

Playful Cities Toolkit

RESOURCES FOR RECLAIMING PLAY IN CITIES



Introduction

Children's well-being, safety, learning and social development, as well as their essential experience of childhood, are affected by the extent and the quality of their opportunities to play.

Most of us remember our favourite childhood game. Indoors or outdoors, alone or together, with or without toys, play is special. Play lets us explore new terrain, re-imagine our surroundings, and build the skills that stay with us forever. The ability to play – in a safe and stimulating environment – is transformative for children. It builds their emotional and social resilience, while fostering their cognitive and physical development. In turn, they grow up ready and willing to face the many challenges in the modern world.

Not convinced? Well, play is so important to children's well-being that, in 2018, the American Academy of Paediatricians and the UK Children's Commissioner both prescribed play for parents and their children. This added much-needed impetus to the 1989 United Nations Convention on the Rights of the Child, which enshrined the Right to Play for all children.

And it's not just children who benefit from play. Incorporating children's ideas into city planning is shown to create friendlier, greener and more inclusive spaces. Furthermore, child- and play-friendly space can boost the economic value and long-term viability of the built environment. The message is clear: child-friendly and playful cities are cities that work better for everyone.

However, the things that children value most in cities are too easily pushed aside. Pressure on available space, together with overzealous regulations, is edging children out of the urban realm. Child's play, and the immense learning potential it brings, is the greatest victim. Play poverty is on the rise, as is the number of children living low-play lives. At the same time, children are excluded from conversations about their surroundings, at a time when their needs and perspectives should be front and centre of the debate.

In 2018, the LEGO Foundation, ARUP, IKEA (Ingka Group), National Geographic Partners and UNICEF formed The Real Play Coalition, with the ambition to create a movement that will narrow the play gap for 100 million children by 2030. We will do this by making play accessible and inclusive, and championing every child's right to play. Three years on, a lot has been achieved. The Reclaiming Play in Cities initiative has been pioneered by Arup and the LEGO Foundation with the Real Play Coalition to embed play elements in city design and planning. Play is about much more than building playgrounds. It requires a cultural shift, a combination of time, space, and facilitation. Efforts to encourage play must infuse all urban systems and occur at all levels of society. The Playful Cities Toolkit aims at creating a step-change in how play is assessed and supported in cities. It brings together the disparate fields of play and placemaking to better understand the complexity of play in cities and provide design guidance in a simple and holistic approach. Tested and refined in contexts as diverse as London, Cape Town and Milan, this Toolkit is aimed at a broad constituency of stakeholders, to help unlock the transformational benefits of play for children, their caregivers and entire cities.



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Introduction

Play is essential for children's well-being and happiness, as well as for their healthy physical and emotional growth.

Studies show that play supports children's well-being by fostering their learning and holistic development, including social, emotional, cognitive, physical and creative skills. Play is an ideal way to equip children with a broad set of flexible competencies and personal capacities to build resilience and tackle new and different challenges creatively.

Outdoor play and interaction also generate numerous benefits for communities and cities, as play spaces frequently become focal community hubs where residents can engage with one another. Play helps improving social cohesion, and reducing the incidence of anti-social behaviour and vandalism.

The right to play for all children is acknowledged by the UN Convention on the Rights of the Child, approved on November 20, 1989, which sets out the obligations of the international community towards children.

Thirty years on, opportunities for child's play are severely hindered around the world. Play is struggling to find a place in the lives of many children today, and low-play lives and play-poverty are seen across all strata of society and socio-economic levels.

Despite the evidence for its role in healthy development, play is still undervalued and under prioritised in children's lives. Children today have less time for play of all kinds than previous generations and are missing out on vital developmental opportunities as a result.

The erosion of play has become a silent emergency across the world, particularly during the COVID-19 pandemic. The health emergency and the necessary protection measures have severely limited the possibility of play, education and social interaction among children and young people, with negative consequences for their well-being and learning capacity.

Therefore, there is an urgent need to rethink how children are ensured the time, choice and space to play. This is why the Real Play Coalition was formed in 2018, to unite organisations who believe in the power of play for children's well-being and optimal development.

The LEGO Foundation, ARUP, IKEA (Ingka Group), National Geographic Partners and UNICEF joined knowledge, skills and resources to change perceptions and practices around the value of play, by promoting play-based opportunities, influencing behavioural change, and mobilising policymakers, urban practitioners, and educators, so that children across the globe can benefit from the power of play.



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Introduction

About this Toolkit

Developed by Arup and the LEGO Foundation in partnership with the Real Play Coalition, the Playful Cities Toolkit provides a range of resources to support local governments, urban practitioners and local communities to understand the complexity of play in cities, to guide the design of play-based interventions; and to measure their impact.

The intersection of play, playful learning, and the built environment is a nascent but growing field of research. This work centres on how investments in public spaces and placemaking can promote children's play and playful learning, whilst supporting their holistic and healthy development. But to date there has been limited guidance on how to design neighbourhoods that encourage play beyond playgrounds, and that consider all of the environments in which children spend their time, including public spaces.

This Toolkit helps fill this gap, by bringing together the fields of play and placemaking. It provide guidance on how to initiate a design process in a simple and holistic approach, by assessing, prioritising and proposing play-based interventions in urban spaces. It includes different tools and practical templates to be used as guides to assist the design process and maximise the chance for children to engage in playful activities in their life.

These tools were tested in the cities of London, Cape Town and Milan, as part of the Reclaiming Play in Cities Initiative, by Arup and the LEGO Foundation.

Navigating through the toolkit

In the toolkit, underlined text is a clickable link. Click on these to quickly navigate through the toolkit and download the resources available.



