
Knee High Design Challenge

SOLUTIONS PAPER



THE KNEE HIGH DESIGN
CHALLENGE HAS BROUGHT
INNOVATION,
EXPERIMENTATION AND
EVALUATION TO PRODUCTS
AND SERVICES THAT AIM
TO MAKE A LASTING
DIFFERENCE TO CHILDREN
UNDER FIVE.

Acknowledgements

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Knee High Design Challenge in partnership with



A CATALYST
FOR INNOVATION
IN HEALTH



HOW CAN WE FIND, FUND AND NURTURE GREAT PEOPLE WITH INNOVATIVE IDEAS FOR TACKLING HEALTH INEQUALITIES AMONG YOUNG CHILDREN?

The Knee High Design Challenge is an open innovation programme, providing support and funding for the development of new services and products that aim to raise the health and wellbeing of children under five living in Southwark and Lambeth. As investors and leaders in new approaches, Design Council, Guy's and St Thomas' Charity and the London boroughs of Southwark and Lambeth want to share the learning from this innovation challenge with policymakers, public health and child development practitioners, and those working in communities who want to test new approaches to improve people's health and wellbeing.

The Knee High Design Challenge seeks to address several critical questions of interest to two distinct audiences. For local authorities and policymakers, it shows how new services or products can evidence that they are raising the health and wellbeing of residents within their communities. It also provides learning about the role of innovation and design in improving outcomes for children in their early years. For investors and entrepreneurs, it illustrates the extent and the ways investments can make a change to health outcomes and how to test and evidence the impact of innovative work.

KNEE HIGH DESIGN CHALLENGE



INTRODUCTION

This paper presents the results of a twelve-month evaluation of the three ventures that received final funding from the Knee High Design Challenge, at the end of a four-stage process which was launched in September 2013. It is focused on the outcomes achieved by these three teams in terms of their achievements on the programme and the impact that their products and services are having on child health. It accompanies a separate Vision Paper by Design Council which sets out the opportunity of the approach taken in the Knee High Design Challenge to tackle other social challenges and a vision for how models of practice like this are adopted more widely.

The full evaluation report, together with material on the ventures established during the programme and the story of the Knee High Challenge is available at designcouncil.org.uk.

Pointers for local authorities and policymakers

Use existing public spaces creatively to encourage families to leave the house.

Innovative approaches to using public space and changing the everyday environment can engage families more effectively and help them to reconsider normal routines.

Find ways to use day-to-day play to connect with families and encourage children's learning and development.

Innovations that use a playful approach engage young children directly, support learning and activity, and can be successful in supporting families where more traditional service delivery models have struggled.

Build on what is already happening locally and involve local people in making change.

Tailored interventions based on a strong understanding of local needs and assets promote a sense of ownership that supports long-term outcomes.

Pointers for investors and entrepreneurs

Innovative funding models like the Knee High Design Challenge can mitigate investment risk and improve health outcomes from ventures.

This works by creating a structured environment which enables entrepreneurs to test their ideas and investors to spread their investment risk.

Embed an evaluation culture throughout the process.

This is important to understand better how a venture has impact over time, and in what areas. This can help when looking for additional funding.

Think about your model of change as there is no 'one-size-fits-all' solution.

Entrepreneurs should reflect on the change they are trying to create, and choose their model accordingly.

Networks and contacts are as important as funding.

Networks are incredibly important to social enterprises and startups, giving access to information, resources, expertise and support in areas they might be lacking.

BACKGROUND

Health inequalities in under-fives: what's the challenge?

The early years of childhood have a lasting impact on a person's life beyond childhood. Healthy behaviours in childhood set patterns for later life. During these early years, we develop the foundations for an understanding of ourselves, the people around us, and the world in which we live.

The early development of essential social, emotional and cognitive skills, such as listening and communication, empathy, resilience and problem solving, are strongly associated with later-life health and wellbeing.

A child's family and home environment have a significant role to play during these early stages. But underlying inequalities mean that not all children are getting the same chances in life. Nationally, one in four children (25.1%) lives in poverty. Child poverty in Lambeth and Southwark is higher than average: one in three (34%) children in each borough lives in poverty.¹ Growing up in poverty can mean going hungry, being cold, and not being able to join in activities with friends.

