

Learning Through Play : Increasing impact, Reducing inequality

A new report from the LEGO Foundation shows that learning through play can close achievement gaps between children from more and less advantaged groups, helping all children develop the breadth of skills they will need throughout their lives. This study was authored by the LEGO Foundation's Head of Evidence, Amy Jo Dowd, and Chair of Learning through Play, Bo Stjerne Thomsen.

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Summary of full research report and full research report
available on: [https://www.LEGOfoundation.com/en/
learn-how/knowledge-base/learning-through-play-in-
creasing-impact-reducing-inequality/](https://www.LEGOfoundation.com/en/learn-how/knowledge-base/learning-through-play-increasing-impact-reducing-inequality/)

01. Summary

A new report from the LEGO Foundation shows that learning through play can close achievement gaps between children aged 3-6 years, from more and less advantaged groups, helping all children in pre-school develop the breadth of skills they will need throughout their lives.

Many pre-school education programmes target children from disadvantaged groups, **focusing only on academic outcomes in early childhood**, with the aim of teaching young children the basic academic skills of school readiness.

But a new report published by the LEGO Foundation **provides initial evidence of the power of learning through play to tackle inequality and improve the outcomes of children from different socio-economic groups.**

Learning through play may represent the **best long-term value for helping children**, regardless of background, to develop a breadth of skills that will last.

Here are some key points:



The power of learning through play

Policymakers and international organisations need to start taking play seriously, as a way of **helping children learn, supporting inclusion and reducing inequality.**



Closing the learning gap

A greater focus on **learning through play** in early childhood could be an **effective strategy for closing achievement gaps** between disadvantaged children and their more advantaged counterparts.



Play for all-round development

Studies from around the world show that **free and guided play and their facilitation help children develop the breadth of skills they need.** Not just ABCs and 123s, but also self control, cooperation, and creativity.



What works best

Evidence suggests that **play that enables children to make their own choices, that allows them actively to test out ideas, and that gives them enjoyment, is also what works best** in closing achievement gaps.

02. Learning Through Play: an effective way to close achievement gaps



There is growing evidence that learning through play can help close achievement gaps between advantaged and disadvantaged children, especially at scale and in environments where resources are limited.

In recent years, **the benefits of learning through play, especially for early brain development, have been increasingly recognised.** But many prestigious international organisations still do not recognise play in their statements of education quality. They need to do so.

There is also a lingering perception among teachers and parents of play as being separate from learning: as being opposed to the seriousness of school and work.

The power of learning through play needs to be more widely recognised. The new report *Learning through play: increasing impact, reducing inequality* (authored by the LEGO Foundation's Head of Evidence, Amy Jo Dowd, and Chair of Learning through Play, Bo Stjerne Thomsen) gathers evidence, for the first time, from the studies that have been carried out on early childhood programme impact around the world over the last decade.

The report shows that **learning through play in pre-school settings helps children in very different countries to develop holistic skills that will serve them throughout their lives.** There is some evidence that it helps to close achievement gaps, in particular.

