

Quality

in Canada's Built Environment:

Roadmaps to Equity, Social Value and Sustainability

Social Sciences and Humanities Research Council of Canada (SSHRC)
Partnership Grant Project #895-2022-1003

Research Report on the Online Convention

Session #2 - November 8, 2023

Accessibility vs. Sustainability

Edited by:

Jean-Pierre Chupin (Scientific Director of the SSHRC Partnership on Quality)

Authors of the summary:

Morteza Hazbei, Postdoctoral Fellow at Université de Montréal

Maria Patricia Farfan Sopo, Postdoctoral Fellow at Université de Montréal

Session Moderators:

Bechara Helal, Université de Montréal (Academic)

Nooshin Esmaeili, University of Calgary (Student)

Kevin Ng, Rick Hansen Foundation (Citizen)

Jean-Pierre Chupin, Université de Montréal (Academic)

Canada Research Chair in
Architecture, Competitions and Mediations of Excellence



Conseil de recherches en
sciences humaines du Canada

Social Sciences and Humanities
Research Council of Canada

Canada



2023 Online Convention, Session #2 – Accessibility Vs Sustainability:

Is it inevitable to bring these two major objectives of our approach to quality into tension?

How can they work in synergy?

Wednesday, November 8, 2023 - from 12:00 to 1:30 PM

Edited by:

Jean-Pierre Chupin (Scientific Director of the SSHRC Partnership on Quality)

Authors of the summary:

María Patricia Farfán Sopo, Postdoctoral Fellow at Université de Montréal

Morteza Hazbei, Postdoctoral Fellow at Université de Montréal

Session Moderators:

Jean-Pierre Chupin (Université de Montréal).

Bechara Helal (Université de Montréal),

Nooshin Esmaeili (PhD student, University of Calgary),

Kevin Ng (Rick Hansen Foundation)

Laura McBride (Rick Hansen Foundation)

Session Coordinator:

Dimitri Weibel (Université de Montréal)

Students:

Cara Chellew (McGillU)

Tatev Yesayan (ConcordiaU)

Taly-Dawn Salyn (UCalgary)

Meg Berry (AthabascaU)

Brendan Roworth (DalhousieU)

Session agenda:

- *Introduction: 10 mins*
- *Breakout sessions: 30 mins*
- *Student's summary: 4* 5 mins*
- *Plenary: 30 mins*

Keywords:

Accessibility, Diversity, Educational Determinant, Educating Stakeholders, Empathetic Process, Environmental Determinant, Environmental Inequity, Invisible Accessibility, Planning, Social Determinant, Social Justice, Standards for Sustainability, Sustainability, Training of Future Professionals, Universal Accessibility, User Experience.

Note:

This report examines the tensions and synergies as they relate to sustainability and accessibility. It is compiled from the comments and summaries made by participants in 5 breakout rooms, and a subsequent plenary session. The methodology used was that of brainstorming, and the interpretation and conclusion are the reporter's analysis with respect to the contributions made during the session.

List of participants:

Achraf Alaoui Mdaghri (Université de Montréal)

Adrian Blackwell (Waterloo University)

Afsaneh Tafazzoli (OACC)

Alanna Thain (McGill University)

Alex Larose (Carleton University)

Alexis Beauchamp-Châtel (IUSMM)

Anne Cormier (Université de Montréal)

Bechara Helal (Université de Montréal)

Belle Gutierrez-Kellam (University of Calgary)

Brad McCannell (Rick Hansen Foundation)

Brendan Roworth (Dalhousie University)

Cara Chellew (McGill University)

Cara Shan (Athabasca University)

Carly Ziter (Concordia University)

Catherine Houbart (GRAME)

Christine Lanthier (OAQ)

Coco Wang (University of Toronto)

Daniella Samira Maamari (Lemay)

Darrell MacDonald (Nova Scotia Department of Public Works)

Dawn Clarke (City of Calgary)

Dimitri Weibel (Université de Montréal)

Douglas MacLeod (Athabasca University)

Dr. Josie Auger (Athabasca University)

Dr. Sara Alinaghi Pour (City of Calgary)

Grant Fahlgren (CLSA)

Henry Tsang (Athabasca University)

Ipek Türeli (McGill University)

Isa-Bella Leclair (PSPC)

Isabelle Cardinal (Société Logique)

Jean-Pierre Chupin (Université de Montréal)

Jeanne Leblanc-Trudeau (*Ville de Montréal*)
Joëlle Tétreault (*Université de Montréal*)
Justine Bochenek (*Toronto Metropolitan University*)
Kayleigh Hutt-Taylor (*Concordia University*)
Kees Lokman (*University of British Columbia*)
Keir Stuhlmiller (*Mount Royal University*)
Kevin Ng (*Rick Hansen Foundation*)
Kristen D'Penna (*Toronto Metropolitan University*)
Lara Pinchbeck (*University of Alberta*)
Laura McBride (*Rick Hansen Foundation*)
Leila Farah (*Toronto Metropolitan University*)
María Patricia Farfán (*Université de Montréal*)
Mariana Esponda (*Carleton University*)
Marie Duffy (*Athabasca University*)
Meg Berry (*Athabasca University*)
Mercedes Garcia Holguera (*University of Manitoba*)
Michaela Pratt Tremblay (*Laurentian University*)
Morteza Hazbei (*Concordia University*)
Negar Ferdosi (*University of Toronto*)
Nooshin Esmaeili (*University of Calgary*)
Paloma Castonguay-Rufino (*Université de Montréal*)
Paniz Mousavi Samimi (*University of Calgary*)
Panos Polyzois (*University of Manitoba*)
Patrick Marmen (*Ville de Montréal*)
Renee Kirby (*Calgary Alliance for the Common Good*)
Sandrine Thibault (*PSPC*)
Sara Jacobs (*University of British Columbia*)
Sarah Huxley (*Fondation Véro & Louis*)
Shantanu Biswas Linkon (*Université de Montréal*)
Shauna Mallory-Hill (*University of Manitoba*)
Susan Fitzgerald (*Dalhousie University*)
Susan Spiegel (*OAA*)

TalyDawn Salyn (*University of Calgary*)

