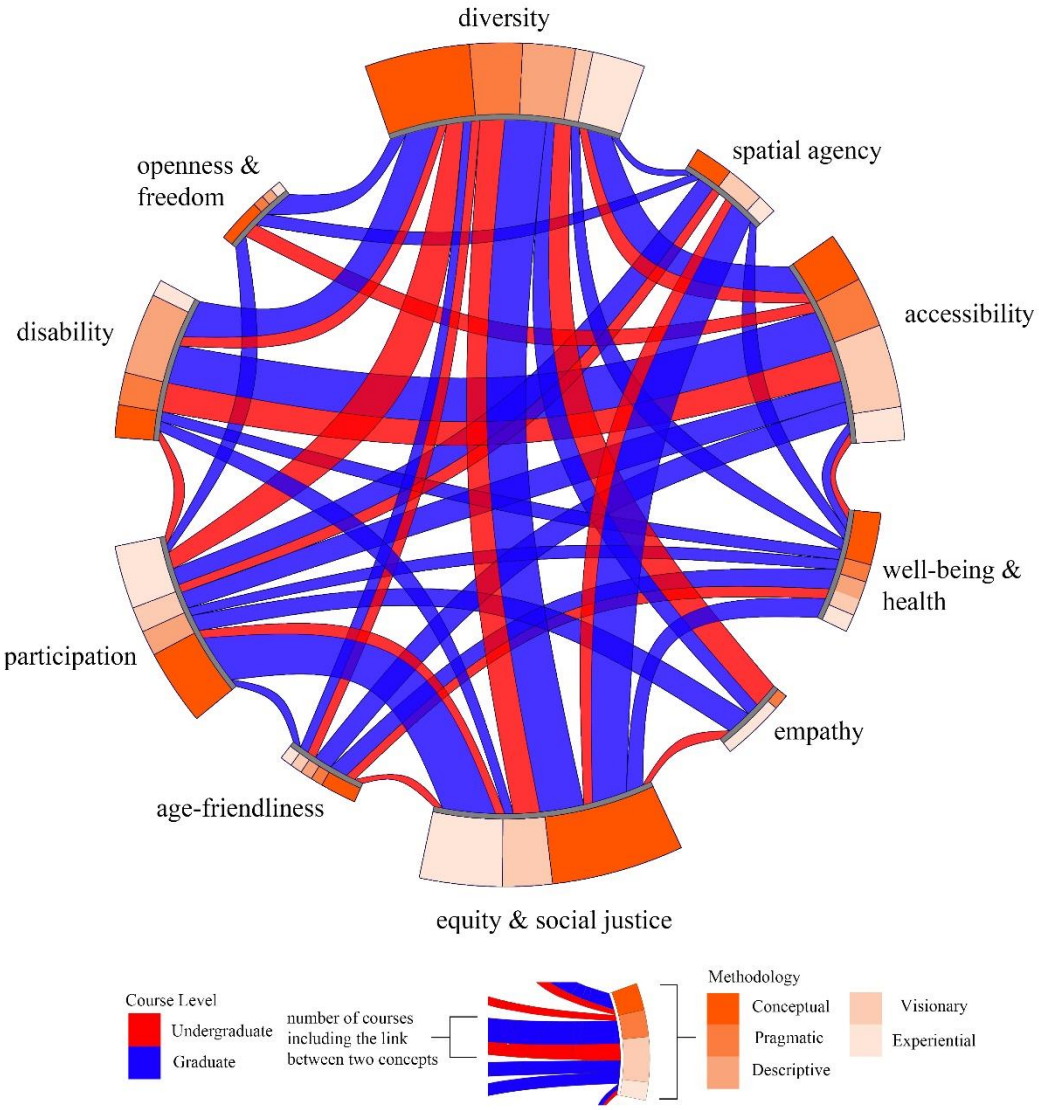



Figure 4.4 Mapping the relational network of recurring concepts and parameters emphasized in courses related to inclusivity

The first mapping presented in the chapter shows how inclusive design philosophy is integrated into architectural education at various levels with varying fields of spatial studies. Yet, it is also essential to understand how concepts and parameters grounding inclusivity are approached through a relational reading of these concepts. This mapping shows the ten concepts and parameters related to inclusivity, the distribution of concepts within the totality of courses, the relations between concepts,

and the dominant methodological approaches utilized for each concept/parameter (Figure 4.4).

Firstly, it is seen that diversity and equity & social justice appear as the mainly studied concepts. Although these two concepts are discussed in many courses, their relationship with other concepts is entirely different. The most substantial network is observed between i) diversity, ii) equity & social justice, iii) participation, and iv) spatial agency (Figure 4.5 Left). This network shows the growing emphasis on architecture's social and societal role as an agent that defines egalitarian, equal, and inclusive based on increasing community engagement and participation. It also illustrates the trends in learning objectives to understand and identify inequalities and exclusion existing in societies and search for participatory solutions. Accordingly, the learning methods mainly rely on conceptual and experiential perspectives combined with visionary approaches toward more inclusive futures. On the other hand, another network of relations is seen between i) diversity, ii) disability, and iii)accessibility (Figure 4.5 Right). This mostly corresponds to the strong discourse on human abilities and experiences, particularly approaching the issue from a pragmatic lens to understand individual diversities to enhance their socio-spatial engagements as a basic objective of inclusivity. The overall mapping also shows how the recent trends and shifts in literature resonate within the educational environments. Notions especially highlighted in recent literature period like empathy, well-being, openness, freedom, and participation are mentioned as key terms in course descriptions and contextualization of design problems in various scales.

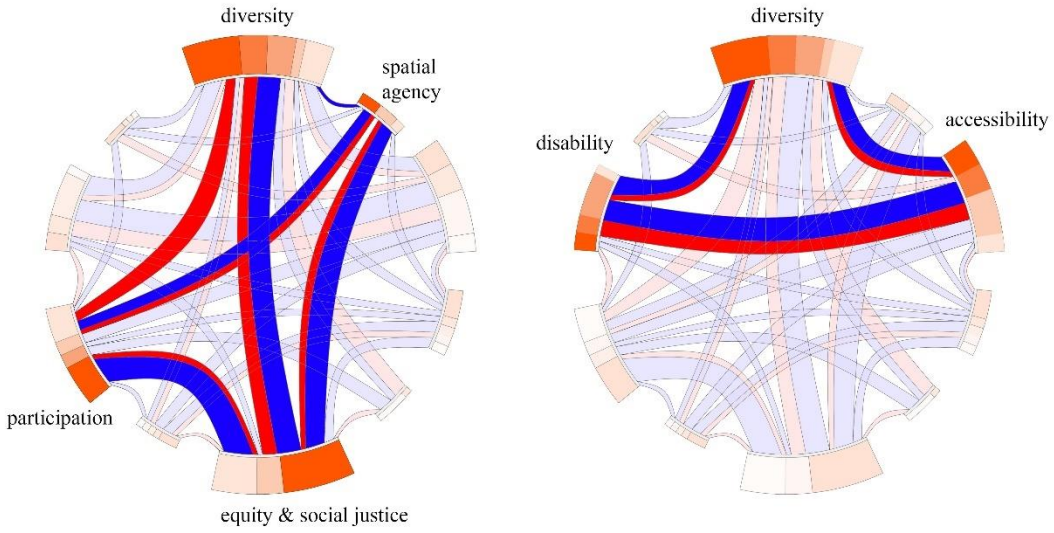



Figure 4.5 Diagrams showing most substantial networks of concepts

It can be deduced from these series of mappings showing the complex network of concepts and parameters regarding inclusive design philosophy that shows the pluralist character of inclusivity. It is possible to trace different interpretations of inclusivity at different architectural scales, with different methodologies, and by focusing on different conceptual aspects. This is because inclusivity is, in essence, a social construct, and its experiential dimension is fabricated through interactions between humans and environments. The contextualization of inclusivity in architectural education contributes to expanding designers' awareness of these aspects as the main learning outcome. However, there seems to be a limited approach regarding certain concepts, especially at the undergraduate level. Yet, the body of courses also indicates a growing effort to develop new perspectives bridging the conceptual knowledge of inclusive design philosophy with the design process through experiential learning methodologies. With the help of these methods, inclusivity and related concepts can be embedded into the education environment and learning outcomes, which can foster the formation of a new and inclusive design approach by scrutinizing the agency of space in the social construction of experiences. Accordingly, the following part of the chapter will focus on particular courses as a case study to present different methods utilized to grasp the experiential

dimension of inclusivity and evaluate how they relate to conceptual grounds based on skills, knowledge, and attitudes acquired as learning outcomes.

## 4.2 Sample Study Examinations: Disclosing Engagement Levels in Different Methodological Studies

Considering the conceptual framework of inclusivity and its current position in architectural education, It is observed that the scope of methodologies for scrutinizing experiential dimensions is especially limited at the undergraduate level. Moreover, the previous mappings show that the change in education level is reflected in students' learning abilities and their degree of capacity to digest concepts. Multilayered discussions focusing on various spatial areas and scales necessitate new educational approaches emphasizing different experiential dimensions of inclusivity and questioning the social construction through the agency of space. Although limited, there are courses and related studies focusing on these experiential aspects in recent years. It is observed that these courses attempt to develop a learning process enriched with engagement models and methods in various degrees to translate conceptual knowledge on inclusivity to understand individual and community experiences. Looking at a closer perspective to these mapped courses, it is traced that there are three primary engagement levels. The first engagement level focuses on individual experiences through empathic learning tools. It includes simulation methods focusing on the physical experiences of different users and other ethnographic methods of observing and interpreting the psychosocial experiences. The second engagement model is based on a direct relationship with the user through co-design methods. The participatory and collaborative nature of the method allows the students to develop inclusive design approaches directly influenced by user experiences and needs. The last level of engagement consists of even more profound levels of participation and negotiation between different stakeholders in a real-life context through community projects. Nine courses are selected as case studies to discuss these three forms of engagement, and their effects on teaching experiential

dimensions of inclusivity are evaluated based on learning outcomes. To clarify the evaluation methodology, it is needed to understand what outcome-based education is and what “knowledge, skills and attitudes" mean as outcomes related to learning experiences of inclusive design philosophy.