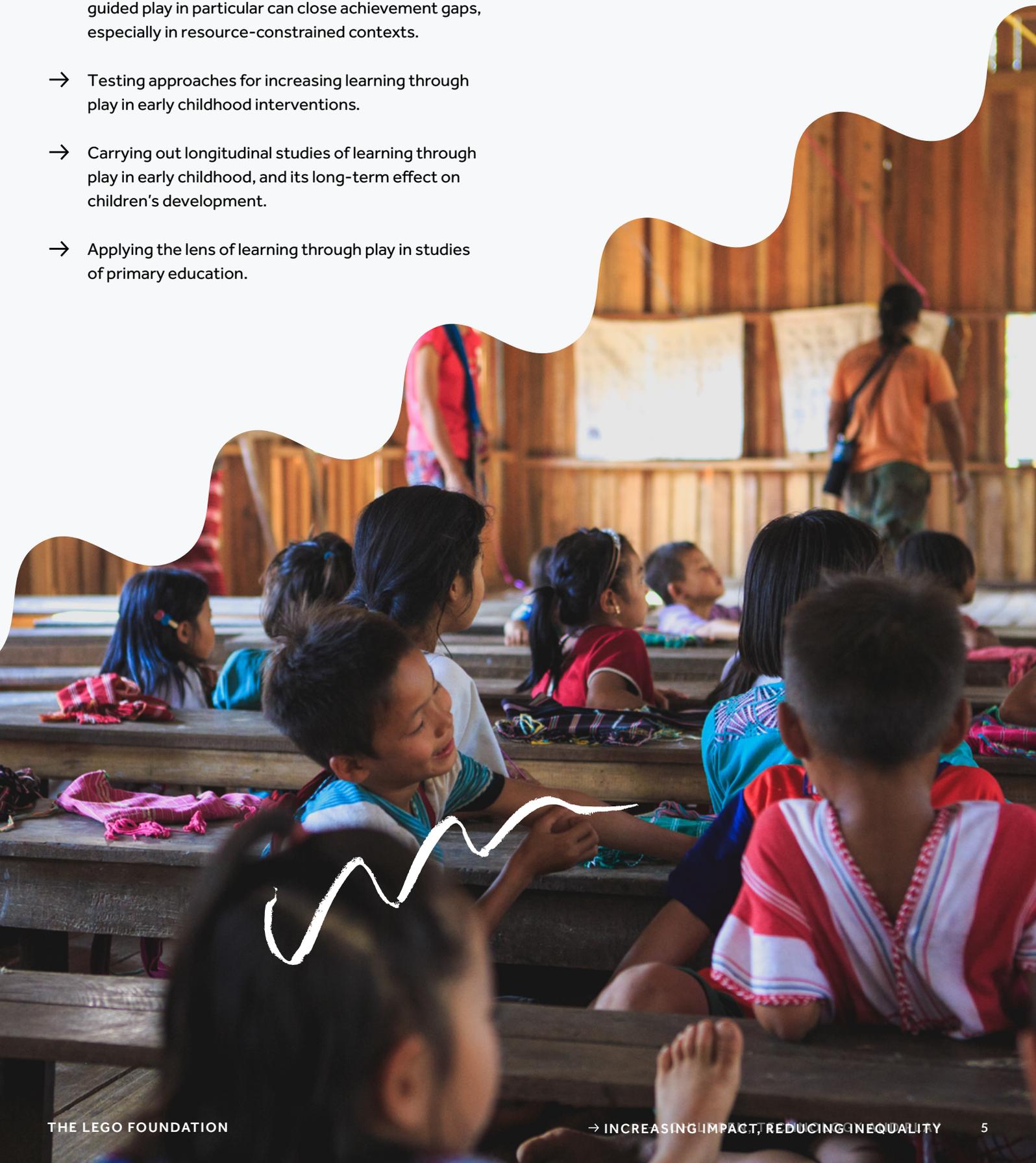
Most of the interventions that close achievement gaps include free play and play guided by adults but led by children. The studies show that these types of play can be supported even where resources are constrained.

The interventions that help to close achievement gaps **not only enable children to make their own choices, but also allow them to try things out and test ideas, and they give children enjoyment.**

Finally, the studies show that different types of play can promote learning in different settings.

The report ends by highlighting areas where greater focus and investment could pay off:

- Building up a better understanding of how free and guided play in particular can close achievement gaps, especially in resource-constrained contexts.
- Testing approaches for increasing learning through play in early childhood interventions.
- Carrying out longitudinal studies of learning through play in early childhood, and its long-term effect on children's development.
- Applying the lens of learning through play in studies of primary education.



Why is the LEGO Foundation involved in research on children's play?

The LEGO Foundation supports learning through play, aiming to empower children to become creative, engaged, lifelong learners, and to develop a breadth of skills that will serve them, their communities and society as a whole, through a lifetime.

In order to reach children systematically with learning through play, the LEGO Foundation has long supported research on children's play and learning. This furthers our understanding of the enormous power of play to support learning in homes and classrooms.

Learning through play involves children learning deeply, leading to them gaining a wide range of skills and subject knowledge, and helping them to thrive as individuals while also contributing positively to the societies they live in.

Why focus on play and equality?

According to UNICEF, early childhood presents an "exceptionally powerful opportunity to break inter-generational cycles of inequity."

Yet inequality starts to show itself early in education. **Across 64 countries, the richest children are seven times more likely to attend pre-school programmes than the poorest (UNICEF).** And even when they do attend pre-school programmes, learning gaps persist between older children from less advantaged groups and their more advantaged peers.

These disadvantages are based on :

- Sex
- Race
- Poverty
- Disability
- Geography
- Ethnicity
- Language

Inequality in learning is an urgent issue, severely impacting on individual children's life chances, and economies and societies around the world.

There is growing evidence that learning through play may present a solution to this problem of inequality. Many studies demonstrate the benefits of learning through play, especially for early brain development – these include social, emotional, cognitive and physical benefits. Yet the value and potential of learning through play is still not recognised widely enough.

Play is absent from many international statements of education quality, as well as from reviews of the impact of early childhood programmes that have been published by economists and developmental psychologists, who often focus on quality in early childhood programmes, but not on play.



A global review of recent research

The LEGO Foundation's new report *Learning through play: increasing impact, reducing inequality* looks at recent evidence from around the world relating to early childhood learning programmes. It shows the potential of children's play to improve learning outcomes, and to close the achievement gap that exists between children from more and less advantaged groups.

The study broadens the scope of previous studies of play's importance for learning, which have tended to be small studies carried out in developed countries. It looks at evidence from around the world (including both developed and developing countries) regarding play, learning and inequality.

Approaches to research

The report analyses recent research studies on pre-school learning programmes around the world, considering their different approaches to learning through play. This includes the different ways in which learning through play can be facilitated.