Why under-fives?

Problems tend to be easiest to tackle in their early stages, before they become established. Furthermore, social problems are often interlinked and deep-rooted. Addressing underlying causes at the outset can forestall the subsequent onset of multiple related problems, reducing inequality and halting poverty cycles. Design Council therefore wished to nurture unique, innovative ventures that aim to give every child a fair start in life, by taking a preventative approach to tackling the above challenges: upstream interventions that aim to prevent harm before it occurs, addressing the barriers to healthy, active play for children and their families.

Opportunities

The Knee High Design Challenge was built upon insights gathered from six months of in-depth research, ethnography and engagement activity with families,

children and professionals in Lambeth and Southwark. Design Council identified three particular challenges where innovative, bottom-up initiatives could provide solutions:

Leaving the house – Connecting more families to the people and places beyond the boundaries of their home. Although there are a variety of services and activities available for under-fives in Lambeth and Southwark, many families who most need them are not accessing them. Families might not be aware of what is available, or they might not be confident enough to go out and do something new. Practically, leaving the house with young children can be a logistical challenge. As a result, some families suffering stress, health problems, or other difficulties may not be accessing support available to them, and children are missing out on opportunities that would aid early development.

Day-to-day play – Helping all children to learn and develop through stimulation, interaction and play in their everyday lives. Playtime is reducing. In areas of deprivation, only 21% of children play outdoors every day near home, compared to 71% of their parents when they were a child.² Play is an important way for children to connect with the world through learning and interpretation, developing imagination, dexterity, physical, cognitive and emotional strength. Outdoor play is also closely linked to physical activity, yet less school time is devoted to active play, and public outdoor play spaces are disappearing while those that remain are often regarded as 'unsafe'.³ Insufficient physical activity is a significant issue for young children today. 23% of children starting school are either overweight or obese, and rates are higher in Lambeth and Southwark than the average.⁴

Parents are people – Helping parents alleviate the stress, anxiety and depression they experience in their day-to-day lives. Being a parent is hard work. Many parents feel overwhelmed by their responsibilities and struggle to cope, but many lack the confidence to ask for help. It is estimated that one in three new mothers suffers from postnatal depression.⁵ Single parents are at a higher risk of depression than couples, and single-parent families are increasing. If a parent experiences stress for a prolonged period of time, it can have a significant effect on the health and wellbeing of their child, who becomes increasingly susceptible to mental health problems later on. Such 'toxic stress' environments have even been found to change the biological structure of children's brains.⁶

DESIGN CHALLENGE

Knee High Design Challenge

Design Council is an enterprising charity that uses design to stimulate innovation in business, public services and communities, improving our built environment and tackling complex social issues. Its aim is to inspire new thinking, encourage public debate and inform government policy to improve everyday life and help meet tomorrow's challenges today. Through the Design Challenges programme, which uses design to tackle social challenges, Design Council has supported the creation of new services, products and environments that make a real difference to people's lives.

In 2012, Design Council formed a partnership with Guy's and St Thomas' Charity and the London boroughs of Southwark and Lambeth to create an open competition which would find, fund and nurture people with innovative ideas for tackling existing health inequalities for young children in these boroughs. The resulting Knee High Design Challenge was launched in September 2013 with the aim of catalysing and supporting innovative services or products that improve the health and wellbeing of children under five in Southwark and Lambeth.

Following an open call for ideas, 25 teams were selected for support and mentoring through a staged funding process. Six teams from the 25 were awarded £51,000 each to develop and refine their business model. These were then each given the opportunity to pitch for further funding, to sustain their service or product. In the autumn of 2014, three teams received further funding of up to £100,000 each to run a twelve month evaluated pilot of their work in Southwark and Lambeth. The three successful funded teams were *Creative Homes*, *KidsConnect* and *Pop up Parks*.