Table 4.2 List of courses selected as case studies for different engagement models

| | Course/ Program Name | University | Country | Department/s | Year | Type | Level | Focus Area | Concepts & Parameters Relating to Inclusivity | Engagement Model |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | HFE - Human Factors/ Ergonomics | I. D. Bilkent University | Turkey | Interior Architecture and Environmental Design | 2016-onwards | Lecture-based | Second Year | Human abilities & experience | Diversity Empathy | Empathic Models |
| 2 | DTB 301 & DTB 401 - Design Studio | Queensland University of Technology | Australia | Architecture Interior Design | 2013-2014 (2020) | Studio-based | Second Year | Housing | Empathy Participation Diversity | |
| 3 | Behahivoural Research Design Studio | Savitribai Phule Pune University | India | Architecture Landscape Architecture | 2020 | Studio-based | Second Year | Housing Public space | Diversity Equity & Social Justice Age Friendliness | |
| 4 | MFA 300 - Social Responsibility Practices | Mimar Sinan Fine Arts University | Turkey | Architecture City Planning Industrial Design Interior Design | 2018-onwards | Lecture-based | Third Year | Human abilities & experience | Participation Disability Diversity | Co-design |
| 5 | AAD - The Activist Architecture and Design Studio | Lawrence Technological University | USA | Architecture | 2015-onwards | Studio-based | Graduate | Neighborhoods | Empathy Equity & Social Justice Participation | |
| 6 | Mobility, Mood and Place | Edinburgh School of Architecture and Landscape Architecture | Scotland | Architecture Landscape Architecture | 2013-2016 | Studio-based | Graduate | Age-friendly neighborhoods | Age Friendliness Participation Accessibility | |
| 7 | Civic Fabrication: Socially Responsible Design | Edinburgh School of Architecture and Landscape Architecture | Scotland | Architecture Landscape Architecture | 2013-2018 | Studio-based | Fourth Year | Neighborhoods | Spatial Agency Participation Equity & Social Justice | Community Project |
| 8 | Project Office | Leeds Beckett University | United Kingdom | Architecture Landscape Architecture Industrial Design Graphic Art & Design | 2016-onwards | Studio-based | Graduate | Neighborhoods | Spatial Agency Participation Equity & Social Justice | |
| 9 | Dotte Agency | University of Kansas | USA | Architecture | 2015-onwards | Studio-based | Graduate | Neighborhoods Public space | Well-being & Health Spatial Agency Equity & Social Justice | |

### 4.2.1 Learning Outcomes in Higher Education

During the late twentieth century and especially in recent decades, outcome-based education has become a prevailing paradigm in higher education. As Spady defines,

“Outcome-Based Education means clearly focusing and organizing everything in an educational system around what is essential for all students to be able to do successfully at the end of their learning experiences” (Spady, 1994, p.1). So rather than the instructor and teaching-based approach, contemporary emphasis is particularly on the outcomes and experiences gained by the students. Bloom's revised taxonomy of learning objectives is a common tool in this approach (Bloom et al. 1956; Krathwohl 2002). The taxonomy model has three basic domains of learning: cognitive, psychomotor, and affective. Students develop their learning in each domain through various methods during the education process. Although the learning experience is categorized through different domains, learning outcomes are combined results. The cognitive domain deals with knowledge, intellectual development, and cognitive processing of information. It encapsulates different levels of knowledge construction, from simple to complex and concrete to abstract. The psychomotor domain is related to skills in applying the knowledge, which are described as cognitive (creative thinking) and practical (use of methods, materials, and tools) (Savic & Kasef, 2013). Lastly, the affective domain relates to behavioral and operational learning and involves motivations, attitudes, and values expected to be developed by students in the learning process.

Based on these three domains of learning, outcomes of three parallel categories are developed: **Knowledge, skills, and attitudes**. While some of the actions and objects related to these categories are general, they also show great variety for each profession and field of study. Accordingly, these learning outcomes can be interpreted in the following ways considering inclusive design philosophy and related conceptual and methodological dimensions of learning:

- **Knowledge:** This group of outcomes is about students’ intellectual development on several concepts grounding inclusivity like diversity, equity, accessibility, human rights, and social justice. It relates to how these concepts are individually understood, combined, and discussed together, and how they

relate to real-life experiences and contextual information (social, cultural, political, environmental realities)

- **Skills:** This group of outcomes relates to students' development of skills regarding conceptual and methodological approaches to the experiential dimension of inclusivity. It consists of critical-thinking skills (evaluating the contextual information and developing design approaches), data-collecting skills (observation, ethnographic methods, questionnaires utilized to trace diverse experiences), design methods and actions-related skills (utilizing co-designing and other participatory methods, developing architectural program and related design interventions) and communication and representation skills (negotitating with various actors, intepret their feedbacks and represent ideas in understandable and inclusive ways.)
- **Attitudes:** This group of outcomes relates to students' development of social, behavioral, ethical, and professional values incorporating inclusive design philosophy, building awareness, empathy, and consciousness, and gaining motivation to utilize concepts of inclusivity in future design approaches as professional architects.

It is critical to discuss integrating inclusive design philosophy into architectural education based on learning outcomes. As literature themes and mappings regarding the position in architectural education show, inclusivity is approached from various perspectives as a multilayered notion, which might create an ambiguous discursive field on its conceptual aspects. Thus, it is essential to present clear and measurable learning outcomes for scrutinizing inclusive design philosophy holistically and evaluating their effects on understanding the experiential dimension. Accordingly, the following cases on different engagement methods utilized to understand experiential realities of inclusivity are evaluated based on these three categories of learning outcomes and how they relate to the conceptual framework.

### 4.2.2 Empathic Methods of Engagement

Traditionally designers are distanced from the actual users and design according to their own inquiries, value systems, and visions. However, as inclusive design philosophy presents, there is great diversity among individuals and societies. Architectural education aims to enhance designers' imagination and empathic thinking abilities rather than providing prescribed knowledge to address this diversity. So, to evaluate and reinforce the built environment for more inclusive opportunities, it is crucial for design students to understand diverse users' experiences. One of the engagement models observed to be applied in architectural and design education is empathic learning, which is based on being immersed in diverse users' lives and experiences (Kouprie & Visser, 2009; Altay & Demirkan, 2013). Empathic approaches involve relating to the user more than just knowing. Designers build an affective and cognitive understanding of diverse user groups' experiences and design environments accordingly. Based on this, three strategies of empathic design can be identified with varying degrees and forms of engagement (Kouprie & Visser, 2009). The first one is simulating the user's condition to understand their experiences directly. This method enables students to understand human-environment relationships, primarily physical than social and psychological experiences, through first-hand bodily experiences. They learn the degree of abilities and diversities and how they affect daily activities. Besides physical exclusion experienced, they have a chance to understand the social and psychological effects of the spatial environment on individuals, particularly on disabled and disadvantaged ones. Inclusivity aims to enable all people to participate fully in everyday life. Through simulation-based methods, a deeper understanding of participation could be achieved. Other strategies of empathic design involve research through indirect information on user experience and direct engagement with users through ethnographic methods of observation and interviewing. Students take the role of the observer to understand the broader physical and psychosocial experiences of diverse user groups. In various ways, they observe the users in their living environment,

learn to prepare appropriate and effective questionnaires, and benefit from the data collected. Besides physical accessibility, ethnographic researchers attempt to understand psychosocial dimensions. Looking at the intersection and interaction of social, cultural, and environmental influences on individuals' physical and mental wellness, the psychosocial dimension provides an insight into the enhanced understanding of diversities by focusing on the experiences of individuals and how these are transformed into a body of knowledge. Also, from a spatial perspective, students learn to understand user needs and experiences and develop a design program/brief accordingly. Yet, rather than speculation, they engage with real-life clients, which increases the effectiveness of the works in understanding the experiential dimension of inclusivity. This also brings out the architectural program as an integral part of the design, defining the experiential dimension of inclusivity. Understood as 'a broader presentation of the plane of interactions before the physical manifestations of architectural spaces through historical, social, philosophical, and conceptual approaches to human values', the architectural program sets the vision for more equal and inclusive experiences by utilizing the data derived from ethnographic research.

#### 4.2.2.1 Case 1: Human Factors/Ergonomics Course (HFE)

Human Factors / Ergonomics Course (HFE) in Ihsan Dogramacı Bilkent University Department of Interior Architecture and Environmental Design is a second-year lecture-based course focusing on teaching inclusive design. The course is based on the vision that promoting students' awareness of diverse individuals' social and physical inclusion is vital within the educational context (Altay & Demirkan, 2013). Accordingly, the course's main objectives are **i)** enhancing students' knowledge and awareness of concepts related to inclusive design, **ii)** analyzing and evaluating the built environment accordingly, and **iii)** establishing a value system to adopt an inclusive design approach. Students experience various models of engagement to understand inclusivity. Among these, two course sessions appear as experiential. In

the first one, students simulate the physical experiences of various disabled people as an empathic learning tool. Later, they reflect on their experiences. They learn to analyze and evaluate their environment and build empathy towards those who have different abilities from themselves. At the same time, rather than distancing to disabled experience as designers, they understand their own capabilities. The second course session also contributes to this, in which students work in groups and design an installation stimulating a multi-sensory three-dimensional experience (Altay, 2017). Students are expected to construct their knowledge on bodily engagement in space and understand their bodies and senses. Overall, the contribution of the course to the discussions on the experiential dimension of inclusivity is expanding the students' vision of user-environment relationship by introducing simulation and role-playing as new tools of engagement in design education.



