

DESIGNING WITH CHILDREN



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SECTION 01 INTRODUCTION



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DESIGN THINKING FOR CHILDREN



Why include children in design?

Children all over the world, and in particular in many African countries, face challenges that can jeopardise their development. Some of these environmental challenges in African cities are a result of the remnants of colonial pasts coupled with continued neglect that leaves them with few resources.

While there is great positive momentum for designing child-friendly spaces in communities all over the world, few of these are in Africa and even fewer make use of approaches involving children's participation in the design process. Without disregard for existing African contributors to this discourse, Play Africa believes there is a great need for more contextualized research, precedents and advocacy for child friendly placemaking and approaches. This guide aims to not only advocate for child-friendly placemaking but also amplify existing voices and work within this discourse while offering you an approach that encour-

ages you to design WITH children and empower these young change-makers.

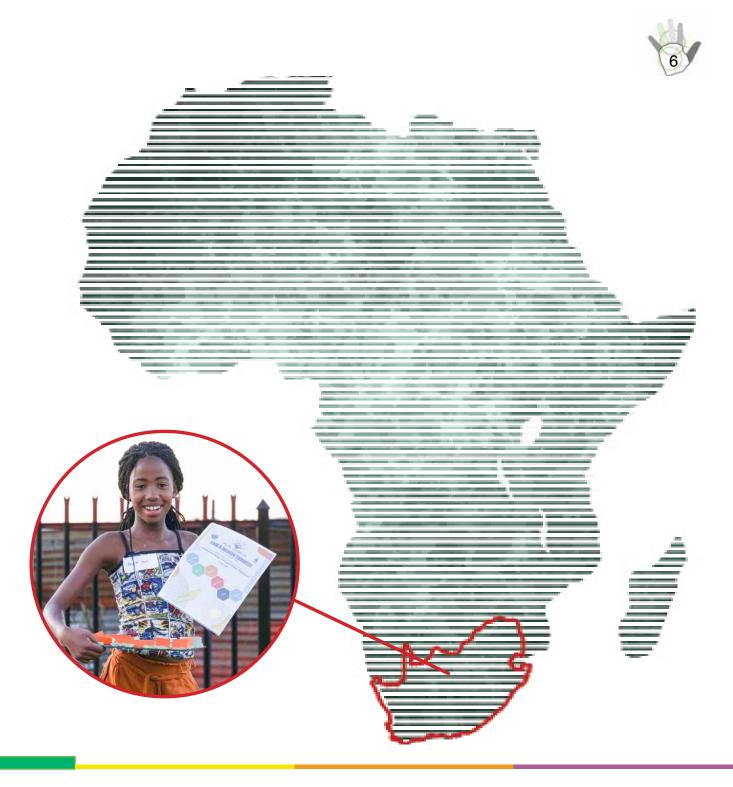
Play Africa's extensive experience working with children in a variety of communities and settings has resulted in the expertise used to provide you with guidance you will need to empower children to become full participants in their own development and that of their communities. Our guide includes a workshop that provides a step-by-step process to allow children to provide meaningful input about their communities. Child friendly environments designed without children's input often only offer adult perceptions of what they should be like and deny children the opportunity of creatively solving the problems they face. Ultimately, spaces designed for children benefit the entire community.



AN AFRICAN PERSPECTIVE

Play Africa brings a unique perspective to the larger conversation of placemaking and child-friendly cities. However, much of the global conversations around this are occuring in the "Global North" while leaving out a continent of 1.2 billion people. Many African countries are rapidly urbanizing, and currently, 40% of the population of the continent is ages 15 or younger. With greater populations living in cities that may not have planned for a population boom, and riddled with remnants of a colonial past, community groups, planners, and thinkers are considering the futures of African cities.

Looking at Africa through the lens of Ubuntu philosophy, which asserts that "I am because we are" this guide aims to offer a placemaking ethos that builds on to this thinking by putting children at the core of community-centeredness. Recognizing the tango between this humanist philosophy and the design thinking process gives the opportunity for spatial strategies that transcend Eurocentric ideals and allow for a new African, postcolonial urbanity to emerge. Play Africa also recognizes that the scarcity of guides and approaches contextualized to Africa with regards to placemaking with and for children creates a challenge for urban actors to effectively transform African urban spaces into child-friendly spaces. It is also important to note that Play Africa realizes that within Africa there is great diversity. This guide aims to bring an African perspective that may be adaptable to various countries in Africa and other developing countries.



WHO IS THIS WORKSHOP FOR ?





ARCHITECTS, CITY PLANNERS, SUSTAINABLE CITIES WORKERS, URBAN ACTORS IN AFRICAN CITIES

This is an opportunity to include children's voices in your work. When was the last time you made child-friendly spaces reflecting factors not only as proposed by professionals but as experienced by and desired by children too? Use this handbook to gather children's voices and engage children in the process of placemaking and realizing more inclusive, playful and equitable cities.



ADVOCATES FOR CHILDREN

You already advocate for children to be full participants in a democratic society, now give them the tools to make their own spaces. Teaching children to actively participate in the development of their physical living environment can plant the seeds for them to grow into active contributors in various aspects of the development of their country.



COMMUNITY GROUPS

Children are an integral part of the community and should be included in community support and improvement agendas. Good community environments empower children by uplifting their voices and giving them freedom beyond their home environments. Use this handbook to help children make choices about their space.



DESIGN THINKERS

Design Thinking is a creative way to solve problems. Now apply that thinking in the challenge of making cities playful and child-friendly. Help children learn the Design Thinking process that is vital in effective problem-solving.