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The Power of Play

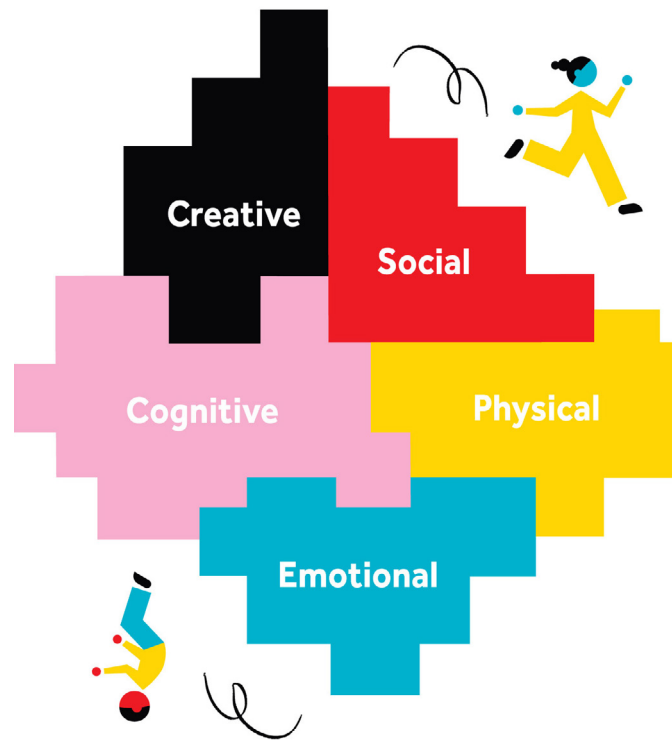
Play is the rocket fuel of brain development!

Under the 1989 United Nations Convention of the Rights of the Child (UNCRC), the Right to Play is recognised by almost all countries of the world. More than thirty years after the ratification of this seminal convention, we are learning that play is in fact much more important to a child thriving and reaching their full potential than was understood at the time of the convention's drafting.

According to the American Academy of Paediatrics, play leads to changes at the molecular (epigenetic), cellular (neuronal connectivity), and behavioural (socioemotional and executive functioning skills) levels. It promotes learning, strengthens our ability to adapt and problem solve, and supports our social skills and positive behaviours.

So important is play to children's holistic development, in fact, that in 2018 play prescriptions were called for by both the American Academy of Paediatrics^[1] and the UK Children's Commissioner^[2]. In the same year, the UNICEF Child Friendly Cities Initiative (CFCI), bringing together more than 900 municipalities, confirmed the right to family time, play and leisure as one of 5 components in their global framework^[3]. In addition, the World Health Organisation, UNICEF, the World Bank Group and others launched the Nurturing Care Framework, which calls out the role of play in two of its five components of nurturing care.

In laying the foundations for a breadth of skills, play supports cognitive, social and emotional, physical and creative development:



› Creative

Coming up with ideas, expressing them and transforming them into reality by creating associations, symbolizing and representing ideas and providing meaningful experiences for others.

› Social

Collaborate, communicate and understand other people's perspectives through sharing ideas, negotiating rules and building empathy.

› Cognitive

Concentration, problem-solving and flexible thinking by learning to tackle complex tasks and building effective strategies to identify solutions.

› Physical

Being physically active, understanding movement and space through practicing sensory-motor skills, developing spatial understanding and nurturing an active and healthy body.

› Emotional

Understand, manage and express emotions by building self-awareness and handling impulses, as well as staying motivated and confident in the face of difficulties.

The Power of Play

Children's wellbeing, safety, learning and social development, as well as their essential enjoyment of childhood, are affected by their opportunities to play.

Research has shown that play is not only about the activity itself; if we want to support children's development and critical skills for a changing world, we need to provide playful experiences that foster deep learning and higher-order skills development.

The following characteristics define the quality of a playful experience, where children are practicing and learning critical skills^[4]:

- › **Joyful** - Joy is at the heart of play, both in terms of enjoying a task for its own sake and the momentary thrill of surprise, insight, or success after overcoming challenges. Research shows how curiosity and positive experiences are linked to learning.
- › **Meaningful** - Play that builds on a child's own sense of meaning, knowledge and experience helps them connect their past and make new things relevant, in order for them to grow and learn.
- › **Actively engaging** - Active, minds-on thinking, where a child is fully absorbed and focused. Children persist more with self-directed efforts and increase the means of discovery, cognitive and physical development.
- › **Iterative** - Play that encourages active experimentation in a risk-free way, builds on cause and effect and experiential learning processes. Children engage in trying out possibilities and testing hypotheses, which aids imagination, creativity and problem-solving.
- › **Socially interactive** - Social interaction in play allows children to collaborate, communicate their thoughts and feelings, and understand other perspectives as they develop their social skills.



The Role Cities Play

The built environment is a critical play and learning resource for children. In cities, there is constant opportunity to realise the potential of playful learning experiences. The city scape invites and nurtures children's innate curiosity during play, whilst providing the interactions necessary for children to practice the relational skills that enable our communities and society to be adaptable, sustainable and flourishing. This affects not just their childhood but the entirety of their lives.

Urban childhoods are the future—by 2050, experts predict that around 70% of the world's population will live in cities. Today, that number is already over one billion. About 90% of urban expansion is taking place in Southeast Asia and Sub-Saharan Africa, much of it in hazard-prone areas in informal and unplanned settlements. Children's health, lives and futures will be increasingly determined by the shape of urban development in the coming decades. Yet many cities continue to ignore the needs of children and their caregivers.

To develop to their full potential, children need not only the basics of safety, nutrition, healthcare, and clean air and water; they also need plenty of opportunities to play and learn from the social and built environments that surround them^[5]. As children grow, opportunities for playful engagement with their environment help build physical, emotional and social resilience^[6], crucial factors for wellbeing throughout their entire lives.

Yet, play is struggling to find a place in the lives of many children today, and low-play lives and play-poverty are seen across all strata of society and socio-economic levels. Low-play and play-poverty risk fuelling inequality and a looming skills crisis.^[7]

In the United Kingdom, children currently spend less time playing outdoors than at any point in modern history^[8]. Rates of obesity and mental health problems among children are on the rise, with the stresses of urban life and declining opportunities for play identified as contributing factors.^[9] On the other hand, children living in vulnerable urban contexts, such as informal settlements and refugee camps in developing contexts, spend on average 35% of their waking time roaming around their settlements,^[10] as their houses are either too small or overcrowded. The built environment occupied by these children can present an obstacle to optimal cognitive and social development, and can contribute to conditions that negatively impact cognitive flourishing.^[11]



The Role Cities Play

The right to play has suffered during the Covid-19 pandemic.