Figure 4.6 Students simulating disability experience
(Altay & Demirkan, 2013, p.203)

Table 4.3 Learning outcomes of Human Factors/Ergonomics course

| Case 1 | Learning Outcomes | Relation to Conceptual Framework of Inclusivity |
|---|---|---|
| **Knowledge** | -*Understand* and *discuss* concepts of inclusivity, disability, and accessibility<br>-*Identify* physiological capabilities and experiences of disabled people<br>-*Describe* and *compare* the disabled experience with their own experience | Understanding accessibility and disability as essential aspects of inclusivity is critical, but the concept of diversity should be approached from other perspectives to present a coherent conception. Otherwise, design approaches may remain at a specialized level, particularly focusing on the disabled experience rather than creating environments that are inclusive and accessible for all**.** |
| **Skills** | -*Trace* and *replicate* the physical experience of diverse users<br>-*Perform* sensory experience on the built environment and *reflect* critically | Simulating first-hand bodily experiences allow students to understand how designed built environments include or exclude. Besides the physical problems confronted, they also understand the social and psychological effects of accessibility, broadening the idea of 'participating in the daily life to the greatest extent possible. |
| **Attitudes** | -*Develop* awareness of their capabilities and empathy toward diverse groups<br>-*Acknowledge* the role of the built environment on accessible and inclusive experiences | It is important to understand accessible environments as a fundamental human right. Architects can emphasize this issue in earlier design stages in a professional environment rather than adjusting the existing work to address some problems. |

#### 4.2.2.2 Case 2: DTB 301 & DTB 401- Design Studio

The second-year design studio for architecture and interior design students at the Queensland University of Technology, Australia, mainly questions the use of fake personas in the design studio based on stereotypical notions of others, building codes, and anthropometric data (Rieger & Rolfe, 2021). Accordingly, the studio employs authentic learning and engagement methods to understand the human-environment relationship to design inclusive environments, in this particular case designing a bathroom for a disabled person. Throughout the semester, students engage in several

activities. Firstly, they are assigned various people with different disabilities and created questionnaires to analyze and understand those clients' experiences. Then, together with them, students developed design briefs according to the needs and expectations of real-life users. The authentic learning process of students is further supported by the group and individual sensory activities in which they simulate the sensory experiences of different disabled people. For students to develop their learning experience, they are required to reflect on the studio process and experiences in their journals. The studio ended with students presenting their proposals to clients with disabilities, providing a shared platform to transfer knowledge on the experiential dimension of inclusive design. This case is particularly compelling in arguing that architectural education is distanced from real-life users. By introducing several engagement tools like simulation exercises and ethnographic studies at different stages of the design process, students comprehend how experiences direct and shape design approaches more inclusively.

Table 4.4 Learning outcomes of DTB301 & DTB401 Studios

| **Case 2** | **Learning Outcomes** | **Relation to Conceptual Framework of Inclusivity** |
|---|---|---|
| **Knowledge** | -*Investigate* the preconceived ideas of disability and ability<br>-*Identify* sensory effects of the built environment on inclusive experiences<br>-*Understand* how real-life experiences of diverse users influence developing design strategies | Observing and understanding the relationship between human behavior and the environment is important to trace how diverse populations' inclusion or exclusion is socially constructed. |
| **Skills** | -*Conduct* in-depth interview questionnaires to understand real-life users' diverse experiences<br>-*Trace* and *replicate* the physical experience of diverse users | Involvement of students in creating questionnaires for diverse users allows them to learn how to utilize user needs, create effective research questions and use appropriate terminology of inclusivity, a skill that is important in a professional environment. So, rather than top-down design strategies, they consider varying degrees of diversities and abilities. |
| **Attitudes** | -*Develop* awareness of the importance of real-life experiences of users in inclusive design approaches | Understanding the experiential dimensions of inclusivity is crucial for students; however, the authentic learning experience should not be limited to only disabled user groups. It can be improved to include other population groups like children and the elderly. |

#### 4.2.2.3 Case 3: Behavioural Research Design Studio

The third- and fourth-year design studios at Pune University are based on integrating behavioral research into the design process and emphasize environment-behavior studies to design more inclusive environments (Natu, 2020). The studio consists of three different projects focusing on particular groups and their needs. In the first project, students focused on disabled people's experience of open spaces. The primary method was simulating disabled experiences to understand sensory dimensions of the built environment defining the experiential reality of inclusion/exclusion. In the second project, students studied several elderly homes, observed user behaviors concerning the spatial organization, and tried to understand the psychosocial dimension of exclusion these people experiences. The final project dwelled on designing an orphanage. Students observed and recorded children's engagement with the spatial organization of existing orphanages, how they personalize spaces and play, and used this knowledge to design a children's village. The common aspect of the projects is that students aimed to understand the broader psychosocial experiences of different user groups and sensitively developed architectural programs based on the vision of providing stimulating, accessible, and inclusive built environments. Using a research-oriented teaching paradigm in relation to several empathic engagement models, the series of studio works presents the effort to integrate inclusive design into undergraduate studios.

Table 4.5 Learning outcomes of Behavioural Research Design Studio

| **Case 3** | **Learning Outcomes** | **Relation to Conceptual Framework of Inclusivity** |
|---|---|---|
| **Knowledge** | -*Understand* diversity concerning needs and experiences of different age groups<br>-*Define* and *describe the* psychosocial dimension of user experience | Understanding the psychosocial experience of diverse age groups are important for inclusive design philosophy. How they respond to or behave in certain contexts presents the factors of exclusion and possible points to address while developing design ideas. |
| **Skills** | -*Conduct* in-depth interviews and questionnaires to understand real-life users' diverse experiences<br>-*Develop* architectural programs according to the needs of real-life users | An in-depth understanding of user experiences shows the inadequacy of providing architectural spaces based on only square meters. Instead, architectural program development is integral to inclusivity's spatial and experiential dimensions. It is highly beneficial for students to develop a vision of inclusion based on real-life users' certain values, behaviors, and attitudes. |
| **Attitudes** | -*Develop* awareness of the importance of real-life experiences of users in inclusive design approaches<br>-*Build* empathy with different age groups by identifying social and spatial factors leading to their exclusion | Through getting in contact with different user groups, students learn to develop an empathetic understanding of the social issues and concerns, which is vital to integrate concepts of equity and diversity into design practices as values defining more inclusive architectural programs. |

### 4.2.3 Co-design Methods of Engagement

Although empathic design strategies are beneficial to understanding diverse populations' experiences, their form of engagement is limited to mainly the development of design briefs/ programs and developing values necessary for inclusive design philosophy. Co-design method appears as the second model of engagement, aiming to increase interaction and collaboration of designers and users during the design process for more inclusive results. Proceeding through practice directly, the design process is carried out within the user experience framework

considering real-life needs and expectations and guided by user feedback within a participatory environment (Cifter et al., 2021). Creating a social connection between different stakeholders and their environments, the co-design method could be utilized by students to address questions of social justice, equity, and inclusion. Also, the involvement of the diverse user in the several stages of design shows how envisioned approaches and abstract visions of inclusivity are experienced in reality by different users. Accordingly, it is possible to trace the integration of the co-design method in architectural education at various stages: Exploration and design brief preparation together with a more inclusive vision; proposal development and co-creation; and evaluation by and with representatives.

#### 4.2.3.1 Case 4: Social Responsibility Practices (MFA 300)

Social Responsibility Practices (MFA 300) is an interdisciplinary elective course in the Faculty of Architecture at Mimar Sinan Fine Arts University (MSFAU), involving the departments of Architecture, City and Regional Planning, Industrial Design, and Interior Architecture. As part of "Sustaining inclusive design collaborations through co-design platforms (SIDe programme)" carried out in collaboration with the School of Design and Creative Arts of Loughborough University (UK), the course aims to increase students' awareness of social issues and provide them with a vision on volunteering and social responsibility (Cifter et al., 2021). Some of the topics addressed within the scope of the course about inclusive design philosophy include: "Disability and accessibility," "Social, economic and gender equality," "Needs of the elderly," and "Environmental Sustainability. A group of students from various departments develops a voluntary project in collaboration with partnering NGOs within the scope of the course. Through user involvement in the process, students identify the real needs and expectations of certain disabled groups, address them through a design project, and develop empathy and awareness. Participation of NGOs and co-design methods are utilized in all stages of design: **i) Explore** (Developing a design brief) **ii) Create** (Designing possible solutions

identified in the 'explore' stage) **iii) Evaluate** (Examining how well the concepts meet the needs of disabled groups within an inclusive design framework). The course is significant as it introduces co-design as the primary engagement method to understand users' actual needs and expectations and integrates inclusive design as an approach to interpret and address social issues and challenges.

Table 4.6 Learning outcomes of Social Responsibility Practices (MFA 300)

| **Case 4** | **Learning Outcomes** | **Relation to Conceptual Framework of Inclusivity** |
|---|---|---|
| **Knowledge** | -*Understand* social responsibility with its ethical, social, economic, and environmental effects.<br>-*Understand* and *discuss* inclusivity, disability, accessibility, and aging concepts. | For students, it is highly important to understand social responsibilities and how design can foster social innovation and inclusion. However, the profiles discussed and worked with are limited to disabled groups. It is vital to enrich these profiles for students to understand social responsibility in the bigger conceptual framework of equity and social justice. |
| **Skills** | -*Collaborate* with peers in an interdisciplinary environment on several scales and stages of design<br>-*Co-design* with NGOs for diverse user groups<br>-*Represent* design ideas in an understandable way for different user groups and *develop* communication skills | Co-designing with NGOs allows the development of multidimensional and multiscalar thinking on design issues. Also, maintaining an understandable level of communication with different user groups is an important skill for students to acquire. Getting their feedback shows how envisioned approaches of inclusivity are experienced in reality by different users. |
| **Attitudes** | -*Gain* social awareness and *acknowledge* the social responsibilities of designers<br>-*Appreciat*e the importance of volunteering for social issues | Codesigning with a representative partner as a social responsibility enhances students' conception of their profession and their ethical position in improving the experiences of diverse groups. |




Figure 4.7 Conceptual framework Social Responsibility Practices Course (Cifter et al., 2021, p.68)

#### 4.2.3.2 Case 5: The Activist Architecture and Design Studio (AAD)

The Activist Architecture and Design Studio is an elective graduate studio at Lawrence Technological University. Being critical of the controlled classroom environment distancing students, the studio aims to make architecture students engage in project discovery and community engagement through co-design practices, which can help students to develop empathy and compassion (Orlowski, 2021). The studio focuses on studying the challenges of areas where institutionalized neglect and economic disadvantage prevail within the advocacy model of design. Advocacy means defending and supporting with empathy. The studio work starts with the 'Picture Problem' exercise in which students identify the problems a community is facing in a specific area and define all constituencies affected by these problems. Then in the phase 'Picture Potential, ' students collaborate with a community partner by entering into a written agreement and developing the project's

scope, program, and objectives together. The dialogue between students and other stakeholders is a key component of the studio, and students record this process. Then, they are required to develop communication techniques to engage with the community at a democratic level. To achieve this, they present their design work in narrative storytelling, including the categories of *Situation*, *Solution*, *Design Team*, *Users*, *Realization*, and *Impact*. The fundamental methodology of the course in terms of inclusive design philosophy is to allow students to engage with the community directly, internalize their challenges and empathize with them to develop best-suited solutions for more equal, just, and inclusive environments.