Tatev Yesayan (*Concordia University*)

Tchango Cyrille (*Université de Montréal*)

Terrance Galvin (*Laurentian University*)

Tess Adebar (*University of British Columbia*)

Victor Bouguin (*Vivre en Ville*)

Victorian Thibault-Malo (*Université de Montréal*)

Table of Contents

1. Synthesis and Summary	6
1.1. Understanding the Concepts of Sustainability and Accessibility	6
1.2. The Profession and Education	7
2. Introduction	9
3. Breakout Room Discussion	10
3.1. Group 1.....	10
3.1.1. Discussion questions	10
3.1.2. Discussion.....	10
3.1.3. Jamboard key points	11
3.1.4. Student summary	11
3.2. Group 2.....	13
3.2.1. Discussion questions	13
3.2.2. Discussion.....	13
3.2.3. Jamboard key points	14
3.2.4. Student summary	14
3.3. Group 3.....	16
3.3.1. Discussion questions	16
3.3.2. Discussion.....	16
3.3.3. Jamboard key points	17
3.3.4. Student summary	17
3.4. Group 4.....	19
3.4.1. Discussion questions	19
3.4.2. Discussion.....	19
3.4.3. Jamboard key points	20
3.4.4. Student summary	20
3.5. Group 5.....	22
3.5.1. Discussion questions	22
3.5.2. Discussion.....	22
3.5.3. Jamboard key points	23
3.5.4. Student summary	23
4. Plenary of the Session #2 Accessibility vs Sustainability.....	25
5. Conclusion by Reporters.....	27

1. Synthesis and Summary

Following a survey conducted after the Calgary convention in May of 2023, the second session of the online convention focused on the importance of sustainability and accessibility, seeking to understand the tension and synergy between the two concepts. The session was approached through the interpretive paradigm - or user experience, - allowing for the development of exploratory ideas and open discussions.

The five breakout sessions examined the concepts of sustainability and accessibility, while addressing the following three questions to help identify synergies and tensions:

- In your own experience, is the training of future professionals, designers, builders, and managers, too focused on sustainability at the expense of accessibility?
- Would you say clients expect more sustainable solutions than inclusive ones?
- In what way is sustainability valued by the users, if at all?

The session highlighted the relationship between sustainability and accessibility from different perspectives. The aim was to argue that sustainability on its own, does not address the importance of accessibility and inclusion, and to study how this weakness can find common ground for improvement. The standards that bind the construction of the built environment are very limited, and are usually focused on sustainability and not on physical accessibility and/or inclusivity. If there are standards for sustainability, the question then arises as to whether there should be standards for accessibility.

The interpretation of this session focuses on two main aspects. Firstly, how to understand the concepts of sustainability and accessibility based on their meaning and the different reactions and contributions of the participants during the session. Secondly, how to observe this analysis to find the similarities and differences between sustainability and accessibility in the professional field, giving a special focus on the commitment required in education.

1.1. Understanding the Concepts of Sustainability and Accessibility

The discussion of the first aspect of the session was based on the evidence gathered through analysis of the significant dissociation between sustainability and accessibility, the quality and quantity of data incorporated in sustainability projects in terms of accessibility, and the readability of such information. It was found that although both aspects seek a common benefit, either for the environment or for the user, the differences, similarities, and connections between sustainability and accessibility must be understood.

By being clear about the concepts, the needs of both sustainability and accessibility are taken into account and do not overlap. In order for the built environment to respond to the needs of users, the discussion led to a series of observations and strategies involving improvements in all aspects of both sustainability and accessibility that must be analyzed.

- ***Observations and Challenges Understanding Sustainability and Accessibility:***

The discussions between the breakout room sessions lead to the following observations:

- For the built environment to respond to the needs of users, strategies that involve all inhabitants with their respective needs must be applied, taking into account the different solutions that can be developed from sustainability and accessibility.
- With respect to the meaning of accessibility within the present context of universal design or affordability, the session focused on “visible” and “invisible” accessibility, and how people access buildings and the environment in general. This accessibility allows users not only physical access, but also allows for overcoming barriers to social accessibility.
- When inclusivity, accessibility and sustainability are addressed together from a resilience point of view, the needs of citizens are met, resulting in an environment that works for everyone in the long term.
- The sessions revealed stakeholder views that exemplified minimal awareness and consideration of accessibility and inclusion.

The previous observations exposed the need of actions to better understand how accessibility is perceived as a social change that must be integrated with sustainability. A change is required where accessibility is viewed as a necessary cultural norm for the future. The sessions also noted the need to place more emphasis on accessibility and inclusion. Therefore, it is imperative that sustainability, accessibility, and inclusion go hand in hand, to meet minimum quality thresholds of the built environment. It is essential to do much more than just follow the basic standards set for universal accessibility.

Sustainability and accessibility are understood as an unequal partnership within a society in which the needs of people with impairments are often not taken into account. Sustainability does not address social barriers, thus, sustainability must also take into account different aspects of the disabled population, as a multidimensional element comprising not only physical impairments and limitations, but also social restrictions. With the global aging of the population and the increase in life expectancy, disability figures are expected to grow considerably in the coming years. In this respect, the sessions revealed the importance to raise awareness that at some point in life, most individuals will have experienced some form of disability.

Finally, the session focused on whether environmental actions should include other aspects beside mere sustainability, where the discussion is not about challenges for users, but rather for professionals to meet expectations and needs of the community.

1.2. The Profession and Education

The second aspect of the session, identified the importance of educating future professionals as well as the general public. Discussions highlighted ways to approach accessibility from the academic, professional and governmental world. With respect to education, it was mentioned that students play an important role in the process. It is necessary to educate users and the

community in general, otherwise people will not recognize the need for sustainability and accessibility.

The session explored how “architecture must redefine the discipline of design, a shift to design in an empathetic process, from the user's perspective”. Hence the importance of understanding that architects make things for others to use. The discipline has not yet understood how the process of exchange between architects and users works, and how each member of society should be taken into account in the design process.

It was mentioned that as professionals, it is important not only to work with clients, but to educate them. There is an ethical responsibility to engage in education when working with clients who come with a particular priority in mind. There is also a responsibility to highlight the potential benefits to both the environment and people.