Creative Homes

Creative Homes is an experiential home visiting service that uses trained early years artists to identify and solve everyday stresses in the home. The Creative Homes team is a collective of specially trained dancers, designers, early years specialists, musicians, sound artists, storytellers, chefs and visual artists. The company was set up by Sally-Anne Donaldson through Tea Dance for Little People, a social enterprise providing exciting, creative play experiences for families with young children. They provide simple, playful solutions designed to give families a helping hand towards building lasting, positive routines, and equip caregivers with the confidence and capability to make lasting change to habits and behaviour.

Families may experience the following interventions, aimed at creating consistent routines, establishing healthy habits and providing stimulating activities for parents and children to enjoy together:

- The '*Clutter Inspector*' – helping families share small spaces by creating multifunctional rooms with more space to play, and reducing accidents in the home
- The '*Play Inspector*' – providing ideas and inspiration for creative play
- The '*Creative Chef*' – helping families change the habits of fussy eaters and encouraging healthy eating habits
- The '*Tooth Fairy*' – helping families to make toothbrushing fun and encouraging healthy dental habits
- The '*Toilet Sailor*' – helping families with the difficult transition to independent toilet use

A stressful home environment can reduce the quality of caregiving and has been found to disrupt a child's healthy brain development. By relieving day-to-day stress in the home and making everyday life easier, Creative Homes aims to unlock the barriers to families seeking and accessing support they might need in the future.

KidsConnect

KidsConnect has developed an app that puts parents and carers in touch with accurate, comprehensive and easily accessible information about activities and support available for children under five living in Lambeth and Southwark. This is to ensure that no child misses out on activities because their parents or carers lack knowledge or networks. The aim is to help parents to access information so that they can decide what is right for them.

The co-founders of KidsConnect are all Lambeth-based parents of children under five. Tracey Gilbert is an IT strategy consultant and published author, Hannah White is a programme director at the Institute for Government, a leading research charity and thinktank and Ben White is a civil servant who works on policy, strategy, finance and delivery. The KidsConnect app is based on five principles. It is accurate, relevant, trusted, user-friendly and comprehensive. Its business model is based on three critical success factors:

A co-produced approach to sharing data, giving service providers the ability to update their information, offering a greater depth of information. Simultaneously, users can review and rate local provision, offering greater insight for other parents looking for local activities, and easily accessible feedback for providers to improve their service.

KNEE HIGH DESIGN CHALLENGE

CREATIVE HOMES

1. Reduce barriers to accessing support
2. Learn lasting routines through creative play
3. Reduce 'pile up of stress'

KIDS CONNECT

1. Connect parents with activities and support
2. Indirectly: access play opportunities
3. Let parents decide what is right for them

POP UP PARKS

1. Encourage safe play outside the house
2. Encourage children and families to spend more time being playful
3. Change in perceptions of space, and encourage ownership

1.
Leaving the house

2.
Day-to-day play

3.
Parents are people

The user-friendly design has been developed to ensure it fits into a busy parent's life, allowing them to find information in a way which makes sense to them.

KidsConnect is based on a hyperlocal model which means parents can access information about services most accessible to them. It promotes local community assets and local people gaining knowledge about their physical and community environment.

Pop up Parks

Pop up Parks creates vibrant space in urban environments that encourage children and families to spend more time being playful, creative and active outside the home. The programme quickly transforms underused urban places into playful outdoor environments for children, their parents and carers. These spaces are where families live and where they spend time near to, or within, housing estates and on community streets.

Pop up Parks is a group of educationalists, designers and fabricators. The company was founded by Tom Doust, a social innovator with experience of designing and delivering creative programmes with children, young people, families, schools and communities, James Sale, a designer and maker with a focus on architecture, furniture and education and Jack Roche, a designer with experience in education and working with young people.

Pop up Parks provides a new local space that encourages children and families to spend more time being playful and creative outside the home. Ultimately the programme looks to transform public space more permanently and to inspire a new way of thinking about urban space and outdoor play. There are several critical success factors that are unique to Pop up Parks' approach:

Interactive and creative design of park activities and toys. Pop up Parks favours equipment and activities that are multi-purpose, relatively inexpensive and that interact with existing street furniture and features.