The report draws on evidence from **26 studies of early childhood learning programmes, carried out in 18 locations around the globe, as well as interviews with the authors of**

these studies. The interventions that were studied vary in focus and intensity, but they all involved moving early childhood education towards incorporating learning through play.

Macro

The evidence that is presented is mostly at the macro scale (across schools and learning programmes, including at the national level), showing the power of learning through play in realising the potential of all children, and specifically in closing achievement gaps.

Micro

But it also looks at the micro level (individual classrooms) – where there is some evidence that learning through play can be used as a way of increasing inclusion, with the aim of creating a more egalitarian society.

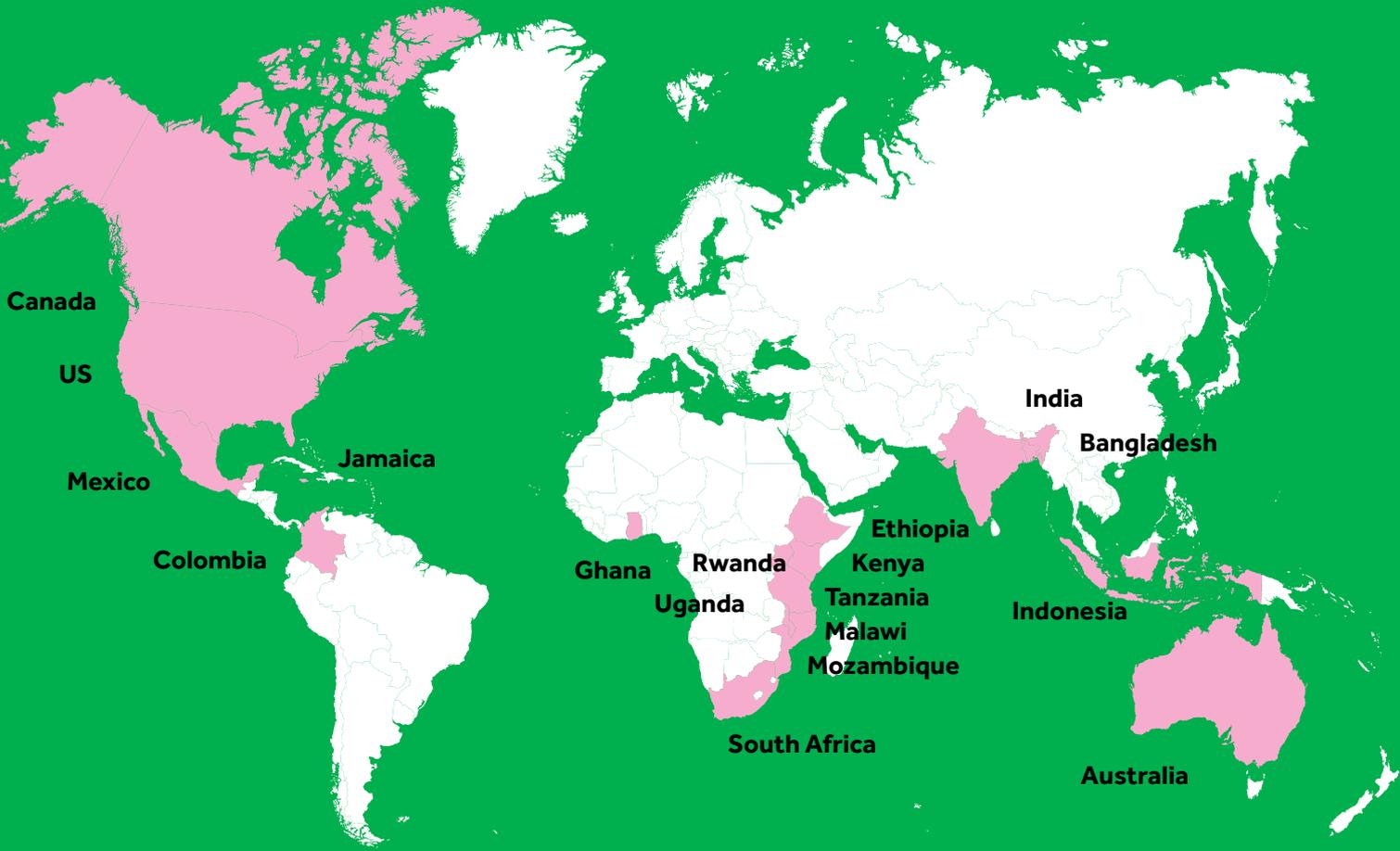
Overall

Overall, the report presents evidence that learning through play can help address inequalities in outcomes between children with different levels of access to learning opportunities – inequalities that exist both within and between countries.

By increasing awareness among policymakers of the potential of play for improving learning and closing achievement gaps, the report enables them to make more informed decisions regarding investment in early childhood.