Also, it is important to understand that the meaning of accessibility ultimately depends on how each person defines it. Most people only see accessibility as a physical mobility issue, and not so much from the perspective of diversity. For example, the growing problem of Indigenous homelessness shows the lack of planning and resources for indigenous housing. There is a need to promote an inclusive design process involving student-design studios that address these needs as a cultural reconciliation process.

- ***Observations and Challenges in Achieving Sustainability and Accessibility in Education:***

Following the analysis of the need to include education as part of the process of understanding accessibility and sustainability, the discussions lead to the following observations:

- Professionals must better manage their responsibilities towards the public, as their designs have a direct impact on people and their communities.
- The importance to approach design not only as a technical challenge, but also socially and culturally, with the user at the centre, as an indispensable element in the planning process.
- The concept of inclusive spaces and design for all comes into play. The main challenge is how to train future designers to develop better and safer all-inclusive and sustainable designs.

The second session of the online convention contributed to the understanding that rather than the actual tension and affinities between sustainability and accessibility, the two terms should be treated together and be included in an adequate and equitable manner within the built environment.

Finally, this session also encouraged partners to consider the use of readability indices and strategies in the different research projects and to focus more broadly in terms of highlighting the shortcomings in addressing accessibility and sustainability in parallel. It also allowed for reflection on how to better educate students and the general public in order to meet the required needs of understanding sustainability and accessibility in broader ways.

2. Introduction

The second session of the 2023 online convention analyzed sustainability and accessibility with respect to tensions and synergies, necessities and expectations, and the analysis of projects or situations that can be treated as case studies.

The sessions were organized around the following questions:

- In your own experience, is the training of future professionals, designers, builders, and managers, too focused on sustainability at the expense of accessibility?
- Would you say clients expect more sustainable solutions than inclusive ones?
- In what way is sustainability valued by the users, if at all?

The session started by allowing participants to address questions related to the intersection of sustainability and accessibility issues. The steering committee developed this session as an opportunity for reflection and debate across the 14 sites. The key goal of this session was to encourage participants to reflect on the concepts of physical and universal accessibility, how to approach inclusive design, and in the end, answer the questions from their own experience or field of expertise - not as a theoretical - but more as a pragmatic discussion. It is expected that the online conference will help confirm the questions or propose pertinent reformulations through examples or cases that illustrate some of these issues that make up today's-built environment.

The issues for discussion were: In one's own experience, how are accessibility and sustainability linked? Does one see them as complementary or contradictory?

The idea was to focus on both notions of sustainability and accessibility. Sustainability in design is a component that has been relevant in the past decades, however in the architectural field and built environment, the concept of accessibility is newer, and not as well defined. Hence, the session focused on analysing and rethinking the way of approaching both concepts from a broader perspective.

Accessibility is usually understood in a uniquely physical dimension, but the online convention considered to open up the concept of accessibility to a wider approach, including concepts such as social, cultural, educational, and financial accessibility. In this case, universal accessibility and inclusive design are approaches that must be considered during the discussions.

3. Breakout Room Discussion

3.1. Group 1

Moderator: Bechara Helal (Université de Montréal)

Student summarizer: Cara Chellew (McGillU)

Jamboard link: (accessed on December 10, 2023)

https://jamboard.google.com/d/1dCxU_35NnXY77wE4TrUetNMrnAHtc63atdcsIWbjmqU/viewer?f=2

3.1.1. Discussion questions

The breakout room focused on the following statement and three Jamboard questions: Is it inevitable that the approach to sustainability and accessibility will always be treated separately, or can they indeed work together?

- Is the training of future professionals, designers, builders, and managers, too focused on sustainability at the expense of accessibility?
- Would you say clients expect more sustainable solutions than inclusive ones?
- In what way is sustainability valued by the users, if at all?

3.1.2. Discussion

The discussion of the breakout room focused on following three aspects: The first aspect pertains to the training of the professionals (designers, builders, and managers). Are we focusing too much on sustainability and not enough on accessibility? The second aspect addresses expectations with respect to clients and society. The third aspect relates to users and how they value sustainability and accessibility and what are the metrics.

Drawing from their own experiences, participants brought forward the following comments:

- Regarding the importance of understanding the meaning of both sustainability and accessibility, participants questioned if there similar or different definitions, and what does inclusion mean for the participants.
- It was analyzed the difficulty of understanding the real meaning of accessibility in relation to what building standards are. Participants mentioned that twenty years ago, sustainability was not considered a priority but now it has become a standard and other priorities need to be addressed. In this sense, just as there are standards for sustainability, there should be concrete solutions and standards for accessibility within a broader scope of inclusion.
- Participants mentioned the importance of doing community-based work, seeing as it is not presently part of the culture of architectural design. Participants see that the current educational model is outdated. The importance of showing students how to work with end users and changing the role of the architect to facilitator instead of creator is paramount.
- It was discussed how sustainability and accessibility can co-exist. What changes need to be made in the systems and decision making to have both.
- Participants mentioned how sustainability and accessibility can lead social justice.

In your own experience:

Team 1: Bechara / Cara

A. Is the training of future professionals, designers, builders, and managers, too focused on sustainability at the expense of accessibility?

Fields linked to the production of the built environment = more complex

I don't think there is 'too much' in terms of our sustainable goals. We are still far away from reaching Net-positive designs, so we should even be more ambitious.

Question: why sustainability vs. Accessibility? Could it be accessibility vs. Structural design/building systems integration or any other aspect of building design?

Whereas Schools of Architecture all teach sustainability throughout design studios, accessible design is not given the same emphasis or PRIORITY.

sustainable wont be only look at environmental but should be look as social and economic as well.

Accessibility is usually only briefly discussed in terms of building code it is not a priority in studio projects

rethinking the design process as an empathic process

There is a general lack of the user perspective in architecture. Design as a disciplines had started to make this shift by defining the design process as an empathic process

2 weeks ago in the National Trust Conference we discussed ways to improve and add sustainability content, but we didnt address accessibility

Whereas Schools of Architecture all teach sustainability throughout design studios, accessible design is not given the same emphasis or PRIORITY.