PARENTS/GUARDIANS

The primary focus of any Play Africa program is always children. However, we always invite and encourage parents/ guardians to observe, if not also participate with their child. Observe your child participating in an innovative workshop and gain new insights into your child's thoughts. We find that parents enjoy gaining new insight into their children outside of the home.

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HOW TO USE THIS GUIDE



Invite and **empower** children to share their thoughts of their community



Use the Design Thinking process to **gather** children's voices for community development



Empower children how to **solve problems** using Design Thinking



Engage your community to create playful spaces for children



Utilize the curriculum to inspire the **inclusion** of children in city planning



Start conversations about **including** children's voices in community planning

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WHAT IS PLACEMAKING?

Placemaking is the processes in which spaces are turned into places. These processes are embedded in a wide range of practices. Paramount to placemaking is the consideration of exploring the practice and discipline of architecture beyond expert culture. Transcending expert culture is not about the destruction of expert knowledge but rather opting for more mindful ways in which expert work can enable the very people and places it serves. Expert work can be disabling in that it denies people their potential to take control over circumstances that take place in or impact their lives. Transcending expert culture sets placemaking within critical practice and pedagogy, extending the value and potential of the field's contribution to cultural production.

Bringing an African perspective is essential to effectively implementing child-friendly environments in African contexts. Many existing guides and knowledge on this area of discourse is contextualized to the Global North which tend to cause difficulty in the effective implementation in African contexts. Many African countries remain riddled with the remnants of co-Ionial pasts and have fewer resources compared to other contexts. Promoting an African perspective help bring about an approach to placemaking that challenges the high-risk of sub-optimal development children growing up in Africa face due to the invironmental factors within their context.





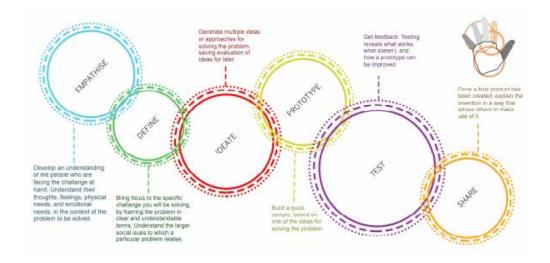


Why Use Design Thinking in Placemaking?

The key benefit of using the Design Thinking process in placemaking is the first step: empathise. What one outside of the community may see as a problem may differ from what one inside the community sees as an issue. Empathising first requires one to spend time with the community to fully understand the issues at hand. Additionally, following steps of prototyping can also be cost-effective; what looks good on paper might not work in real life. The mindset of using Design Thinking suggests that projects may take multiple iterations before being completed.

Why should children use Design Thinking?

Children can benefit from learning the Design Thinking process early and often. The process of following distinct steps encourages planning and regulation, which are key skills for young children. Furthermore, the process of ideating and prototyping and testing demonstrate to children that the first idea might not be the best, but that it's important to go back and try again. Persistence, along with the of 21st Century Skills collaboration, communication, and creativity are all developed through Design Thinking.







SECTION 02 PLANNING



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THE PLAY AFRICA APPROACH



Play Africa approaches working with children in ways you may not have experienced. We value children's opinions and abilities to make good choices for themselves.



TIMING

We always plan with the child in mind. We like to include time guidance, but we often find children let us know where they need more or less time. We dissuade adults from dictating how children should use all their time; instead we like to give guidance and leave space for children's choice. We suggest allowing for additional time before beginning the workshop to allow children to orient themselves to the space, use the bathrooms, and get comfortable with the other children.



INCLUSION

We believe that all children have the right to play. When necessary Play Africa will make adaptations and modifications to make exhibits and programs accessible to all children.



VOCABULARY

We treat children with respect and dignity. When we communicate with children we use their names and listen to their ideas. We believe children have the ability to understand complex ideas, as long as age-appropriate language is used. Before working with children consider jargon you might use, and think about how you can define complex terms in a clear, concise manner.



CHOICE

At Play Africa we strongly encourage children to make their own choices and decisions. We believe that giving children choices lets them discover their interests and passions. Whenever possible allow children to choose the activities to spark their interest.

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DEFINITIONS



DESIGN THINKING

A 6 step process of creating design solutions to problems. The steps of the process can be repeated many times before a finished product is made.



PLACEMAKING

The act of turning a public space into a usable space for the community.



WORKSHOP

In this context, a structured learning opportunity outside of the classroom.



CHILD-FRIENDLY SPACES

A space that takes a child's needs into account, and is welcoming and inviting for children



PUBLIC SPACE

A part of the neighbourhood that is used by everyone, and owned by the city, community, or other large organization.



PRIVATE SPACE

A part of the community that is owned by an individual or some company.



COMMUNITY

A group of people who live in the same area.



PROTOTYPE

An early model to test a concept. In this case, a small model made of recycled materials rather than a full-sized object.

CHILD SAFETY



The Play Africa approach always puts children at the center. We view everything from the child's perspective and with the child's best interest at the fore. With that in mind Play Africa has an unwavering commitment to child safety.

Before beginning the planning process please read the Play Africa Child Safety Policy, then do one of the following:



1. Adapt our policy to meet the needs of your organization.

Or



2. Check your existing child safety policy against the play africa child safety policy. Select the highest level of safety.

All adult participants in the program must read and sign the child safety policy (either the editable Play Africa version, or another organization's policy), and all children must have a signed consent form from a parent/guardian.

Prior to the workshop you may wish to send home an informational letter to parents/guardians. Please feel free to adapt the Workshop Information for Parents letter

If your child population includes children with special needs you will need to adapt the parent/guardian consent papers, and take additional mitigation steps prior to beginning the workshop.

