THE UNIVERSITY OF MELBOURNE

Making the City of Melbourne more inclusive for children and young people with a disability

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We acknowledge the Traditional Owners of the land on which we work, and pay our respects to the Elders, past and present.

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City of Melbourne Partners

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Stakeholder Groups

The following organisations provided advice and support recruiting participants for the stakeholder workshops conducted in February 2020:

Youth Disability Advocacy Service.

Association for Children with a Disability.

Contents

Executive Summary

This study sought the voices of children and young people with disability, and their families, to generate ideas on how the City of Melbourne could be made more inclusive for children and young people with a disability.

The City of Melbourne Disability Advisory Committee and City of Melbourne – Melbourne Disability Institute Steering Committee assisted the research team throughout the project. Findings from this study will inform the development of the City of Melbourne's Disability Action Plan and other relevant strategies.

In early 2020, we held a workshop with children and young people with a disability and their parents and guardians. The children and young people sat at one table, and their parents and guardians sat at another. With the help of a facilitator, they spent about an hour and a half discussing ways in which the City of Melbourne could be made more inclusive for children and young people with a disability. Together, they brainstormed 84 ideas we could work towards to achieve this goal.

The research team undertook a thematic analysis of the brainstormed ideas and identified emergent patterns in the data. The children and young people data resulted in the identification of seven themes that related to: accessible public spaces; assistance; communication; pedestrian infrastructure; public good; public transport; and safety. The parents and guardians' data resulted in six themes that included ideas related to: amenities; awareness; communication; pedestrian infrastructure; public spaces; and public transport.

Three prominent themes emerged. These were ideas featured across both the children and young people group, and the parents and guardians' group, while elements of these ideas appeared across multiple other themes throughout. These themes were: communication, pedestrian infrastructure, and public transport.

The need for adequate, disability-appropriate communication was expressed throughout the study across a number of themes. Many of these ideas related to: providing clear and accurate information on public transport; the provision of 3D models that can be touched; the use of technology; awareness and training for relevant staff and the community.

The provision of pedestrian infrastructure that can facilitate movement throughout the city was prominent in discussions and in the development of ideas. Many of these ideas related to: safety at crossings; the use of technology; signage at eye-level for children that communicates information via multiple methods; and safety, such as on ramps and escalators.

Ideas around public transport were developed across both study groups. These ideas related to communication, including: detailed and clear announcements; those pertaining to within carriages such as the use of tactile cues; buttons that beep and vibrate; awareness of accessible seating; and also those pertaining to platforms; including clear display information. Some ideas, such as crowding and the provision of uniformed assistance staff, were relevant for both within carriages and on platforms.

This study was a collaboration between the University of Melbourne, and the City of Melbourne, with funding from the University of Melbourne Deputy Vice-Chancellor of Engagement, and was supported by the National Health and Medical Research Council Centre for Research Excellence in Disability and Health.

Introduction

Disability affects people of all ages, inclusive of children and young people. Disability is a complex phenomenon arising from the interaction between features of a person's body and features of the society in which that person lives. Activity limitations (difficulties in executing a task or action such as mobility, self-care and communication), result from the interaction of physical, sensory, psychosocial, neurological and/or cognitive/intellectual impairments (differences in body function or structure) and environmental restrictions on social, economic, cultural and political participation [1]. Approximately 647,600 Australian children and youth (aged 0-24 years) have a disability [2]. Globally, the United Nations estimates a minimum 2.5% of the world's children (aged 0-14 years) live with moderate-severe levels of sensory, physical and intellectual impairments [3].

Article 23 of the United Nations Convention on the Rights of the Child (UNCRC, 1989) recognises that children *"should enjoy a full and decent life, in conditions which ensure dignity, promote self-reliance and facilitate the child's active participation in the community"* and emphasises the responsibility of all signatory states – including Australia – *"to recognise the right of every child to a standard of living adequate for the child's physical, mental, spiritual, moral and social development"* (Article 27). Statements on the active inclusion of children and young people in society include the right to not be discriminated against on the basis of the child's or his or her parent's or legal guardian's race, colour, sex, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status, and the freedom to seek, receive and impart information and ideas of all kinds, regardless of frontier [4].