Th Need to integrate accessibility (in a broad way) much earlier in the curriculum as a global issue

B. Would you say clients expect more sustainable solutions than inclusive ones?

I think accessibility has been left behind for a long time, whereas sustainability is everywhere now

Very clear frameworks for sustainability (LEED, etc.) that are used to specify expectations (legal approach) but not as clear of accessibility (beyond construction standards)

Clients need to be educated by design teams and consultants on both issues. Aging-in-place as an example, for housing clients. Literature is there but projects few.

Yes, clients, students and the public in general seem to be more informed about sustainability challenges, therefore these topics are more present in current conversations.

Sustainability can be linked to financial savings while accessibility is often seen as an unneeded cost

In a recent Quality compass on a project of the City of Montreal, the quality objective identify by the community was about inclusion against the project manager focus on sus

Many inclusion features are contested in the public spheres. The example of the non-gendered specific toilets are just one examples

Considering multiple filters to assess the development of the design + in the end, accountability

There is more lose than gain by not prioritizing accessibility, yet there is a common misperception that accessibility costs us "extra".

We should be asking: accessible for who, sustainable for who? Are we listening to those voices most impacted by sustainability or accessibility challenges?

Th Education of clients and general public on the importance of accessible design. Also need to consider all stakeholders and users needs.

C. In what way is sustainability valued by the users, if at all?

The discussion should not be on accessibility put on larger concept of inclusion. And social inclusion is part of the sustainability. Environmental actions should not be the only side of sustainability

Many sustainable feature relye of the users to set them into action. If the users do not understand them we will not achieved the sustainability objectives.

Sustainability is clearly valued by customers/users in terms of economic benefits (savings) and also in terms of reversing impacts on the climate/environment.

Accessible design and sustainability both lead to more just cities and places

If we view sustainability through a lens of short-term financial gain, then its value will be misinformed.

Th Sustainability has a participatory/inclusive component

Figure 1. Jamboard screenshot for the first breakout room

3.1.3. Jamboard key points

- “Whereas schools of architecture all teach sustainability throughout design studios, accessibility design is not given the same priority.” The need for a curriculum that is homogeneous in the needs of the users and the environment is necessary.
- “Considering multiple filters in assessing the development of the design + in the end, accountability.” An example of a design process in Edmonton, illustrated how through “filters” of sustainability and accessibility, the users get what they need from stakeholders and how the evolution of the implementation responds to the identified needs. Therefore, improvements are needed if sustainability and accessibility are to be treated equally.
- Regarding the quality of spaces, it was mentioned that “Circular spaces where we can sit around and have discussion,” allow cultural integration and inclusion.

3.1.4. Student summary

By Cara Chellew (McGillU)

- Based on the first question, the discussion revolved around the way sustainability, for the last twenty years or so, has been part of teachings but the concept of accessibility has still not found its way into the curriculum. This is due, in part, to the complex nature of the built environment, and the many components that have to be considered. In this regard,

accessibility has to be seen as an important part in the design process. It is important to rethink this as an empathic process, that takes into account the needs of the users.

- Based on the second question, do clients expect more sustainable solutions that inclusive ones? This exposes the fact that there is a lack of understanding by clients and the general public with respect to the importance of accessible design. The interests of stakeholders and/or users are not always taken into consideration. There are very clear frameworks that define sustainability with a clear understanding of the metrics. Inclusivity or accessibility, in a general sense, are not as structured and understood. There is therefore a need to better understand the real significance and importance of sustainability and accessibility.
- The third question looked at whether sustainability has a participatory and inclusive component. Is not just about a system that is sustainable, it is the fact that the users participate. The participants see sustainability as a valuable component not only in terms of realizing economic benefits but also in terms of mitigating negative impacts on the environment and considering issues ethical in nature.

3.2. Group 2

Moderator: Nooshin Esmaeili (PhD Student, University of Calgary)

Student summarizer: Tatev Yesayan (ConcordiaU)

Jamboard link: (accessed on December 10, 2023)

https://jamboard.google.com/d/1dCxU_35NnXY77wE4TrUetNMrnAHtc63atdcsIWbjmqU/viewer?f=3

3.2.1. Discussion questions

This breakout room focused on the following statement and three Jamboard questions: ‘Is it inevitable to bring these two major objectives –sustainability & accessibility– of our approach to quality into tension? How can they work in synergy?’

- Is the training of future professionals, designers, builders, and managers too focused on sustainability, at the expense of accessibility?
- Would you say clients expect more sustainable solutions than inclusive ones?
- In what way is sustainability valued by the users, if at all?

3.2.2. Discussion

The breakout room focused on discussing each of the following three aspects:

The first aspect is focused on the training of professionals. Is the training good enough? Is it too focused on sustainability rather on accessibility and what are the expectations of the clients. The second aspect to analyze is how sustainability and accessibility are implemented in an inclusive design? The third aspect is the way users, clients, and people use designed spaces. Is sustainability the only metric and how should sustainability, inclusivity and accessibility be managed in general?

Drawing from their own experiences, participants brought forward the following comments:

- What does accessibility actually mean? Is it a question of physical accessibility, (universal design) or financial accessibility (affordability).
- Schools of Architecture teach sustainability throughout design studios. Accessible design is not given the same emphasis or priority. There are not many courses that focus on accessibility; lack of training individuals.
- Participants mentioned that students are creative when looking to sustainability but sometimes their way of approaching sustainability is not always realistic. Accessibility is important because it affects all of us during our life time. A lot of people don't look at accessibility and sustainability in the same way, especially able-bodied people. There is a need for empathy to play a larger role in driving needs.
- Professionals have responsibilities to the public, which must lead to more collective action. People focus too much on sustainability and disregard accessibility. In this analysis, participants ask what is a realistic definition for inclusive design?
- Participants mentioned that sustainability is more urgent. If there is no sustainability, accessibility cannot follow.
- Why perceive sustainability vs accessibility as competing factors? It is important to understand the importance and tensions of the both within the same scope.
- Participants mentioned that rectify and readapt is the least effective way to address sustainability and accessibility.

In your own experience:

Team 2: Nooshin / Tatev

A. Is the training of future professionals, designers, builders, and managers, too focused on sustainability at the expense of accessibility?