The health emergency has made necessary protection measures that have severely limited the possibility of movement outside the home. One of the consequences of these limitations was their impact on the well-being of children and adolescents, whose development is closely linked to fundamental activities such as social gathering between peers, play, and education. Young people are shown to have been affected negatively by long periods in the home, especially with respect to school preparation (43%), friendships (52%), the ability to socialize (59%), and their mood (57%).^[15]

On the other hand, as part of the pandemic recovery plan, in many cities the theme of play and the right to play are gradually establishing themselves as central dimensions in the planning and design of spaces, especially in urban areas where this right is more strongly limited.

In the UK, experts called for a 'summer of play' to help children recover from Covid-19 stress.^[16] At the same time, the Royal Town Planning Institute published guidance that stressed the importance of meaningful consultation with children through the use of creative techniques like Minecraft, Lego building, and arts and crafts.^[17] Elsewhere, from Europe^[18] to Southern Africa^[19] and Asia,^[20] advocates and decision-makers have emphasised the importance of putting the needs of children at the heart of recovery strategies.

In cities, barriers to play are complex and numerous:

- › **Global urbanisation** trends are reducing accessible open space for play: cars have pushed children from the streets in which they played in previous decades, sidewalks have become busier and narrower, and in general children's radius of independent mobility has seen a continuous reduction over the past several decades. It can be argued that children are increasingly being 'designed out' of city streets, public spaces, neighbourhoods, and housing estates.^[12]
- › **Urban lifestyles** are also changing, with a growing prevalence of insecurity and parental risk aversion, the increasing role played by technology in our lives, and a recurring time-scarcity problem, each of which impact children's experience of the city.^[13]
- › **In urban decision-making and planning** the needs and challenges of children often go unheard. City authorities and professionals such as housing developers, planning officers, engineers, and development experts often have difficulty understanding how their work, and the built environment as a whole, relates to children's needs, specifically to learning through play.^[14]
- › **Limited evidence** on the state of play in cities, particularly on the role of the built environment in enabling and constraining access to play opportunities, and on the economic benefits of designing for play. This knowledge gap contributes to diminished political will, constrained commercial interest, and limited commitment to plan, design and upgrade neighbourhoods that encourage play.
- › **Limited guidance** exists on how to design neighbourhoods that encourage play beyond playgrounds and consider all of the environments in which children spend time, including public spaces.

The Role Cities Play

THE BENEFITS OF A PLAYFUL CITY

Play should be part of all aspects of children's lives as an element of both activities and the environment.

Play is often seen as an activity confined to playgrounds or children's facilities, but cities can offer critical opportunities to better realise the potential to learn through playful experiences. Strategies should move away from addressing children's needs primarily through playground provision to an integrated approach that can deliver the full range of streets and spaces needed for a successful children's infrastructure network.^[21]

Play permeates all aspects of a child's life, in a wide variety of locations and environments. The choices we make in the built environment through urban planning and design to encourage play can help to ensure children have both a healthy life and the best chances of tackling the challenges of tomorrow. When designed to enable meaningful play and exploration, the built environment can improve skills development and enhance pro-social behaviours.

Green spaces and community art installations, for example, can offer children considerable play value. Play areas can be embedded in the way we design and plan for public space, transforming the way to school into a learning opportunity, or polluted and unsafe sites into vibrant assets. Play elements can also shape the way we design and plan for basic infrastructure, such as handwashing stations and water and sanitation facilities in refugee camps and informal settlements.

A combination of formal and informal play solutions can cultivate a greater sense of place, allow fuller play experiences, and reap substantial benefits for children, their families and their communities. Play, in fact, is associated with higher levels of volunteering and community action; improved social cohesion between different ethnic groups; and a reduced incidence of anti-social behaviour and vandalism.^[22]

By taking a child-friendly approach, it is possible to tackle issues in a more holistic and integrated manner, leading to benefits and positive outcomes for all. Focusing on the needs of children has the potential to act as a unifying theme to navigate complex challenges and gain support for progressive agendas – including health and well-being, sustainability, economic development, climate resilience and safety, and to act as a catalyst for urban innovation. Also, this approach can contribute to several UN SDGs, while achieving the overall goal of children's wellbeing and optimal development.

The message is clear: public, private, and civic sector leaders need to embrace and prioritize play in their communities so new ideas can be implemented, measured and evaluated, and scaled. By thinking differently about the role of play in cities, we can optimize learning for children while at the same time enhancing urban environments for all citizens.

SDGs and targets playful cities can contribute to:



SDG 3 - Good Health and Well-being (Targets: 3.4)

SDG 4 - Quality Education (Targets: 4.5, 4.a)

SDG 5 - Gender Equality (Targets: 5.5, 5.c)

SDG 8 - Good Jobs and Economic Growth (Targets:)

SDG 9 - Industries, Innovation and Infrastructure (Targets: 9.1)

SDG 10 - Reduced Inequalities (Targets: 10.2, 10.3)

SDG 11 - Sustainable Cities and Communities (Targets: 11.1, 11.2, 11.3, 11.4, 11.6, 11.7, 11.a, 11.b, 11.c)

SDG 13 - Climate Action (Targets: 13.2, 13.3)

SDG 17 - Partnerships for the Goals (Targets: 17.3, 17.6, 17.7, 17.16, 17.17)

The Role Cities Play

THE BENEFITS OF A PLAYFUL CITY

Successful cities are cities where children of all ages are active and visible in the public realm. The amount of time children spend playing outdoors, their ability to get around independently and their level of contact with nature are strong indicators of how successfully a city is performing, not just for children but for everyone.^[23]

We are at a critical moment in the evolution of cities. We can be both opportunistic and strategic in improving existing and new urban environments through all lenses of city making. The questions that we ask, the choices that we make and the leadership that we show to create better neighbourhoods and cities for children now, will shape the lives of urban citizens for many generations to come.