The parks offer a range of activities for under-fives, from sounds and listening posts and den building to running tracks and ramps, which invite users to reshape the space.

Pop up Parks are temporary. While some toys and materials may remain, the parks encourage people to use all existing space and local assets more creatively. Local groups are supported to create more permanent play spaces.

The parks intentionally disrupt public space and are located in highly visible areas to entice passers-by to interact with the space.

Pop up Parks are designed to reclaim public space for outdoor play, often displacing other groups of people with families and children.

SOLUTIONS

Knee High Design Challenge: pilot evaluation

NEF Consulting, the consultancy arm of the New Economics Foundation and specialists in social impact, was commissioned to deliver the evaluation of the pilot, in partnership with Narativ, an organisation that has researched, developed and refined methods for listening and storytelling. The evaluation focuses on the journey of the three final funded teams and provides insights into the benefits of early intervention programmes for under-fives.

The ventures were directly involved in the design and delivery of the evaluation process to embed an evaluation culture within their teams. This also provided insights for Design Council and its partners to inform and inspire their future work using innovation to improve health and wellbeing outcomes. The staged process offered multiple opportunities to share learning with strategic stakeholders as the evaluation progressed, for example through steering groups and events, so that the evaluation outputs could be reviewed, questioned and refined.

The methodology behind the evaluation begins by developing an understanding of how each of the three funded ventures aims to create positive change. For each venture, therefore, the starting point was to develop a variety of 'Theory of Change' models highlighting the short, medium and long-term outcomes that the ventures anticipate for different stakeholders.

Data was collected through direct project activities and through surveys sent out to participants. In addition, Narativ worked with each team to develop an approach to embed story gathering in activities. This enabled staff and volunteers to collect data which aids ongoing learning and brings the quantitative data to life through telling vivid and memorable stories. Narativ's approach to storytelling also offered a space in which each team could reflect on its evolution.

The evaluation demonstrates the extent to which the ventures have created positive changes in health, development and wellbeing outcomes in children under five and their families, and aims to ensure that findings from this work inform current evidence-based practice in early years.

Knee High Design Challenge: outcomes

Each of the selected ventures increases the amount of enjoyable time that children spend with their parents and contributes to addressing the three key focus issue areas. The ways in which they address the issues are illustrated in the diagram on the opposite page.

All three teams are seeking to create lasting change for children by encouraging their parents to build positive and sustainable routines. They provide inspiration for parents to seek out new experiences with their children and to bring new ways of learning about the world into their lives. In each venture, there is also a focus on unlocking the barriers to accessing support or activities to those parents who may not know how or where to seek it.

For children, each venture offers new and varied ways in which they can play and access stimulating activities. They also offer ways of meeting other children and adults which can increase their ability to engage in new situations. For Creative Homes and Pop up Parks in particular, there was evidence of an improvement in the variety and quality of play and activity. Creative Homes families were found to feel more connected to their communities and put in touch with new local services.

Importantly, the evaluation highlighted the ways in which different interventions have varying degrees of success in improving health, development and wellbeing outcomes in children under five and their families in Southwark and Lambeth. It also highlighted how the teams were able to adapt their approaches in different ways based on initial results and feedback. For example, KidsConnect made regular changes to their app, initially in response to user needs and later in response to investor requirements.

CREATIVE HOMES

Creative Homes is reducing stress in the family home and bringing play into parents' and children's lives, helping children's development and stopping families reaching toxic stress levels.

Measuring outcomes

37% Reduction in parental stress

64% Increase in the quality of healthy routines



Increase in the time children spent in creative play and stimulating activities



Increase in parents' perceptions of time and energy to spend with their children



Families are put in touch with an average of 1–2 new local services

Creative Homes helped housing associations to identify at-risk families, and crucially could be a catalyst for support before families' situations deteriorate significantly. Housing associations typically become aware of families when they fall behind on rent arrears or when anti-social behaviour becomes a problem they can measure.

Creative Homes also connects families to housing associations' internal services such as employment support, as well as external health and cultural services such as children's centres, which provide additional support to families beyond the timeframe of their intervention.

