

# Reclaiming Play in Cities



The Real Play Coalition Approach





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# Introduction

Play has always been an integral part of cultures and societies; exposure to playful experiences, a broad diversity of play materials and consistent support from adults for curiosity and creativity have been the critical mechanisms by which we have learned and adapted to changing circumstances and evolved our cultures.<sup>1</sup>

The evidence on the positive benefits of play is now overwhelming, and we are reaching a point where experts have come together to suggest the need to 'prescribe' play due to its critical role in children's development and learning.<sup>2</sup> Children develop a broad set of physical, social, emotional, cognitive and creative skills<sup>3</sup> through play, along with gaining a deeper understanding of their environment; parents understand the intrinsic benefit of play for their own well-being and social relationships<sup>4</sup>.

Given the rapid change we experience across our environmental, cultural, social and technological landscape, we know that particular attention must be paid to skills like creativity, critical thinking and collaboration<sup>5</sup>; play is critical to fostering these skills. Cities offer us opportunities to better realise the potential to learn through playful experiences, by harnessing our innate curiosity to play, learn and practice the relational skills that enable our communities and society to be adaptable, sustainable and flourishing.

In order to increase the quality of our cities and communities, we need a coordinated effort with better access, breadth and depth of learning through play across our communities and institutions.

## ACCESS

Playful experiences are important at playgrounds, parks and playrooms, but it's critical that we extend opportunities for learning through play across the home, community, and wider urban systems, including infrastructure, shops, cultural institutions and into formal learning environments at school. Learning through play in school has been demonstrated to achieve high engagement, increase knowledge and understanding, while building holistic skills<sup>6</sup>; existing urban spaces can be transformed into actively engaging environments for playful learning<sup>7</sup>. We need to open our minds to how urban space has the potential for children to learn through play.

## BREADTH

Increasing access is not enough; we need to broaden opportunities for engagement through a variety of different learning environments and materials, with physical, creative and social forms of play, and via a spectrum of different facilitation approaches<sup>8</sup>. Play is often understood as only requiring access to free play; free open spaces are important, but evidence shows that quality facilitation with guidance and games, based on adult support, is critical to increase the benefits of play across a range of critical skills. We need to increase capacity in play workers, public and private actors to better engage citizens and facilitate learning through play.



## DEPTH

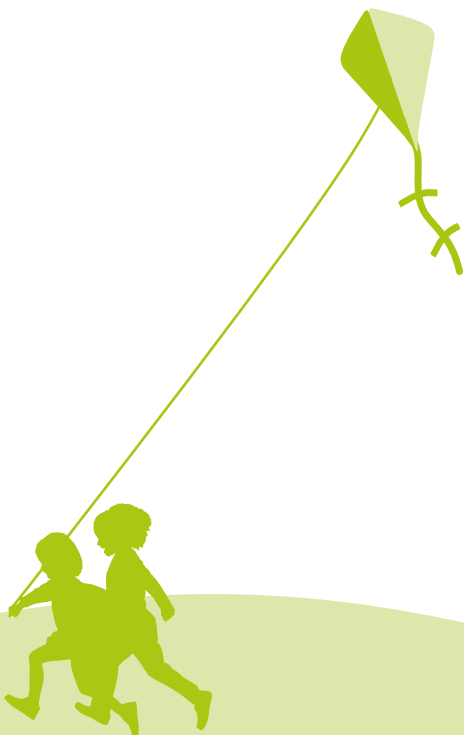
Cities must take into account the individual interests and needs of different stakeholder groups, and those of children in particular, as their perspectives are critical. Quality learning through play happens when children and families are actively engaged in meaningful activities which stimulate their interests and provides opportunities to participate, collaborate and express themselves<sup>9</sup>. Cities need to move from being passive environments primarily meant to direct citizens, to support active engagement where citizens can creatively direct their own activities and be fully immersed in collaborative projects.

Flourishing cities require communities of participation, and among the most effective ways to cultivate active participation, co-ownership and identity is to listen to children's perspectives and support play and creativity.<sup>10</sup> Parents report that their lives are increasingly structured with diminishing access to play opportunities<sup>11</sup>, in response, we must open up our cities for participation and support secure and stimulating environments for play. By ensuring that all institutions and urban systems are giving attention to children, and by designing cities with attention to learning through play, we will not only prepare children to contribute to a more complex and changing world, but also develop more liveable, enjoyable and sustainable environments for everyone.

With this publication, we are sharing our initial steps towards developing an Urban Play Framework, a holistic tool aimed at supporting city stakeholders, including decision makers, urban practitioners, and investors to assess the breadth and depth of play in their cities based on the three play dimensions: *Facilitation for Play, Spaces and Facilities for Play, and Time and Choice for Play*, to make informed decisions on city development for children and the future.

**BO STJERNE THOMSEN**

*LEGO Foundation*



# 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 authors could have known 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, and promotes learning, strengthens our ability to adapt and problem solve, and drives our social skills and positive behaviours.

**Play is so important to children's holistic development that both the American Academy of Pediatrics and the UK Children's Commissioner have called for "play prescriptions" from public health authorities.**

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 Pediatrics<sup>12</sup> and the UK Children's Commissioner<sup>13</sup>. 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<sup>14</sup>. 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.

Yet, despite the evidence, play is still undervalued, under-prioritised and unrecognised 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. 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 optimal child development. The LEGO Foundation, IKEA\*, National Geographic Partners, UNICEF and Arup 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 by 2025, 500 million children will have benefited from the power of play.

*\*Represented through Ingka Group*

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

## Physical

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

## Creative

Coming up with ideas, expressing them and transforming them into reality by creating associations, symbolising 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.