Ample research has shown that urban design (the scale, form and function of areas including the street network, destinations and open spaces) influences inequalities in the general population [5-7]. Further evidence suggests that people with disability may be more vulnerable to the effects of poorly designed urban environments (i.e. differential vulnerability), than their non-disabled counterparts [8]. While there has been some research in the field of ageing from the perspective of mobility and sensory impairment [9], there are still significant gaps in our understanding of how urban design affects children and young people with disability.

Children and young people with disability have the right to participate in society on an equal basis to those without disability. However, the specific needs of children and young people with disability to be fully included are not fully known. This project aims to identify the key enablers of inclusion by employing an innovative methodological approach known as 'group concept mapping': a collaborative mapping exercise between planners, disability advocates, disability experts, and children and young people with disability. As such, the project fostered relationships between the University of Melbourne, and key government and advocacy partners. The project findings will inform the City of Melbourne's upcoming Disability Action Plan which form part of the larger Australian Government Action Plan under the National Disability Strategy 2010-2020.

The project builds on an existing collaboration between the City of Melbourne and University of Melbourne's Melbourne Disability Institute. The project, led by Dr Rachele, and funded the Melbourne Sustainable Society Institute, Lord Mayor's Charitable Foundation, Melbourne Disability Institute and City of Melbourne, investigated how the City of Melbourne could be made more inclusive for adults with disability [10].

The National Disability Strategy (2010-20), National Framework for Protecting Australia's Children (2009-20), Disability Discrimination Act (1992) and Victorian Equal Opportunity Act (2010) are among key documents which aim to protect and enhance the rights of children and youth with disabilities, and enable Australia to uphold its commitment to the UNCRC, through articulating provisions for the protection of children and youth, and access to a community that is safe and supportive [11].

The National Disability Strategy (2010-20) in particular, outlines that it is the role of all levels of government – Commonwealth, State, Territory and local – to develop policies, deliver programs and services and fund infrastructure to remove barriers. Thus, all government levels have a responsibility to ensure inclusion, accessibility, and connection in all matters affecting the lives of children and young people with disability.

Bringing together children and young people with disability, government staff, and academics, this study aimed to identify ideas that can help make an inner-city local government, the City of Melbourne, more inclusive for children and young people with disability. It further aimed to ascertain which of these ideas are the most important, and feasible to implement.

Methods

This study used focus groups to brainstorm ideas in response to a focus prompt.

Participants

Participants were invited through a range of channels and networks known to the research team and staff at the City of Melbourne. Participants were children and young people (ranging in ages 10-14 years, n=5) with disability; and their parents/guardians (ranging in ages 29-45 years, n=4). Of children and young people, two reported a physical impairment, three a sensory impairment, three a psychosocial impairment, and one an intellectual impairment. Three of the five children and young people identified as female, while all parents and guardians identified as female. Participants' sociodemographic information are presented in Table 1.

Participants were led through the process by a facilitator (JNR) and worked in one group of 'children and young people' and another group of 'parents and guardians'. All participants were located within the same room. One scribe was assigned to each table, and additional support people provided by the City of Melbourne were available to address any individual accessibility requirements (e.g. literacy and/or communication supports to enable participation). One graphic illustrator was present for the duration of the workshop. At the conclusion of the workshop, the graphic illustrator drew a free-form sketch of the ideas generated. An audio-described and captioned video which summarised the method and findings was also developed after the workshop for public viewing.

Brainstorming

Prior to the workshop day, all participants were provided with an accessible visual schedule which described the tasks to be completed during the workshop using plain language and accompanied with images to support participants with limited literacy. During the workshop, the facilitator explained the aims of this project and revisited this document on an overhead PowerPoint presentation. The facilitator then introduced participants to the City of Melbourne through reading a purpose-built visual guide on PowerPoint. A range of images were showcased, including a map displaying City of Melbourne's boundaries, iconic landmarks within the municipality (e.g. Federation Square, Melbourne Cricket Ground, Museums etc) and images which aimed to trigger broad conceptual thought around life domains (e.g. an image relating to University of Melbourne to represent 'education', an image of retail staff representing 'employment', a composite image of a tram, train, bus and car to represent 'transport'). The group was then presented with the following prompt: *"What are some ways that the City of Melbourne could be made more inclusive for kids, teenagers and young adults with disabilities?".* The facilitator then directed participants to work in their table groups to answer this question and were reminded that there were 'no wrong answers'. The scribe from each table reported back to the whole group on the ideas that had been generated by each table group. All ideas were written down by a member of the research team. If new ideas were generated during the whole group discussion, these were noted and included at this time.

