

Accessibility and Inclusion of Students with Disabilities in University Campus Spaces

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Abstract

Accessibility is one of the priorities of inclusive public spaces for all members of a community, with reference to the numerous man-and-environment studies since the 1960s. Enhancing accessibility of campus spaces is also a prerequisite for equalization of opportunities among all students in higher education institutions. Equal participation to the various fields of campus life as well as city life is essential for students with disabilities (SWDs) as a basic human right. SWDs generally do not benefit from educational facilities in an equal manner due to the drawback of the campus spaces regarding accessibility. This study addresses the concepts of accessibility and inclusiveness in focusing on the creation of inclusive campus spatial environment which is seen as a bounded public spatial environment. Accessibility and Inclusiveness are the concepts which are based on the complex and comprehensive relationship between person and environment with reference to both physical and social design aspects. From this manner, Universal Design and Inclusive Design can be given as an important architectural design philosophies that respond to the essential aspects of the design. This study aims to dwell on these architectural concepts to scrutinize guidelines of a holistic accessibility planning of campus spatial environment and thereby to create a real inclusive and democratic campus spaces for all, involving SWDs.

Keywords: accessibility, inclusion, campus spaces, higher education

1. Introduction

Accessibility is an important theme for the inclusion of people with disabilities in public life. Since the spatial environment is generally designed according to common needs of the majority of the population with no disabilities, it is full of physical obstacles that affect significantly life choices and desires of people with disabilities, and in turn, their physical and social inclusion in public life. Education is also among the central issues in architecture aimed at catering for a more democratic campus life. Higher education can lead easily to an increase in individual capabilities and level of self-sufficiency, which in turn promotes and explicit increase in quality of life (Burgstahler & Moore, 2009: 155). This is also valid and even more important to advance the quality of life of individuals with disabilities. Achievement on the accessibility of educational environments can promote the quality of the community life as well as full participation in educational services and facilities. Since universities are seen as pioneering institutions in a city in their contribution to social, cultural, economic, political and technological development of a country, they should take a foremost character within society in supporting and taking measures to ensure equal opportunities for all, including students with disabilities (SWDs). However, an inconsistency still exists in the approach of planning an inclusive campus design (Dinç Uyaroğlu, 2015).

This study addresses that accessibility becomes an issue with both physical and social aspects in the person-environment relationship, with reference to the valuable architectural philosophies Universal Design (UD) and Inclusive Design (ID). Though this relationship is focus on a more deterministic understanding, accessibility is a prerequisite tool towards the construction of an inclusive society. Based on this idea, this study *firstly* brings into a discussion the issue of the right to education, and social and physical access to educational services, thus enhancing equal opportunities in campus community life. A lack of insight and collaborative effort among the stakeholders in an institution can have a negative effect on the success of design and construction for accessibility efforts. A major issue here is the failure to adopt a right-based approach that appreciates the importance of an inclusive design approach and a holistic accessibility planning that addresses the full and equitable participation of SWDs in all educational activities. This study, *secondly*, argues that a unified and comprehensive accessibility planning approach should be developed without being based only on a literal application of design standards.

2. Accessibility and Inclusiveness in Public Life

Public spaces, as commonly-used places that allow dialog between members of a community, have a crucial role in producing and retaining a participatory social life (Lynch, 1965; Francis, 1989; Gehl, 1987; Mehta, 2014). The concept of accessibility, has developed in architectural and city planning studies since the 1970s. Studies have

been dedicated to the growth of concepts oriented towards accessibility in order to design *real* “public”¹ spaces (i.e. Lynch, 1981; Lozano, 1990; Carr *et al.*, 1992; Gehl, 1987). For instance, Lynch dealt with “access” as a basic element in his normative theory “*Good City Form*”, while highlighting its crucial effect on the creation of an *open, democratic and non-discriminative* society for all (Lynch, 1981). For Jacobs and Appleyard (1987), it is a prerequisite among the goals of the urban design manifesto, aimed at altering the urban setting into a more human-based form.