## 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.

## Cognitive

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

As children explore themselves, their relationships and their world through play, it is not unusual that play fluidly moves between forms of expression. Whitebread et al.<sup>16</sup> suggest five types of play, including known benefits for child development:

PLAY TYPE <sup>17,18</sup>	DESCRIPTION	BENEFITS
<b>PHYSICAL PLAY</b>	Physically active play including fine motor skill play, rough-and-tumble play as well as sports. For example skipping, bike riding, coloring, cutting, and pretend fighting with peers.	<ul style="list-style-type: none"> <li>› Physically active play provides children with exercise and is also linked with academic progress, self-regulation and social competence.</li> <li>› For some children, rough-and-tumble play helps development of social skills and emotional awareness.</li> </ul>
<b>OBJECT PLAY</b>	Play that involves objects including forms of early play such as mouthing/biting, throwing and later play such as sorting, classifying, building and constructing.	<ul style="list-style-type: none"> <li>› Play with objects has been linked with representational abilities (e.g. a banana becoming a telephone), reasoning and problem-solving strategies.</li> <li>› There is some evidence of benefits to the development of language, math and spatial and fine motor skills.</li> </ul>
<b>SYMBOLIC PLAY</b>	This type of play begins when children start communicating and progresses to include spoken language, mark making, numbers and music. Play with sounds, words, numbers are examples of symbolic play.	<ul style="list-style-type: none"> <li>› Symbolic play is linked to children's language development which in turn engages self-regulation and academic achievement.</li> <li>› Music play could aid the development of communication skills, with links to higher cognitive functioning.</li> </ul>
<b>PRETEND PLAY</b>	Pretend play, such as the classic games of make-believe and role play where the child pretends to be another character.	<ul style="list-style-type: none"> <li>› Studies suggests that pretend play may have an impact on social development and perspective taking.</li> <li>› There's good evidence that pretend play, particularly that is fantasy-orientated, may enhance learning-to-learn skills.</li> </ul>
<b>RULE-BASED GAMES</b>	These include physical games, such as sports, chasing games, hide-and-seek, board games, electronic and computer games.	<ul style="list-style-type: none"> <li>› Board games (especially those involving numbers) help improve numeracy.</li> <li>› Physical games with rules help children adapt to formal schooling.</li> <li>› High quality electronic games have the potential of support literacy and numeracy.</li> </ul>



Research has shown that play is not only about the activity itself, but if we want to support children's development and critical skills for a changing world, they need the quality of playful experiences to engage in 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:<sup>19</sup>

#### **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 Global State of Play

Play is increasingly being recognised as the engine of optimal child development, happiness and achievement. Modern play has become a multi-dimensional, multi-layered experience, where narratives and characters flow easily between different play-spaces. From virtual, online and augmented life-worlds into the physical domain and back again, play has become a seamless set of interlinked experiences and opportunities for learning and pleasure.

While children's play is undoubtedly becoming a more sophisticated and multi-layered experience, less time is spent on play than in previous generations. Whether at home, in the community, at school or across virtual spaces, children spend less time playing than their parents did<sup>20</sup>.

Research by Real Play Coalition partners<sup>21</sup> found children and families want more play in their lives, but have increasing difficulties making time for it. Children are often too busy for unscheduled forms of play. Active outdoor play in particular is struggling to find a place in the lives of children today.

**92% of children** say they want more play in their lives.

**1 in 5 children** say they are 'too busy' to play.<sup>21</sup>

**Around a fifth** of 7-12-year olds globally are not allowed to play outside their own.

**20% of children** get less than one hour of free play per week.

## UK

Time playing outside has

**declined by 50%** in a generation.

## Only 9%

of primary teachers in the UK felt they were very well prepared to facilitate play; 39% primary teachers reported that they were not prepared at all.<sup>22</sup>

## LAOS

**21% of households**

surveyed said no adult had sung with the child (aged 3-5) in the last 3 days.<sup>23</sup>



Global data also provides hope for what can be achieved when play is prioritised in children's lives: improvements in literacy and numeracy scores, links to improved science scores, correlated improvements in vocabulary scores and in emotional wellbeing, as well as decreases in anti-social behaviours.

## US\$8 return to society

for every US\$1 invested in early education with strong components of facilitation that enable children's quality play, active engagement, meaningful experiences and social interaction that enable them to thrive.<sup>24</sup>

### NEPAL

**200%**

more likely that 3-5 year olds were on track for literacy and numeracy learning when adults reported regularly engaging the child in play and learning at home.<sup>25</sup>

### COSTA RICA

**2 days a week**

is the average frequency young people reported engaging in physical play for at least 20 minutes, about half the time reported by peers in Iceland.<sup>28</sup>

### USA

from 1981 to 1997, children's playtime **decreased by 25%.**

In 2018, parents of 6-11-year-olds reported that they were playing with their children less than 5 minutes per day.

**Over 40% of Americans**

believe children up to the age of 12 should be legally required to be supervised when playing in a park.<sup>31</sup>

### SOUTH AFRICA

Young children who played at home were

**36% more likely**

to have higher executive function scores.<sup>26</sup>

### GERMANY

A study of kindergartens found that children who

**learned through play**

were more advanced in reading, maths and social skills. It also found they were more creative.<sup>27</sup>

### JAMAICA

Adults who benefited from a play at home intervention as young children

**earned 25% more**

that their peers who had not benefited the intervention.<sup>29</sup>

### FINLAND

**15 Minutes**

of break time for every 45 minute lesson, in addition to at least one 30-minute recess, is shown to promote student wellbeing and enjoyment of school.<sup>30</sup>

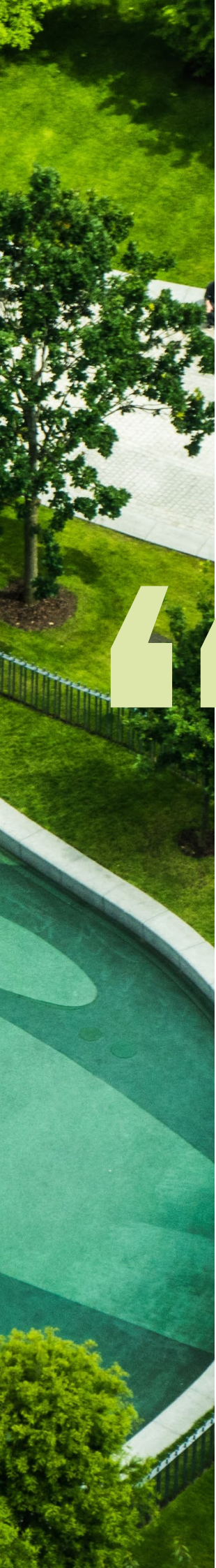
### UK

**A 90% decrease in local anti-social behaviour,**

from 44 to 4 incidents was achieved through the creation of a play space in Merseyside, UK.<sup>32</sup>



# The Role Cities Play



**We are living in an ever increasingly urban world, with more children growing up in cities than ever before. It is therefore imperative that we design and build cities that meet the needs of children: seeking their input during the design process, providing them with access to play and education, and facilitating their social and cultural interactions.”**

- Prof. Klaus Schwab, founder and Executive Chairman, World Economic Forum

By 2050 around 70% of the world's population will live in cities<sup>33</sup>. The majority of these urban residents will be under the age of 18<sup>34</sup>. 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.