A Creative Homes story

How Creative uses playful solutions to help families build confidence and capacity at home, as told by Creative Homes...

I'm standing outside a flat on a housing estate in South London dressed in blue sailor trousers and a red and white stripy top. Leyla opens the door smiling, Omar and Jamel jump up and down beside her. "Hello Sam the Sailor," they say to me. "Wiggle, wiggle..."

"That's brilliant," I say. "You remember my sailor song from last week." I start to sing: "Wiggle, wiggle, wiggle, woo I need a poo or a wee." Omar and Jamel join in, dancing and singing.

"How's it going with the night toilet training?" I ask.

"Omar is still wetting the bed most nights," says Leyla.

"Don't worry," I say. "It's only been a week since our last visit so it may take a few weeks more. Keep trying, you're doing really well."

One month later... "Come in!" The two little boys pull me into the house. Straight away I notice a new, brightly coloured road play mat on the floor. I'm sitting on the floor of Leyla's flat with Leyla and Jamel. Today we're making bean tambourines. Jamel is drawing on his tambourine and starts to say "wiggle, wiggle."

"Sing the song!" says Omar bouncing over and staring up at me with big brown eyes. "Wiggle, wiggle, wiggle, woo," we all sing, twisting back and forth on the spot.

"So how is it going with toilet training now? We haven't seen you for a month or so," I ask Leyla. "Oh yes, he's fine now," says Leyla smiling. "No more nappies at night. Jamel has started toilet training as well, he wants to follow his brother. We play more together now too, go out to the park and meet new people. I have more ideas of things to do and since we made those fruit kebabs with you I realised they can help me with cooking too. They chop vegetables and mix things, before I did that all myself."



KIDSCONNECT

KidsConnect helps to improve the health and wellbeing of children indirectly, by providing more options for, and easier access to, play and activities for children close to home. KidsConnect links parents and carers with accurate, comprehensive and easily accessible information about activities and support available for children under five living in Lambeth and Southwark. Over 5,500 users across Lambeth and Southwark have signed up for the KidsConnect app and the research provided some qualitative evidence that shows changes in behaviour around activities attended, as well as inspiration to try new activities and games at home.

Measuring outcomes

An app such as KidsConnect has an indirect impact on wellbeing outcomes and acts as a catalyst for the use of other services that lead more directly to the desired outcomes. An interesting aspect of this is that a connection to a new service that may have not happened without KidsConnect could potentially lead to significant, life-changing outcomes, for example, establishing new friendship groups or learning a new skill, such as a language.

The pilot with KidsConnect provided useful insights into some of the difficulties of measuring outcomes for users of early stage technology products. In the early stages of developing a new technology, priority is understandably given to developing product functionality and user experience as well as addressing investors' needs, rather than finding ways to measure outcomes. It can be difficult to engage users of an app to provide feedback, particularly when the primary aim of using the app is to find quick and easy information and users may resist registering their details.

A KidsConnect story

How KidsConnect helps families to learn what's going on, as told by a parent...

I remember looking at the app once and thinking - I never would have thought to take him to something like that. I wouldn't know that that was on. Obviously with the internet you can find anything. I think with KidsConnect what's amazing is the immediacy of the information all together. It's Monday morning, you don't need to think: "This playgroup I know is on I'll just go there." You can think: "Oh actually just five minutes slightly further there's this, that's on." It's the wider range at your fingertips. You don't need to spend half an hour on the internet.

And it's this that I haven't seen elsewhere - pulling it all together. I think what the app has done for us is just for the breadth of activities, like a cookery class or like a concert or something that's a bit different or if there were swimming lessons. I think for that I would be prepared to travel further. And the KidsConnect app is brilliant for that.

London Borough of Lambeth
EFFRA ROAD
SW2



POP UP PARKS

Pop up Parks is leading a shift in thinking about interactive play and the use of space. It creates outdoor environments that encourage energetic activity, where parents play more with their children and children play with other children. The qualitative data shows that Pop up Parks acts a 'disrupter'. Spaces that families engage with regularly, such as a high street or the roads near a primary school, are transformed into colourful spaces for play which encourages parents to observe the area in a new way. In particular, the presence of a Pop up Park can allow families to explore concepts of risk and play in urban settings while in a safe space.