18 countries



26 studies



** Map not to scale*

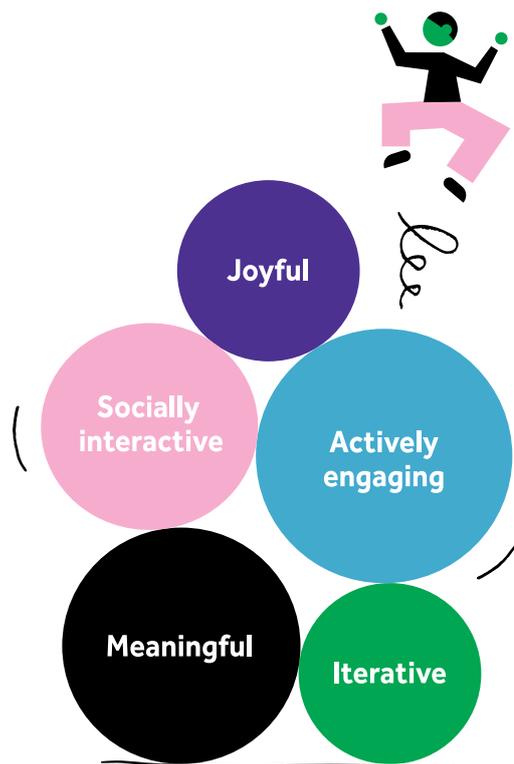
What is learning through play?

The report draws on previous research supported by the LEGO Foundation, on the benefits of learning through play. The LEGO Foundation and its research partners have identified five key characteristics of learning through play.

For children, the experience of learning through play is:

- Joyful, even if it is challenging.
- Meaningful, by connecting to children's lives and past experiences.
- Engaged, involving active, 'minds-on' thinking.
- Iterative, allowing children to test ideas and try things out.
- Social, involving interaction and collaboration with others.

When these elements are strongly present in play, deep learning is the result: learning that stays with children and gives them the skills and knowledge that they can apply to real-life situations.



Types of play

The report describes how play activities fall into five main types :

- Physical play
- Pretend play
- Object play (involving physical materials)
- Symbolic play
- Games with rules

While there is naturally some degree of overlap between them, the authors note that these types of play were seen with very different degrees of frequency and intensity in the early learning programmes that were researched.

Types of play frequently overlap. As one study author noted: *The complexity of play is such that you have pretend play superimposed over the others... when you have play in a park, the main activity is jumping around with a ball, but there are roles and parts in a battle. It isn't just physical play. Good players make pretend play out of the other types... Pretend play is thinking play.*

The spectrum of strategies for facilitating learning through play

As well as the types of play involved, there is also considerable variation in the approaches used in early childhood education programmes, to support and facilitate children's learning through play.

These approaches can be seen as representing different points on a spectrum or continuum, in terms of the amount of adult intervention that they involve. They range from structured, teacher-led approaches at one end of the spectrum, in which games are used didactically, to guided and free play at the other, in which children have much more initiative, and where the adults define the outcomes and provide relevant resources (in the case of guided play), but children find their own solutions and are encouraged to reflect on play.