Accessibility is significant in providing *fit* between an individual and the spatial environment based on physical and social aspects. First of all, it ensures every citizen can physically access environmental facilities that are vital for individual survival (Lynch, 1981; Jacobs & Appleyard, 1987: 116). Its realization, especially for people with impairments, depends mostly on the success of technical design standards, although accessibility is not exclusively a technical design concern. Social dimensions also need to be embodied while comprehending multifaceted meaning of accessibility for public space quality (Lynch, 1981; Farrington & Farrington, 2005). In this sense, access refers to not only one’s free access to the vital necessities in the spatial environment, but also an essential means of experiencing real *participation* and *inclusion* in social life. That is to say that direct, active and independent involvement in a public space is possible when physical access is realized holistically.

There is a strong associative link between the physical and social dimensions of access: a person *presence* can secure *direct physical* and *visual involvement* in a space, which results in the *connectedness* of the person to the behavioral form of that space (Lynch, 1981; Francis, 1989). Experiencing connectedness within a spatial environment is a pointer of the competent environmental support for the *inclusion* of individuals in social life that is particular to that space.

The concept “openness of public spaces” best incorporates all meanings of access, referring to a good public environment that is open to all members of the community of different kinds, without threatening the balance of public life by exclusion (Lynch, 1965; Jacobs & Appleyard, 1987; Carr *et al.*, 1992). Designing the physical environment on a more human scale with accommodations accessible to the entire community would reflect an open built environment for all. Accordingly, an architect should consider the dimensions of the spatial environment together with the ability people to access and become involved in public opportunities. The degree to which one may participate in a range of activities offered in a public spatial environment may determine its level of inclusiveness (Mehta, 2014: 58).

To achieve inclusiveness for the entire community, the variety of individual needs should be valued in the manner of a pluralistic community (Imrie, 2004). The population has diverse and dynamic needs, and these change throughout the lifespan of an individual as a result of a broad range of reasons, such as age and impairment. Lozano describes that responding to the diverse wishes and choices of the individual in a spatial environment would achieve an effective community design² that guarantees a degree of equality among community members (Lozano, 1990: 132-133).

1.1 *Suitability in Man-Environment Relationship*

The fit between the needs of person and their experienced physical environment has been one of the main concerns in person-environment studies since the 1960s. In the 1960s, person-environment studies focused predominantly on social issues, when the value of “community design” was seen as a crucial concern among design professionals in response to the poorly designed environments (Jacobs & Appleyard, 1987: 114). However, at the beginning of the 1980s, a shift of focus occurred from social engagement to formalism, which resulted in a lack of knowledge and indifference among architects and urban planners about local needs and the spatial requirements of the individuals (Jacobs & Appleyard, 1987: 114). In the 21st century, attempts were made by researchers and important research communities, particularly the International Association for People-Environment Studies (IAPS) and Environmental Design Research Association (EDRA), to answer such questions as “Where do person-environment studies stand today, and what for the future?” and “What are the strengths and weaknesses of current literature in terms of theoretical and methodological issues within people-environment relationships?” The issue of the *Journal of Environmental Psychology* entitled “*Environmental psychology on the move*” laid these questions out on the table, to be taken up by Uzzel and Moser (2009: 308), who highlighted that recent studies tended to address issues of “quality of life” and “sustainable development” by looking at the multifaceted relationship between the people and their living spaces. Recently, studies addressing complex and social-centric contexts have emerged as a challenging starting point in the building of

¹ Francis (1989) defines the concept of “publicness” as a central issue for architectural and urban studies, relating it as one’s right to use the public environment (p. 157). Supporting his viewpoint, herein, the public can be portrayed as an umbrella term to define a community, segregating no part (individual) of its members.

² In using the term “community design” rather than “urban design”, Lozano (1990) focuses on human experiences and the organization of human communities in both larger urban areas and in small settlements, like university campuses, for a good urban- thereby community- life.

new theories and approaches for the realization of quality in community life (Uzzell & Moser, 2009: 308).