Once completed, the facilitator then asked each participant to share their top 3 ideas. As ideas were shared by participants, the graphic illustrator drew a visual scene display, which grew in attributes upon each new participant's contribution.

Analytic approach

Data was analysed qualitatively using descriptive thematic analysis. During thematic analysis, patterns within the data (themes) were identified and reported so that the findings were organised in an understandable manner that maintains the rich detail of the data set [12].

Ethics

The study was approved by the Human Research Ethics Committee of The University of Melbourne (Ethics ID 1954974).

Results

Ideas and Themes Generated

The following is a presentation of the emergent themes pertaining to ideas for promoting inclusion for children and young people with a disability, both from children and young people, and from their parents and guardians.

Children and young people

The children and young people group included five participants. Children and young people themes that emerged are presented in Table 1. They identified seven themes that included: ideas related to accessible public spaces; assistance; communication; pedestrian infrastructure; public good; public transport; and safety.

Public spaces (6 ideas)

Many of the ideas in this theme related to creating spaces that were quiet and calm, including in libraries, schools, and other learning spaces. Other ideas related to making public spaces more amenable, such as reducing rubbish and waste, and the provision of places to rest.

Assistance (3 ideas)

Ideas in this category related to the provision of assistance, including supplying wheelchairs where needed, helpers around the city, and schools made for people with specific disabilities.

Communication (7 ideas)

Ideas in this theme focused on both the provision of communication devices and technology, such as computers with Braille and voice-touch, as well as awareness of communicating with people with a disability, including education campaigns and staff training.

Pedestrian infrastructure (7 ideas)

Ideas in this cluster related to the provision of pedestrian infrastructure including crossings, such as sound quality of traffic lights at pedestrian crossings, coloured and lightened tactile cues, vibrating cues, and streetlights at eye-level. Ideas also related to physical infrastructure including yellow lines on escalators, railings on ramps, and the height of bollards.

Public good (4 ideas)

Participants devised ideas relating to people without a disability, including helping people who are homeless, and less hunting of animals.

Public transport (9 ideas)

Many of the ideas in this theme related to communication on public transport, including announcements of upcoming stops, alerting passengers which side to exit trams, buttons that beep and vibrate, and tactile cues. Other ideas related to awareness, including of accessible seating, while others related to crowding.

Safety (12 ideas)

Participants stressed the importance of maintenance, including repairing tactile bumps that have been vandalised, and repairing pavements that have been cracked. Other ideas related to the use of footpaths, including dangers posed by distracted pedestrians, parked vehicles encroaching on footpaths, and clear marking of off-road bike paths, while further ideas related to surveillance, including more CCTV cameras and a greater police presence.

Table 1: Ideas from children and young people with a disability on making the City of Melbourne more inclusive for children and young people with a disability.