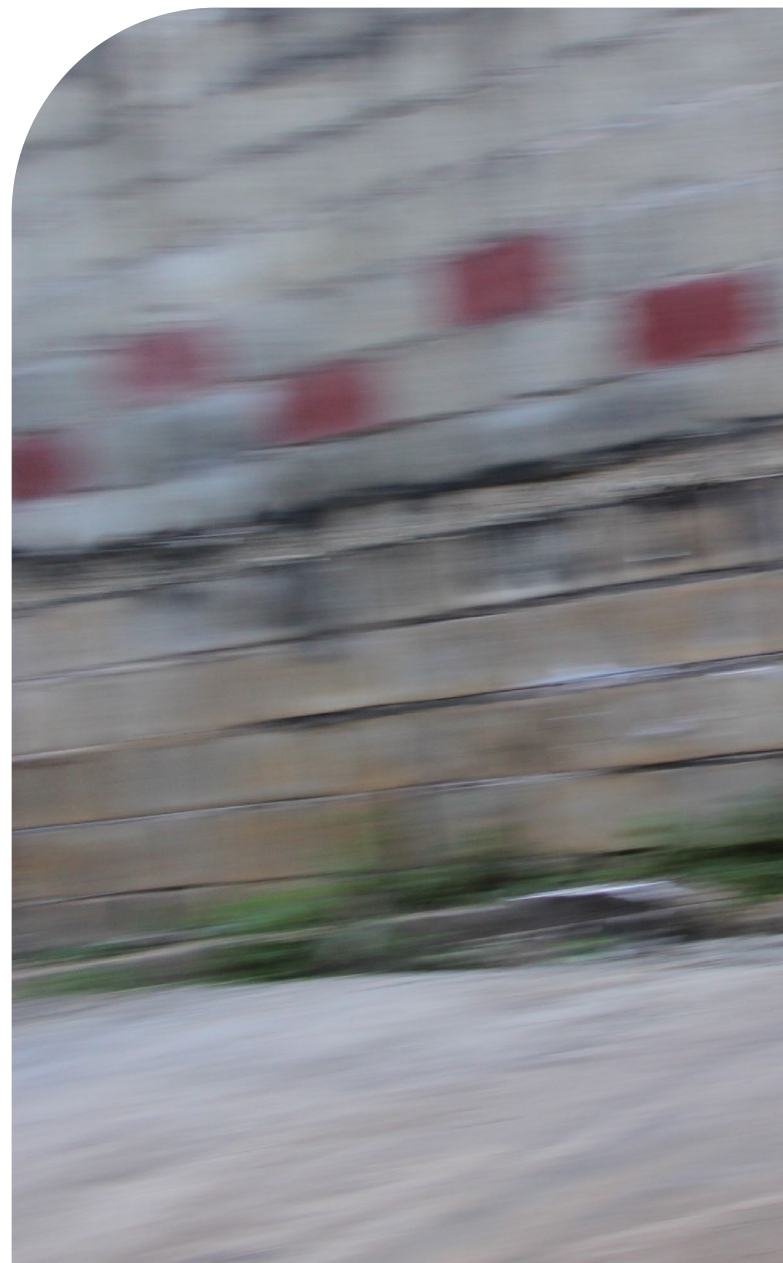
To develop to their full potential, children need not only the basics of safety, nutrition, healthcare, and clean air and water; they also need plenty of opportunities to play and learn from the social and built environments that surround them<sup>35</sup>. As children grow, opportunities for playful engagement with their environment help build physical, emotional and social resilience<sup>36</sup>, crucial factors for wellbeing throughout their entire lives.

The whole built environment is a critical play and informal learning resource for children. This affects not just their childhood but the entirety of their adult life.

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.<sup>37</sup>

In cities, barriers to play are complex and numerous. Global urbanisation trends are reducing accessible open space for play: community spaces, family-friendly parks, and play areas are often the first casualties as cities adopt unsustainable forms of development. 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

**When designed to enable meaningful play and exploration, the built environment can improve skills development and enhance pro-social behaviours.**



problem, each of which impact children's experience of the city.<sup>38</sup> In addition, the needs and challenges of children often go unheard in urban decision-making and planning.

In the United Kingdom, for instance, children currently spend less time playing outdoors than at any point in modern history.<sup>39</sup> Many elements of the built environment that encourage free play have been lost: 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.<sup>40</sup>

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.<sup>41</sup>

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<sup>42</sup>, 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.<sup>43</sup> Recent evidence demonstrates that the built environment, when designed to enable meaningful play and exploration, can improve skills development and enhance pro-social behaviours.<sup>44</sup>





Despite this, the role of the built environment in learning processes is largely unaccounted for in informal settlement upgrading programmes and in the planning of refugee camps.

There is to date a limited base of evidence on the state of play in cities around the world, and particularly on the role of the built environment in enabling and constraining access to play opportunities. 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.<sup>45</sup>

Very little guidance exists on designing neighbourhoods that encourage children's independent mobility and free play. In addition, limited evidence of the economic benefits of designing for play contributes to diminished political will, constrained commercial interest, and minimal effective guidance on how to plan, design and upgrade neighbourhoods to encourage children's free play.

Play is often seen as an activity confined to playgrounds or children's facilities, but the whole built environment can offer a critical play and learning opportunity for children. In reality, play permeates all aspects of a child's life, in a wider variety of locations and environments than adults





**In the United Kingdom, children currently spend less time playing outdoors than at any point in modern history.**

often suspect. Landscaping, planting 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. 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.

Cultivating a quality of life that caters the most vulnerable groups in cities by addressing children's needs and enriching their development will determine our global future. 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.

The work of the Real Play Coalition's partners aims to generate the evidence and knowledge to support city authorities, urban professionals, development actors, and communities to better understand how the built environment can support children's diverse needs and abilities and provide for their optimal development. It also aims at creating guidance on how to design and implement play-based strategies, urban policy and practices that encourage diverse play experiences in cities.