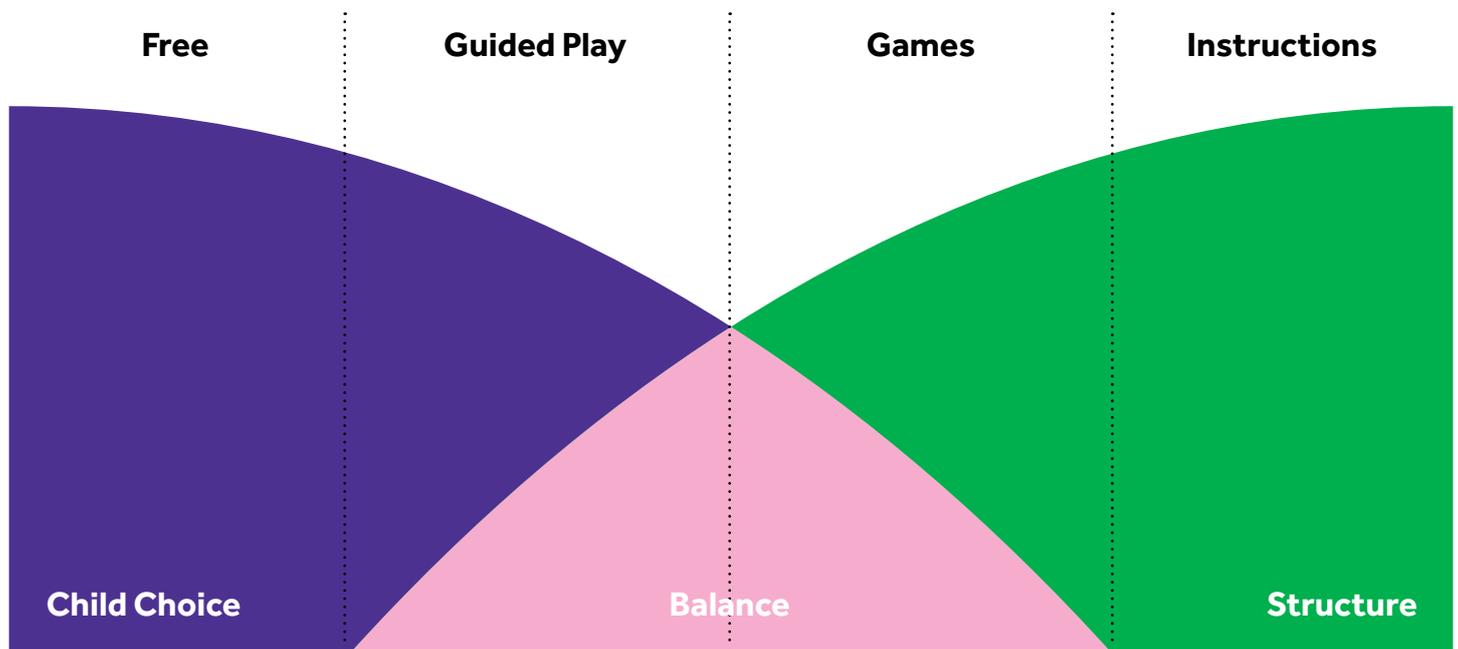


Figure 1. The spectrum of classroom facilitation strategies

An example of guided play : *Tools of the Mind*

Guided play can involve adults providing guidance and reflection, but allowing the children to decide on the approach they will adopt. This approach can be seen in the *Tools of the Mind*® intervention in Canada and the US, in which teachers help children to dramatise *The Magic Treehouse* books, supporting them in planning their play, creating their props and shaping their roles.

Children involved in Tools of the Mind® :

- Have been shown to have **greater reading and writing skills, self-control, attention regulation and joy in education** than their peers in other early childhood settings;
- They also experience **lower levels of exclusion** and the intervention has also been shown to **close achievement gaps between students from advantaged and disadvantaged groups.**

03. The findings

The report shows that supporting learning through play in early childhood education **can indeed be an effective strategy for closing achievement gaps between children aged three to six.**

In all 18 countries, the studies show **the impact of interventions involving learning through play on child development, including on the development of children in disadvantaged groups.** Seven interventions were seen to close achievement gaps. Across these studies, the domains investigated differ (see Figure), as do those on which the intervention had an impact.

Interventions that include **more free play and guided play were shown to be more likely to demonstrate all five characteristics of learning through play.** They also appear more likely to close achievement gaps.

There are initial suggestions, across different countries, of the importance of child choice in leading, changing and contributing to play.

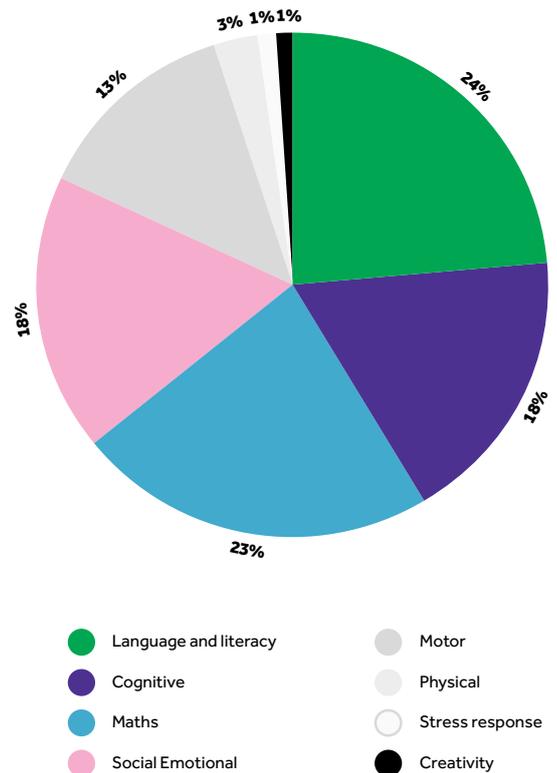


Figure 2. Domains of child development included in intervention studies

Four factors emerge as important in early childhood interventions:



Training

The amount and type of teacher training implemented.



Follow-up

The amount and type of follow-up teacher support that is provided.