Public spaces
Reduce rubbish and waste – more sustainable packaging
Make calm spaces for people with disability (e.g. computers, educational games, learning space, TV room, library, young adult room, toy room)
Provide special rooms that are disability-friendly
Calm spaces in schools and in each council area
Create more quiet spaces
More resting benches and places to sit in parks and on the streets
Assistance
Supply wheelchairs for people who need them
Provide more helpers around the city
Schools made for people with a specific disability – e.g. children with vision impairment at one school
Communication
Awareness campaign educating people about vision impairment – e.g. not to pat assistance dogs and give people with canes more space
Promoting "subtle awareness" of disability
Toys with less sound
Instruct staff on how to speak to and help people with disability
More libraries including books with bigger fonts, books entirely in Braille, and covers that have texture (to make the image "pop"/more appealing)
Braille on the keypad of computers – friendly-technology in public places
Voice-touch on computers – e.g. you touch a key and the letter is narrated
Pedestrian infrastructure
Change the design of low-level bollards so that they are more visible and don't become a tripping hazard
Improve sound quality of traffic lights at pedestrian crossings
Vibrating cues at pedestrian crossings when it is time to cross
More tactile cues on escalators indicating direction (e.g. coloured lights)
Make yellow lines on escalators clearer for people with vision impairment
All ramps should have railings on either side to avoid falling off
More streetlights at crossings, particularly at eye-level and on the ground
Public good
Help the poor and homeless people with food, shelter and employment
More animals in the city – e.g. farm animals
Less hunting animals and more protecting our oceans
Less taxes so there's more money to pay for children's needs (e.g. school fees etc.)
Public transport
More announcements on public transport to alert passengers of upcoming stops
Announcement on trams altering passengers which side to exit the tram
Awareness campaign for people to give up the accessible seats on public transport
Beeping and vibrating buttons on train that light up to press to open the door on trains could beep/vibrate as well so children can actually find it before the train takes off and he misses getting off at his stop
More tram super stops (i.e. larger tram strops) that prevent overcrowding
Raise awareness amongst public transport workers that service pets (e.g. guide dogs, therapy companions) are allowed on public transport
Keep escalators at train stations in the same direction all day (e.g. either going up or down)
More accessible seating on public transport, including spaces for people with disability and guide dogs, where families can use this space too

Small bumps on public transport – these are at the train/tram/bus stops, but they need to be on the buses/trams/trains, especially high floor trams
Safety
Stop dumping toxic dirt from infrastructure projects
Reduce use of petrol and bad poisonous smells
Repair tactile bumps that have been vandalised
Repair pavements that have been cracked and have bumps
Hazard tape on glass doors and panels so we do not run into them
Prevent oversized parked vehicles from encroaching onto footpaths
Reduce traffic in the city
Off-road bikeways that are clearly marked
Prevent overcrowding in the city
More CCTV cameras to increase safety
Increase police helping people in the city
Reduce distraction from technology for people walking around the city

Parents and guardians

The parents and guardians group included four participants. Parents and guardians' themes that emerged are presented in Table 2. They identified six themes that included ideas related to: amenities; awareness; communication; pedestrian infrastructure; public spaces; and public transport.

Amenities (7 ideas)

Many of the ideas in this cluster related to assisting children and young people with a disability in getting around the city, including: the provision of easy-to-read maps of bathroom and social services; clarity on escalators; and improving experiences at landmarks around the city. Other ideas related to bathrooms, including increasing the number of bathrooms and changing places and tables.

Awareness (7 ideas)

Ideas focused on improving awareness about disability and different disability types, including the provision of display boards and advertisements, education for children and the community, and training front-of-house staff.

Communication (6 ideas)

Participants devised ideas related to audio guides, 3D models that can be touched, and real-time live information around the city. Other ideas also related to how people communicate, including training for customer service staff and volunteers.

Pedestrian infrastructure 5 ideas)

These ideas related to street signs that are at eye-level, and which say which side of the street that you are on, maps with audio capability, and locations for people to rest.

Public spaces (5 ideas)

Ideas related to creating spaces that were safe, quiet, and low-sensory, including quiet time at popular locations, reducing crowding, and providing seating and 'stations' for people with special needs.

Public transport (6 ideas)

Participants stressed the need for announcements on public transport that are clear, and provide information related to stop names, numbers and nearby landmarks, with clearer display information. Other ideas related to the provision of uniformed assistance staff, increasing the number of low-floor trams, and improving safety.

Table 2: Ideas from parents and guardians of children and young people with a disability on making the City of Melbourne more inclusive.