The relationship between the built environment and the spatial experiences of people with disabilities has long been of interest in both theoretical (i.e. Iwarsson & Stahl, 2003) and experimental (i.e. Dinç Uyaroğlu, 2008) works. Ensuring quality of life for all through accessibility depends on a developing a comprehensive understanding of this dual relationship, which is diverse and ever-changing in connection with the aspects of both personal and environmental contexts (Webb *et al.*, 2011: 43.1). In this regard, accessibility must be analyzed in both its personal (based on experiences) and environmental (based on spatial environment) components in a holistic manner (Iwarsson & Stahl, 2003: 57).

In short, there are two interactive but complicated factors that influence the construction of a person-environment fit: (1) personal (i.e. disability, preferences) and environmental factors (i.e. site, resources), which are ever-changing and timeless attributes that are particular to spatial usability (physical and social experience of a space); and (2) architectural design approach. In other words, the features of the person-environment relationship are in a continuous state of change according to contextual and circumstantial factors, and addressing social-centric contexts when assessing these two factors offers a challenging starting point for the development of user-centered design perspectives. Accessibility related studies, as environment-behavior concepts, should take into account the *real* spatial experiences, leading to the creation of a more human-centered culture of social life, not just for people with disabilities, but for all.

3. Architectural Design Values: Universal Design and Inclusive Design

The concern about the reciprocal relationship between people with disabilities and their environment has led to the birth and growth of accessibility-centered design philosophies, among which ‘Universal Design (UD)’ (NCSU, 1997) and ‘Inclusive Design (ID)’ (Clarkson *et al.*, 2003), are the most valued and accepted around the world, with missions based on social inclusion through accessibility. They, in general, outline the process in the creation of products and physical environments that serve for people with the widest range of abilities and operate within the widest possible range of situations. Although, the concept of “barrier-free design” has a much earlier basis (Bednar, 1977), UD and ID have gained greater acceptance among scholars of architecture and urban design since they are deep-seated and value-laden design concepts that highlight issues of “right to access” and, in turn, “inclusiveness” for *all* in community life.

Universal Design, first introduced by US Architect Ron Mace in 1985, is defined as “*the design of all products and environments to be usable by people of all ages and abilities to the greatest extent possible*” by the North Carolina State University (NCSU) (Story, 2011: 4.3, citing Connell *et al.*, 1997). UD and its seven design principles (Table 1) was penned in 1997 at NCSU (Ostroff, 2011: 1.5), and is seen as a social movement that challenges disabling values and attitudes of society, dealing with the integration of people with disabilities into society by making products, environments and communication systems usable to the greatest extent possible (Imrie, 2004: 280). Through this social movement, it denotes a process for the realization of *democracy, equity* and *citizenship* in public life (Iwarsson & Stahl, 2003: 62).

Table 1: Universal Design Principles (NCSU, 1997)

<i>Principles</i>	<i>Descriptions</i>
Principle 1: Equitable use	The design is useful and marketable to people with diverse abilities.
Principle 2: Flexibility in use	The design accommodates a wide range of individual preferences and abilities.
Principle 3: Simple and intuitive use	Use of the design is easy to understand, regardless of the user’s experience, knowledge, language skills or current concentration level.
Principle 4: Perceptible information	The design communicates necessary information effectively to the user, regardless of ambient conditions or the user’s sensory abilities.
Principle 5: Tolerance for error	The design minimizes hazards and the adverse consequences of accidental or unintended actions.
Principle 6: Low physical effort	The design can be used efficiently and comfortably and with a minimum of fatigue.
Principle 7: Size and space for approach and use	Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user’s body size, posture, or mobility.