It should be that way, Sustainability is an emergency, Accessibility will soon be irrelevant in the digital age.

At Schools: Sustainability is treated as a technical issue. Accessibility doesn't have faculty champions who teach and supervise new research.

Schools: The student projects can be sustainable designs on paper/screen, but we do not practice sustainability (in materials and energy we use, what happens to our waste?)

It depends on the environment that we are working in. Is sustainability being practiced at the academic level or in reality, which can be a consulting firm or a municipality?

What do you mean by accessibility? Do you mean physical accessibility like a universal design or financial accessibility?

Education is important.

We should not think of these as zero sum - we need to instead consider our responsibility to the public. Are we deserving of the titles we hold if we cannot achieve both.

Accessibility is often treated as a minimum standard within building code - which often is not sufficient. Sustainability less often has such minimum standards.

It is not always obvious what should be considered to make a building universally accessible. Without this expertise taught in schools it can easily be an oversight.

Change in education and systems is required to educate designers and those who make final decisions

Accessible buildings are sustainable

B. Would you say clients expect more sustainable solutions than inclusive ones?

Without incentive, Neither.

Client expectations can vary widely depending on their specific needs

Important to educate client on what inclusivity means and how it can be implemented in the project without extra!

the challenge is to find our HOW to have both? What changes needs to be made in the systems and decision making to have both.

important to go beyond what other metrics can we have to measure? how can accessibility pushed to the forefront of design? What is missing?

It is dependent on the client and the types of incentives they have. Institutions may have more incentives to be sustainable while private sector motivated by cost.

Sustainability is more urgent!!!

They are both important and required.

Accessibility is essential to a sustainable Design approach.

Article: Social sustainability through accessibility and equity
Marie-Odoree Poirier-Gauthier, Local Development Research Institute, Department of Geog

There needs to be a balance between inclusivity and sustainability to have a welcoming community for everyone. That way, we will have a complete community.

Book by David Gleeson: The Architecture of Disability, Buildings, Cities, and Landscapes beyond Access.

It all depends on the time and budget of the project

Able bodies might not understand those who have limited abilities!

Both are required while Sustainability is more urgent! The question is how to have both and what needs to change to include both?

C. In what way is sustainability valued by the users, if at all?

Sustainability is linked to comfort.

Sustainability impacts the quality in the indoor environment!!!

This has been a weakness in the discussion around sustainability, that sustainability has been less considered for how it is experienced by users.

accessibly and comfort should be considered more!

use of the building/space

flexible spaces for the future and various uses for the next generation

Connection to Comfort and user's involvement

Article: <https://www.greatorbuilt.com/insights/what-does-sustainability-and-accessibility-have-to-do-with-comfort/>

Figure 2. Jamboard screenshot for the second breakout room

3.2.3. Jamboard key points

- “At schools: sustainability is treated as a technical issue. Accessibility doesn’t have faculty champions who teach and supervise new research.” Participants mentioned that there is a lack of experience in the field of accessibility. Unfortunately, it is not a research topic that has the same importance as others, unless there is someone who has the knowledge and can guide the student. This analysis shows the lack not only of experts in the academic, but also in the professional field, who can guide these processes.
- “The challenge is to find out how sustainability and accessibility can co-exist. What changes need to be made in the systems and decision making to have both.” There is a need to reorganize societies with principles, responsibilities, philosophical, and ethical values, in order to consider sustainability and accessibility as one.

3.2.4. Student summary

By Tatev Yesayan (ConcordiaU)

- The main idea that came up is understanding how accessibility and sustainability are connected, required, and how they must both play a role in the built environment.
- With respect to education, it was seen how sustainability is treated solely as technical issue rather than being more multidimensional. Students are merely learning building codes and not taking into account human needs. One needs to understand the point of

view of the physically impaired. Outside of education, in the professional field, it is important to understand occupants needs, aside from a post occupancy evaluation, to understand how people experience space. It is important to bring community and disability needs to the forefront.

- Sustainability is imperative, but inclusiveness is paramount. Therefore, it is important to identify what needs to be changed to make the two work together. It was noted how sustainability is linked to comfort, and this has been a weak point. It was also mentioned the importance of consulting with community members, users, and the people who occupy the space to get their input during the design and completion process. There was an interesting example brought up of this in British Columbia, where individuals with disabilities were playing an active role in the review process of a design project.

3.3. Group 3

Moderator: Kevin Ng (Rick Hansen Foundation)

Student summarizer: Taly-Dawn Salyn (UCalgary)

Jamboard link: (accessed on December 10, 2023)

https://jamboard.google.com/d/1dCxU_35NnXY77wE4TrUetNMrnAHtc63atdcsIWbjmqU/viewer?f=4

3.3.1. Discussion questions

This breakout room focused on the following statement and three Jamboard questions: ‘Is it inevitable to bring these two major objectives –sustainability & accessibility– of our approach to quality into tension? How can they work in synergy?’

- Is the training of future professionals, designers, builders, and managers, too focused on sustainability at the expense of accessibility?
- Would you say clients expect more sustainable solutions than inclusive ones?
- In what way is sustainability valued by the users, if at all?

3.3.2. Discussion

The breakout room focused on discussing the participant’s understanding of sustainability and inclusivity, and the different meanings through the following three aspects: the first aspect to analyze based on personal experience, what is the current understanding of sustainability and accessibility? there is a great focus on sustainability? How about accessibility? The second aspect is to identify the needs, and to understand what clients and communities are asking. Finally, in what way is sustainability value by the users and what will be some of the design features to accomplish that?

Drawing from their own experiences, participants brought forward the following comments:

- There is a greater focus on sustainability than on accessibility. It is a challenge, from a teaching perspective, to get students to consider accessibility in their designs. Sustainability has been prioritized in most all designs, and accessibility is often ignored in curricula.
- There are “passive” systems in sustainability. The building science professionals that teach building science courses are in some cases very interested in teaching best practices, and often not interested in the architectural form of the building and how they can be improve it to be more sustainable. That prevents students from seeing design as a sustainable practice.
- Participants mentioned that academic courses need to focus on the concepts of accessibility, of everybody having access to spaces. Accessibility should be focused on a human posture, and not limited to a specific group.
- Participants mentioned the importance of inclusion and homelessness. The structure of Indigenous traditional houses has to be considered in the face of lack of resources. It will be important to considers design as a sign of reconciliation.