# The Urban Play Framework

To better understand the complexity of play in cities and support the design of play-based interventions for children optimal development, Arup has developed the Urban Play Framework, with the Real Play Coalition and the support of the Royal Town Planning Institute (RTPI).

The Urban Play Framework provides a structured, granular and holistic method to understand how various urban systems relate to a child's learning through play experience, by assessing the challenges and opportunities surrounding play in a given urban context; and to help support, prioritise and design play activation interventions. The Framework is also intended as a tool for ongoing outcome assessment, to measure the long-term impact of specific play activations.

The knowledge and evidence generated through the application of the Urban Play Framework will be used to influence and support activities to improve the wider play experience in cities. In particular, the framework can support governments, development partners, urban practitioners, and citizens in exploring actionable ways to address the causes and effects of low play in cities; and to design and promote play-based interventions to make cities more playful and inclusive for optimal child development.

The Urban Play Framework does not prescribe a 'right way of play' but rather seeks to understand how and where children play, how much children play, and what might influence this.

The Urban Play Framework was designed to address the following key question:

What can contribute to make the built environment an enriching and nurturing play and learning experience for children, to support their optimal development?

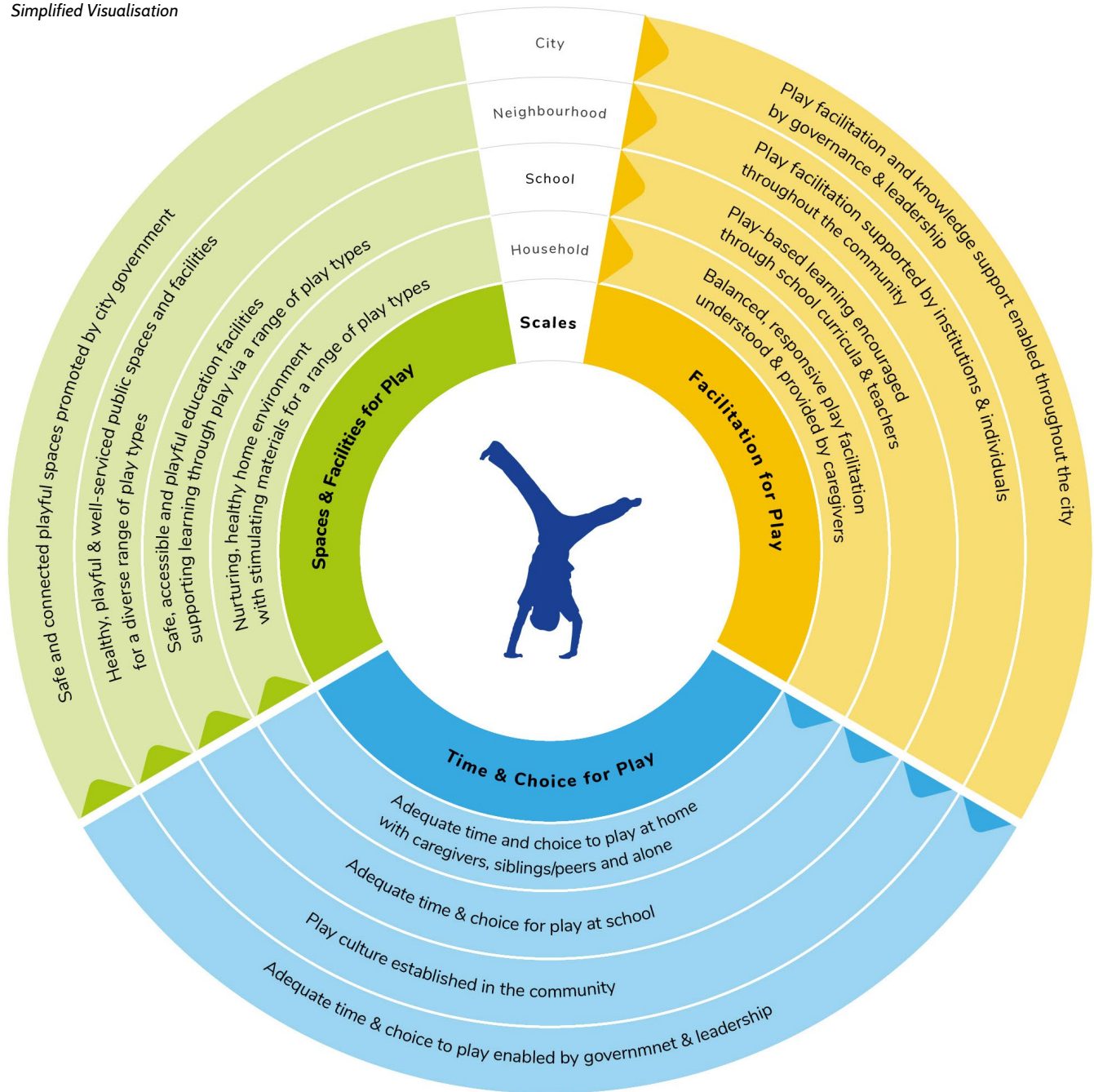
The framework was developed through a phased process of desk-based research, consultations with key informants, and fieldwork in pilot cities. It has been field tested in two neighbourhoods in a pair of pilot cities selected for their widely varying play characteristics: Town 2, a partially informal settlement within the township of Khayelitsha, Cape Town; and Burnt Oak, an area within the London borough of Barnet.

## The Toolkit

The application of the Urban Play Framework is supported by a toolkit for conducting a play assessment, as well as identifying and co-designing play activation initiatives in a given location. The toolkit includes methods and tools for the following activities:

- › **Desk-based Analysis**  
of secondary socio-economic and spatial data on the selected neighbourhood.
- › **Transect Walks**  
to map and assess site materiality and accessibility, social conditions, playspace availability and conditions, child-friendliness and child-specific hazards manifested by local infrastructure, pedestrian and vehicular traffic flows, and potential barriers to play access.
- › **Key Informant Interviews**  
with preselected stakeholders including academic experts, built environment professionals, NGO staff, city authorities, youth groups, educators and community leaders to better understand the environment for play and systemic approaches to play optimisation.
- › **Photography Contest**  
for children to generate an understanding of the experience of play among them in the local community.
- › **Focus Group Discussions**  
with children, educators, and community members to examine local opportunities and challenges surrounding play. These discussions are conducted with participants' consent, by personnel appropriately trained and screened for safeguarding requirements.
- › **Assessment Workshops**  
with children (0-12), caregivers, local educators, community leaders and community members to map and understand where and how children play, and key issues experienced by children and carers in the local community.
- › **Co-creation Workshops**  
with children (0-12), caregivers, educators and community members to assess common themes across children's desires for play improvements in their community and generate ideas for possible play-based interventions.