The social emphasis of UD advances its far-reaching status in literature (Imrie, 2012: 874), with the focus of its seven principles ranging in scale from products to buildings and urban spatial settings. The reason behind the excessive use of the UD concept and its design principles in both theoretical and empirical studies may be a result of definition of the seven principles in a concrete and rule-based way, which facilitates their easy adoption into the functional attributes of the design. There have been many recent attempts to address the insufficiencies of the UD notion in its design guidelines (D’Souza, 2004; Preiser, 2011) in terms of (1) its theoretical aspect; and (2) the way the two-way relationship between disability and design is comprehended. In this respect, D’Souza states that although the word “universal” refers to a set of principles that are *stable*,

timeless and *value free*, he puts forward several instances in which the universals do change, are time bound and value laden (D'Souza, 2004: 8). For him, “*Universal design follows a critical theory paradigm in its conception and knowledge generation*” (D'Souza, 2004: 8). This frees it from a positivist paradigm. That is to say, its powerful position in the disabling of environmental barriers is the most facilitating aspect of its multi-layered development. In parallel with D'Souza's viewpoints, Imrie (2012: 874) points out that there is a need to study the development of the theoretical and conceptual content of UD and its underlying principles. For Imrie, studies tend to consider UD principles to be the best problem-solving model; however, to achieve an inclusive environment, it is essential to enhance conformity in the understanding of the spatial needs of people with disabilities by focusing on the evidence-based framework of user interactions with their environments (Imrie, 2012: 873- 874).

The environmental component is not constant, on account of the ever-changing worldwide differences and societal ambitions (Iwarsson & Stahl, 2003: 63). As a result of these alterable situations, to make each part of the built environment accessible for every member of a community in an equal and timeless manner would appear to be rather utopic. That said, the integration of spatial experiences into the design process can overcome challenges to the universalism of the UD principles, and in general to the development of the UD philosophy. Moving away from design for universal use, offering various choices in a balanced way when single design solutions are unable to respond to the diverse spatial needs of the users is a valued idea (Lynch, 1981; CABE, 2006). Inclusive Design (ID) approach looks into accessibility from this perspective. ID is based on a design process that looks for inspiration in design values on the basis of the reciprocal relational process that exists between the physical environment and the people who use it (Imrie & Hall, 2001; Clarkson *et al.*, 2003; Cassim, 2013). In both the ID and UD approaches, the designer's approach to finding balance when faced with a diversity of spatial needs during all phases of the design process is crucial in the creation of inclusivity. ID is a United Kingdom (UK)-oriented design philosophy that, like UD, has gained global respect in all fields of design around the world. The Commission for Architecture and the Built Environment (CABE) in the UK defined five principles of ID, as shown in Table 2. When comparing ID principles with those of UD, it can be seen that the ID guidelines are much broader than the more clean-cut and specific design principles associated with UD.

Table 2: Inclusive Design Principles (CABE, 2006)

Principles	Descriptions
Principle 1: Inclusive design places people at the heart of the design process.	You should ensure that you involve as many people as possible on the design.
Principle 2: Inclusive design acknowledges diversity and difference.	Good design can be achieved only if the environment created meets as many people's needs as possible.
Principle 3: Inclusive design offers choices when a single design solution cannot accommodate all users.	By applying the same high design standards to meet the access requirements of all users, a design embraces everyone on equal terms.
Principle 4: Inclusive design provides for flexibility in use.	Meeting the principles of inclusive design requires an understanding of how the building or space will be used and who will use it.
Principle 5: Inclusive design provides buildings and environments that are convenient and enjoyable to use for everyone.	Making environments easy to use for everyone means considering signage, lighting, visual contrast and materials.

Whether focus is on more normative/rule-based design than those that are broader or more specific, the two approaches represent the absolute primary sources for accessibility studies. However, when local disability experience concerns are brought to the table, legal provisions, the way architects and local authorities approach, the implementation and monitoring of legislation and design standards, and the level at which the voices of the disabled are heard concerning their needs are among the most crucial concerns influencing the accessibility of a physical environment at a nationwide level. Accordingly, the body of related literature needs to be expanded with studies that identify a powerful relational model that involves every aspect of the issue, including the designer, user and local circumstances.

4. Designing Inclusive University Campus Environment

The growth of a truly educative and collective dialogue among all campus members, including SWDs, is closely related to the accessibility of the university campus spatial environment. Having discussed the contribution of a university education to the students in its broadest sense, this section dwells upon the right to education through inclusiveness in campus life. It advocates that inclusive educational environments rely heavily on a holistic accessibility planning process.