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WHO WILL YOU ?

Identify the group of children you will work with. The workshop is designed for children ages 7-11, but other ages can be included too. If you are not already part of an organization that works with children it may be easier to find an existing group such as:



AFTER SCHOOL CARE

RELIGIOUS GROUP

SCHOOL GROUP

COMMUNITY GROUP

Play Africa designs programmes for ALL children. With some groups you will need to make modifications to ensure children can fully participate in the workshop. Adaptations of this workshop to suit your contextual needs while considering child-safety protocols is encouraged.

Suggested adaptations

Young children

- Include movement breaks
- Increase use of visual supports
- Give opportunities for children to show you want they want to communicate through pictures and prototypes rather than writing and speaking
- Allocate more time for building prototypes

Older children

- Provide inspiring examples of community interventions (a Google Image search for "Public Space Design" or "Urban Landscape Design")
- •If chidlren are willing, go further in conversations about the community

School setting

- Break the workshop into smaller pieces
- Include opportunities for writing and presenting
- Try our S School Adaptation form

MAP THE AREA



Spend some time in the neighborhood. Walk around and find public spaces for improvement. We suggest choosing spaces that you have permission to work in so if you choose to take children's voices further you can implement the designs.

While mapping, identify the cultural groups most children belong to. Learn about the cultural norms in the community, the preferred language, and any community-specific experiences the children may have. When in doubt, connect with a community leader to learn more about the community you will work in before beginning the workshop. We recommend using a map, either printed or handdrawn, during the workshop. Identify key areas for intervention on the map prior to the workshop.



OPTIONAL:

Start speaking to your local officials (city planners, community leaders etc) to tell them what you'll be doing. It's always a good idea to get the community involved.

SUGGESTED ADAPTATIONS

Longer time frame

- Include children in mapping the area. During the Empathize and Define stages visit the space and allow children to share their feelings about the space.
- In the Test stage re-visit the site. Allow children to explain how they imagine their prototypes fit and function in the space.

Intervention site approved

- If you already have permission to build an intervention at a specific site allow additional time for children to visit and explore the space. Encourage children to create prototypes based on their observations of the site.
- If possible, visit the site with children at various points of the day. Engage in the Empathize and Define stages of the Design Thinking process to ascertain if there are different issues at various times of the day.
- You may create opportunities for children to engage with other uses of the space through short surveys or interviews. Children must always be accompanied by facilitators.

SITE ASSESSMENT



Conduct a thorough site assessment. This includes the area where you will conduct the workshop, and the areas for community improvement.

- Visit the site during the time you will conduct the workshop (to check the weather conditions and how the space is used during that time)
- Make a plan for adverse weather conditions
- Where will children sit and play during the workshop?
- Where are the closest bathrooms?
- Do you have permission to meet in that area?
- Consider the needs of children with specific needs

Complete a Site assessment form

We suggest conducting the site assessment with a member of the community who may have specific insight into how the space is commonly used.

ROLES



Before conducting the workshop assign adults to specific roles. We suggest these roles so children can be adequately supported, and to ensure child safety.



LEAD FACILITATOR

This person will lead the workshop with children.



ASSISTANT FACILITATORS

(minimum 2 people) These people will assist the lead facilitator in running the workshop. They may also guide children's conversations during the workshop.



CHILD SAFETY FACILITATOR

This person's sole focus will be on child safety during the workshop. This may include keeping an eye on other adults in the area (if the workshop is held in a public space), taking groups of children to the bathroom with an additional adult, checking materials to ensure they're safe for children, or assisting children with tools.



FAMILIAR FACES

If the facilitators are not already known to children please invite 2 familiar faces to be present. They may not need to facilitate the workshop, but they are a helpful child safety measure. A familiar face could be a parent, a teacher, or a community leader.



MONITORING AND EVALUATION

This role is for documenting children's thinking and learning through notes, voice recordings, and photographs. All documentation needs to comply with child safety standards



LANGUAGE GUIDE

If some of the children speak a different language from the facilitators please ensure that you have at least 1 person present who can translate and communicate with children. In an ideal situation the facilitators will speak the same language as the children. Where that is not an option a language guide must be included.



DESIGNER

You may want a spatial designer like an architect present during the workshop. The designer may aid in the documentation of children's proposals. These proposals can then be taken forward and used to design a final spatial intervention. The intervention should reflect children's ideas from the workshop and depending on its nature may be built with children's active participation.



PARENTS

We strongly encourage you to invite parents/guardians to observe or attend the session too. this makes child safety policy easier to follow, and gives parents/guardians a new insight into how their children think and play with others.

RISK MITIGATION



Conduct a thorough risk mitigation assessment before beginning the program. Special considerations for Covid-19 protocols must be included.

Cultural norms may not always align with the child safety policy or Play Africa approach used for the workshop. You may need to consider what could happen if adults speak for children, or build prototypes for children. Take clear mitigation steps before beginning the workshop. Speak with adults, explain the process and approach. You can use our model NRisk Mitigation form to guide your assessment.

Give time for questions and concerns.