Creating cities that offer streets, spaces and facilities – for all ages, abilities and backgrounds to enjoy together – can make a vital contribution to our collective wellbeing. With children projected to make up the majority of the world’s urban population by 2030, the quality of life experienced in our cities will in many ways determine our global future. Focusing on the needs of children has the potential to act as a unifier while navigating complex challenges and gaining support for progressive ideas^[24]



Safety

Promote access to facilities for children

Focus on removing danger from the road environment, not the removal of children from danger - Policy Studies Institute



Nature and sustainability

Invest in green space and clean environment

The Hangzhou City’s master plan promotes green space in rapidly urbanizing environments



Local economy

Create coherent communities through shared spaces

Parks and public spaces that are children and parents’ top go-to places are good for business - Roger Madelin, Head of Canada Water, British Land



Health and wellbeing

Make diverse-use urban spaces child-responsive

Barcelona superblocks create citizen spaces without compromising the mobility network



Stronger communities

Social interaction is essential to support community life

The Bicentennial Children’s Park in Chile provides a continuous accessible walkway across the city



Climate Resilience

Measures that improve urban resilience can also create opportunities to expand children’s everyday freedoms

Floodable and playful public space planned in Enghaveparken, Copenhagen



The Urban Play Framework

The Urban Play Framework is at the core of the Playful Cities Toolkit. It was developed by Arup and the LEGO Foundation to capture and understand the complexity of play in cities – challenges and opportunities; and inform the design of playful cities.

The Framework was developed to address these play gaps:

- › **Limited participation of children** in urban decision-making and planning.
- › **Limited evidence and knowledge** on the state and value of play in cities, and its role in child development.
- › **Limited guidance** for city authorities and urban practitioners on child-friendly urban design and planning.

It development was guided by the following key question:

What makes the built environment an enriching and nurturing play and learning experience for children (to support their optimal development)?

The Framework was developed through a phased process of desk-based research, consultations with key informants, and fieldwork in pilot cities (London, Cape Town, Milan).

The following foundational principles guided the development of the Framework:

- › **Urban systems-based approach**
Looking at a city holistically to consider the impact of city's physical, socio-economic and governance systems on the well-being of children and on their play experience.
- › **Strengths-based approach**
Focusing on and leveraging children's strengths to address their needs and build their capacities.
- › **Rights-based approach**
Focusing on children's rights to encourage local governments to make decisions in the best interest of children.



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The Urban Play Framework

The Urban Play Framework considers three dimensions critical for designing playful urban environments, supporting playful learning and children well-being and optimal development:

FACILITATION FOR PLAY

Play is understood and actively supported by caregivers, teachers, community members, and city authorities as a whole.

TIME & CHOICE FOR PLAY

Children have adequate time and choice to engage in stimulating, and developmentally rewarding play activities, alone or with their playmates and caregivers.

SPACES & FACILITIES FOR PLAY

Children with varying cognitive, socioemotional, and physical capabilities have access to adequate play spaces, playable environments and facilities for different play modes; and they have a variety of different toys, creative supplies, materials and equipment for play.

These three dimensions, along with children's living conditions (i.e., needs for shelter, healthcare, education, nutrition), are critical to enable optimal play conditions. The Framework does not prescribe a 'right way of play' but rather seeks to identify how and where children play, how much children play, and what influences these factors.



The three dimensions are considered at different urban scales:

- › **Household**
Play conditions in the home and immediate outdoor space, involving children, their caregivers, and existing family members.
- › **School**
Play conditions in the school environment, and the immediate outdoor space, involving children, and their educators.
- › **Neighbourhood**
Play conditions in the local neighbourhood, its streets, spaces, facilities, and institutions, involving children, caregivers, educators, and community organisations.
- › **City**
Play conditions across the city as a whole, including its connectivity and services, and involving planners, decision-makers, government officials, policy, strategy, and budgets.

The Urban Play Framework

FACILITATION FOR PLAY

This dimension seeks to understand if play is actively supported and facilitated by caregivers, teachers, community members, and city authorities as a whole.

The focus is on adults' roles (caregivers, teachers, community members, and city leaders) in supporting children's learning and development through facilitated play, which can take the form of free play or guided play. While free play (child initiated and directed) is important and contributes to a range of positive developmental outcomes, evidence shows that guided play—a type of play where an adult initiates or designs an activity that targets a learning goal but the child maintains agency and control over the learning—is an effective approach for strengthening a range of critical skills.



Goal 1 - Household Level

Balanced, responsive play facilitation understood & provided by caregivers.

Factors assessed at the household level examine if caregivers understand the importance of learning through play as a critical activity for children's well-being and development, including for supporting their social, cognitive and motor skills, their mental and physical health condition, and for building their resilience. Caregivers' awareness of existing challenges and barriers that reduce children's opportunities for play at home, and if they facilitate different and responsive play activities in their household are also analysed.

Goal 2 - School Level

Play-based learning encouraged through school curricula & teachers.

Factors assessed at the school level examine if teachers and school staff understand the importance of learning through play as a critical activity for children's well-being and development, and are aware of existing challenges and barriers to play at school. Whether schools embed play in curriculum, teachers support a range of play activities - considering different abilities and needs, and whether training support is available for teachers regarding play are also analysed.

Goal 3 - Neighbourhood Level

Play facilitation supported by institutions & individuals throughout the community.

Factors assessed at the neighbourhood level examine if community members and social networks understand the importance of learning through play, and support it as a critical activity for children's well-being and development, and are aware of existing challenges and barriers to play in the neighbourhood.

Goal 4 - City Level

Play facilitation and knowledge support enabled throughout the city by governance & leadership.