4.1 Right to Education

Higher education is a critical life phase for all post-secondary students, including those with disabilities,

enhancing both formal and causal educative training. While the former refers to the obtaining of a higher level of professional training in preparation for the labor market, the latter is important for the development of an adult identity as a result of the increase of social interactions (Gillies & Dupuis, 2013: 199; Riddell & Weedon, 2014: 38).

Beyond its formal meaning, education should be treated as an ongoing factor of life involving a learning process that is integral with community experiences (Carr & Lynch, 1968: 1277-1278). Responding to this conception of education, Simons and Masschelein state:

“... the university can be regarded as a space and time to constitute a public by gathering people around matters of concern, and to make something a public concern for people” (2009: 204).

This collaborative community culture can result from the securing of equal opportunities for social interaction in which individuals who engage in post-secondary education can learn valuable social skills.

Putting democracy at a central position in education, Dewey studied the role of training through an interactive social environment. For Dewey, the basis of democracy is founded on the sharing of life experiences, which leads to a truly educative and collective dialogue among community members in social life (Dewey, 1916: 19, 87). He supports this belief with the claim that “*We never educate directly, but indirectly by means of the environment*” (1916: 19). From this perspective, social life is a vital condition for the efficiency of higher education. Based on this democratic notion of education, Dewey states which attributes of the physical environment should be present:

“It is the office of the school environment to balance the various elements in the social environment, and to see to it that each individual gets an opportunity to escape from the limitations of the social group in which he [sic] was born, and to come into living contact with the broader environment.” (Dewey, 1916: 20)

Dewey implies that democracy in education can be enhanced by both physically and socially open-for-all environmental setting. In this sense, a truly educative atmosphere depends on the total inclusion of all students in the spatial environment. It is the primary responsibility of higher education institutions to create such an all-encompassing formal and causal educative environment.

The achievement of full inclusion in higher education can be considered a comprehensive and multi-layered issue; therefore, a unified strategy needs to be implemented if the creation of a sustainable inclusive social environment on a university campus is to be ensured. This strategy should encompass a range of subjects, including 1) *attitudinal approaches* (e.g. understandings of all stakeholders, social relationships); 2) *educational structures* (e.g. accessibility of educative documents, instructional sources); and 3) *environmental factors* (e.g. physical accommodation, informational access). For a successful outcome, the entire system should be established simultaneously, as many studies into the design of built environments in higher education shown how environmental factors work as a catalyst in the transformation of the entire structure into one that is more inclusive.

4.2 Towards Inclusive Campus Life

The design of outdoor campus spaces is an important issue, since it should integrate three forms of outdoor activity put forward by Gehl (1987), being necessary, optional and social. Gehl suggests that a high spatial quality in the public outdoor spatial environment is contingent on the success of incorporating those three activities. His framework for assessing the functional quality and sociability of public space corresponds well with the meaning of an outdoor campus environment. Outdoor spaces are made up of a variety of elements for circulation, use and approach, such as streets, all types of paths, and green areas for sitting, socializing and sport activities. According to Gehl, activities such as walking, standing, sitting, seeing, hearing, talking, playing or other community activities, which make outdoor environments particularly attractive and meaningful to be in, are also the most sensitive to the quality of the physical environment.

On large university campuses, the outdoor environment serve as interactive communities where students can meet and get to know each other, being much more than only transition areas. This facilitates interaction among the students, especially new students, and advances a powerful communication system that then results in involvement on campus. Students somehow escape from the weightiness of education, and may consider outdoor spaces as places of excitement, either individually or collectively. This is also a critical issue for SWDs, as inclusion in such spaces can lead them to be satisfied in their educational environment if they can get involved. Accordingly, this study sees the outdoor campus spaces between buildings as a limited urban environment that is in common use for both learning and growing throughout the education process. It should serve many functions, and should provide many opportunities and services in supporting the growth of SWDs on an equal basis. In this respect, full access to common outside areas can be seen as a crucial aspect of full participation in general campus life, allowing engagement, whether individually or collectively, within the outdoor spaces.