Guidelines to inform your risk mitigation

STAFFING

- Adequate staffing of all entrances, exits, toilets and other identified points
- Facilitators or volunteers patrolling the site perimeter
- Facilitators, volunteers and participants wearing identifiable clothing (e.g. high-visibility vests or coloured tee shirts for staff)
- Appropriate numbers of facilitators or volunteers trained in first aid
- All facilitators and volunteers aware of and committed to child safety protection policy and procedures

SECURITY AND SIGNAGE

- Cordoning off activity areas for event staff, volunteers, participants and approved others only, and provide accreditation for event staff, volunteers and participants
- Signage (appropriate for young people) to help them find their way around the site

HANDOVER ARRANGEMENTS

- Designate a clear venue and system for the handover of children to parents at end of the workshop, ensuring that children do not disappear unaccounted for
- Event staff or volunteers stay until the last young person is safely accounted for and that suitable arrangements are made for any participants whose parents/ quardians fail to collect them

WEATHER CONTINGENCIES

 Ensure there are weather contingencies in place and understood by key staff/volunteers

COVID-19 PREPARATIONS

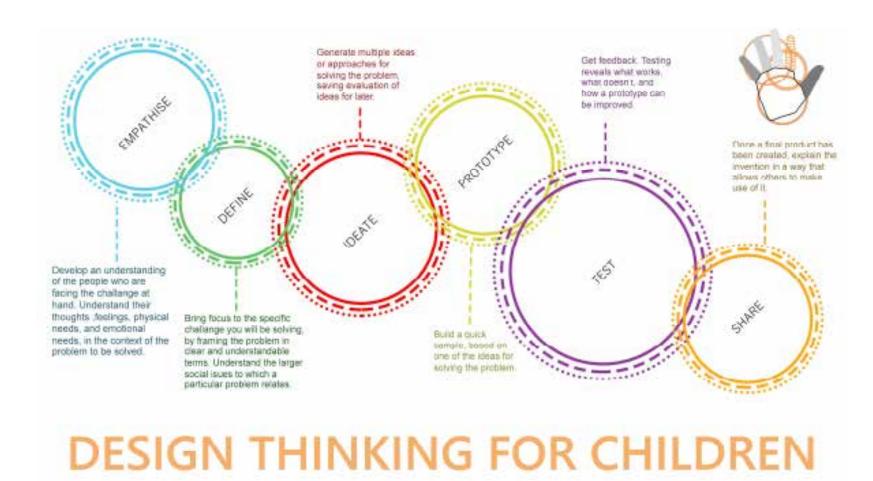
- Facemasks for all facilitators, volunteers, participants, and observing adults
- Hand sanitizer or hand washing stations available
- Temperature checks
- Adequate spacing and air flow

DESIGN THINKING





If design thinking is new to you, please familiarize yourself with the steps. You are not expected to be an expert, but a basic understanding of the steps will help the flow of the workshop.







GUIDING PRINCIPLES OF PLACEMAKING

- 1. Listen to the community
- 2. Collaborate with the community and key stakeholders.
- 3. Create a culture of possibilities
- 4. Celebrate what makes a place unique
- 5. Be future focused
- 6. Start by doing



THE BENEFITS OF PLACEMAKING

- 1. Empowered and engaged communities
- 2. Stimulating economic growth
- 3. Enhanced social interaction
- 4. Demonstrating what is possible
- 5. Turning spaces into places
- 6. Improved environmental sustainability



PLAY AFRICA'S APPROACH TO PLACE-MAKING WITH CHILDREN

- 1. Understanding place
- 2. Co-creating proposals with children through Design Thinking Workshop
- 3. Planning for implementation
- 4. Consolidation of ideas
- 5. Transforming place



GATHER MATERIALS



Our recommended materials include:

During the workshop children will need materials to create prototypes of their interventions. We have found that creating small prototypes is the most successful first step. As a starting point, small prototypes create more room for all children to express themselves more confidently and creatively at a manageable scale, while enabling the process to be more iterative until you come to a final design.

The materials you make available for children send a message-a mix of colorful, well organised materials lets children know that their ideas are important. Depending on the context, collecting recycled materials may be the most cost-effective option both for the workshop, and for life-sized prototypes.

As you begin to contact the parents of children to participate in the workshop you may want to ask them to save recyclable materials such as boxes, food containers, rubber bands, and cardboard tubes.



Consider the budget you have for the workshop and what the community has to offer:

- Do you need help and are there people/ organizations that can help?
- Recycling is always good and cost-effective.
 How can your workshop make use of recycled
 materials in a fun and playful way? What materials are easily accessible and most familiar in this
 community to make this possible



Cardboard



Paper



String



Adhesives Like Kids' Glue, Prestik, Tape



Craft Sticks



Polystyrene



Beads



Playdough



Cleaned Found Objects Such As: Plastic Bottle Tops, Plastic Bottles



Legos



Paper Scissors



VISUAL AIDS



You will also need some visual aids during the workshop. You can use the provided Play Africa materials, or design your own.



Play Africa materials

- ♦ What Learned Today (children)
- Should be sh
- Solution Documenting Children's Thinking (adults)



Additional Materials

- Map of the area
- Drawing paper
- Pencils/crayons/markers
- Prototyping materials
- Chart paper (optional)
- •Snack/water (optiona

\square	Checklist
	Child Safety code of Conduct signed by all adult facilitators/volunteers
	Group of children identified/invited
	Informed consent forms for all children
	Photo/Media release form returned
	Site assessment completed
	Area mapped
	Risk mitigation completed
	Roles assigned
	Materials gathered



SECTION 03 WORKSHOP CURRICULUM



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 - 1. Welcome
 - 2. Icebreaker
 - 3. Introduction to Design Thinking
 - 4. The Design Process: Empathise, Define, Ideate Break
 - 5. The Design Process: Prototype, Test, Share
 - 6. Summary and Debrief
 - 7. Optional: Free Play

DESIGN THINKING FOR CHILDREN WORKSHOP





OBJECTIVES

- Provide space and encouragement for children to participate meaningfully in placemaking, by providing a safe nurturing environment for children to share their feelings, insights and ideas about their neighbourhood
- Solicit meaningful input from children about their visions for the neighbourhood through Play Africa's design thinking workshop
- Children feel seen, heard and valued as caring adult supervisors recognise their creative solutions to real world issues, developing their confidence as designers with original solutions
- Through the design thinking process, using play, creativity and problem-solving, children develop tangible ideas for creative interventions they imagine might add value to their neighbourhood
- Through participatory placemaking, children develop a sense of personal empowerment, as well as ownership and belonging to their neighbourhood.
- To encourage the active participation of children by suggesting the improvement of their urban spaces thereby inevitably supporting child development by encouraging children's active participation in their own development.