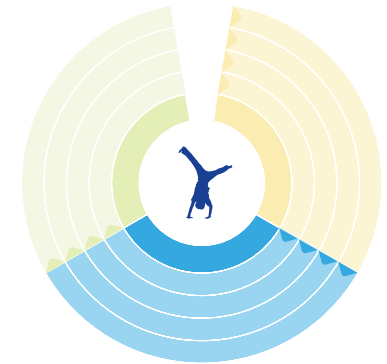
Factors assessed at the city level examine if government authorities understand the importance of play for children's well-being and development, and are informed about the benefits of play to citizens and the built environment. Public policies, guidelines and communication campaigns that facilitate and support the creation of playful environments are also analysed.

The Urban Play Framework

TIME & CHOICE FOR PLAY

This dimension seeks to understand if children have adequate time and choice to engage in stimulating and developmentally rewarding play alone or with their playmates and caregivers, within the target community.

The focus is around providing adequate time and choice for children to engage in stimulating and developmentally rewarding play alone or with their playmates and caregivers. Research conducted by the Real Play Coalition^[25] indicates that while children and families want more play in their lives, it is increasingly difficult to find the time when children are overscheduled and distracted by multiple forms of technology and parents are balancing busy work-lives. With respect to choice and agency in play, both anecdotal and experimental evidence support the benefits of active or “minds on” learning—where children are focused and engaged in the learning process through questioning and reflection—over passive learning where students listen and memorize information. Active learning^[26] highlights children’s agency in play and the important role of choice in the learning process.



Goal 1 - Household Level

Adequate time and choice to play at home with caregivers, siblings/peers and alone.

Factors assessed at the household level examine how much time caregivers and children have to undertake playful activities, what obstacles stand in the way of their time & choice for play. It also assesses caregivers and children’s mindset for nurturing relationships and interactions.

Goal 2 - School Level

Children have adequate time and choice for play at school.

Factors assessed at the school level examine much time and choice for a variety of play types is provided in the school environment (both in formal and informal education), including for regular and secure play, as well as the type and quality of this play. It also assesses if schools offer a diverse mix of play-focused pre- or after-school activities, and whether school facilities are available for out-of-school activities by the community.

Goal 3 - Neighbourhood Level

Play-supportive culture is established in the community, and the wider community participate in playful activities and events.

Factors assessed at the neighbourhood level examine if there is a cohesive community promoting a play-supportive culture in the neighbourhood, through local residents and civil society organisations; and whether opportunities and events exist for community members to engage in and support play.

Goal 4 - City Level

Adequate time & choice to play enabled by government and leadership, using a participatory approach.

Factors assessed at the city level examine the degree to which government budgets include the promotion of play-friendly initiatives and interventions, and whether caregivers, children and the broader community are consulted and feel included in decision-making and planning, and are engaged in public space interventions.

The Urban Play Framework

SPACES & FACILITIES FOR PLAY

This dimension seeks to understand if children with varying cognitive, socioemotional, and physical capabilities have access to adequate play spaces, playable environments and facilities for different play modes; and if they have a variety of different toys, creative supplies, materials and equipment for play.

The focus is on availability and accessibility for children to a safe space, variety of facilities, and range of toys and creative materials to engage in different play types (e.g., physical play, pretend play, and games). Cities aren't well designed for children and their families, and safe spaces for children to play unsupervised are often hard to find. Designers, city planners, community leaders, and behavioural scientists will work on cross-disciplinary strategies for converting densely populated environments into people-friendly habitats that support healthy living.



Goal 1 - Household Level

Nurturing and safe home environment with stimulating materials for a range of play types.

Factors assessed at the household level examine the safety and quality of home materiality; and the availability and quality of space and equipment for a range of different play types.

Goal 2 - School Level

Safe, accessible and playful education facilities supporting learning through play via a range of play types.

Factors measured at the school level explore the quality of play space and play equipment within local schools, and wider school safety conditions and accessibility.

Goal 3 - Neighbourhood Level

Healthy, playful & well-serviced public spaces and facilities for a range of play types.

Factors measured at the neighbourhood level explore the availability of public spaces, green areas and facilities within the neighbourhood, and their wider quality and safety conditions, and accessibility. It also assesses the accessibility of the local pedestrian environment for children and those with special needs and abilities, and whether the environment itself exhibits characteristics of playfulness either unintentionally or by design.

Goal 4 - City Level

Safe and connected playful spaces created by city government.

Factors measured at the city level examine the safety, reliability, connectivity, and both child- and caregiver-friendliness of the local environment with respect to wider public transit networks. It also assesses whether city authorities support the creation of playful environments through the implementation of child- and family friendly spaces and initiatives, including as part of the post-COVID-19 recovery strategy.

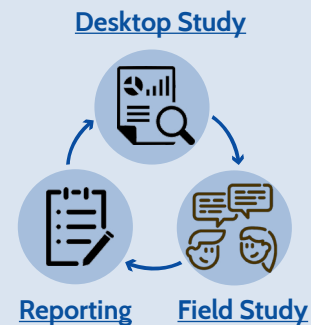
The Playful Cities Toolkit

The Playful Cities Toolkit provides a range of resources to support local governments, urban practitioners and local communities to understand the complexity of play in cities, to guide the design of play-based interventions, and to measure their impact.

The toolkit is structured on a simplified design process comprised of three main phases: Understand, Design, Measure, as illustrated in the diagram below. Its application is supported by a set of resources, including methods and tools for conducting a play assessment, as well as identifying and designing play activation initiatives in a given location and measuring impact.

UNDERSTAND

It helps understand the complexity of play in cities – challenges and opportunities, considering different urban scales and systems. This phase is composed of three main steps: Desktop Study, Field Study, Reporting.



DESIGN

It helps support the planning and design of play-based interventions at different stages of a master planning process.



MEASURE

It helps measuring impact or outcomes achieved through play-focused interventions.



The Playful Cities Toolkit

UNDERSTAND

This phase aims at providing a holistic understanding on how various urban systems relate to a child's play experience, by assessing the challenges and opportunities surrounding play in a given location.