Table 4.7 Learning outcomes of Activist Architecture and Design Studio

| **Case 5** | **Learning Outcomes** | **Relation to Conceptual Framework of Inclusivity** |
|---|---|---|
| **Knowledge** | -*Define* and *discuss* advocacy, empathy, and related concepts concerning inclusivity<br>-*Identify* social, economic, and environmental problems of communities<br>-*Understand* inequality, discrimination, migration, segregation, and their spatial effect on inclusive experiences. | Advocacy-based studies directly lead the student to think about critical issues of inclusivity like equity, social justice, and well-being. Understanding inequalities in specific contexts allows them to conceptualize an inclusive design approach to protect fundamental human rights and provide equal opportunities for disadvantaged groups. |
| **Skills** | -*Collaborate* with a community partner on design development for improving neighborhood conditions<br>-*Develop* communication skills and mediums to utilize real-life users' experiences in the design process. | Communicating with non-architects and utilizing their knowledge, needs, and expectations are critical architectural skills that increase engagement. |
| **Attitudes** | -*Build* empathy and *aspire* to engage with the community<br>-*Integrate the* concept of advocacy into professional and ethical positions to address inequalities in societies | Internalizing advocacy and empathy is an important learning outcome for students because rather than distancing themselves, they look at the existing situation from the lenses of specific groups and scrutinize how the social construction of inclusion and exclusion occurs in everyday life. |

#### 4.2.3.3 Case 6: The Mobility, Mood, and Place

The Mobility, Mood, and Place is an undergraduate architectural design studio in the Edinburgh School of Architecture and Landscape Architecture. The studio is an effort to design a research-led pedagogic studio model in which sociocultural, economic, political, and environmental issues are critically approached at different layers, with the methodological attempt to negotiate between academic studio project, research project, and live participation (Scott, 2017). The studio's scope is presented as expanding the city and aging population relationship from general physical mobility and removing barriers to include features making a place attractive and enabling socially and emotionally through studying a real-life project. Methodologically, the academic studio process is supported by ethnographic and co-design strategies to increase engagement. The studio started with creating an 'Age-friendly Lens' through research sessions that aimed to direct the engagements in the following stages. The concept of inclusion and age-friendliness is discussed in relation to various parameters. Then, based on this framework, students utilize place-specific forms of engagement, including walking tours, interviews with older people, film, and photography, and co-design to understand the needs and expectations of different and sometimes competing stakeholders. The process uncovered issues and perceptions related to home and outdoor environments. Students developed a manifesto and an inclusive program at urban and architectural levels in the following phase. Midway through the design process, another co-design review session with older people is conducted. They gave feedback on the program of activities, placement on the site, and relationship with the existing urban environment. The studio's high level of engagement and research-oriented approach resulted in more inclusively designed proposals and allowed students to equip with tools, strategies, and values essential to form a holistic and inclusive design approach that they can continue in their professional practices.

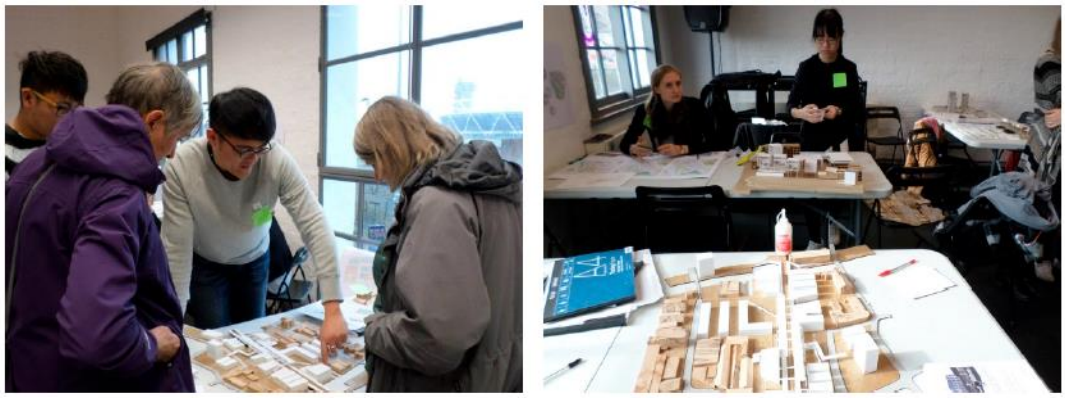


Figure 4.8 Elderly people involving in codesign sessions
(Scott, 2017, p.14)

Table 4.8 Learning outcomes of The Mobility, Mood and Place Studio

| Case 6 | Learning Outcomes | Relation to Conceptual Framework of Inclusivity |
|---|---|---|
| **Knowledge** | -*Define* and *discuss* health, well-being, participation, mobility concerning age-friendliness and inclusion | Discussing diversity stemming from different age groups within the framework of health, well-being, and participation allows to expand the psychosocial dimension of experiences. The capabilities of different age groups are not only physical and related to accessibility but involve cognitive and psychological aspects too. |
| **Skills** | -*Represent* design ideas in an understandable way for different user groups and *develop* communication skills<br>-*Perform* place-specific forms of engagement such as ethnographic walking tours, co-designing, conducting questionnaires<br>-*Develop* architectural programs according to the needs and experiences of real-life users | Combining place-specific ethnographic methods and co-design methods enhances the level of engagement with a particular user group, expanding the role of participation. By doing so, at every design stage, students reflect on inclusivity based on real-life experiences and feedback from those involved in the process. |
| **Attitudes** | - *Have* an appreciation for place-specific forces from the perspective of a particular user group<br>-*Develop* awareness of the importance of real-life experiences of users in inclusive design approaches | Students understand the importance of research-based approaches to design and how engagement with specific user groups during different phases results in more sensitive, inclusive, and accessible environments. |

### 4.2.4 Engagement through Community Projects

Co-design methods incorporate the concept of social responsibility into the design process in architectural education. However, the distinction between the designer and the user mostly remains during the collaboration or engagement process. A final model of engagement to integrate inclusive design philosophy into the profession aims to dissolve this traditional distancing of architects as creators and introduce them as agents of social change for the betterment of society through community-based projects. This method enables students to engage with the community to the greatest extent possible as the most active method. The conceptual approach of community projects is based on *'spatial agency'* relating to equity, social justice, and well-being directly. As Awan et al. describe, the spatial agency is the act of engaging transformatively with the current cycle of architectural production to create social change through the empowerment of others, opening up new freedoms and potentials of social space by allowing community members to engage in their spatial environments in new and alternative ways (Awan et al., 2011). This approach ruptures the traditional architectural education pedagogies by involving other stakeholders in the process. "Spatial agency shows how negotiation, tenacity, imagination, participative spatial encounters, and one's own understanding as a morally responsible actor, might together lead to a different and more ethical understanding of spatial practice" (Awan et al., 2011, p. 150). Students are equipped with several tools allowing them to engage with socio-spatial issues. They negotiate between different stakeholders, bringing different parties together and finding more inclusive solutions and approaches to the built environment as mediators between top-down authorities and bottom-up community initiations.

#### 4.2.4.1 Case 7: Civic Fabrication: Socially Responsible Design

Civic Fabrication is a final-year undergraduate design studio in the Edinburgh School of Architecture and Landscape Architecture seeking to involve students in an

intense socio-political context of an unpredictable live-project experience in which they meet with competing stakeholders and issues shaping the built environment (MacLaren, 2016). The studio name refers to two aims of the course: Students undertake two forms of "fabrication" one is making (involving in a construction process with the community), and the other is making things up (developing an inclusive vision for the area). "Civic" implies the main objective of the studio, that is, designing inclusive and inviting spaces with participation that fosters engagement in community interaction, health, and happiness. The studio experience starts with introducing students to the local environment and community members. Then, they develop a project according to problems and challenges they identified, but instead of sterile academic platforms, their works are reviewed by community members themselves. One primary outcome of this tension between the idealistic representation of ideas in architectural education and community evaluation is that students develop skills to navigate between different stakeholders and present their ideas to non-architects. The build phase of the studio allows them to engage in the actual construction of a playground together with community members and observe the empowering qualities of spatial agency.



Figure 4.9 Students taking part in playground design for community children (MacLaren, 2016, p.31)

Table 4.9 Learning outcomes of Civic Fabrication Studio

| Case 7 | Learning Outcomes | Relation to Conceptual Framework of Inclusivity |
|---|---|---|
| **Knowledge** | -*Interpret* engagement in community interaction for an inclusive built environment<br>-*Identify* the needs and expectations of diverse user groups | Rather than passively observing communities' problems, students are directly involved in the complex urban life and understand how community members really experience social issues. |
| **Skills** | -*Communicate* with community members and *demonstrate* project vision<br>-*Develop* skills to navigate and negotiate between different needs and wishes of different stakeholders | Engaging in unpredictable experiences of live projects allows students to comprehend other factors shaping the built environment and spatial dimension of inclusivity, such as ownership, politics, and economics. |
| **Attitudes** | -*Acknowledge* the role of architects in society<br>-*Understand* the importance of engagement with the community for a more sustainable design process<br>-*Develop* empathy and understanding of contradictions and complexities of urban environments experiencing inequalities | . Students understand the value of communicating with locals to develop inclusive design approaches by experiencing the tension between the architectural language and everyday non-architectural language. They observe and critically evaluate how ideas on paper are represented and conceived by the members of society, which is extremely important for professional development enmeshed with inclusive philosophies. |

#### 4.2.4.2 Case 8: Project Office

Project Office is a design and research collaboration of academic staff and students at Leeds Beckett University using architecture as a means of social change by involving students in non-profit community projects as part of their curriculum (Stott & Warren, 2021). As an extension of educational initiation, the Office provides concept proposals for charities and associations of marginalized communities facing inequalities, mainly produced within the co-design environment of students. As

defined by its founders, the primary difference of Project Office is to benefit from the pedagogical values of live projects: Students are taken out of their controlled studio environment and relocated to a 'real world,' engaging with real users. One of the examples from the many works of Project Office is New Worthley Community Centre. To improve social cohesion and inclusion in the neighborhood, the design of an extension to the existing community center is led by students and Project Office. Parallel with the curricular structure of the university, the conceptual design process is led by students through a cross-school design competition. Using competition as a tool of engagement with real-life problem in an interdisciplinary environment was effective on developing students' skills and attitudes on inclusivity more. After deciding on the winning proposal, a team of students comes together and develops the project through co-design sessions. Students engage with community members during the design and construction phases, control, and contribute to the construction process. Students from various departments are involved in different stages, from architectural design and landscaping to furniture production. As a result, a cohesive and inclusive community strategy and built environment approach are developed by the collective of residents, academic staff, and students.