OUTCOMES

Through Play Africa's design thinking workshop, adults will support children's participation with the aim to reveal and document:

- What children in the neighbourhood think about their public spaces
- How children define and understand the problems and highlights of their public spaces
- What suggestions the children make to improve their lives and their communities
- How children think public spaces could be more child-friendly
- How children's participation in placemaking enhances their spatial understanding of their neighbourhood

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THE PLAY AFRICA APPROACH

The Play Africa approach to working with children might be different from what you have experienced. We view children as full participants in society with ideas that hold value for the community. They have rights that must be upheld. We aim to provide situations that allow children to learn and grow on their own terms. We value play-based learning as the highest form of learning for children.



GUIDELINES FOR WORKING WITH CHILDREN

- Treat all children's thoughts as valuable
- Speak to children with respect and use age appropriate language
- Whenever possible, allow children to guide conversation and activity
- Create space and time for children to come to their own conclusions or solve their own problems
- Think of your role as a guide, rather than a teacher. Support children's activities rather than dictate children's actions



This curriculum is meant to be adapted. Please feel free to make changes, adaptations, and additions as meets the needs of your community. While the workshop presents a focus on interrogating a neighbourhood with children to see what suggestions children may have on its potential, facilitators may adapt the workshop to focus on a determined and more specific location. You may want children to participate in inventing for a specific location if you intend on implementing their suggestions and, for example, already have permission to implement a child-friendly and playful intervention in that location.



TIMING

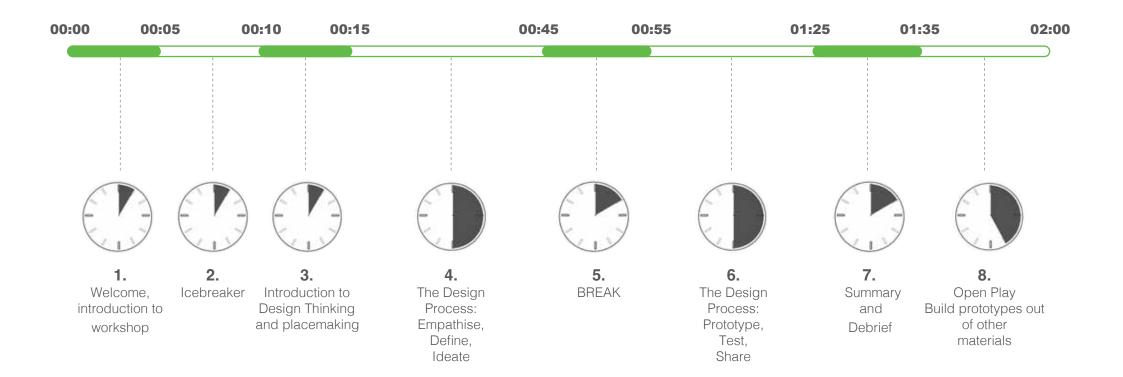


We recommend setting aside 2 hours (minimum) to gather children's voices in the workshop. You are free to make adjustments to meet the needs of your setting. Our recommendation is as follows:



Registration, name tags made, materials in place, snacks/water

30 MINUTES BEFORE START



WORKSHOP BREAKDOWN







SUGGESTED MATERIALS

- Name tags
- S Attendance register



OBJECTIVES

- Create a safe and welcoming space for children
- Child safety perspective-introduce all adults, explain rules/expectations

SUGGESTED ITEMS IN A WELCOME



- Introduction to all adults facilitating the program
- Introduce all children to each other
- Share rules/expectations of behavior
- Share expectations with regards to workshop outcomes (e.g should children expect workshop to lead to life-size intervention in a public space, ideas brought to a planning committee etc)
- Give guidelines to observing adults
 - -Encourage adults to jot down observations
 - -Observe children, help only if children are struggling
 - -Listen to children's thoughts
- Point out toilets/explain toilet policy
- Explain timetable



SAMPLE SCRIPT

Welcome to our workshop! We're excited that you're here (introduce all adults and children). Today we're here to learn what you think about your neighbourhood. Before we get started we need to review a few expectations.

In this space we will:

- Treat everyone with respect
- Listen to each other
- Help each other

In this space:

Everyone's ideas are valuable

The purpose of this workshop is to have fun while sharing ideas on how your neighbourhood can be improved and to transform a public space to make it more child-friendly and playful for your use. Who has heard the term public space before? [give time for child responses]. Public spaces are parts of the neighborhood that are for everyone to use. Your home is private; I can't just walk into your house and start playing. A public space is a place for everyone...like the streets, sidewalks, and parks.







SUGGESTED MATERIALS

- Paper/pencils, depending on the icebreaker activity
- 2-4 small balls, depending on the icebreaker activity



OBJECTIVES

Create a safe space where children feel welcome



SUGGESTED ACTIVITIES

- Share participant names
- S Icebreaker Activities

Icebreaker activities help children feel more comfortable in a new setting, and are a playful way to interact as a group. Please adjust the icebreaker activity to your setting; consider the space, materials, and familiarity with the group when choosing an activity.