The level of physical accessibility affects not only the level of equitable use by SWDs, but also gives students, faculty members and staff at the university an idea of what is required for a pluralistic educational and social life within a campus community (Heylighen *et al.*, 2006). All users of campus may become more conscious, responsive and engaged in the matter of diversity, and in improvements to the design of campus spaces, and the potential benefits may extend far beyond the campus community, leading to societal progress in all aspects, whether physical, intellectual or social.

4.2.1 Holistic Accessibility Planning Process

Although accessibility is seen to be limited to the physical attributes of spaces, it also exerts a strong influence on inclusion through the enhancement of participatory community life. It cannot be said that a spatial environment that is accessible to users leads automatically to social inclusion. Bringing about transformations to the lives of disabled people and restoring their dignity and independence cannot be achieved only through the implementation of user-friendly design. Imrie (2004) highlights the need for a fully comprehensive and collaborative process in the creation of an inclusive post-secondary education environment, as without the development of a social or political program for change as the primary goal, the success of the adopted inclusive design approaches will have only limited success (Imrie, 2004: 283). While architectural studies, legislation and higher education institutions all emphasize the need to provide equal access to university programs and services for SWDs, the means and processes by which institutions provide equal access to the spatial environment are not clearly delineated. In such a process, the social and political program, as well as architectural and planning decisions, should be well and comprehensively developed at the outset, since “*architecture is pre-determined by political and economic power, including laws, statutes, codes and corporate clients*” (Knesl, 1984 cited in Imrie, 2004: 283). The success of accessibility planning relies significantly on a collaborative and integrative institutional approach (Figure 1).

The selection of an accessible campus is critical to the long-term success of SWDs looking to continue higher education. The choice of a disability friendly campus “*entails a great deal more investigation and consideration than the typical checklist of college attributes and amenities that most non-disabled students consider*” (Wilson *et al.* 2000: 38 citing Navicky, 1998). This requires the assessment of the goodness of the general “campus climate” (Wilson *et al.*, 2000), an umbrella term to describe a campus atmosphere, with a good example being one that accepts fully students with diverse physical and learning abilities. To enhance an all-around livable campus climate, students are considered within the planning process and are encouraged to participate fully in a variety of campus-life activities (Wilson *et al.*, 2000: 38). In this way, the accessibility of an inclusive campus climate can be improved not only physically, but also perceptually, which links with the success of the tripartite system shown in Figure 1.

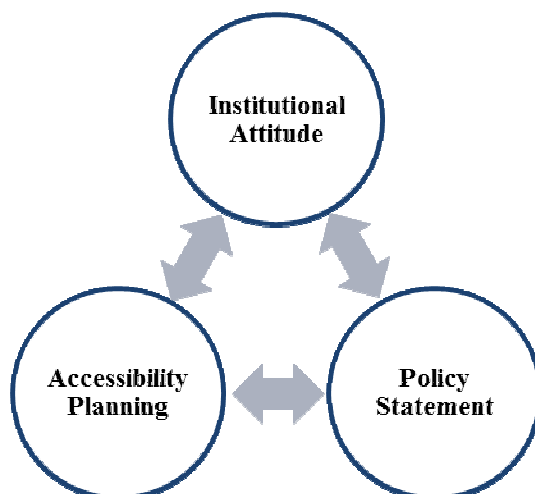


Figure 1: Collaborative and integrative institutional approach for the success of accessibility planning (Dinç Uyaroğlu, 2015)

In the light of this tripartite system, a holistic accessibility planning process is a continuing strategic development route that includes seven interlinked sub-stages:

1. *Establishing an institutional policy statement with the goal of developing an inclusive higher education environment, involving also the accessibility of the spatial environment:*

The realization of this main goal depends on the adopted disability approach. I believe that an embodied notion of disability that covers both medical and social constituents is crucial for optimum accessibility and full social recognition. This way of looking at the issue responds well to the issue of how accessibility deficits might be

identified and addressed in an ongoing way.