Measuring outcomes

The quantitative data shows some evidence of increased healthy behaviours:

73% of children tried a new activity

1/5 A fifth of children increased playtime outdoors, with an average increase of energetic physical activity of 33 minutes and light activity of 53 minutes per week.

A Pop up Parks story

How Pop up Parks helps children to be active, as told by Pop up Parks...

A girl, aged about four, stands at the fringes of the Pop up Park. She doesn't move towards anything. Her mother takes her to play with the sound wall. I smile and say hello, introduce myself. "Would you like to do some gardening?" I ask. I suggest some games, running along the track, jumping. She shakes her head. Hours later she is still at the park. I have seen her run up and down the chevroned ramps; I have seen her circumvent the park on the multicoloured running track and look to the pedometer I attached to her top, before running off again and arranging the foam blocks into a towering structure; I have seen her, a wooden spoon in each hand, bang the pots and pans hanging on the music fence alongside other children.

Her mother says: "Come on. We have to go now." She continues to balance a coloured block on top of another. Her mother repeats: "We need to go to the shops now. Come on. We can play another time." She doesn't look up, but says, "No."

After further attempts from her mother and no movement to leave from the girl, I say: "We are coming back next week." I hand her a flyer. "If you take this home, you can remember to come back at the same time next week. And we can play some more." She looks at the flyer, stands, takes her mother's open hand and they leave the park.



LESSONS LEARNED

Pointers for local authorities and policy makers

We offer below some headline pointers for local authorities and policymakers with an interest in the programme's three key areas of impact – leaving the house (connecting more families to the people and places beyond their home), day-to-day play (helping children to learn and develop through stimulation, interaction and play in their everyday lives) and parents are people (helping parents alleviate the stress, anxiety and depression they experience in their day-to-day lives).

Use existing public spaces creatively to encourage families to leave the house.

The research found that innovative approaches to using public space enabled ventures to engage families more effectively. One aspect of this was through acting as a 'disruptor' and changing the everyday environment in a way that caused families to reconsider their normal routines.

Creative Homes reached out to families in their own environment by setting up hubs on council estates, knocking on doors and carrying out home visits that encouraged families to change their normal daily routines. Changing the environment rather than setting up a location-specific service encourages more sustainable change for families. Because the new routines were developed in situ, there was no difficulty in trying to translate new healthy routines into the home environment.

In the case of Pop up Parks, the transformation of areas where families live into colourful play spaces also encouraged parents to challenge their preconceptions about where play and physical activity should take place, and reimagine how the streets they pass through could be used. One mechanism for doing so is using road closures to enable street play, which would relieve parental fears about traffic accidents.

Find ways to use day-to-day play to connect with families and encourage children's learning and development.

Innovations that use a playful approach can be successful in supporting families where more traditional service delivery models have struggled and directly support learning and activity in children. A play-based approach engages young children directly, which consequently sways parents.

Examples of this successful approach include Creative Homes who reached out to families on housing estates by putting play packs through post boxes, for instance

a balloon accompanied by tips for different ways it can be used in creative play. Pop up Parks also found that children were attracted to the brightly coloured park events which would encourage parents to stop and allow a half-hour for active play outdoors rather than returning home. These approaches also lacked the potential stigma of existing service models targeted at 'needy' families. New activities and behaviours that involve the whole family are more likely to be sustained over time, and involving the whole family helps to model healthy behaviours for younger children. It is recommended that local government supports projects with opportunities for mixed-age play (including intergenerational play). For example, street play avoids the restricted age bands of many play centres and allows younger children to try new activities and stretch themselves through play with older children.

Build on what is already happening locally and involve local people in making change.

The Knee High Design Challenge started with an extensive period of research and engagement and therefore the ventures could tailor their interventions based on a strong understanding of local needs and assets. KidsConnect found that the local specificity of their app and its specialist knowledge has been attractive to both users and participating local businesses.