In your own experience:



Figure 3. Jamboard screenshot for the third breakout room

3.3.3. Jamboard key points

- “Accessibility isn’t just about design for a specific group, but it should be a design principle for everyone.” In this sense, it is important to reflect mainly on the concepts of inclusiveness and accessibility from the user's point of view: What do people think is inclusive? What is accessible? What is desirable and what are people's needs?
- “There is a gap between what is taught in school and it’s applications in the field.” The focus on sustainability often reflects the disengagement between academia and developers, in the sense that there are many issues that do not translate to reality, with perhaps the exception of large, well-funded projects.
- “At the city of Calgary, inclusivity, accessibility and sustainability were placed under the “umbrella” of resilience.” The vision of making sustainability, accessibility and inclusion visible as a holistic element between the environment makes it possible for the user to approach things from a unified rather than a disaggregated point of view.

3.3.4. Student summary

By Taly-Dawn Salyn (UCalgary)

- It was identified that there is a lack of education when it comes to accessibility. Education has been very much focused on sustainability. This situation needs to be approached in a proactive way, putting sustainability and accessibility together and ensuring that the building is resilient as well. Students do not seem to be interested in accessibility, it’s been very challenging to get students to look to accessibility when it

comes to a project, because they only learn legal legislative concepts and not the importance of considering the human approach to design.

- Sustainability has clear guidelines and specifications. Clients can simply require existing certification, such as Leed certification. Whereas when it comes to accessibility, it is very much driven by legislation and there is nothing concrete. There is a need to develop in a participatory way, accessibility guidelines or standards, that can be referred to by clients. Architecture needs to be more proactive in terms of looking at this approach.
- The last question brought different understanding in terms of what sustainability features are, those that are not necessarily always visible to users. It is important to understand how sustainability is valued by people as sometimes there is the notion that both accessibility and sustainability are just buzzwords. Consequently, it is important to recognize what sustainability and accessibility mean, to which groups these words pertain, how different groups define them, and then move forward with education.

3.4. Group 4

Moderator: Jean-Pierre Chupin (Université de Montréal)

Student summarizer: Meg Berry (AthabascaU)

Jamboard link: (accessed on December 10, 2023)

https://jamboard.google.com/d/1dCxU_35NnXY77wE4TrUetNMrnAHtc63atdcsIWbjmqU/viewer?f=5

3.4.1. Discussion questions

This breakout room focused on the following statement and three Jamboard questions: ‘Is it inevitable to bring these two major objectives –sustainability & accessibility– of our approach to quality into tension? How can they work in synergy?’

- Is the training of future professionals, designers, builders, and managers, too focused on sustainability at the expense of accessibility?
- Would you say clients expect more sustainable solutions than inclusive ones?
- In what way is sustainability valued by the users, if at all?

3.4.2. Discussion

The breakout room focused on discussing what the participant’s understanding of sustainability and inclusivity is through the exchange of differing viewpoints. From their own experience, field or position, participants brought forward the following comments:

- Participants discussed what is meant by accessibility, what is the scope and what, if any, is required by law for true accessibility. It seems that municipalities and institutions have already established the framework for sustainability, but nothing concrete for accessibility.
- Inclusive design is improving the quality of user experience. Examples of public areas in Montreal were mentioned.
- There is a need for monetary commitment to help people in need, and when it comes about resources, there is a tension between sustainability and accessibility. In this sense, participants mentioned that there seems to be more financial interest and social awareness towards sustainability.
- Participants mentioned the idea of sustainability and future of accessibility, and the distinction between inclusion and accessibility. It is necessary to bring the distinctions and commonalities that are been analyzed into the forefront.
- The analysis of the terms of “inclusion” and “accessibility” helps to envision the roadmaps to quality.
- The term inclusion will be kept for a general goal, and accessibility as a very practical demand and need. Also, there is a need to develop in a participatory way, accessibility guidelines or standards.
- Participants mentioned that in the end, it is the standards that promote the development of appropriate design that includes accessibility. It is essential to do a better job, and to do much more than just follow the basic standards set for universal accessibility.

In your own experience:

Team 4: Jean-Pierre / Meg

A. Is the training of future professionals, designers, builders, and managers, too focused on sustainability at the expense of accessibility?

How is accessibility defined? How extensive will it be? I am thinking of doing the minimum versus really trying to make spaces inclusive	What do we mean by accessibility? What is the extent of the accessibility: what the law requires versus striving for true accessibility	Without accessibility, can there be sustainability of places? If people cannot use them in inclusive ways...
Sustainability and accessibility intersect as both emphasise the diverse needs of individuals. A sustainable design that did not consider accessibility is not truly sustainable.	Je me demande si l'agrément du CCCA exige des enseignements en matière d'accessibilité, ce serait à vérifier	without sustainability, there is no future to be accessible.
Yes - it seems that the municipalities and institutions have already established a concrete framework for sustainability, but nothing concrete has been developed yet for holistic accessibility	No - As a Landscape Architecture student, and accessibility to sustainable design is crucial in our designs	
Où la durabilité est plus mise en avant. Ceci est dû en partie au fait que le concept de durabilité a pris place plus tôt dans les formations du design et en aménagement.	La durabilité a tendance à s'adresser à tout le monde, et l'accessibilité PARFOIS à des minorités.	Tk: Main Idea A : A lovely tension between the two. They are not contradictory, rather complimentary. Can there be one without the other?

B. Would you say clients expect more sustainable solutions than inclusive ones?

Clients of the big projects oftentimes request community engagement in urban projects. However, their main focus is usually on the project's acceptability by the community	May be easier to measure sustainable solutions - numbers and data are highly effective
yes - because they are obliged to in many cases and it is not a matter of choice.	Yes, because it may seem easier to find material or constructed solutions to sustainability questions than accessibility ones
Building on this idea, a sustainable environment is inherently more accessible (better overall health, use of materials, ease of circulation, more stringent regulations...	who is the client responsible for environmental issues?
Sustainability: Money is involved	Place Fleurs-de-macadam, Parc Pierre-Dansereau, Par Dickle-Moore
	Tk: Main Idea B A lot of times it is easier to address sustainability as it is required. It is connected to monetary elements much of the time as well.