2. Obtaining data about the demographic situation:

This is one of the initial phases of an accessibility study in which the main concern is the identification of disability groups and their personal disability experiences in terms of their functional abilities and limitations in their engagement in activities. Access to wide-ranging demographic information about the SWD population is essential when aiming to establish a set of fundamental priorities and guidelines in response to the task requirements on the quality of services in the university.

3. Understanding the dynamics of the environment in terms of its overall usage/ Acknowledgement of the physical and social dimensions of the usage of the outdoor environment:

To create an inclusive campus environment, architects should focus on the dynamics of its community life, as well as means of technical design. This study deals with accessibility as a means of social inclusion, implying the right to education for all. True success depends on the success of these two concepts.

4. Understanding whole user spatial needs:

Regular consultations with users about their diverse spatial experiences would contribute to advances in the design and spatial renovation. Beyond complying with the technical design standards, valuing user experiences of disability can guide the design. Herein, the changing needs of users depending upon their impairments should be taken into account.

5. Conducting campus accessibility analyses to understand the existing situation and the factors that hinder or support the equitable access of users (Figure 2 and 3):

This process is a central role in a design evaluation of a physical campus environment. A comprehensive analysis of campus spaces may also contribute to identifying accessibility priorities in the field.



Figure 2: An inclusive ramp connecting different ground levels of the Alley, METU Campus, Ankara (Source: Dinç Uyaroğlu, 2015)

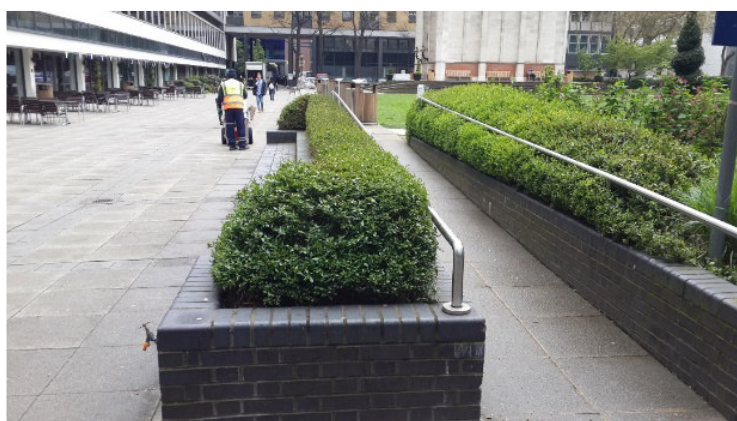


Figure 3: An aesthetic and safe ramp linked to the main route in Imperial College, London (Source: Dinç Uyaroğlu, 2015)

6. Design proposal for an inclusive campus with the participation of all stakeholders (including SWDs):

Different aspects of campus accessibility (physical and social situations) and the various perspectives of all stakeholders, especially SWDs, should be integrated into the design process.

7. Putting the plan into action step-by-step, according to the identified accessibility priorities:

There is a need to scrutinize the existing institutional process to ensure ongoing accessibility on campus. As a

part of this process, it is essential to look at methods by which accessibility deficiencies may be identified and addressed in an ongoing way.,

5. Conclusion

Accessibility is a necessary tool in the construction of social inclusion, which in turn supports the inclusion of SWDs in the full range of university campus life. It has technical and social dimensions based on the notion of full person-environment fit. In this respect, when the degree of accessibility is enough to ensure equal opportunities for SWDs, the promotion and development of democratic participation in a campus environment will be realized. Providing inclusivity for all on university campuses necessitates strategic campus planning with a holistic approach, calling for a comprehensive and systematic design. Its achievement depends on the collaborative work formed by all stakeholders in the university. In this process, it is indispensable that all of the spatial concerns of SWDs are documented in the design and evaluation stages of a plan, being fundamental to the development of inclusive campus planning. As a result of a lack of consideration to spatial needs, user feedback on the usage of the design is generally deficit, and so, very little is actually known about their spatial experiences. Communication between people with disabilities and designers can cause the emergence of reliable knowledge to inclusive design process.

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