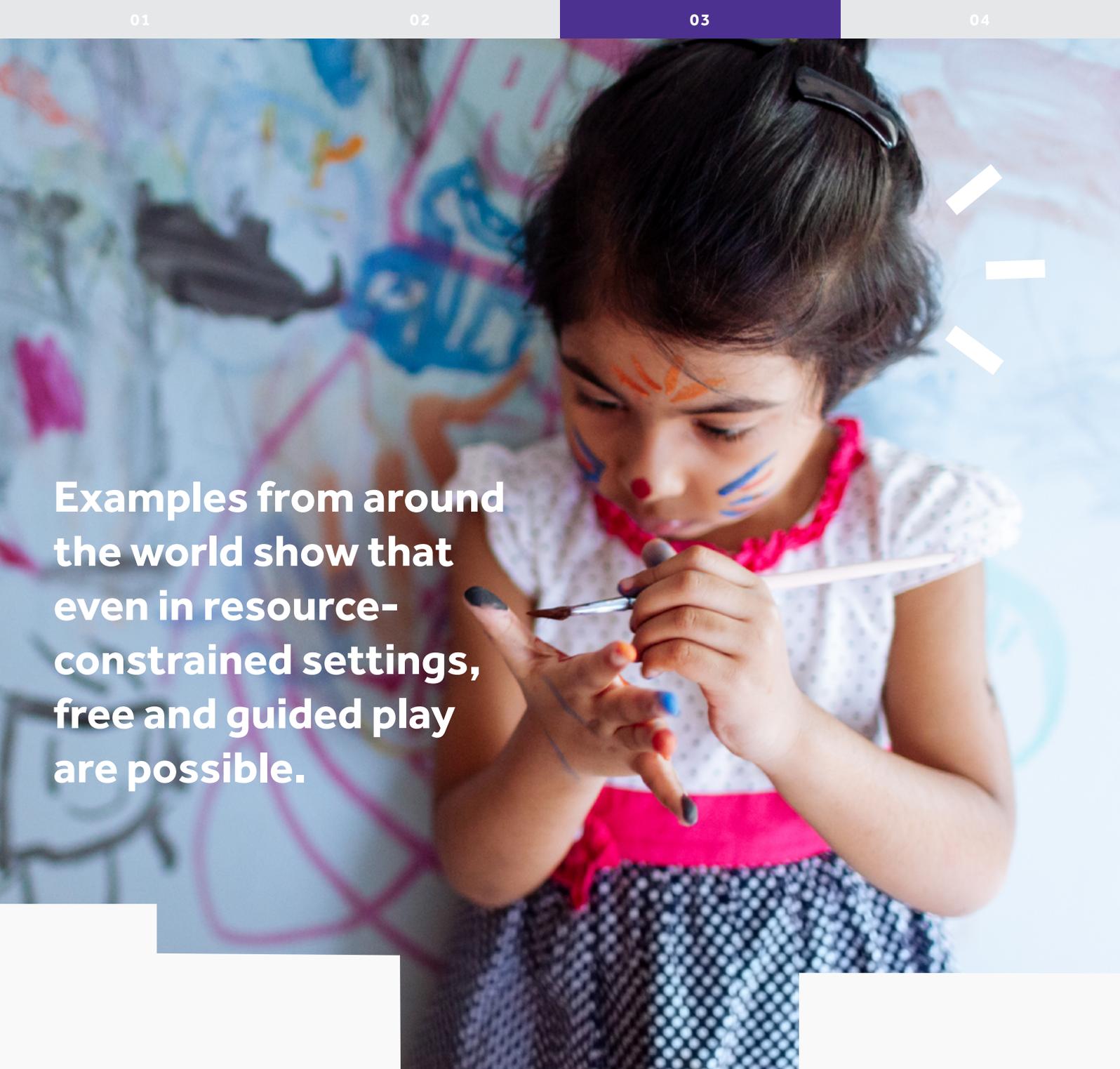
Materials

How much interventions involve the provision of materials (books, toys, etc.) & activities (singing, storytelling, etc.)



Engagement

How much they engage parents (few currently do).



Examples from around the world show that even in resource-constrained settings, free and guided play are possible.

Interventions at scale in disadvantaged communities: *Save the Children's programmes in Bangladesh, Rwanda and Ethiopia*

Interventions in Bangladesh, Rwanda and Ethiopia used a **mix of instruction as well as free and guided play**, and took place across dozens if not hundreds of early childhood centres in disadvantaged communities.

Studies of these interventions show significantly greater learning gains for children in terms of their literacy, numeracy, motor and social-emotional development, compared to children in traditional early childhood centres, and the closing of achievement gaps between children of different socio-economic status.

These and other examples from around the world show that even in resource-constrained settings, free and guided play are possible.

Key findings

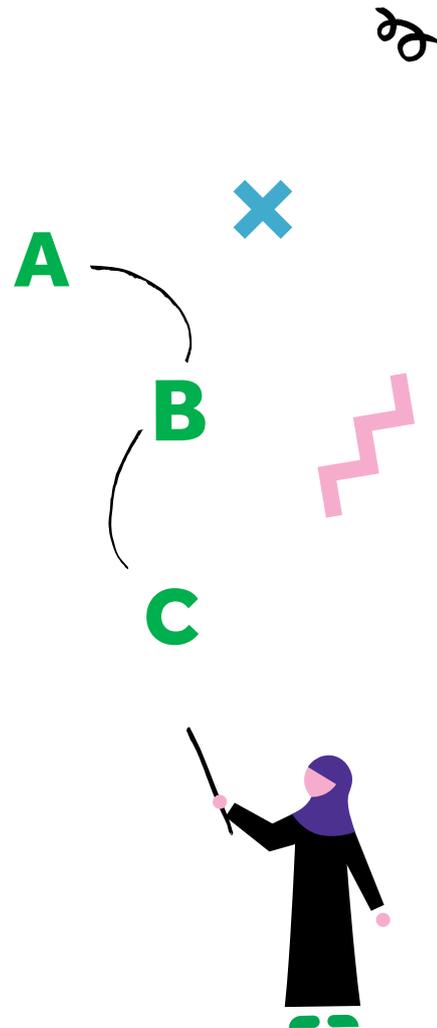
01 - The importance of support for teachers.