Feel free to create your own ice breaker activity, or use one of the suggested activities in the annex.



SAMPLE SCRIPT

Before you start sharing your ideas we need to play a little bit. We need to get our brains ready to invent. We're going to play a short game. (Give instructions for the icebreaker)





3 | INTRODUCTION TO DESIGN THINKING

[5 MINUTES]



SUGGESTED MATERIALS

- S Design Thinking poster
- Documenting Children's thinking



OBJECTIVES

- Create a space where children know they can comfortably share their ideas
- Clarify expectations- the workshop is about gathering and sharing ideas to create child-friendly spaces in the neighbourhood. [explain what will happen to their ideas, tell children how you will take their ideas further]
- Encourage children to begin thinking of themselves as inventors



NOTE

- Please be culturally aware and sensitive.
 Some children may not feel comfortable sharing ideas immediately
- Some modifications
 - -Assign small groups for discussions
 - -Allow children to draw ideas first
 - -Always allow children to communicate in their preferred language



SUGGESTED ACTIVITIES

- Ask questions such as "What is an inventor?" ask children to describe what they do
- Inventors use a process called Design Thinking to help guide their work
- Share Design Thinking poster
- Reinforce that there are no bad ideas, and that children have the innate ability to come up with solutions. Children don't need to wait for the adults in the room to guide their ideas.
- If time allows, take children on a short site visit to explore the space, draw quick pictures, and share their thoughts





SAMPLE SCRIPT You have powerful voices. What do you have to say about your neighbourhood? What do you like, what do you not like? What you think might be done to make your neighbourhood better for children?

> Children have very important voices, and you see the world in a different way than adults. Your input can help design neighbourhood that can be friendlier, more playful and safer for children.

We also know that every child can be an inventor. What is an inventor?

To become an inventor, we don't just start with inventing things perfectly the first time. There is a process that we use. It's called Design Thinking. It's a process where there are no wrong answers. In fact, the answers that seem the craziest are maybe the very, very best, because no one has thought of them before!

Design Thinking is a helpful way to think about a problem and find a solution. [show Design Thinking poster]. Inventors use this process when they create something new, and today we're going to try Design Thinking to think of ways to improve the neighbourhood.





4 | THE DESIGN PROCESS: | EMPATHISE

[30 MINUTES Empathise, Define, Ideate]



SUGGESTED MATERIALS

- Chart paper
- Markers
- Emotion faces
- Map of the neighbourhood
- S Documenting Children's Thinking



OBJECTIVES

- Identify the emotions children feel about different parts of the community
- Empower children to share their experiences with others
- Gather children's thoughts about issues in their community



NOTE

- Some children may not feel comfortable sharing emotions, especially while parents/ guardians are present. You will need to judge the situation as it arises, and possibly create some space between parents/guardians and children
- Young children may not be able to name emotions without support. Use the "How do I feel?" faces to assist

SUGGESTED ACTIVITIES

- Explain that before inventors start fixing a problem they need to understand the problem. That means speaking to people in the community to hear their concerns
- Ask children how they feel in different parts of their neighbourhood (differentiate between home and community)
- Ask children to imagine how older or younger children feel in different parts of the neighbourhood
- Use emotive faces and place them on parts of the map (a happy face at the park, a worried face at a busy intersection)
- Document children's thinking on chart paper and a map of the area





SAMPLE SCRIPT

Before an inventor can fix a problem they have to understand the problem. Think about your walk to school, or your walk to the shops, or to a friend's house. What is in your neighbourhood? What do you see? [document children's thinking on chart paper and on the map, summarize what you hear/write on the "Documenting Children's Thinking" form].

[You can introduce a map at this point, if using]

With any great invention, you have to understand what people need most. Maybe you have a little brother or sister, or little cousin. Maybe you have a neighbour who is littler than you. Maybe there is a baby going to be born in this neighbourhood. We want you to EMPATHISE with the experiences of other children in your neighbourhood. When you EMPATHISE, you understand how they are feeling

What are some of the feelings you have in different parts of the neighbourhood? How do you think other children might feel in different parts of the neighbourhood?

[document children's thinking on chart paper and ask children to paste emotion faces on the map, if using]

Note- A variation- Ask children to act out the things they see in their neighbourhood. This has the benefit of keeping children moving, and is a playful way to explore the neighbourhood.



4 | THE DESIGN PROCESS: DEFINE



SUGGESTED MATERIALS

- Chart paper
- Markers
- S Documenting Children's Thinking



OBJECTIVES

- Be aware of which children are speaking and which children are quiet
- Consider how the issues children mention affect different ages and genders
- Modifications
 - -Put children in small groups or pairs to discuss
 - -Encourage all children to share to one other person



SUGGESTED ACTIVITIES

- Read through charts of children's thoughts and look for patterns
- Ask children to identify a problem they think they can solve
- Choose 1 or 2 specific problems to work on as a group



SAMPLE SCRIPT

Now we know how you and other children feel about the neighbourhood. What are some of the challenges you, or you think other children face in the neighbourhood? (Document thinking on chart paper)

[If a map was used in "Empathise"] Why did you paste the face there? Tell me more about this place. How does it make you feel?