The Urban Play Framework,  
Simplified Visualisation



Each Dimension of the Urban Play Framework aims at achieving four Goals, or reference standards for “what good looks like” as regards play in a given location. These Goals are assessed against the performance of physical, socio-cultural, economic and policy factors that individually and collectively contribute to enable optimal play conditions. They are also observed at four different scales of urban interaction, whose boundaries are highly context-dependent:

**THE HOUSEHOLD SCALE**

Play conditions in the home and immediate outdoor space, involving children, their caregivers and existing family members.

The Urban Play Framework assesses three Dimensions critical to ensure a play-friendly environment for optimal childhood development. These dimensions assess the socio-cultural and urban systems that contribute to play in cities, as well as children's living conditions within the target community. This includes children's fundamental needs for shelter, healthcare, and nutrition, preconditions that are central to enjoyable and developmentally rewarding play.

### FACILITATION FOR PLAY

This dimension seeks to understand if adults' important role in boosting children's learning and development through facilitated play is actively supported by caregivers, teachers, community members, and city authorities.

Hallmarks of quality play facilitation are:

- › The facilitator inspires play, creates space and time for many kinds of playful activities, and adapts their role to match children's needs as they take on new challenges.
- › Children are supported rather than directed, enabling their sense of agency.
- › Facilitators are able to spot opportunities to integrate learning goals in playful settings without disrupting children's engaged and playful endeavours.
- › Play facilitators balance a broad spectrum of approaches from free play, to guided play to direct instruction.<sup>44</sup>

### SPACES & FACILITIES FOR PLAY

This dimension seeks to understand if children have adequate space to be able to undertake a range of play types; and if they have access to a range of toys, creative supplies, materials and equipment for play.

This dimension builds on a taxonomy of play types, each with particular characteristics and developmental benefits described in the Power of Play Chapter.<sup>46</sup>

### TIME & CHOICE FOR PLAY

This dimension seeks to understand if children have adequate time and choice to engage in stimulating and developmentally rewarding play within the target community.

Providing children with time and choice for rich play experiences is important for their well-being and builds the skills they will need to thrive in life. The characteristics of joyful, meaningful, iterative, actively engaged and social play<sup>47</sup> can figure when children play on their own or with others, in school, in preschool, in the homes, and in the community.

#### THE SCHOOL SCALE

Play conditions in the school environment, and immediate outdoor space, involving children, and their educators.

#### NEIGHBOURHOOD SCALE

Play conditions in the local community, its streets, spaces, facilities and institutions, involving children, caregivers, educators, and community organisations.

#### THE CITY SCALE

Play conditions across the city as a whole, including its connectivity and services, and involving planners, decision-makers, government officials, policy, strategy, and budgets.



# Understanding Play

## Barnet, London

With the support of Barnet Council, UNICEF UK and the LEGO Foundation, Arup and the Royal Town Planning Institute (RTPi) trialled the Urban Play Framework in the community of Burnt Oak in the Borough of Barnet.

## CONTEXT

Barnet is a historically suburban area in London's northern outskirts, where the urban fringe gives way to the protected rural areas of the London Green Belt.

Barnet is rapidly changing. Tens of thousands of new homes are being built, altering the Borough's suburban feel and redefining community dynamics. The borough's population is projected to grow by 20 to 30 percent by 2036, potentially passing the half million mark from today's 390,000, with a projected 100,000 children and young people.<sup>48</sup>

## BARNET PLAY GAP

As in most of London, rising housing costs and inequality are key issues in Barnet, and children can pay a high price. Housing is a key issue in Burnt Oak, with reported high levels of overcrowding across the ward and a high demand of units for social rental that the Council struggles to meet. The Borough is below London's average for housing affordability, and above the average for income inequality.<sup>49</sup>

Poor housing conditions, high unemployment and other factors of deprivation, such as social isolation of vulnerable carers, can lead to home environments that are not nurturing for children, with suboptimal conditions for meaningful play. This is compounded with cuts in the local provision of key public services, including essential childcare.

Perceived low levels of safety in the public realm is another significant concern. Carers are reluctant to allow a degree of independence when children use parks and public spaces over fear of youth gang violence and antisocial behaviour, such as substance abuse and alcohol drinking.

A survey of carers in two local primary schools indicates that children in vulnerable households can spend up to 13 hours during the weekend on electronic devices – which is seen as a safer alternative to outdoor play. There are also related reports of problems with concentration in classrooms, particularly at the beginning of the week.

The perceived lack of public safety, time-scarcity, and a historical culture of 'quiet streets', with public signage discouraging ballgames and outdoor play, all contribute to low play levels in outdoor spaces in Burnt Oak.

## BARNET PLAY OPPORTUNITIES

Urban regeneration in the area has provided significant opportunity to invest in play infrastructure, with key interventions addressing the redesign of two local parks, where works are currently underway.

The ongoing transition in Barnet towards private development presents a key opportunity to address the local play gap through the uptake by developers of Learning through Play principles in planning strategies.

An example is the state-of-the-art UNITAS youth centre, intended to provide affordable, safe play options for local residents. Expanding this approach from indoor playspaces to a true integration of play principles into the broader connected built environment has the potential to significantly improve children's experience of local outdoor play conditions.

Balancing private development with adequate resourcing for the local voluntary and community sector to provide play activities for the most vulnerable children in the borough is a key opportunity space revealed through the Urban Play Framework. Another opportunity for activating play and Learning through Play principles is in the transport and mobility layer of Barnet's systems infrastructure. Use of public transit in the borough is substantial; intervening to transform the 'trapped time' that families and children spend on various transport modalities into a chance for playful learning could reap significant benefits for the local community.