It is not easy for teachers to make the transition to approaches involving learning through play: the studies show the importance of supporting them in this. **While free and guided play in particular may provide unique benefits for children's learning, and help to reduce inequality, it takes time and training for teachers to be able to facilitate it.**

It is still unclear how much training is needed and for how long, or whether to introduce the change to approaches involving learning through play incrementally or disruptively. We need to know more about how best to support teachers and education systems in adopting a more play-based approach.

Nevertheless, **greater investment would clearly be valuable in teacher training, monitoring and evaluation**, to help bring the benefits of play-based interventions to more early years settings.

While free and guided play in particular may provide unique benefits for children's learning, and help to reduce inequality, it takes time and training for teachers to be able to facilitate it.



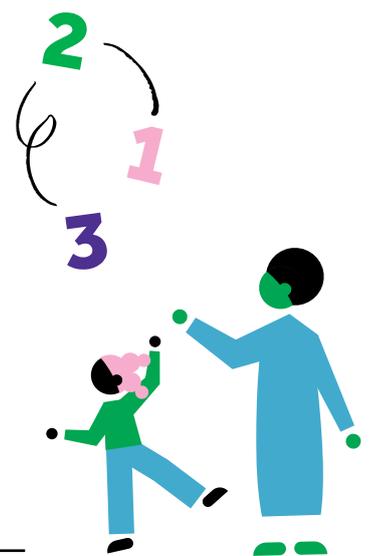
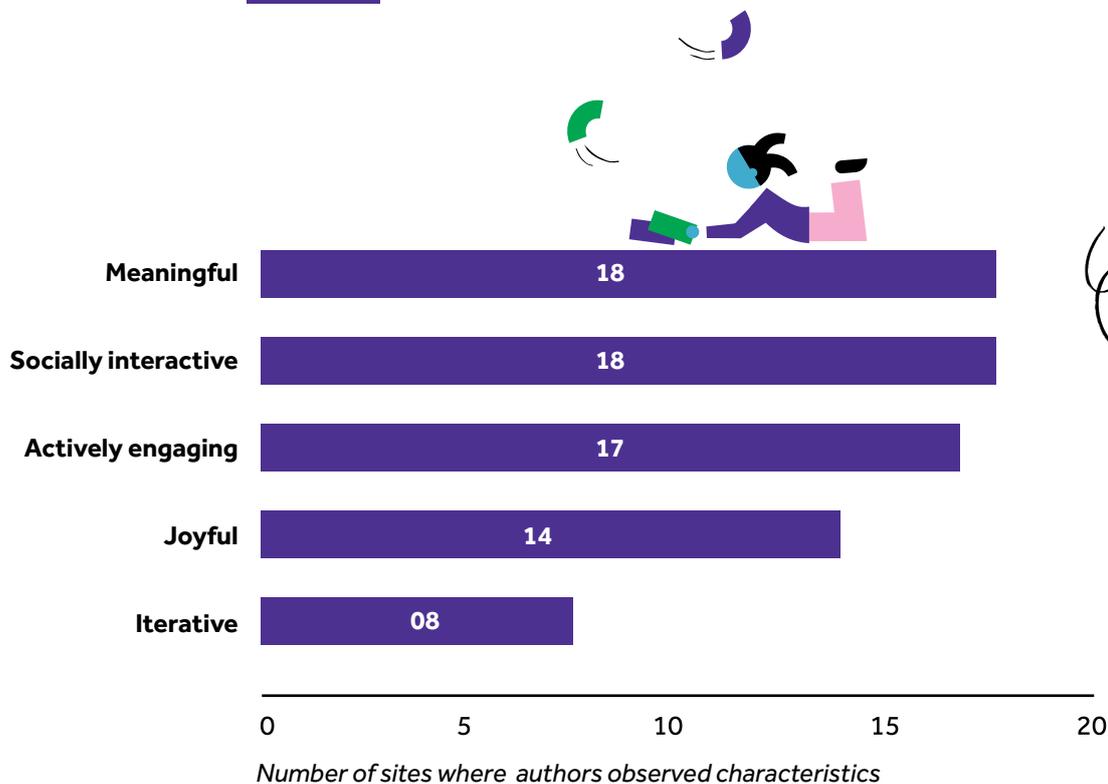
Key findings

02 - Pre-school learning and the five characteristics of learning through play.

In terms of the five characteristics of learning through play, **playful pre-school learning was often seen to be social, meaningful and engaging.**

It can be more difficult to see learning through play as joyful, though iteration and joy are both seen more in free and guided play than in other kinds.