Figure 4.10 Co-designing the community center project (left) and students involving in the construction field (right)
(The story of New Worthley Community Centre, 2017, pp.11 (left), pp.32 (right) Retrieved from http://cagd.co.uk/projectoffice/pages.php?p=1124612 )

Table 4.10 Learning outcomes of Project Office initiative

| Case 8 | Learning Outcomes | Relation to Conceptual Framework of Inclusivity |
|---|---|---|
| **Knowledge** | -*Identify* and *reflect* on the challenges & inequalities experienced in urban environments | Comprehending the forces behind existing inequalities is crucial to implementing conceptual knowledge of inclusivity in a particular context. Especially, the philosophical ground of equity and social justice presents a universal, abstract picture. Contextualize these concepts through questions such as 'Equity for who?' 'Equity of what?' allows to concretize inclusive design approaches. |
| **Skills** | -*Communicate* with community members and *demonstrate* project vision<br>-Collaborate with peers in the interdisciplinary environment for more inclusive design ideas | Live projects provide a situated learning environment where students learn spatial strategies adopted to create more inclusion, transferring conceptual knowledge and awareness on the issue of inclusivity to practice. |
| **Attitudes** | -Learn how to act as agents of social change and its impact on society<br>-*Understand* the importance of engagement with the community and its transformative capacity | Engaging in a live project and witnessing its empowering qualities, especially for environments facing inequalities, students adjust their mindset on the profession and internalize the role of being an agent of social change. |

#### 4.2.4.3 Case 9: Dotte Agency

Formed in 2014, Dotte Agency is an architectural studio collaboration of three professors within the School of Architecture at the University of Kansas, working to provide multi-disciplinary design services for local initiatives and stakeholders to address existing health disparities in culturally diverse neighborhoods (Criss & Kleinmann, 2016; Criss & Gore, 2021). The organization is based on the dialogue between students, residents, and community organizations, supported by participatory approaches and a collaborative environment. Engagements occur on three levels: Firstly, health outcomes are identified and framed together with community partners. Then, to advocate community interest and act as a mediator

between community initiatives and decision-making authorities, stories of residents are collected, shared, and visually represented by students. Lastly, with various methods like feedback and prototyping, the community improvement process is fostered for a more inclusive, equitable, and healthier vision of the city. At the intersection of architectural education and community practices, incorporating spatial agency as a framework can improve the existing conditions of cities to address health disparities. Dotte Agency utilizes creative forms of community participation to achieve this, including pop-up panels and map carts, Mobile Collaboratory, and student-led fabrications tested together with community members.

Table 4.11 Learning outcomes of Dotte Agency initiative

| **Case 9** | **Learning Outcomes** | **Relation to Conceptual Framework of Inclusivity** |
|---|---|---|
| **Knowledge** | -*Identify* and *reflect* on the importance of healthy environments, existing health disparities, and inequalities in neighborhoods<br>-*Understand* health and well-being as a fundamental human right and an important aspect of the built environment for inclusion | Expanding the agenda of social issues to include public health and physical and social well-being as integral parts of equal and inclusive environments is important as they are directly related to people's experiences and how the design of cities socially constructs these. |
| **Skills** | -*Communicate* with community members<br>-*Negotiate* between top-down authorities and bottom-up organizations<br>-*Design* and *manage* creative tools of participation for community engagement<br>-*Document* and *represent* different ideas, perspectives, and realities of urban environments | Achieving inclusivity is a complex and multifaceted task on an urban scale due to the multitudes of stakeholders. Thus, a key approach for inclusion is learning and designing participatory approaches that can foster the creation of a common ground of negotiation for those involved in spatial production. |
| **Attitudes** | -*Learn* how to act as agents of social change and its impact on society<br>-*Acknowledge* the importance of engagement with community initiations for the inclusion and well-being of society | Students internalize the importance of participation and engagement for inclusion. Also, they appreciate their role as mediators between stakeholders as social agents by observing the empowering power of spatial agency. |




Figure 4.11 Participatory methods for community engagement, map carts (left), fabrication tests (right)
(Criss & Kleinmann, 2016, pp. 232-233)

### 4.2.5 Evaluation of Engagement Models and Discussion

Sample study examinations reveal many common points between various courses' learning outcomes and methodological approaches with varying degrees of engagement. It is highly critical to understand different engagement models and their role in contextualizing inclusivity and its experiential dimension in architectural education. Following the individual examinations of different courses, it is possible to list some common learning outcomes specific to an engagement model as well as the ones shared by all models. These outcomes are listed in the table below. Parallel to these, discussing potentials and challenges in each model is beneficial. Empathic models of engagement contribute to students' development of necessary knowledge and attitudes related to inclusivity and its conceptual framework. Directly involved in bodily engagement with the environment enhances students' conceptualization of the socially constructed experiential dimension of inclusivity, which is the primary benefit of empathic models. It is vital for students to understand thinking beyond standards and idealized user-profiles and searching for solutions that can stimulate the experiences of diverse groups. Methodologically, simulating experiences and observing other users' experiences through ethnographic research techniques are seen to be practical and easy to integrate into the course structure. However,

educational philosophies of courses should foster an expanded conceptual understanding of inclusivity beyond physical accessibility and disability.

Table 4.12 Common learning outcomes of three engagement models

| | **Learning Outcomes** | |
|---|---|---|
| **Empathic Models of Engagement** | **Knowledge** | -*Understand* and *discuss* concepts of inclusivity, disability,diversity and accessibility<br>-*Identify* physiological capabilities and psychosocial experiences of diverse users, and sensory effects of the built environment on inclusive experiences<br>-*Understand* how real-life experiences of diverse users influence developing design strategies |
| | **Skills** | -*Trace* and *replicate* the physical experience of diverse users, and *reflect* critically<br>-*Conduct* in-depth interview and questionnaires to understand real-life users' diverse experiences<br>-*Develop* architectural programs according to the needs of real-life users |
| | **Attitudes** | -*Develop* awareness of their capabilities and empathy toward diverse groups by identifying social and spatial factors leading to their exclusion<br>-*Acknowledge* the role of the built environment on accessible and inclusive experiences, and understand the importance of real-life experiences in evaluating these |
| **Codesign Methods of Engagement** | **Knowledge** | -*Understand* and *discuss* inclusivity, disability, accessibility, well-being, empathy, social responsibility, and advocacy concepts in relation to participation<br>-*Understand* inequality, discrimination, migration, segregation, and their spatial effect on inclusive experiences of diverse user groups. |
| | **Skills** | -*Collaborate* with a community partner, together with peers in an interdisciplinary environment on several scales and stages of design<br>-*Represent* design ideas in an understandable way for different user groups and *develop* communication skills<br>-*Perform* place-specific forms of engagement such as ethnographic walking tours, co-designing, conducting questionnaires |
| | **Attitudes** | -*Build* empathy and *aspire* to engage with the community, and to volunteer for social issues<br>-*Develop* awareness of the importance of real-life experiences of users in inclusive design approaches<br>-*Build* empathy and *aspire* to engage with users, and to volunteer for social issues |
| **Engagement through Community Projects** | **Knowledge** | -*Identify* and *reflect* on the challenges & inequalities experienced by communities in urban environments<br>-*Identify* the needs and expectations of diverse user groups, and *reflect on* the importance of accessible, just, healthy, and inclusive environments |
| | **Skills** | -*Communicate* with community members and *demonstrate* project vision<br>-*Develop* skills to navigate and negotiate between different needs and wishes of different stakeholders<br>-*Design* and *manage* creative tools of participation for community engagement |
| | **Attitudes** | -Learn how to act as agents of social change and its impact on society<br>-*Understand* the importance of engagement with the community for a more sustainable design process<br>-*Develop* empathy and understanding of contradictions and complexities of urban environments experiencing inequalities |

The main conceptual contribution of the codesign method is removing the distance between designers and users and allowing students to understand real-life users' problems and expectations to design more inclusively. Accordingly, they can observe the experiential responses of a wide range of people to their programmatic developments and spatial proposals. Also, engaging with real-life users allows students to gain awareness of their responsibilities as social agents. Methodologically, students learn the necessary skills and methods to conduct place-specific forms of engagement and participation. Also, they learn how to communicate with non-architects and search for novel ways to represent ideas understandably. At this point, a possible drawback regarding the codesign method might be the limited integration into the design process. Codesigning activity should be utilized in all stages of exploring issues and ideas, developing design strategies, and evaluating proposals. Also, it is necessary for instructors to plan and regulate the activities and inform about the process where needed. Similar potentials and challenges can be mentioned for community project methods. The participatory approach of codesigning still continues in community projects. However, real-life experiences are dealt with at a more complex level: Instead of individuals' experiences and challenges, students understand and identify more complex problems and inequalities that communities face. The primary benefit of community projects is that students are freed from the controlled studio environment and deal with real-life project processes with various stakeholders, which allows them to understand how their conceptual knowledge of inclusivity is reflected in practice. Moreover, witnessing the impact of design on communities, they become more aware of their role as social agents. Methodologically, they also learn how to negotiate between many conflicting actors. Although community projects provide many opportunities for engagement at various levels, integrating this method into course structure is observed to be the hardest among all models described. The effort needed to maintain the projects is more than regular courses, mainly long-term. So, students who participate in a particular stage might not be involved in the following stages.

The methods discussed in this chapter disclose engagement at various levels to transfer conceptual knowledge on inclusivity to understand its experiential dimension. Although discussed separately, they can be utilized together in different course structures, and their application might show varieties compared to the ones examined in sample cases. However, all examples illustrate the importance of incorporating inclusivity in architectural education. When students understand the conceptual framework of inclusive design philosophy and its experiential dimension, they can utilize it in their future studies and projects as professionals, which will eventually lead to more inclusive engagements. In this respect, it is possible to determine some essential and beneficial points for teaching inclusivity in general based on the evaluated sample studies and the expanded conceptual understanding presented in the thesis. These points relate to curriculum development, course structure, scope, methods utilized in courses, and designation of learning objectives and outcomes. The following points also correspond to the main issues, challenges, and opportunities voiced in inclusive design education literature.