Amenities
Improve clarity on escalators for where the stairs start and stop
Improve inclusion in fun runs for young people with disability
More changing places and more change tables that are clean
Increase the number of bathrooms
Provide a map with the location of bathrooms with social stories
Easier to read maps with bathrooms and social services on them that are kid friendly (e.g. an app)
Many landmarks in the city (e.g. zoo, museum etc.) are not a fun place for people with vision impairment – hand-on workshops are good but just visiting the buildings are not fun
Awareness
Increase front-of-house and customer service people trained with mental health and disability awareness
More advertisements increasing awareness of autism
Provide display boards that provide educational information about different disabilities
Improve knowledge about disabilities in the city
Educate people about children with vision impairment touching things
Improve advocacy to improve inclusion for children with disability
Provide community education that it's OK to offer help
Communication
As a first point, customer service staff could ask "how can I help?"
Real-time live information around the city – particularly if there is an emergency in the city (e.g. exit routes)
Volunteers and ambassadors that are trained to help those who require assistance
Audio guides that are more descriptive
Melbourne Museum to provide 3D models of things that children can touch
Ways to encourage personal connection to the city (especially teenagers)
Pedestrian infrastructure
Include street signs on the street posts at eye level and that people can touch
Street signs that say which side of the street you are on
Maps around the city that say "you are here" with audio capability
Locations for people to rest (e.g. self-help stations)
Scaled replica models of buildings that are tactile
Public spaces
More seating and stations with special equipment for people with "special needs"
Reduce crowding (e.g. large events, trains, trams)
Create safe spaces for children with disability
More quiet times at popular locations (e.g. 3 hours)
Increase the number of calm, low sensory spaces throughout the city
Public transport
Improve clarity of announcements by tram drivers on public transport (e.g. clearer, slower, stop numbers, stop name, nearest street or landmark)
Reduce contrast in light between foyer and concourse at train stations
More volunteer staff in clearly defined uniforms that can assist people with where they want to go at train stations
Increase the size and clarity of display information (e.g. at train stations)
Improve safety on trains and trams
Increase the number of low floor trams, advertise which trams are low floor, and have consistent timetabling for when these trams are available

Figure 1: Graphic representation of the ideas from children and young people with a disability and their parents and guardians on making the City of Melbourne more inclusive for children and young people with a disability.

Key Findings

The following section details this study's key findings, including prominent themes that featured across both children and young people, and their parents and guardians.

Communication

The need for adequate, and disability-appropriate communication was expressed throughout the study across a number of themes. Many of the ideas related to providing clear and accurate information on public transport, the provision of 3D models that can be touched, the use of technology, and awareness and training for relevant staff and the community.

Pedestrian infrastructure

The provision of pedestrian infrastructure that can facilitate movement throughout the city was prominent in discussions and in the development of ideas. Many of these ideas related to safety at crossings, the use of technology, signage at eye-level for children that communicates information via multiple methods, and safety, such as on ramps and escalators.

Public transport

Ideas around public transport were developed across both study groups. These ideas related to communication, including detailed and clear announcements, those pertaining to within carriages such as the use of tactile cues, buttons that beep and vibrate, awareness of accessible seating, and also those pertaining to platforms, including clear display information. Some ideas, such as crowding and the provision of uniformed assistance staff, were relevant for both within carriages and on platforms.

Strengths and Limitations

A strength of this study was that we were able to include children and young people with a range of different disability types. This allowed us to explore the diverse types of accessibility barriers in depth and bring about the creation of ideas that facilitate inclusion for a range of children and young people with disability.

This study also had several limitations. First, we were unable to obtain the number of participants that we had originally planned, and although we think that the current findings provide a rich source of information for policymakers, we believe that this could have been even greater. It should also be noted that, although this was in the beginnings of the COVID-19 pandemic, this was not a topic of conversation in the workshops. Several of the ideas related to crowding were regarding the general context of making it easier for children and young people to get around the city, rather than improving safety through social distancing.

Lessons Learnt

Recruiting participants was the biggest challenge the team faced in this project. We avoided visiting sites where we were likely to encounter children with a disability (e.g. special schools and play groups) for several reasons: to reduce coercion to participate, to avoid bias towards children with a certain impairment type (i.e. a deaf children's play group), and to avoid disruption during these sites' operating hours. It should be noted that although we were unable to recruit the number of participants desired, we held the workshop on a Saturday and at a central locale (Melbourne Town Hall) – which was the same study site that was successful in a previous study among adults with disability [13, 14].

Despite advertising widely through our established networks, and a $50 gift card gratuity, we were only able to obtain nine participants – well below the 50 participants that we had planned for. Unfortunately, it is difficult to disentangle our strategy from the relative influence of both past and looming public events. Our workshop was held on the 22nd of February 2020. It followed recent natural disasters in the area including bushfires [15] then floods [16], then the beginnings of the COVID-19 global pandemic [17]. Given these circumstances, it is difficult to make any recommendations to improve recruitment of children and young people with a disability and their parents and guardians into qualitative research.

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