C. In what way is sustainability valued by the users, if at all?

Why is accessibility so rarely in the top pages of the news while climate change is the number one topic?	by having sustainability knowledge
Lack of sustainability can lead to lack of use if there are other options.	In landscape setting: stormwater management to mitigate flooding, planting to mitigate urban pollution
don't confuse inclusion with accessibility, we are talking about access more than cultural inclusion. Sustainability is global, accessibility a personal experience	The end user may feel the perennity, which is partially overlapping with sustainability.
Sustainability encompasses a wide variety of ideas and approaches which means the way we value it can often feel intangible and context dependent	When users are engaged in sustainable actions.
	Tk: Main Idea C Diverse values, from emotive to personal experience, inclusion, to global standards.

Figure 4. Jamboard screenshot for the fourth breakout room

3.4.3. Jamboard key points

- “Don’t confuse inclusion with accessibility, we are talking about access more than cultural inclusion. Sustainability is global, accessibility a personal experience.” From that concept of personal experience, it was mentioned how to address not only physical accessibility, but also social and economic inclusion.
- “Without sustainability, there is no future for accessibility.” Sustainability definitely paved the way and now it must delve into other factors that are equally important which can help improve the physical and social conditions of people in need.
- “Sustainability and accessibility intersect as both emphasise the diverse needs of individuals. A sustainable design that does not consider accessibility is not truly sustainable.” From a testimony at the Canadian Centre for Diversity and Inclusion, it was expressed how places that are supposed to be accessible still have physical barriers to full accessibility. The idea showed how designers struggle to meet standards, and that these standards are important enough to strike a balance and respond to the needs of users.

3.4.4. Student summary

By Meg Berry (AthabascaU)

- One of the key discussions in this group was the use of language, and how there’s further need for better definitions and distinctions of the word’s sustainability and accessibility and how they are defined by different users in each space.

- It was mentioned how there is presently a disconnect between sustainability, accessibility and inclusivity and how they should coexist. It is clear how it is easier to address sustainability, as there is a structure that makes it easier for clients to relate to. There is still no clear definition of inclusivity. There is a need to push past laws and current requirements and move forward to better address the needs of the stakeholders, users, and communities.
- Finally, the group mentioned that the sustainability value for users is motivated by personal experience, inclusion and global standards. In this respect, there is a need to better define both sustainability and accessibility and to address the tension between the two. Highlighted were the difficulties of design experts addressing accessibility through sustainability strategies.

3.5. Group 5

Moderator: Laura McBride (Rick Hansen Foundation)

Student summarizer: Brendan Roworth (DalhousieU)

Jamboard link: (accessed on December 10, 2023)

https://jamboard.google.com/d/1dCxU_35NnXY77wE4TrUetNMrnAHtc63atdcsIWbjmqU/viewer?f=6

3.5.1. Discussion questions

This breakout room focused on the following statement and three Jamboard questions: ‘Is it inevitable to bring these two major objectives –sustainability & accessibility– of our approach to quality into tension? How can they work in synergy?’

- Is the training of future professionals, designers, builders, and managers, too focused on sustainability at the expense of accessibility?
- Would you say clients expect more sustainable solutions than inclusive ones?
- In what way is sustainability valued by the users, if at all?

3.5.2. Discussion

From their own experience, field or position, participants brought forward the following comments:

- Participants mentioned that part of the issue of misunderstanding what means accessibility and sustainability is that people are considering sustainability and accessibility as separate ideas.
- The idea of regenerative design seems to be a bigger umbrella where different ideas could live. It was mentioned that the Living Future Institute defines regenerative design as socially just, culturally rich and ecologically restored. Participants mentioned that if we don't do all three of these things, we cannot accomplish any single one of them.
- Participants mentioned that often sustainability is seen as “a good to have” in a project, but not as something that is required. This is something that does not even happen with accessibility.
- In academia, sometimes the curricula illustrate how sustainability is emphasized at the expense of accessibility.
- Participants discussed what is meant by accessibility, and the need to established a better framework accessibility.
- Some Canadian provinces have accessibility laws, but not have accessibility legislation. One of the problems is that they all differ.
- Participants mentioned that students seem to be more interested in sustainability than in accessibility. It was also mentioned that if this interest reflects the how the curricula is designed.

In your own experience:

A. Is the training of future professionals, designers, builders, and managers, too focused on sustainability at the expense of accessibility?

B. Would you say clients expect more sustainable solutions than inclusive ones?

C. In what way is sustainability valued by the users, if at all?

Figure 5. Jamboard screenshot for the fifth breakout room

3.5.3. Jamboard key points

- “The general understanding is that accessibility is for “the disabled.” There is a need to be clear that at some point everyone will have a physical need that must be taken into consideration in advance from a design standpoint.
- “Most clients are very interested in both. However, clients are also very sensitive to costs.” The need to embrace sustainability and affordability as a unit from the onset of a project could improve financial perception.
- “Accessibility seems to be a user issue while sustainability seems to be a client issue.” The need arises to embrace the two aspects in a holistic way where both concepts complement each other for all stakeholders.

3.5.4. Student summary

By Brendan Roworth (DalhousieU)

- The main focus for question one was how to approach education, how to move beyond the checklist into more explicit and determinant factors surrounding sustainability and accessibility and integrating the ideas of the two topics into a design methodology that isn’t focused on outcomes but on the process. Accessibility and sustainability should include the lived experiences of people and create a conceptual approach to design that push beyond the boundaries of prescriptive solutions that are currently in codes.