Although the courses are fundamental sources for teaching inclusive design philosophy, for the fullest comprehension of the conceptual and practical dimension of inclusivity, it is observed to be effective to consider the overall curriculum development as suggested in examples. Notions grounding inclusivity like accessibility, equity, diversity, and participation can be approached from different perspectives, so it is important to connect various curriculum courses to foster a general understanding of these notions. The courses referring to similar concepts while focusing on different spatial practices and scales could be beneficial for a more holistic sense of inclusivity with various dimensions, leading to more long-lasting effects on learning outcomes. Besides the connection between different courses, introducing more interactive and engaging extracurricular or co-curricular activities like workshops and learning modules also supports students' development of necessary knowledge, skills, and attitudes by repeating the notions learned throughout the classes. Considering the intense program of studios and the limited time, such experiential learning activities could enhance the learning process. A

similar argument can be stated for lecture-based courses too. While such classes are significant for students to gain necessary conceptual knowledge on inclusive design philosophy, as also seen in the mapping of contextualizations in the educational milieu, they remain less effective in developing practical knowledge and skills for students, especially at the undergraduate level. With the help of engaging in extracurricular activities in these theoretical courses, students may learn how to utilize their vocabulary and knowledge of inclusive design in practical cases and develop communication skills. Moreover, the engagement models described and critically evaluated in this chapter could be adopted in such extracurricular activities to enhance learning the experiential dimension of inclusivity. Besides such extracurricular activities, architectural competitions can be highlighted as another engagement tool for students bridging the theoretical and practical knowledge on inclusivity. As seen in the Project Office example, competitions are unique platforms for design-related disciplines, being the first time for students to engage with the community, identify the needs, and try to come up with inclusive solutions through working collaboratively.

A parallel point to enhancing the curriculum structure for more effective inclusivity learning is traced as the multidisciplinary learning environments. The inclusive design philosophy is a multidimensional understanding as seen from its emergence and plurality of approaches. Considering that it is a socially constructed experiential reality, interactions leading to inclusion can be discussed from different social, cultural, political, behavioral, spatial, and legal perspectives. Thus, inclusivity deserves more interdisciplinary teaching and studio environments. Collaborations of students from architecture, city planning, urban design, landscape design, sociology, laws, occupational health, and many other departments lead to the multidimensional discussion of issues regarding inclusivity. This understanding was observed to be a rising trend mostly in graduate studies, but as seen in the example course of ‘Social Responsibility Practices’ at Mimar Sinan Fine Arts University, interdisciplinary understanding could be adopted at the undergraduate level and further supported by collaboration with other community partners. By doing so, at early levels, students

develop an awareness of the many complexities of spatial practices and how it is affected by the actions and decisions of diverse professions. Through these interdisciplinary approaches, students also comprehend the significance of cooperating and engaging with others in the design process and its socio-spatial implications on experiences.

When course scope and structures are considered, the examined sample studies and mapped courses in the world show important points regarding the teaching of inclusivity. This design philosophy is primarily discussed at the undergraduate level concerning human abilities and experiences, with a large body of courses being lecture-based theoretical courses. The issues for this tendency could be illustrated in two main points. Firstly, inclusivity is fundamentally a design philosophy with a strong conceptual framework. Since studios are essential environments for critical and conceptual thinking and developing novel ideas, schools and instructors need to search for methods to integrate inclusivity into design courses at the undergraduate level. While separate theoretical courses are very important to present the conceptual framework of inclusivity to students, once they utilize this knowledge in their practices, they can also develop the necessary skills and attitudes for more inclusive design. Besides, limiting the scope of undergraduate learning with human abilities might lead to an insufficient understanding of space and its impact on defining experiences. If integrated studio courses focusing on different spatial study areas are presented to students in their studio structure, their multidimensional thinking and designing abilities for diverse scales and conditions of inclusivity can expand significantly. A crucial factor in this respect is to detract students from controlled lecture and studio environments directed by idealized approaches to different users and themes of inclusivity. Suppose they are introduced to more engaging and challenging learning environments where they can observe social constructions of inclusion and exclusion by a complex network of actors. In that case, they can appreciate the role of architects/ designers as social agents and adopt inclusive design philosophy in their future practices.

In summary, the points illustrated above are considered beneficial for teaching inclusivity, with particular emphasis on its socially constructed experiential dimension and conceptual framework. The analytical survey of courses presented in this chapter aimed to reveal that inclusivity is not a predetermined absolute reality, which can be approached with prescribed design methods. As expanded conceptual framework and recent shifts in the literature suggest, it is an experiential reality that could be better understood by more engagements within diverse and interrelated social, cultural, and political frames. So the points referred to for teaching inclusivity above are not the only solutions but some essential dimensions revealed within the scope of the thesis. These dimensions, engagement models, course structures, objectives, and outcomes can be studied in other studies within different research frames to develop further strategies for teaching inclusive design philosophy. The reason for evaluating the courses based on learning objectives and their relation to the conceptual ground of inclusivity was also to illustrate how different teaching methods and environments influence the measurable and observable qualities that students gain in the form of knowledge, skills, and attitudes. These outcomes are presented as some essential points needed for students to understand and utilize inclusive design philosophy more efficiently. They can be guiding, especially for instructors, while forming new course structures and objectives and adopting novel engagement models to teach inclusivity.

# CHAPTER 5

# CONCLUSION

The rapid growth of cities and population increase have combined with the mobility of people, which resulted in complex sociocultural life patterns with people from diverse backgrounds. This sociocultural diversity is accompanied by the expanding social, behavioral, and physical needs of diverse user groups. While inclusivity has been an essential concept for many fields in today's contemporary structure, all these factors also illustrate the need for developing more inclusive approaches in spatial practices. Especially in the last twenty years, we have observed that inclusive design philosophy is brought forward through a pluralistic discursive field in spatial studies. Although we trace a significant evolvement of the inclusivity notion and its spatial implications since its emergence in the 50s and 60s, the conceptual unclarity regarding the foundations of inclusivity has persisted, which causes challenges regarding the theoretical and practical knowledge production on more inclusive approaches and their use in practice. It is possible to discuss two significant factors for this unclarity. Firstly, the paradoxical situation of inclusivity between the universal ideal of reaching solutions inclusive for all and the impossibility of considering all diversities resulted in many different conceptual approaches focusing on concepts like equity, human rights, accessibility, diversity, and participation from different perspectives. The conceptual ambiguity regarding inclusive design philosophy is also reflected in knowledge production both in theory and practice. Especially, designers' limited conceptual understanding of inclusivity is observed to be leading to an incomprehensive adoption of the notion or approaching it as a secondary design issue. In light of this, the thesis fundamentally aimed to clarify the notion of inclusivity and construct an expanded conceptual framework for its application both in education and practice. Accordingly, the literature mapping on the spatial dimension of inclusivity presented that there has been a shift in

approaches in the last twenty years from a more deterministic and pragmatic definition of inclusivity based on physical accessibility standards, disabilities, and removing barriers to a more experiential and user-oriented definition.

Based on the shift towards experiences, the notion of inclusivity is reevaluated as a socially constructed reality to resolve conceptual unclarities. Consequently, inclusivity is not considered an absolute, predetermined reality but a constructed reality by social interactions of people with others and the environments. Space actively influences the social relations and experiences of people. Based on this, fundamental notions grounding inclusivity could be interpreted in a broader framework. Equity is primarily a question of not providing the same for all but equal opportunities for all to participate in social and physical environments to the greatest extent possible. The principle of equal opportunity necessitates a broader understanding of accessibility and diversity, which refers to considering diversities and searching for accessible and non-discriminating solutions. In light of this, accessibility implies more than the physical dimensions. Access to activities, discussions, and information is essential for all individuals to be included and to ensure their participation. Concerning this, diversity relates to individual and social differences and resulting complex patterns of interactions leading to a multidimensional constructed reality of inclusivity. Within its conceptual framework, a celebration of diversities by enabling equal participation of users in the deliberation processes of spatial practices emerges as a central position. Thus, to enhance the adoption of inclusivity, the practices should focus on these notions and search for more accessible and engaging design.

A social constructionist perspective presented in the thesis was beneficial to evaluating concepts grounding inclusivity and unfolding the conceptual ambiguities internal to the notion. Besides these issues, another drawback in utilizing inclusive design philosophy has been discussed as the lack of adequate theoretical and practical knowledge on implementation. This thesis states that the educational milieu is the primary environment influencing the adoption of inclusivity in design practices as it is the first time students develop their knowledge, skills, and attitudes

concerning the notion. Therefore, the study intended to answer the question of how the experiential realities of inclusivity can be studied and taught in architectural education by mainly presenting the contextualization of the notion in the architectural educational milieu with fundamental conceptual grounds of equity, and human rights, accessibility, diversity, and participation. In light of this, initially, a group of selected courses and programs worldwide are researched and mapped to unfold common and differentiating points in teaching. While the spatial focus of courses, their context, and structure vary at graduate and undergraduate levels, it is seen that some of the themes and parameters are shared, which also corresponds to the experiential dimension of inclusivity. Parallel to increasing discussions on experiences and engagements in the literature, concepts like user experience, health and well-being, openness, porosity, spatial agency, engagement, empathy, and social justice are mentioned primarily in these courses. This also resonates with the multidimensional nature of inclusivity and plurality of approaches, as inclusivity is studied in various spatial scales and focus areas. Understanding the recurring themes, parameters, and methodologies utilized in the courses is essential to show potential and address possible challenges in existing approaches.

Besides the shared conceptual approaches, mapping the contextualization of inclusivity in architectural education also highlights some disconnections and temporalities in approaches concerning the course level and context. Based on these, the study presented some possible points to enhance implications in teaching inclusivity, both in the course and curriculum levels, regarding their context and the content. Since inclusivity is essentially a socially constructed and experienced reality, transferring the theoretical and conceptual knowledge on inclusion into studio practices through more engaging methods is observed to be highly beneficial. These include being immersed in others' experiences directly, cooperating with real-life users in an interdisciplinary environment, or engaging with the multifaceted urban issues of communities in a real-life project. However, as pointed out throughout the thesis, sample study examinations on different engagement methods for teaching the experiential realities of inclusivity do not imply specific ways of

teaching inclusivity but highlight the importance of understanding this dimension for a more structured and comprehensive adoption of inclusive design philosophy. Although such approaches are discussed in many studies, this thesis opens up a new and holistic discussion on the importance of engagement for teaching inclusivity, especially focusing on the student's learning outcomes in an analytical way to understand how students can develop necessary knowledge, skills, and attitudes regarding the notion. Considering learning outcomes is highly important for inclusive design philosophy since it is firstly a value-driven, philosophical approach that necessitates forming an awareness and motivation. Secondly, it is required to understand and critically discuss related concepts in different contexts and benefit from design and communication skills to transfer this highly intellectual process to spatial practices. The findings of the examinations could be supportive for instructors in developing courses and programs to teach inclusivity, especially by benefitting from different engagement models and their effects on students' development. In this respect, teaching inclusivity systematically through learning outcomes, as proposed in the thesis, is not only limited to architectural education but also relates to other disciplines. Also, besides higher education, the importance of inclusivity, social responsibility, and related concepts can be integrated into other educational levels in a similar manner to primary and secondary education, as it is crucial to develop such awareness as early as possible. In the thesis, courses and programs directly formed around inclusivity and related concepts are selected as the domain of study to unfold different contextualizations worldwide. However, the findings of sample study examinations on teaching the experiential dimension of inclusivity more effectively could be interpreted in other related design discussions in a similar way like sustainability issues and inclusive cities.