4 | THE DESIGN PROCESS: IDEATE



SUGGESTED MATERIALS

- Sketching paper for children
- Pencils/crayons/markers
- S Documenting Children's Thinking



OBJECTIVES

Use the chosen problems as inspiration for design



SUGGESTED ACTIVITIES

- Provide children with sketch paper and writing utensils and encourage them to draw
- Encourage children to choose one part of their neighbourhood they want to make more playful and child friendly
- Encourage children to draw as many ideas as they can

Guidelines for sketches

- Don't judge (no idea is a bad idea in brainstorming)
- Go for quantity (create as many new ideas as you can)
- Build on the ideas of others it's OK!
- Encourage wild ideas (sometimes crazy ideas are the best!)
- No ideas from adults



SAMPLE SCRIPT

Now it's time to think of possible ways to make the neighborhood more child-friendly. Please choose one part of the neighbourhood that you want to improve for children. You are going to draw as many inventions as you can to improve your chosen part of the neighbourhood. Go wild! Draw as many ideas as you can.

[provide children with enough time to create multiple drawings, periodically ask children to share about what they're drawing]





Children need a mental and physical break between activities. Take a few moments to get some water, have a quick snack, and give the brain a moment to recharge.





THE DESIGN PROCESS: PROTOTYPE

[30 MINUTES Prototype, Test, Share]



SUGGESTED MATERIALS

- Building materials
- Stopwatch
- S Documenting Children's Thinking



OBJECTIVES

- Understand that a prototype is a model of an idea
- Transfer ideas from paper (sketches) to small 3-d models
- Understand that prototypes give you the opportunity to test your ideas and improve on them, to make sure you have the best invention possible.



SUGGESTED ACTIVITIES

- Ask children to choose 1 sketch that they think would help the most children in the neighbourhood. You can choose more than 1 sketch based on the needs of your group
- Pass out prototype materials (playdough, clay, sticks, cardboard, glue etc)
- Give children a set time to try to build a prototype of a sketch



NOTE

Note- The prototypes that children develop may look quite different from their drawings. It's more important that children explore possibilities with materials than create an exact copy of a drawing. The drawings should inspire the prototypes, but we are not concerned with direct replication.





ISAMPLE SCRIPT

Now we will create prototypes of our drawings, because what works on paper might not work in real life. Inventors create models called prototypes before making the final invention. Prototypes are often smaller models than what we hope the final product to be because it's easier to make changes. Let's look at the drawings we did before the break. Which drawings do you think will help the most children in the neighbourhood?

[allow for discussion, gently push children to provide reasons for their thoughts]

Let's create prototypes of these drawings [or allow children to choose their own drawing]. You can use these tools to create a small version of what you see in this drawing. Prototypes are not supposed to be perfect; rather they should give us an idea of what your creation/invention will look like.

[pass out materials and let children build]

You will have 5 minutes to build a prototype. Prototypes are not meant to be perfect. (When children start building, set a timer. Based on progress you may wish to add a few additional minutes).

Countdown....time's up! This was your first prototype. Now we need to try the next step in Design Thinking...testing.



THE DESIGN PROCESS: ΓEST



SUGGESTED MATERIALS

- Additional building supplies (as needed)
- S Documenting Children's Thinking

OBJECTIVES



- Understand that creating multiple iterations can help us find the best solution to the problem
- It's important to let the people who will be using our inventions look at them and try them out



SUGGESTED ACTIVITIES

- Break children into pairs and ask them to discuss their prototypes
- Adults can support children's ideas and conversations, and gather feedback



NOTE

- Keep an eye on how children react to feedback. Be aware that some children may see any criticism of their work as failure. Remind children that inventors go through this process too, and that they often go back and prototype again and again and again!
- When possible put children in groups where they speak the same language
- Be culturally sensitive as to how mix-gender and mixed-age groups communicate and listen to each other



SAMPLE SCRIPT A very important part of creating something new is testing our invention. One way to test is to share it with people who will be using it, and ask them what they think. After getting feedback we can take the suggestions and make changes to our prototype to create an even better version.

> We're going to practise giving feedback to each other about our inventions. In pairs/small groups please share

- 1. Things you like about an invention
- 2. Things you don't understand about an invention
- 3. Ideas for making an invention better

Now that you have received some feedback we're going to take those comments and make another prototype. Inventors call multiple versions "iterations". Iteration means continuing to test and make changes, which helps find the best way to solve a problem. Iterations continue until an invention is as helpful as possible for the people who will use it.

Now you can make your prototype even better You have 5 minutes to make another prototype....go!

[Repeat the feedback exercise again. If time allows go through the prototype-test stages a third time]



5 | THE DESIGN PROCESS: SHARE



SUGGESTED MATERIALS

- Sketching paper/clay/playdough for 1-2 children
- S Documenting Children's Thinking



OBJECTIVES

- Understand that sharing is communicating your ideas to others
- Sharing is important because we invent things for other people to use



SUGGESTED ACTIVITIES

- Have children share their prototypes with the group, explaining what it is, how it will be used, and how it will help make the neighbourhood more child-friendly
- Depending on what your next steps are you can inform children that they will
 - -Continue prototyping
 - -You will take their ideas to planning meetings



NOTE

You can add additional prompts if you wish, or you may choose to leave the sharing format flexible. Keep in mind that some children may not wish to share in front of the whole group. You are welcome to share in smaller groups.



SAMPLE SCRIPT

An important part of inventing is sharing it with others. After all, the reason we make inventions is to help other people. It's important to tell others what your invention is, and how it helps make your neighbourhood more child-friendly.

However, it can be challenging to share our ideas with others. I need 1 volunteer to talk about their prototype, and 1 helper. (Choose 1 child to share their prototype with a child who was not working in the same area).

(While keeping the prototype out of sight) Child 1, please describe your prototype for Child 2. Child 2 is going to try to build your invention.

(Child 1 describes the prototype while child 2 tries to draw, or model out of clay, what is being described. Set a short time limit.)