Involving families in the design and development of ventures enables parents to become the agents of change in their community and to have a sense of ownership that supports change. Pop up Parks encourages this by supporting families to create play spaces in urban environments through using 'Pop up lockups', which are secure units which can store materials the ventures have designed with children and families. The lockups are a permanent fixture, available to anyone in the community that wishes to use them. Growing the use of Pop up lockups in communities may be a route to empowering families to use urban spaces for play independently.

Another aspect of a holistic approach is to encourage innovations that involve cross-organisational working. The ventures participating in the Knee High Design Challenge were more successful in their work with families by working in conjunction with children's centres, primary schools and community organisations, particularly as a route for engaging with families initially and marketing the ventures.

The Knee High Design Challenge has been built on a foundation and an ethos of innovation and learning. Knowledge sharing and strategic learning opportunities were embedded throughout the process with respect to improving the health and wellbeing of children under five, designing innovative investment processes and nurturing entrepreneurs.

Pointers for investors and entrepreneurs

A workshop at the end of the programme with the funded teams revealed some helpful pointers for those thinking of adopting a similar approach.

Innovative funding models such as the Knee High Design Challenge can mitigate investment risk and improve health outcomes from ventures.

Successive rounds of funding at the seed stage allow entrepreneurs to test their ideas and generate a working product or service in a structured environment. In the Knee High Design Challenge, the time and money available has allowed teams to learn by doing, by following a design process of prototyping and testing, and teams agreed that the end products were much stronger than they otherwise would have been.

For investors, this structure provides a balanced way to spread investment risk. Crucially this means investors can support a diversity of new and exciting ideas, increasing the likelihood that one or several will be successful. A diverse range of services or products can also appeal to or support different families in different ways – one size does not fit all – and improve the health of a wider cross section of the local population more than one intervention alone.

In order to become self-sustaining, ventures need to have a creative approach to future business models. For the ventures participating in the Knee High Design Challenge this involved exploring a range of funding models including introducing a fee-based service for families with the means to pay to subsidise work directed at their social impact goals. Such a model can be a resource intensive and lengthy process, and investors should be aware of the commitment required before they embark on it.

Embed an evaluation culture throughout the process. In the Knee High Design Challenge, evaluators worked closely with the teams to build capacity and embed a culture of evaluation. When this worked well, team staff appreciated being able to receive constant feedback on their success and families found the evaluation tools therapeutic. This also ensured that data collection was not a significant additional burden. Really understanding how a venture has impact, and in what areas, also allowed the ventures to identify better how they can meet the needs of commissioners, and to begin to identify additional sources of investment.

Although ventures may be innovative, where possible evaluation approaches should follow standardised methodologies to enable future comparisons and effective communication to different external approaches. It is important to consider the appropriate standard of evidence for an early-stage venture. To evidence long-term change of early intervention programmes such as this in a robust way, a longitudinal study design is necessary.

Think about the model of change: depth and breadth. The teams had different models of family engagement, and as such there is no 'one-size-fits-all' solution. Pop up Parks delivered a high number of park events in different locations, engaging with many families, but in some cases only once or twice. They had a wide inspiration effect, and many families reported that they had started thinking differently about outdoor space and physical play, though concrete behavioural change in physical activity and outdoor play is not evident from the research. Creative Homes, on the other hand, had repeated sessions with fewer families over the course of several weeks and months, and encouraged families to embed changes within their day-to-day lives: families were much more likely to report changes in play and healthy habits. Entrepreneurs wishing to create early years outcomes should reflect on the change they are trying to create, and choose their model accordingly.

Networks and contacts are as important as funding. Networks are incredibly important to social enterprises and small startups, giving access to information, resources, expertise and support in areas which they might be lacking. The Knee High Design Challenge teams appreciated the opportunities they had to meet and learn from each other. Teams identified a wish for structural support in relation to making connections in the industry. For example, there was a suggestion made for more opportunities to meet with people in the health industry, such as public health commissioners or NHS personnel.