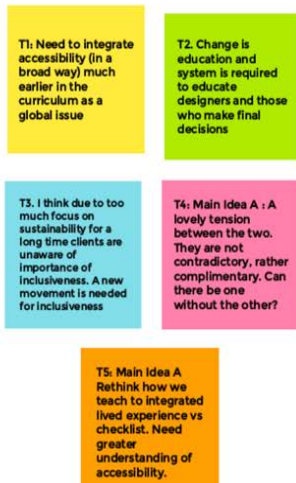
- For the second question, the participants focused on how the profession has this responsibility to take an educational role when it comes to clients. It was mentioned the importance of understanding the accessibility requirements for users and how sustainability ethics go along with the design project, and budget. The conflict between best intentions and reality is clear.
- For the last question concerning what is sustainable or what might be detrimental to the environment, the participants mentioned that there has been a push for a cultural idea that sustainability is good, but there's not always a consensus on what the right approach is. As professionals, part of their role is to guide the public towards a proper approach, and make certain that there are no misconceptions.

4. Plenary of the Session #2 Accessibility vs Sustainability

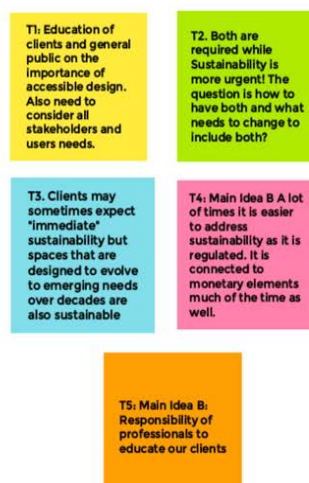
Summary of All The Main Ideas:

All Teams

A. Is the training of future professionals, designers, builders, and managers, too focused on sustainability at the expense of accessibility?



B. Would you say clients expect more sustainable solutions than inclusive ones?



C. In what way is sustainability valued by the users, if at all?



Figure 6. Jamboard screenshot for the plenary

The questions for the plenary were:

- Do we still agree on this tension between sustainability and accessibility?
- Do we want to reformulate this tension too make it more instrumental or operative for the partnership?

Participants brought forward the following comments:

- Regarding the tension between sustainability and accessibility, it seems that it is a false tension, especially when looking at the framework of urban justice. It is important to think about this tension as complementary rather than oppositional.
- People with disabilities still face unique challenges. It is important to have their voices heard, not only as users or clients, but also as professionals, that participate in design processes.
- There is now a sense of urgency linked to sustainability in most design projects. This is not, however the case, when approaching the concept of accessibility in design. It is therefore necessary to tackle the ideas of the just city with more empathy, allowing for more diverse and multigenerational spaces.
- The importance of this partnership project is based on the quality of the built environment, and the empathetic part that has the human and habitation at its center. It must be observed in its current state; hence sustainability, accessibility and inclusivity have to be integrated, within the complex nature that architecture and design are trying to respond to.

- When considering sustainability and inclusivity it is important to recognize the differences between urban and rural environments. First Nations have a connection to land and this cannot be overlooked. Canada is a vast country with many rural areas. It is important to consider the differences between urban and rural needs as some of the solutions in urban areas are not relevant to rural communities.
- Accessibility is most often focused on standards. Unconsciously, accessibility design ends up playing an exclusive role for people with disabilities, when it should be about design for all. Participants mentioned the need to seek opportunities to integrate research and standards so projects do not become static, allowing for new ideas to drive connections between sustainability and accessibility.
- From a sociological point of view, accessibility is very important, since at some point in life most people will encounter some kind of disability. Accessibility becomes an issue for all. Research has shown that there are many invisible disabilities that affect us all. The design process must take accessibility into account within the goal of achieving sustainability that promotes equality.
- The challenges of balancing sustainability and accessibility with inclusivity were recognized.
- The need for sustainability and accessibility guidelines was mentioned to ensure that all requirements and needs of users and their environment are prioritized in projects.
- It is essential to ensure equity in the decision-making process and understanding the choices that are significance for the people and the environment. This brings into line the concept of sustainability and inclusivity into a fair process.
- It is important to recognize what sustainability and accessibility mean, and how to define them. In this sense the role of education is essential.
- Finally, it was mentioned the need to link sustainability and accessibility through empathy, and a holistic approach, where the built environment is visualized not just as an element that produces some kind of outcome, but as a participatory element that involves everybody. Hence, sustainability and accessibility have to evolve in an impartial way.

5. Conclusion by Reporters

Once the issues and challenges with respect to sustainability and accessibility were clarified, the common questions of how to overcome these issues and challenges in an adequate and above all universal way, became apparent.

The Quality in Canada's Built Environment: Roadmaps to Equity, Social Value and Sustainability Project, through the online convention, provided a platform for the analysis of the issues and challenges outlined in the sessions. This also created an opportunity for reflection that hopefully will lead to concrete action. The main goal of the participants in the session was to work on parameters brought forth the following statement: "How to involve sustainability and accessibility by respecting and educating stakeholders, and becoming aware of what these means – through relationships with users and the environment, – from the onset, development and completion of a project."

When it comes to the built environment, we face complex challenges that require careful design considerations. Properly designed development projects have the potential to strengthen communities by helping to fight inequality, redress a legacy of environmental inequity, and improve personal and social health issues, all while adapting to a changing environment. Developers, designers, academics and public administrators need refined methodologies to ensure that projects have a positive impact on their communities and meet the needs of all stakeholders. The question is how to ensure that a methodology that equitably addresses sustainability and accessibility is developed and universally applied, or at least follows the methodological steps developed for sustainability.

Future discussions:

In order to build a strategy to address the needs expressed in the 2023 online convention, it is important that through simple guiding determinants, each partner-research site generates answers to the shortcomings as seen from within their own projects. To this end, it will be important to propose and establish in each research site, sustainability and accessibility determinants in line with what will be presented in the posters for the 2024 Halifax convention.

These determinants could include:

- Environmental determinant: this includes factors that are related to distinguishing the parameters related to sustainability and accessibility, identifying their similarities and differences.
- Social determinant: this includes external factors that may influence an individual's well-being.
- Educational determinant: this includes factors related to educating people in the greater awareness of the needs arising from sustainability, accessibility and inclusive design.

The combination of these strategies could provide insight into the current conditions of each research site. It will also allow the roadmaps project to find possible solutions that can be achieved through design, and by finding common elements that can be permanently implemented in future developments. This will help in the co-development of new paths towards equity, diversity, and inclusion in the built environment.