# Activating Play

## Khayelitsha, Cape Town

With the support of the local organisation Ikhayalami and the LEGO Foundation, Arup trialled the Urban Play Framework in the community of Town 2, in the Township of Khayelitsha.



## CONTEXT

Khayelitsha is a 39 km<sup>2</sup> township on the southeast outskirts of Cape Town. Town 2 is an area of Khayelitsha composed of a core of formal structures surrounded by ad-hoc informal shacks; this informal growth began after the advent of free internal movement in South Africa in 1994 and shows no signs of slowing 25 years later.<sup>50</sup>

The current total population of Khayelitsha is unknown; transient workers and extremely mutable informal development make accurate counting difficult. The last census, conducted in 2011, indicated a population of 391,749. Other sources estimate the population at anywhere from 700,000 to 1.5 million people.<sup>51</sup> The average household size is 3.30 people.<sup>52</sup>

## KHAYELITSHA PLAY GAP

Town 2 suffers from gang violence, exposure to environmental hazards, and long commute times to the city centre, all of which impact children's ability to play both independently and with caregivers.

Child safety is an overwhelming concern in Khayelitsha. Our assessment found that children spend a substantial amount of time outdoors, playing in streets with no traffic calming, near unhygienic latrine blocks, or near a local river tributary. A lack of adequately maintained and supervised playspaces leads to children playing in materially and socially hazardous locations.

The only designated local play space is a Playpark featuring five fixed pieces of metal play equipment which become hazardously hot during summer months. On weekends, the popularity of the Playpark as a place to hang washing provides passive surveillance from women in the community; for the remainder of the week the Playpark is unsupervised and used as an ad-hoc garbage dump. The site is unfenced, providing unfettered access to the hazardous Kuils River tributary nearby.

Latrine Blocks are also popular playspaces, due to the frequent presence of known adults at the adjacent public water taps and the easy availability of discarded plastic refuse near the latrines for use as toys. While the latrine blocks provide a degree of passive surveillance due to frequent adult users, the health hazards associated with playing in these areas are considerable. Human waste and discarded rubbish are intermixed in non-functional

latrines, attracting insects and stray animals. The latrines themselves also provide a space where unsupervised children are at risk of sexual assault.

A local tributary of the Kuils River adjacent to the settlement is a popular place for children to play, despite being widely acknowledged by both children and adults as an extremely dangerous location. Particularly during rainy seasons, the river can be fast-moving and over 1.2m deep, with steep, overgrown banks. Three children had drowned in the river in the year preceding our visit. Children and caregivers also reported that rugged terrain near the river provides visual cover for adults wishing to harm children.

Compounding these spatial and safety issues is the lack of an understanding in local culture of the developmental importance of play, and the need for caregivers to participate in, encourage and facilitate play.

## KHAYELITSHA PLAY OPPORTUNITIES

As a result of findings from the assessment and co-creation work, we identified an opportunity to increase learning-through-play activities in Town 2, through the Activation of a Network of Play Spaces. A two-phase intervention was developed with the intention of contributing to the development of a local play culture which recognises the importance of play and the need for play facilitation, and increases play safety via supervised play spaces.

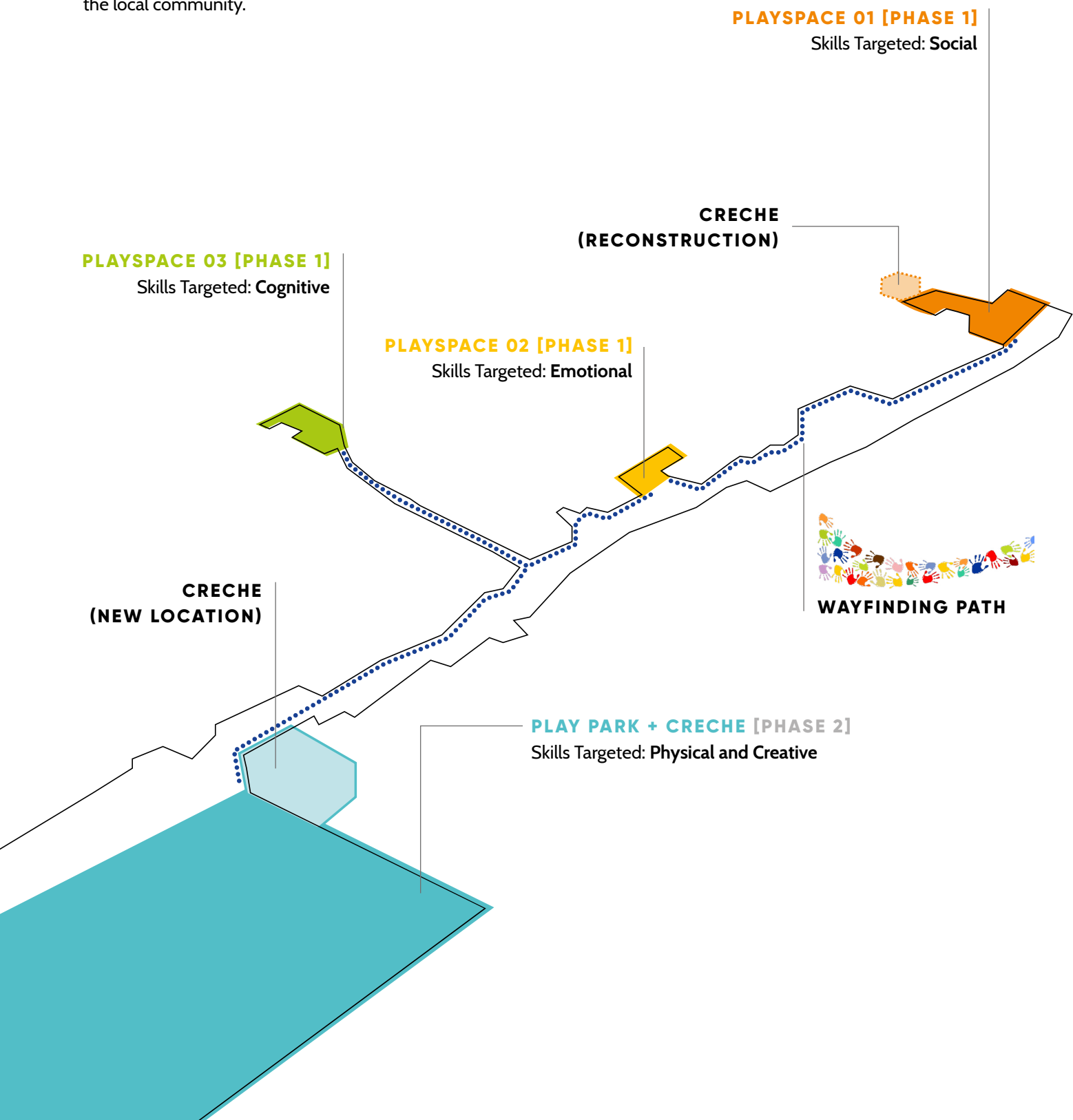
Phase one of the project upgrades a series of existing courtyards throughout the settlement, to form a network of designated playspaces. A local nursery creche facility will be refurbished to serve as a hub for the play network. These activated playspaces are linked by a playful wayfinding system of child-height signage and brightly coloured tires, which also serve to provide traffic calming for the settlement streets.