In this phase you will carry out a comprehensive assessment of the various factors that contribute to making a site playful, and child- and family friendly, considering different urban scales and systems. You will consider physical spaces and social factors as well as behaviours at different urban scales that contribute to both a child's ability to play and a play-friendly environment. The evidence generated through this assessment can be used to prioritise and design play activation interventions, and to influence and support activities to improve the wider play experience in cities. In particular, this knowledge can support governments, urban practitioners, and communities in exploring actionable ways to address the causes and effects of low play in the target location.

This phase is composed of three main steps: **Desktop Study, Field Study, Reporting.**



Desktop Study

This is the initial step for understanding your project site and developing a database of key local stakeholders to engage with during the Field Study.

To assist and structure this step, the following tools can be used:

- › [Play Assessment Tool](#): use this tool to structure and guide your study and understand play in your target site considering the three dimensions of the Urban Play Framework, which are critical for creating a playful environment. The tool can be used to assess all three dimensions of the framework, at all urban scales. Depending on your project priorities and/or scope, you can choose to assess only one dimension or only one urban scale across dimensions. For instance, if your project focuses only on schools, you might decide to undertake an assessment at the school level only. Within this Tool, use the Desktop Study Tab to identify and collect secondary socio-economic and spatial data on your selected site to establish baseline conditions, and provide a grounding in the assessment area's population, material conditions and historical trends.
- › [Stakeholders Map](#): use this tool to develop a database of key local stakeholders, sorted by specialisation and mapped against the Urban Play Framework Dimensions and Goals, to engage during the Field Study.

The Playful Cities Toolkit

UNDERSTAND



Field Study

This step aims at identifying key issues affecting play and children's well-being and development in your project site. This is done through engagement with different stakeholders, including children, their caregivers, local authorities, practitioners and community members, which is essential to compile relevant primary data, and understand user experience, their perceptions and aspirations for the study area. A site visit is also critical to validate your analysis, and to collect additional data to better understand challenges and opportunities at the selected site. .

To assist and structure this step, use the [Play Assessment Tool](#) and the following supporting tools:

- › [Play Survey Guide](#): use this tool to organise and conduct a Play Survey with the target community, to gather information about play conditions at your project site.
- › [Key Informant Interview \(KII\) & Focus Group Discussion \(FGD\) Guide](#): use this tool to organise and conduct KIIs and FGDs with caregivers, community members, school staff, NGOs and city government officials, to gather in-depth knowledge about play challenges and opportunities in the study area.
- › [Transect Walk Sheet](#): use this tool to map and assess site materiality and accessibility, social conditions, play space availability and conditions, child-friendliness and child-specific hazards manifested by local infrastructure, pedestrian and vehicular traffic flows, and potential barriers to play access.
- › [Assessment Workshop Guide](#): use this tool to organise an assessment workshop with children and community members to understand their perceptions of play in the study area (challenges and opportunities).
- › [Photo Contest Guide](#): use this tool to run a photo contest with children, to generate an understanding of the experience of play among them in the local community.
- › [Consent Form](#): use this tool to develop a consent form template that needs to be signed by all individuals partaking in research and engagement activities.

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UNDERSTAND



Reporting

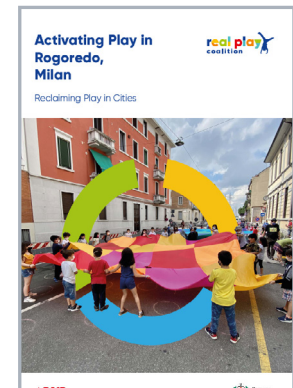
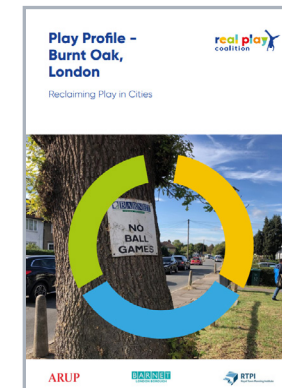
Data gathered in the previous steps generate an understanding of the study site and beneficiaries as well as the existing opportunities and constraints for the adoption of play-based solutions.

To assist and structure this step, the following tools can be used:

- › [Play Profile Report Template](#): use this tool to structure the data collected and analysed during the Desktop and Field Study, and consolidate key findings and recommendations related to challenges and opportunities to play in the study area.

Play Profile Reports:

Take a look at the Play Profile Reports we developed for [London](#) and [Milan](#), as part of the **Reclaiming Play in Cities Initiative**. Led by Arup and the Lego Foundation for the Real Play Coalition, the Reclaiming Play in Cities initiative aims at generating evidence around learning through play and the impact that urban environments have on children's access to play and ultimately on their well-being and overall development. This knowledge will help mainstreaming the adoption of learning play-focused concepts in norms and practices across cities globally, by influencing change across individuals and institutions responsible for decision making and planning at the city level. We are activating play also in [Cape Town](#), and the report will be ready in December 2021.



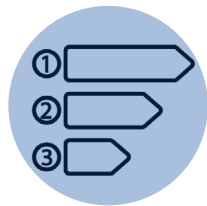
The Playful Cities Toolkit

DESIGN

This phase aims at supporting the planning and design of play-based interventions to make cities more playful and inclusive for children well-being and optimal development.

In this phase, you will engage with users and beneficiaries to support the identification and design of play-based solutions that respond to the site and the beneficiaries' needs and vision for the future. Making informed design decisions is critical to creating an effective and context-sensitive intervention that will have lasting positive change for children, their caregivers, and the whole community where they live.

This phase is composed of two main steps: **Prioritisation and Solutions**.



Prioritisation

This step aims at delivering a consistent evaluation of the factors that influence children's play experience within a specific site, against a set of benchmarks of what 'good looks like'. Data gathered in the Assessment Phase, set out an understanding of the study site and beneficiaries, and the existing opportunities and constraints for play.

In this step, users score each factor using scores ranging between 1 and 5 to indicate how poorly or well a community performs against each factor, where 1 indicates 'least desired performance' and 5 indicates 'desired performance'. A consolidated score by factors and goals is presented to enable users to analyse results and generate a visual that illustrates priority areas for play-based interventions.