Playful pre-school settings that were described as demonstrating all five characteristics of playful learning were more often among those that have been shown to close achievement gaps. But we need to do more to test whether children's choice, engagement and exploration can lead to better, and more equal, learning.



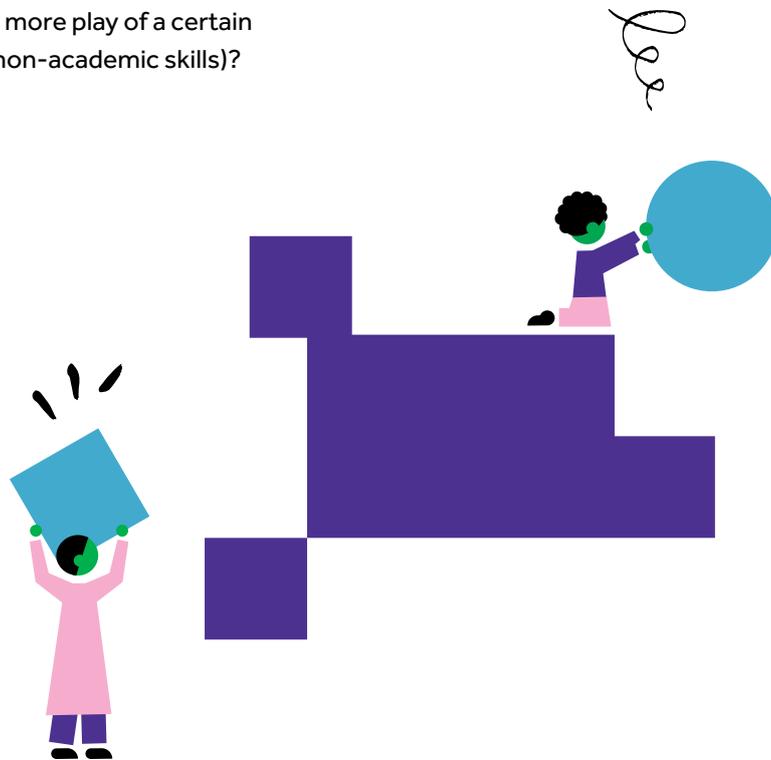
Key findings

03 - Types of play

Finally in terms of types of play, **object and game play were most often seen – pretend and symbolic play less often, and physical play only occasionally.** Given the strong benefits of these types of play, much can be done to increase their role in early childhood settings.

It appears that different types of play can promote learning in different areas. **But we need to know more about the ideal balance between free play, guided play, use of games and playful direct instruction.**

Can greater variety of types of play, or more play of a certain type, improve outcomes (including in non-academic skills)?



Given the strong benefits of these types of play, much can be done to increase their role in early childhood settings.

04. Conclusions and recommendations

Learning through play should be an integral part of any government policy aimed at giving children greater skills and knowledge in their early years.



Three key recommendations

01 - Improve understanding

Interventions that involve free and guided play are more likely to demonstrate all five characteristics of learning through play, and are more likely to close achievement gaps. This suggests a strong link, across very different settings, between children's choice, enjoyment, iteration and learning.

→ We need a more nuanced understanding of this, and an understanding of how to build teacher competencies in supporting these kinds of play.

02 - Explore how to support teachers

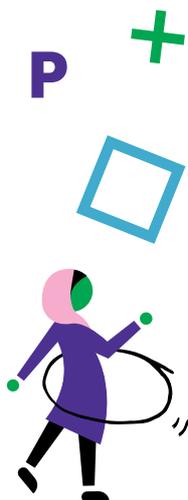
Examples show some success in supporting children's choices and using free and guided play in resource-constrained environments.

→ We need more research on the time and resources that are needed to help teachers change their practice in this area.

03 - Research different types of play

Evidence supports the idea of using different types of play for different purposes. Some skills are better directly taught, some are best learned through exploration: children need a breadth of opportunities for play.

→ We need more research on the right balance between kinds of play, and on the importance of play for creativity.



Four questions for further investigation :



Facilitating play

What are the best ways of facilitating play, especially free and guided play, and especially in the context of learning where resources are constrained? We need a better understanding of how play and child choice benefit learning and close achievement gaps: this involves being able to test and measure the impact of free and guided play in particular.



Long-term effects

What are the long-term effects of play in promoting learning and closing achievement gaps? We need longitudinal studies to understand this.



Introducing play

Is it best to introduce more play in pre-school learning incrementally or disruptively: moving quickly to introduce more child choice, free and guided play, pretend and iterative play, or gradually adding some of these elements to teacher-directed play? In this we need to consider the likely acceptance of this move among parents, teachers and education systems. And we need to consider how teachers can best be supported in this, and how parents can be engaged.



The next level

How can we apply the lens of play to the next level of schooling: understanding the importance of free play, guided play, games and playful instruction in primary school? This may help to smooth out the abrupt transition to formal schooling, and encourage the use of play to enliven national curricula.



The **LEGO** Foundation[♥]

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