Phase two of the project will link this network of activated spaces to a central hub – the reclaimed playpark, refurbished with community participation, with a nursery creche facility built on the grounds to provide constant passive surveillance and a central community resource for play education.

Construction of Phase 1 of the Activated Playspace Network is scheduled to begin in April 2020.

# Activated Play Network

Each play-activated courtyard is designed to engage a particular child developmental skill through play, supervised by trained play facilitator volunteers from the local community.



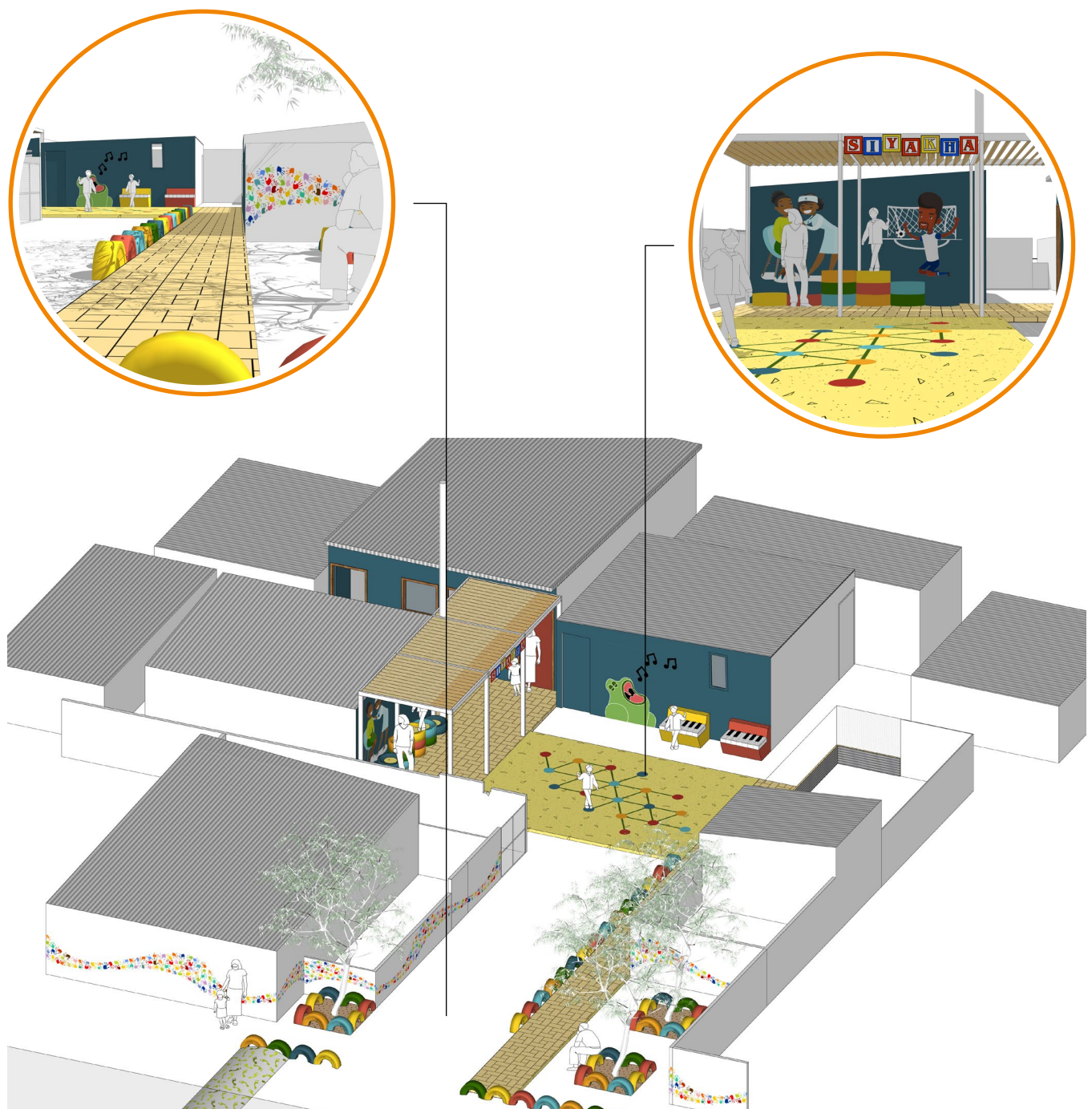
# Playspace 01

## SKILLS TARGETED: SOCIAL

Playspace 01 was designed to stimulate the development of social skills through play: collaborating, communicating and understanding other people's perspectives by sharing ideas, negotiating rules and building empathy.