In conclusion, for architects understanding the complex conceptual framework of inclusivity and adopt in their future works is highly critical considering the growing challenges of urban environments today. If a more comprehensive understanding of inclusion can be provided to students in the educational milieu while they are also equipped with skills to engage in community and gain awareness of the social role

of architects as agents of change, they can strive for more inclusive environments and methods of engagement for equitable, accessible and participatory futures.

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# APPENDIX

## A. Table of Mapped Literature Studies between 2000-2022

| Study No | Year | Author/s | Name | Central Themes and Concepts |
|---|---|---|---|---|
| 1 | 1991 | Mace, R.L. Hardie, G.J. & Place, J. P | Accessible Environments: Toward Universal Design | disability<br>accessibility, standards, legislation<br>universal design |
| 2 | 1999 | Hall, P. Imrie, R. | Architectural Practices and Disabling Design in the Built Environment | disability<br>accessibility, standards, legislation |
| 3 | 2000 | Imrie, R. | Responding to the Design Needs of Disabled People | disability |
| 4 | 2001 | Peace, S.M. Holland, C. | Inclusive Housing in an Ageing Society- Innovative Approaches | accessibility, standards, legislation<br>aging population |
| 5 | 2001 | Imrie, R. Hall,P. | Inclusive Design: Designing and Developing Accessible Environments | disability<br>accessibility, standards, legislation |
| 6 | 2001 | Preiser, W.F.E, Smith, K. H. | Universal Design Handbook | universal design |
| 7 | 2002 | Christophersen, J. | Universal Design, 17 Ways of Thinking and Teaching | universal design<br>design pedagogy &education |
| 8 | 2002 | Morrow, R. | Building and Sustaining a Learning Environment for Inclusive Design: A Framework for Teaching Inclusive Design within Built Environment Courses in the UK. | design pedagogy &education |
| 9 | 2003 | Greed, C. | Inclusive Urban Design: Public Toilets | accessibility, standards, legislation<br>disability |
| 10 | 2003 | Clarkson, J., Coleman, R., Keates, S., Lebbon, C. | Inclusive Design: Design for the Whole Population | accessibility, standards, legislation<br>aging population |
| 11 | 2003 | Keates, S. Clarkson, J. | Countering Design Exclusion<br>An Introduction to Inclusive Design | accessibility, standards, legislation<br>aging population<br>user knowledge/experience |
| 12 | 2003 | Iwarsson, S., Stahl, A. | Accessibility, Usability and Universal Design— Positioning and Definition of Concepts Describing Person-Environment Relationships | accessibility, standards, legislation<br>universal design |
| 13 | 2004 | Swain, J., French, S., Barnes, C., Thomas, C. | Disabling Barriers- Enabling Environments | disability<br>accessibility, standards, legislation<br>aging population |
| 14 | 2004 | Sawyer, A. Bright, K. | The Access Manual: Designing, Auditing and Managing Inclusive Built Environments | accessibility, standards, legislation |

| Study No | Year | Author/s | Name | Central Themes and Concepts |
|---|---|---|---|---|
| 15 | 2004 | Wright, E. | Designing for an Ageing Population: An Inclusive Design Methodology | ageing population<br>design pedagogy &education |
| 16 | 2004 | Keates, S.<br>Clarkson, P. J.<br>Langdon, P.<br>Robinson P. | Designing a More Inclusive World | accessibility, standards, legislation<br>user knowledge/experience<br>disability |
| 17 | 2005 | Akkar, Z. M | Questioning 'Inclusivity' of Public Spaces in Post-industrial Cities: The Case of Haymarket Bus Station, Newcastle upon Tyne | accessibility, standards, legislation<br>social justice, equity, well being |
| 18 | 2006 | Burton, E.<br>Mitchell, L. | Inclusive Urban Design: Streets for Life | accessibility, standards, legislation<br>aging population<br>social justice, equity, well being |
| 19 | 2007 | Coleman, R.,<br>Clarkson, J.,<br>Dong, H.,<br>Cassim, J. | Design for Inclusivity: A Practicle Guide to Accessible, Innovative and User-centered Design | accessibility, standards, legislation<br>user knowledge/experience |
| 20 | 2008 | Vandenberg, M. | An Inclusive Environment | accessibility, standards, legislation |
| 21 | 2008 | Heylighen, A. | Sustainable and Inclusive Design:A Matter of Knowledge? | design pedagogy &education<br>social justice, equity, well being |
| 22 | 2009 | Vavik, T | Inclusive Buildings, Products & Services-Challenges in Universal Design | universal design<br>accessibility, standards, legislation |
| 23 | 2009 | Peel, D., Posas, P.J. | Promoting Disability Equality and Inclusive Learning in Planning Education | disability, design education, participation<br>design pedagogy &education |
| 24 | 2009 | Gossett,A.,<br>Mirza, M.,<br>Kathleen Barnds, A.,<br>Feidt, D. | Beyond Access: A Case Study on the Intersection between Accessibility, Sustainability, and Universal Design | universal design<br>disability<br>accessibility, standards, legislation |
| 25 | 2009 | Olguntürk, N.,<br>& Demirkan, H. | Ergonomics and Universal Design in Interior Architecture Education | universal design<br>design pedagogy &education |
| 26 | 2009 | Dong, H. | Strategies for Teaching Inclusive Design | design pedagogy &education |
| 27 | 2010 | Langdon, P.,<br>Clarkson, P. J.,<br>Robinson, P. | Designing Inclusive Interactions | user knowledge/experience<br>disability<br>accessibility, standards, legislation |
| 28 | 2010 | Bernardi, N.,<br>Kowaltowski, D.C.C.K | When Role Playing is Not Enough: Improved Universal Design Education | design pedagogy &education<br>user knowledge/experience |
| 29 | 2011 | Afacan, Y.<br>Afacan, S. O. | Rethinking Social Inclusivity: Design Strategies for Cities | universal design<br>social justice, equity, well being |
| 30 | 2011 | Preiser, W.F.E,<br>Smith, K. H. | Universal Design Handbook | universal design |
| 31 | 2011 | Erkılıç, M. | Conceptual Challenges Between Universal Design and Disability in Relation to the Body, Impairment, and the Environment | universal design<br>disability |

| Study No | Year | Author/s | Name | Central Themes and Concepts |
|---|---|---|---|---|
| 32 | 2011 | Afacan, Y. | Teaching Universal Design: An Empirical Research in Interior Architecture | universal design<br>design pedagogy &education |
| 33 | 2012 | Steinfeld, E.<br>Maisel, J. L. | Universal Design: Creating Inclusive Environments | universal design<br>participation/engagement |
| 34 | 2012 | Heylighen, A.<br>Bianchin M. | How Does Inclusive Design Relate to Good Design? Designing as a Deliberative Enterprise | user knowledge/experience<br>participation/engagement |
| 35 | 2012 | Ozten Atay, M. | Integration of Inclusive Design Approach into the Architectural Design Studio: On the Spot Inquiry | user knowledge/experience<br>design pedagogy &education |
| 36 | 2012 | Erkılıç, M. | Inclusive Schools and Urban Space Diversity: Universal Design Strategies in Use | universal design<br>social justice, equity, well being |
| 37 | 2012 | Sanford, J. A. | Universal Design as a Rehabilitation Strategy: Design for the Ages | universal design,<br>disability<br>aging population, |
| 38 | 2012 | Imrie R. | Universalism, Universal Design and Equitable Access to the Built Environment | disability<br>accessibility, standards, legislation |
| 39 | 2012 | Langdon, P.,<br>Clarkson, J.<br>Robinson, P.,<br>Lazar, J.,<br>Heylighen, A. | Designing Inclusive Systems | user knowledge/experience<br>disability<br>accessibility, standards, legislation |
| 40 | 2012 | Helvacioglu, E.,<br>Karamanoglu, N.N. | Awareness of the Concept of Universal Design in Design Education | universal design<br>design pedagogy &education |
| 41 | 2013 | Afacan, Y. | Elderly-friendly Inclusive Urban Environments: Learning from Ankara | accessibility, standards, legislation<br>aging population |
| 42 | 2013 | Carr, K., Weir, P.L., Azar, D., Azar, N.R. | Universal Design: A Step toward Successful Aging | aging population<br>universal design |
| 43 | 2013 | Heylighen, A., Van Doren, C., & Vermeersch, P. | Enriching our Understanding of Architecture through Disability Experience | user knowledge/experience<br>disability<br>accessibility, standards, legislation |
| 44 | 2013 | Altay, B.,<br>Demirkan, H. | Inclusive Design: Developing Students' Knowledge and Attitude through Empathic Modelling | participation/engagement<br>user knowledge/experience<br>design pedagogy &education |
| 45 | 2013 | Watchorn, V., Larkin, H., Ang, S., & Hitch, D | Strategies and Effectiveness of Teaching Universal Design in a Cross-faculty Setting | universal design<br>design pedagogy &education<br>user knowledge/experience |
| 46 | 2014 | Heylighen, A. | About the Nature of Design in Universal Design | disability<br>universal design |