The tool can be used to assess all three dimensions of the framework, at all urban scales. Depending on your project priorities and/or scope, you can choose to assess only one dimension or only one urban scale across dimensions. For instance, if your project focuses only on schools, you might decide to undertake an assessment at the school level only.

To assist and structure this step, the following tool can be used:

- › [Play Prioritisation Tool](#): use this tool to undertake a consistent evaluation of the factors that influence children's play experience within a specific site, against a set of benchmarks of what 'good looks like'. A consolidated score by factors and goals enable users to analyse results and generate a visual that illustrates priority areas for play-based interventions.

The Playful Cities Toolkit

DESIGN



Solutions

The previous steps set out an understanding of the study site and its opportunities and constraints. To design solutions that respond to the site's needs and its vision for the future, it is critical to engage children, caregivers and the community in co-creation activities. To support the design of play-based solutions, global case studies can be used to inspire future initiatives.

To assist and structure this step, the following tool can be used:

- › [Co-creation Workshop Guide](#): use this tool to identify and assess common themes across children's desires for play improvements in their community and generate ideas for possible play-based interventions.
- › [Get Inspired](#): explore a selection of best-practice examples of projects from around the globe to get new ideas on how to activate play in your community.



The Playful Cities Toolkit

MEASURE

This phase aims at supporting the assessment of ongoing outcomes, and to measure the long-term impact of specific play-focused solutions.

This phase aims at measuring the impact or outcomes achieved through the implementation of play-focused interventions.

This phase is composed of one main step: Impact measurement.



Impact measurement

This is the final step for assessing the site where the intervention was implemented and identify key positive and negative impacts this solution has had on children, and the broader community. In this step, users deliver a consistent evaluation of the factors analysed at the assessment and prioritisation stage, to assess whether their performance has improved or not after the implementation of the play-based intervention.

Each factor can be scored using a range between 1 and 5 to indicate how poorly or well the selected site performs against each factor. A consolidated score by goals is presented to enable users to analyse results and generate a visual that illustrates the impact of the intervention.

To assist and structure this step, the following tool can be used:

- › [Play impact Tool](#): use this tool to evaluate the impact the play-based intervention has had on children, and the broader community.

Get Inspired

CASE STUDIES

A selection of case studies were identified in different international urban contexts, to inspire multiple ideas, actions and strategies aimed at promoting play in cities.



Place and year:
De Zavala Park, Houston, USA - 2013

Designers:
University of Houston College of Architecture

Theme:
Create a multifunctional space

Target:

Governance:

The Zona de Juego (Play Zone) Project is located in the heart of Magnolia Park, one of Houston's oldest and most populous neighbourhoods. Statistically, residents of the Magnolia Park neighbourhood are twice as likely to suffer from diabetes and weight-related problems as those in the city. The Zona de Juego was needed to promote healthier living habits. The project, implemented in close contact with residents and the local community, is now widely used by both local residents and the neighbourhood's primary school, which regularly organises numerous play activities and outdoor classes there.

1 ZONA DE JUEGO



Place and year:
San Francisco, USA - 2017-2019

Designers:
Livable City

Theme:
Design a community toolkit

Target:

Governance:

Play Streets SF is a program that allows San Francisco residents to transform their block into an open, accessible, and car-free space for children and seniors on a regular basis for the enjoyment of children and seniors with the mission of creating healthier, more connected, and resilient communities. Play Streets SF provides residents with everything they need to "claim their street" including permits, safety equipment and games. Presented in partnership with Livable City with the help of City Hall, Play Streets came to San Francisco in 2017 as a 2-year pilot project.

2 PLAY STREET SAN FRANCISCO



Get Inspired

3 PLAY STREET AUSTRALIA



Place and year:
Kensington, Victoria, Australia - 2019

Designers:
Co Design Studio, Vic Health

Theme:
Promote a brand to replicate



Play Streets Australia is a community effort brought together by people who care about neighbourhoods, children's health, and social inclusion. What is unique about Play Streets Australia is that it provides neighbourhood residents and even participating schools with a set of structured documents to ensure that they have the regulatory permissions to carry out the project. The permits provided include, in addition to a well-detailed kit of "play types", letters to be addressed to neighbourhood residents, the municipality, flyers and posters, as well as safety regulations including the closure of the street to traffic.

4 GUDVANGER STRASSE



Place and year:
Berlin, Germany - 2015-ongoing

Designers:
Drachenreiter

Theme:
Plan over time



The temporary initiative on Gudvanger Strasse has become a recurring event that has enabled this to be closed to traffic every year for a few days and become a playground that children and adults use as a place to play and meet. The popularity of this initiative has also allowed Graefekiez has also become a popular play street. The activities promoted by Drachenreiter, the event organiser, are characterised by different games each time. In September 2020, a 30-metre-long remote-controlled car track was built in September 2020 with the help of volunteers, where each child could race against the others.

Place and year:
France - 2015-2017

Designers:
ANACE], CAFEZOIDE, Rue de l'Avenir, Vivacites, France

Theme:
Develop a play culture



The National Association of Children and Youth Councils (ANACE)], and other associations decided to pool their expertise within a collective "Streets for children, streets for all" by promoting and supporting "Streets for children" initiatives, particularly in working-class neighbourhoods. The objective is to integrate the concept of "Street reserved for play" into the highway code. In November 2015, a first call for proposals was launched by the "Rue aux enfants, rue pour tous" collective. The result was more than encouraging: 43 projects were received in 2016, which were then implemented over the next two years by the collective through ad hoc events and days throughout France.