[Current state]



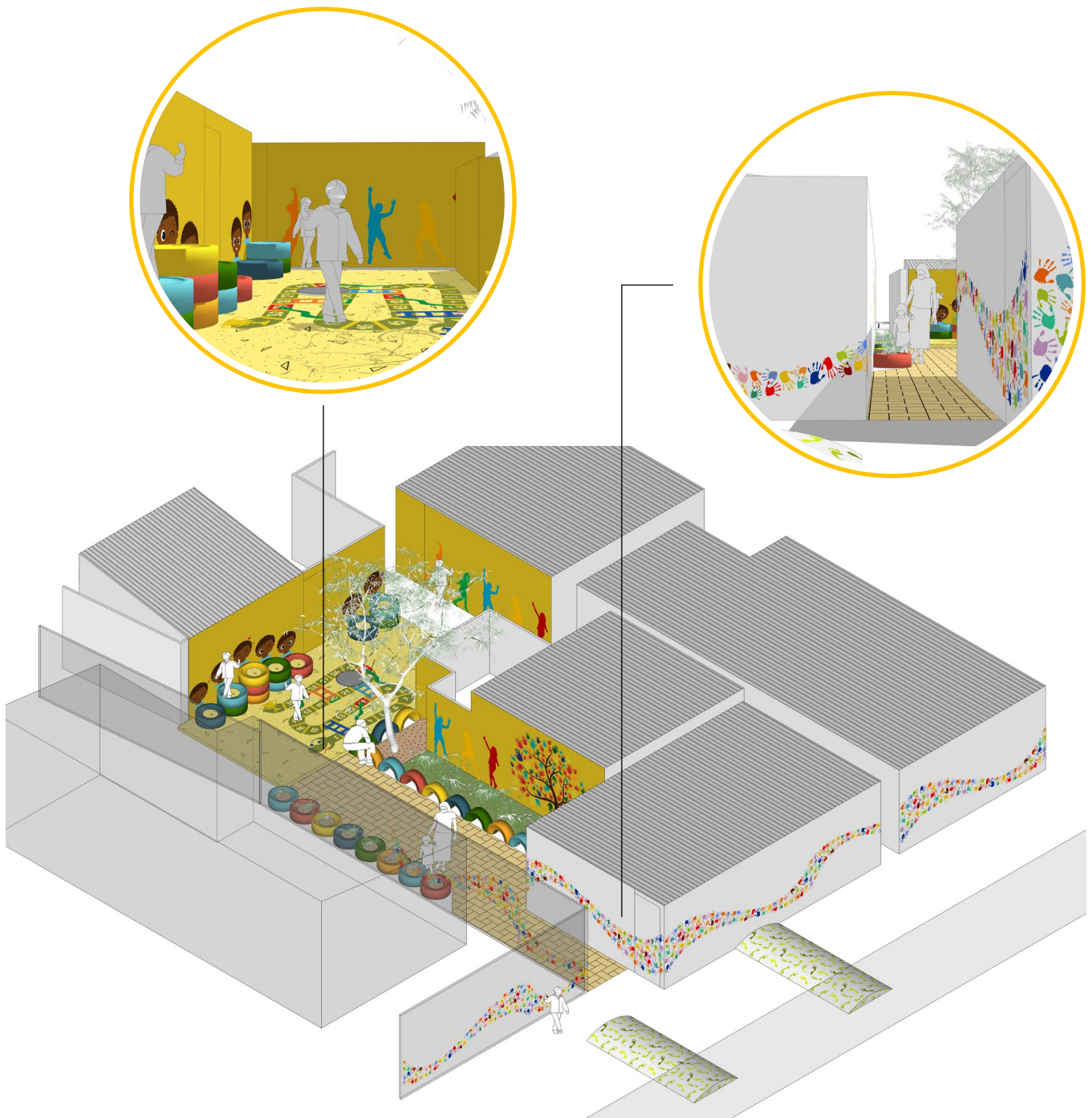
## Playspace 02

### SKILLS TARGETED: EMOTIONAL

Playspace 02 was designed to stimulate the development of emotional skills through play: understanding, managing and expressing emotions by building self-awareness and handling impulses, as well as staying motivated and confident in the face of difficulties.



[Current state]



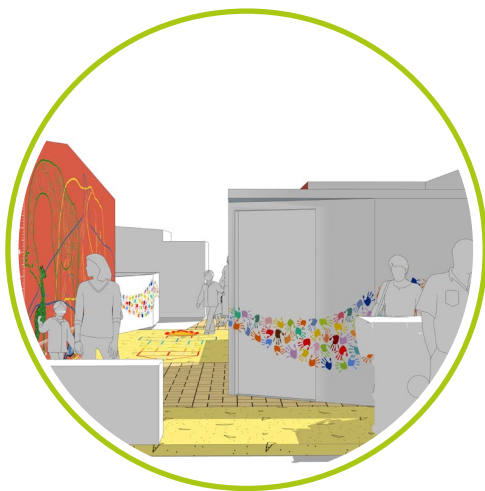
## Playspace 03

### SKILLS TARGETED: COGNITIVE

Playspace 03 was designed to stimulate the development of cognitive skills through play: concentration, problem-solving and flexible thinking by learning to tackle complex tasks and building effective strategies to identify solutions.



[Current state]



# Playing it Forward: Next Steps

More than ever, we know that our ability to learn through play is the hallmark of human development and civilizations.<sup>53</sup> The three dimensions of the Urban Play Framework - the physical environment, the opportunity for play, and play facilitation - can shift our attention to prioritise critical actions across decision-making and practice.

With this brief publication, the Real Play Coalition aims to:

- › Share some evidence on the importance of learning through play in cities, in order to inspire and create a culture of play, learning and development.
- › Engage with city stakeholders around a global state of play, which is absolutely critical to seamlessly integrate play in our environment.
- › Introduce the Urban Play Framework with specific and measurable dimensions, which we can target and reward for future interventions.
- › Share with practitioners examples and stories of the change that can happen if we shift our cities towards an environment embedded with learning through play.

**We have an obligation to reclaim play in cities, due to the critical role it has for children's development and learning in particular, but also for society in general -- to create more lively, livable and stimulating environments for current and future generations.**

The Real Play Coalition aims to mainstream the adoption of learning through play concepts in norms and practices across cities globally, focusing on the most vulnerable and marginalised contexts in both developed and developing countries, by influencing change across individuals and institutions responsible for decision making and planning at the city level.

In particular, the Real Play Coalition looks forward to operationalising its vision in the coming year via:

### **INSIGHTS**

Strengthening and evolving the Urban Play Framework in different urban contexts

### **AWARENESS**

Co-designing solutions with communities in cities around the world to show the benefit of learning through play principles in city design and planning

### **RAISING THE SPACE**

Inspiring ideas and catalysing action to enable a playful cities approach through the design and implementation of play-based interventions



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### 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.

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