| Study No | Year | Author/s | Name | Central Themes and Concepts |
|---|---|---|---|---|
| 47 | 2014 | Persson, H., Ahman, H., Yngling, A.A. & Gulliksen, J. | Universal Design, Inclusive Design, Accessible Design, Design for All: Different Concepts—One Goal? On the Concept of Accessibility— Historical, Methodological and Philosophical Aspects | universal design<br>accessibility, standards, legislation |
| 48 | 2014 | Langdon, P.M., Lazar, J., Heylighen, A., Dong, H. | Inclusive Designing - Joining Usability, Accessibility, and Inclusion | user knowledge/experience<br>participation/engagement<br>accessibility, standards, legislation |
| 49 | 2014 | Winance, M. | Universal Design and the Challenge of Diversity: Reflections on the Principles of UD, Based on Empirical Research of People's Mobility | universal design<br>disability<br>user knowledge/experience |
| 50 | 2014 | Wauters, H., Vermeersch, P. & Heylighen, A. | Reality Check: Notions of Accessibility in Today's Architectural Design Practice | disability<br>accessibility, standards, legislation |
| 51 | 2014 | Valerie, W., Larkin, H., Hitch, D., Ang, S. | Promoting Participation through the Universal Design of Built Environments: Making it Happen | universal design<br>disability<br>participation/engagement |
| 52 | 2014 | Jones, P. | Situating Universal Design Architecture: Designing with Whom? | universal design<br>participation/engagement |
| 53 | 2014 | Imrie, R. & Luck, R. | Designing Inclusive Environments: Rehabilitating the Body and the Relevance of Universal Design | universal design<br>disability |
| 54 | 2015 | Akkar Ercan, M. Memlük, N.O. | More Inclusive than Before?: The Tale of a Historic Urban Park in Ankara, Turkey | accessibility, standards, legislation<br>social justice, equity, well being |
| 55 | 2015 | Sungur Ergenoglu, A. | Universal Design Teaching in Architectural Education | universal design<br>design pedagogy &education |
| 56 | 2016 | Van der Linden, V. Dong, H. & Heylighen, A. | From Accessibility to Experience: Opportunities for Inclusive Design in Architectural Practice | user knowledge/experience<br>accessibility, standards, legislation |
| 57 | 2016 | Hitch, D., Dell, K. & Larkin, H. | Does Universal Design Education Impact on the Attitudes of Architecture Students towards People with Disability? | universal design<br>disability<br>design pedagogy &education |
| 58 | 2016 | Heylighen, A., Schijlen, J., Van der Linden, V., Meulenijzer, D. & Vermeersch, P.W. | Socially Innovating Architectural Design Practice by Mobilising DisabilityExperience. An Exploratory Study | disability<br>accessibility, standards, legislation<br>user knowledge/experience |
| 59 | 2016 | Altay, B., Ballice, G., Bengisu, E., Alkan-Korkmaz, S. Paykoç E. | Embracing Student Experience in Inclusive Design Education through Learner Centred Instruction | participation/engagement<br>user knowledge/experience<br>design pedagogy &education |
| 60 | 2016 | Langdon, P., Lazar, J., Heylighen, A. Dong, H. | Designing Around People | aging population<br>user knowledge/experience |

| Study No | Year | Author/s | Name | Central Themes and Concepts |
|---|---|---|---|---|
| 61 | 2016 | MacLaren, A. | Civic Fabrication: Social Responsibility in the Architectural Studio | participation/engagement<br>social justice, equity, well being<br>design pedagogy &education |
| 62 | 2016 | Criss, S., Kleinmann, M. | Dotte Agency: A Participatory Design Model for Community Health | participation/engagement<br>social justice, equity, well being |
| 63 | 2016 | Sungur Ergenoğlu, A., Bayraktaroglu, B. | Integrating Inclusive Design Awareness into Architectural Education | accessibility, standards, legislation<br>design pedagogy &education |
| 64 | 2016 | Tauke, B., Basnak, M., Weidemann, S. | Universal Design in U.S Architectural Education: Successes and Challenges | universal design<br>design pedagogy &education |
| 65 | 2017 | Heylighen, A., Van der Linden, V. & Van Steenwinkel, I. | Ten Questions Concerning Inclusive Design of the Built Environment | user knowledge/experience<br>design pedagogy &education |
| 66 | 2017 | Wu, K.C., Song, L.Y. | A Case for Inclusive Design: Analyzing the Needs of Those who Frequent Taiwan's Urban Parks | accessibility, standards, legislation<br>aging population |
| 67 | 2017 | Maisel, J. L. et al | Inclusive Design: Implementation and Evaluation | disability<br>accessibility, standards, legislation |
| 68 | 2017 | Bianchin, M. Heylighen, A. | Fair by Design. Addressing the Paradox of Inclusive Design Approaches | social justice, equity, well being<br>universal design |
| 69 | 2017 | Hamraie, A. | Building Access: Universal Design and the Politics of Disability | universal design<br>disability<br>accessibility, standards, legislation |
| 70 | 2017 | Altay, B. | Multisensory Inclusive Design Education: A 3D Experience | user knowledge/experience<br>design pedagogy &education |
| 71 | 2017 | Scott, I. | Mobility, Mood and Place—Co-Designing Age-Friendly Cities: A Report on Collaborations between Older People and Students of Architecture | participation/engagement<br>user knowledge/experience<br>design pedagogy &education<br>aging population |
| 72 | 2018 | Luck, R. | Inclusive Design and Making in Practice: Bringing Bodily Experience into Closer Contact with Making | user knowledge/experience<br>participation/engagement<br>disability |
| 73 | 2018 | Langdon, P., Lazar, J., Heylighen, A., Dong, H. | Breaking Down Barriers - Usability, Accessibility and Inclusive Design | accessibility, standards, legislation<br>user knowledge/experience |
| 74 | 2018 | Heylighen, A. Bianchin, M. | Building Justice: How to Overcome the Inclusive Design Paradox? | social justice, equity, well being<br>participation/engagement |

| Study No | Year | Author/s | Name | Central Themes and Concepts |
|---|---|---|---|---|
| 75 | 2018 | Bianchin, M. Heylighen, A. | Just Design | universal design<br>social justice, equity, well being<br>participation/engagement |
| 76 | 2018 | Kerry Mulligan, Allyson Calder, Hilda Mulligan | Inclusive Design in Architectural Practice: Experiential Learning of Disability in Architectural Education | disability<br>design pedagogy &education<br>user knowledge/experience |
| 77 | 2018 | Scott, I., Mclachlan, F. & Brookfield K. | Inclusive Design and Pedagogy: An Outline of Three Innovations | design pedagogy &education<br>user knowledge/experience<br>participation/engagement |
| 78 | 2019 | Zhang, X. Warner, M.E. & Firestone, S. | Overcoming Barriers to Livability for All Ages: Inclusivity Is the Key | aging population<br>social justice, equity, well being<br>participation/engagement |
| 79 | 2019 | Lim, Y., Giacomin, J., Yin,Y.& Nickpour, F. | A First-time Investigation of psychosocial Inclusivity in Design: Inclusive Supermarket Design for Older Individuals | user knowledge/experience<br>participation/engagement |
| 80 | 2019 | Mcclung, K. T. | Diversity and Equity Issues in Design: Course Creation as Impetus for Compassionate and Inclusive Design | design pedagogy &education<br>social justice, equity, well being |
| 81 | 2019 | Iacofano, D., Malhotra, M. | Streets Reconsidered: Inclusive Design for the Public Realm | accessibility, standards, legislation<br>social justice, equity, well being |
| 82 | 2019 | Krishnamurthy, S. | Reclaiming Spaces: Child Inclusive Urban Design | social justice, equity, well being<br>participation/engagement |
| 83 | 2019 | Watchorn, V., Hitch, D., Grant, C., Tucker, R., Aedy, K., Ang, S., & Frawley, P. | An Integrated Literature Review of the Current Discourse around Universal Design in the Built Environment – is Occupation the Missing Link? | universal design<br>disability<br>participation/engagement |
| 84 | 2020 | Shuayb, I. | Inclusive University Built Environments | accessibility, standards, legislation<br>disability |
| 85 | 2020 | Jian, I.Y., Luo, J., Chan, E.H.W. | Spatial Justice in Public Open Space Planning: Accessibility and inclusivity | social justice, equity, well being<br>accessibility, standards, legislation |
| 86 | 2020 | Rajendran, L.P., Boyko, C.T., Coulton, C.J., Hale, J. D., Cooper, R.F.D. | A Socio-Spatial Approach to Enable Inclusive Well-Being in Cities: A Case Study of Birmingham, UK | social justice, equity, well being |
| 87 | 2020 | Lim, Y., Giacomin, J.& Nickpour, F. | What Is Psychosocially Inclusive Design? A Definition with Constructs | participation/engagement<br>user knowledge/experience |

| Study No | Year | Author/s | Name | Central Themes and Concepts |
|---|---|---|---|---|
| 88 | 2020 | Rinaldi, A., Angelini, L., Khaled, O. A., Mugellini, E., Caon, M. | Codesign of Public Spaces for Intercultural Communication, Diversity and Inclusion | social justice, equity, well being<br>participation/engagement |
| 89 | 2020 | Natu, A. | Integrating Behavioral Research in Undergraduate Design Studio in Architecture for Designing Inclusive Environments | user knowledge/experience<br>design pedagogy &education |
| 90 | 2020 | Serena, K.L., Hauderowicz, D. | Age-Inclusive Public Space | social justice, equity, well being<br>aging population |
| 91 | 2020 | Langdon, P., Lazar, J., Heylighen, A. Dong, H. | Designing for Inclusion | ageing population<br>user knowledge/experience |
| 92 | 2020 | Pineo, H. | Towards Healthy Urbanism: Inclusive, Equitable and Sustainable (THRIVES) – An Urban Design and Planning Framework from Theory to Praxis | social justice, equity, well being<br>participation/engagement |
| 93 | 2021 | Ferdous, F. Bell, B. | All-Inclusive Engagement in Architecture: Towards the Future of Social Change | social justice, equity, well being<br>participation/engagement<br>design pedagogy &education |
| 94 | 2021 | Manahasa, O., Özsoy, A. & Manahasa, E. | Evaluative, Inclusive, Participatory: Developing a New Language with Children for School Building Design | participation/engagement<br>user knowledge/experience |
| 95 | 2021 | Rieger, J., Rolfe, A. | Breaking Barriers: Educating Design Students about Inclusive Design through an Authentic Learning Framework | participation/engagement<br>user knowledge/experience<br>design pedagogy &education |
| 96 | 2021 | Jian, I.Y., Chan, E.H.W., Xu, Y. & Owasu, E. K. | Inclusive Public Open Space for All: Spatial Justice with Health Considerations | social justice, equity, well being |
| 97 | 2021 | Zallio, M., Clarkson, J. | Inclusion, Diversity, Equity and Accessibility in the Built Environment: A Study of Architectural Design Practice | participation/engagement<br>user knowledge/experience |
| 98 | 2021 | Cifter, A. S., Dong, H., Cook, S. Olgun, I. | Inclusive Design + Social Innovation: A Methodology and Case Studies | participation/engagement<br>user knowledge/experience<br>design pedagogy &education |
| 99 | 2022 | Zallio, M., Clarkson, J. | The Inclusion, Diversity, Equity and Accessibility Audit: A Post-occupancy Evaluation Method to Help Design the Buildings of Tomorrow | participation/engagement<br>user knowledge/experience |

Note: Gray colored studies are books and edited books