5 RUE AUX ENFANTS



6 VIA RECREATIVA - CHILDREN AREA



Place and year:
Guadalajara, Mexico - 2005-ongoing

Designers:
Via Recreativa

Theme:
Design a network of spaces



The Children's Area, created by Via Recreativa, is an exclusive recreational space for children aged 4 to 13 in which various activities are carried out on a rotating basis. The aim of this programme is to create adequate and safe spaces for children to play in the city along several thoroughfares. The Children Area is one of three projects involving the city of Guadalajara organised by Via Recreativa. The projects are aimed not only at children but also at adults, who can at different times use certain streets in the city as exclusive cycle paths or sky theatres to promote initiatives, stage shows, concerts and cultural activities.

Get Inspired

7 STREET SMART



Place and year:

Aurangabad, India - 2011-ongoing

Designers:

AProCh (A PROtagonist in every CHild)

Theme:

Co-design spaces with the community

Target:



Children



Adults



Seniors

Governance:



Private



Public

Street Smart is an initiative that allows the main streets of the city of Ahmedabad to close (one day a month) to traffic and welcome children and the community into safe and welcoming spaces. The community is free to set up games, activities, small spontaneous markets, etc. The message is that of a city that takes care of its youngest protagonists. aProCH organises several other outdoor events for children in the city, including City as my Landscape, an event aimed at designing a child-friendly city by painting pedestrian crossings, school walls and fences in the city and cycle routes.

8 PLAYING OUT



Place and year:

Bristol, UK - 2009-ongoing

Designers:

Playing Out

Theme:

Organize bottom-up activities

Target:



Children



Adults



Seniors

Governance:



Private



Public

Bristol is famous for being one of the first cities to have a play street in the UK. The initiative of a play street was undertaken by a group of parents experimenting with the city council, which allowed them to close certain streets in the neighbourhood for 3 hours a week so that children could play freely. The success led to the creation of an association called "Playing Out" with the aim of spreading these practices. Two years after this initiative there were more than 40 play streets in Bristol. The aim is to make playing close to home a natural and everyday part of every child's life, as it used to be.

9 SMALL-SCALE URBAN RESPONSES

Place and year:

Vietnam, Bangladesh, India - 2020

Designers:

UN-Habitat, Block by Block

Theme:

Revitalise the public space

Target:



Children



Adults



Seniors

Governance:



Private



Public



The need to get outdoors with the advent of the pandemic has become increasingly widespread. In order to equip public spaces to meet the challenges of Covid-19, UN-Habitat with the Block by Block Foundation supported ten cities in 2020. With the help of local governments and the community, the initiatives have helped municipalities, especially in poorer neighbourhoods, to safely enhance public spaces. By embracing the potential of public spaces as flexible and resilient areas, these small-scale projects support cities to slowly reopen and have enabled communities to regain confidence in being together and using public spaces safely.

10 LA PLAY STREETS PROGRAM

Place and year:

Los Angeles, USA - 2015-ongoing

Designers:

Kounkuey

Theme:

Integrate a digital approach

Target:



Children



Adults



Seniors

Governance:



Private



Public



KDI has been working with the LA Department of Transportation to develop a "Play Streets" program. The pilot project was developed in two phases: in Phase 1, Kounkuey worked with low-income and poor communities in parks to design and distribute a 'play box', containing portable games and furniture, at Play Street events. Kounkuey then developed an online application process and portable play pieces. In phase 2, residents have successfully used the online app to apply for Play Street events. The game box is distributed at each event, providing a set of games that can be assembled, disassembled and moved.

Get Inspired

REAL PLAY CITY CHALLENGE



In 2020-2021, the Real Play Coalition and PlacemakingX led the **Real Play City Challenge** to scale up child-friendly, safe, and playful urban practice. The Challenge brought cities and placemakers together from all over the world to inspire action, enhance impact and catalyse playful cities. The following initiatives were selected as the best play-based solutions, for the value they showed to children well-being and development.

CITIES

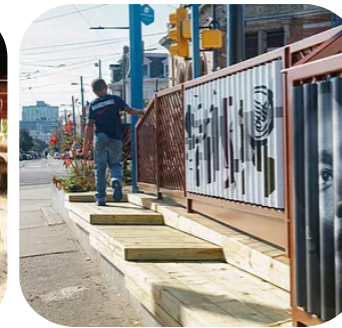


Child Friendly Cities - Tirana

PLACEMAKERS



BRAC Community based Play Lab - Dhaka



Playful Learning Landscapes Action Network



Nudel Kart



Afuera Strategy - Zapopan



Pop-Up Playgrounds - Istanbul



LIMA95, Zona de Calma - Lima



Participatory Spatial Intervention - Lebanon



Play Africa - Our Ideal World



Tamaulipas - Mexico City

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Acknowledgments

This toolkit was co-created and co-delivered by Arup and The LEGO Foundation through the Real Play Coalition partnership. The main authors are Sara Candiracci and Spencer Robinson of Arup, and Anne Holme and Zeldá Yanovich of the LEGO Foundation. We are grateful for input and advice from a number of contributors and reviewers, including Brenna Hassinger-Das of Pace University and Victoria Mendoza of the LEGO Foundation. Graphic design: Miriam Spadafora of Arup.

The LEGO Foundation

The LEGO Foundation exists to inspire and develop the builders of tomorrow; a mission that it shares with the LEGO Group. The LEGO Foundation is dedicated to building a future where learning through play empowers children to become creative, engaged, lifelong learners. Its work is about re-defining play and re-imagining learning.

In collaboration with thought leaders, influencers, educators and parents the LEGO Foundation aims to equip, inspire and activate champions for play.

www.legofoundation.com

ARUP

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The Real Play Coalition is a global non-profit coalition created in 2018 which includes UNICEF, National Geographic, Arup, IKEA and LEGO Foundation. It has the ambition to create a movement that narrows the play gap for 100 million children by 2030, by making play accessible and inclusive, because it is an essential right for children to thrive now and in the future. The coalition seeks to change the perception of the value of play; embed play-based principles into urban design and planning; support the implementation and upscaling of safe play activations in cities globally; and grow the number of play moments in the lives of children across the world.

The front cover is 'children's playground in Ust-Kamenogorsk, Kazakhstan' and the image was kindly provided by UNICEF © UNICEF/UNO45590/Kim

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