Do the inventions look the same? Why or why not? (give time for responses)

As you can see it can be challenging to talk about our inventions with other people. To guide our sharing let's share the following:

- 1. Where does your invention belong in the community?
- 2. How does it work?
- 3. How does it make the space more child-friendly?





6 SUMMARY AND DEBRIEF



SUGGESTED MATERIALS

- S Design Thinking Poster
- S What I Learned Today
- Si'm a Design Thinker Certificates
- S What I Observed Today (adults)



OBJECTIVES

- Review the steps of Design Thinking
- Remind children that their voices are important in making cities more child-friendly



SUGGESTED ACTIVITIES

- Show the Design Thinking poster and review the steps children used
- Ask question about how they felt while creating something new
- Ask question to learn more about what children want adults to know



SAMPLE SCRIPT

Today, inventors, you used the Design Thinking process to think of ways to Improve your community

[review Design Thinking poster]

How did you feel when you were creating your idea? [give share time]

What do you wish grown ups in the neighbourhood knew about children's experiences? [give share time]

We'd like to document your learning today, Please fill out "What I learned today"

Adults, we'd like to know what you've learned too. Please fill out "What I observed today

[Pass out "I'm a Design Thinker" certificate]





OPTIONAL: FREE PLAY [25 MINUTES]



OBJECTIVES

- Allow children to continue to experiment with prototypes and building materials
- Invite parents/guardians to build with children



SECTION 04 NEXT STEPS



- 47 I Continue the Design Process
- 49 | After Implementation



STEP 1 Continue the Design Process

- Determine a location
- Get Funding
- Produce a final design
- Implement design

STEP 2 After implementation

- Test intervention with children
- Test intervention with stakeholders

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CONTINUE THE DESIGN PROCESS

For this stage you will need your spatial designer(s) to take lead in translating the design proposals that were produced by children in the workshop.



SUGGESTIONS IN THE DESIGN IMPLEMENTATION STAGE:

CREATE AN EXHIBIT TO SHARE CHIDLREN'S WORK

Gather all prototypes, drawings, and other materials used durign the workshop. Create an exhibit to showcase the ideas children shared. Whenever possible include dictation of children's own words about their inventions. Be mindful of child safety procedures; use only initials or first names when displalying children's work. Invite children, their families, and the community to see the work and comment.

MULTIPLE ITERATIONS

The beauty of the design thinking process is that participants are encouraged to loop back to the various steps at any time. After the initial workshop you may want to redefine the problem, or create additional prototypes. You may choose to continue an iterative design process that stretches over weeks. Whenever possible include children in these design iterations.

FINALISE LOCATION

The location of the intervention will be determined by the manner in which the workshop was held. If children were given a specific location to design for, the intervention should be realized within that specific space. If children individually picked public spaces within their neighborhood to design for, then the designer may choose the best possible location for which the designs will be adapted to.

DEVELOP A STAKEHOLDER LIST

Consider to whom does the property/ land of proposed intervention belong? Is it publicly or privately owned? Who will be affected by the proposed intervention? Are there traders who use the space who may need to be engaged and considered in the intervention? Is a public utility buried on the site and how will it be affected by the intervention? Create a list of stakeholders you will engage with to create and install the intervention.



SHARE WITH STAKEHOLDERS

Share key learnings from the workshop with various stakeholders. Whenever possible include children's drawings, ideas, and prototypes.

Ways to share with stakeholders:

- Plan a community meeting, or join an existing meeting
- Create a sharing wall in a public area (a library, community center). Leave space and materials for community members to comment and share ideas
- Take the plans to local businesses, especially those that are close to the proposed site
- Attend local government meetings
- Create a website or Facebook page to share your plans and ideas more widely
- Approach a local publication with your plans and ideas.

Ensure that permission for the intervention in the public space you will use has been granted by your local authorities. If the land is publicly owned you will need to liaise with the local government. Many cities and parks departments have mandates to involve the community in improvement projects. Connect with city and parks employees whenever possible.

FUNDING

- You may want to get funding to implement child-friendly space. If you already have funding, start considering your budget and the scale/ nature of intervention.
- If you have a small or no budget consider how you can leverage local materials and local expertise in building the intervention. Recycled tires can easily be turned into jumping rings, swings, and sand pits.
- Contact your local government and parks department.
 Often cities have funds set aside for community improvement projects.
- Research community activism groups in your area. You
 may be able to partner with an organization that aligns
 with your goals.



TIMING

Determine whether child-friendly space will be permanent or temporary. If temporary, consider building the intervention aligned with school holidays, or public holidays to increase child participation.

PRODUCE A FINAL DESIGN

Using contributions from children create a final design that stakeholders support.

A few key issues to consider when taking the design forward:

- How can you get the children and/ or the local community involved?
- How can you create a reduced cost implementation?

IMPLEMENT THE DESIGN

Follow your plans to implement the community design. Include various stakeholders in the building process, and find safe ways for children to contribute to the creation of the space too.

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AFTER IMPLEMENTATION



TEST THE INTERVENTION WITH CHILDREN

Having set the expectations for life-sized prototypes to be built, the children are likely eager to see them built. Harness that excitement! Take the children to the site to see and test the outcome. Note how children engage the intervention. It is important to document the impact of the intervention for future improvement on it and on your other future projects.

TEST THE INTERVENTION WITH RELEVANT STAKEHOLDERS

Test the intervention with relevant stakeholders
By the point of completion of the implementation stage, you
have engaged various stakeholders within the community. It
will be great to introduce them to the final product too! Invite
them and encourage them to bring their children to experience the space. It will be great to document their thoughts
and commentary on the process you went through and the
result in order to use that to improve on our future projects.