It is recommended that support is tapered, providing more intensive support at the start when it is most needed. However, it should also be flexible and critical times of need are identified early so that support is not withdrawn at points when ventures are most vulnerable, ie, support towards the end of the investment rounds to identify where further investment could come from.

AN ENTREPRENEUR'S STORY

How a new venture came to life, as told by KidsConnect....

I woke to hear the baby whimpering and waited a while to see if she would settle. My husband was breathing steadily beside me. As her cries began to escalate I climbed out of bed, checking the time on my phone - shortly after 3am. I shivered as I slipped on my dressing gown and made my way across the bedroom in the grey morning light to scoop her out of her cot. Her cries stopped immediately and she quickly latched on as we settled into the feeding chair. Supporting the baby's head with my left hand, I used my right to fish my phone out of my pocket and navigate to my emails. Amongst the various emails in my inbox, I read an email posted to the local Borough Babies parent Yahoo group about the Knee High Design Challenge.

The next morning my husband came downstairs to the kitchen where I was giving our two-year-old her breakfast.

"Design Council is running a competition for ideas to improve the health of kids under five in Lambeth and Southwark." I said. "We're parents of two under-fives living in Lambeth - we must be able to come up with something!"

A couple of weeks later, walking down the Thames Path with the baby waving her arms and legs enthusiastically in the sling on my chest, I said to my friend - who works for a venture capital firm, "I've got this idea for a mobile app so parents can find out what's on for their kids."

"Doesn't that exist already?" she asked - the first of many questions that afternoon.

Two weeks later my husband turned and asked: "Have you done that application yet?"

"No," I admitted.

"Right," he said. "I'm taking the kids to the park so you can get it done." An hour later I pressed send and the KidsConnect Knee High adventure began.

Footnotes:

1. Centre for Research in Social Policy, *Compilation of Child Poverty Local Indicators (2014)* Available at: www.endchildpoverty.org.uk/images/ecp/Report_on_child_poverty_map_2014.pdf
2. Pop up Parks Knee High Design Challenge Phase 3 Report (September 2013)
3. Paul McArdle, *Children's Play. Child: Care, Health and Development (2001) 27, 509-514*
4. Pop up Parks Knee High Design Challenge Phase 3 Report (September 2013)
5. *Child and Maternal Health Observatory, Child Health Profiles (2013)* Accessed 21/03/2013 at: www.chimat.org.uk/resource/view
6. American Academy of Pediatrics, *Policy Statement: Early Childhood Adversity, Toxic Stress, and the Role of the Pediatrician: Translating Developmental Science Into Lifelong Health, Pediatrics (2012) 129:1 e224-e23*

CONCLUSION

The quality of neighbourhoods has a positive impact on how people feel, enabling them to lead fulfilling lives. Changing the everyday environment can help families to reconsider their normal routines. In one way or another all of the funded ventures create and support spaces for families to meet and build networks. They also provide real benefits to the under-fives, through the creative use of public space and local assets.

The ventures have successfully reduced barriers to families accessing support or activities. They have introduced families to new and fun ways of supporting the physical development, health and creative stimulation of their children. Other key outcomes achieved include reduced parental stress over daily routines, increased connection to the local community and changed perceptions of outdoor activity and use of public spaces.

The experience of the ventures has highlighted the importance of long-term work in communities for sustainable outcomes, particularly for health and wellbeing. Developing a legacy plan that supports families to continue new, healthy behaviours and daily routines independent of the programme's support was a key learning for the ventures.

The Knee High Design Challenge shows the benefits of a phased, iterative approach to funding entrepreneurial ventures. Gradually increasing investment reduces risk and supports the exploration of a range of innovations. It also allows teams who had never launched a venture before to grow confidence over time in both their product/service and themselves.

By linking up people and organisations, the Knee High Design Challenge was able to build a shared sense of purpose, enabling the ventures to complement each other's efforts. This approach improves connections, communications and knowledge-sharing and is a model to inspire new potential entrepreneurs with great ideas.

FURTHER INFORMATION

More information about the
Knee High Design Challenge:
designcouncil.org.uk/kneehigh

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