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What we mean by:  
**Creativity**

The LEGO Foundation 

# Introduction

At the LEGO Foundation, we want to build a future where learning through play empowers children to become creative, engaged, lifelong learners. In an age of rapid innovation, where children will encounter unimagined advances and navigate unpredictable dilemmas, this aim is more important than ever before.

There are many ways to understand creativity,<sup>1</sup> and many perspectives on the role children can or should play in the world. In this leaflet, we share our view of creativity as a critical skill and mindset for today's children, one that is personally meaningful and that all children can develop and practice through play. Because we see children as role models and active agents in the world,<sup>2</sup> we believe that supporting their creativity through play will nurture their capacity to authentically contribute to their communities and positively shape their present and future world.



## Our Definition

At the LEGO Foundation,  
we see creativity as  
**the iterative process  
of connecting, exploring,  
and transforming the  
world in both new and  
meaningful ways.**









# Iterative

When we talk about creativity, we mean acts that are intentional and iterative in nature.

Iteration, for us, is a process of trying out different possibilities, revising hypotheses in response to new information, and discovering new questions.

From a toddler playing with different strategies to complete a puzzle, to a young child exploring how the angle of a slide impacts the way a marble shoots across the floor, iteration is essential to our understanding of creativity.



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Iterative	Process	Connecting, exploring, and transforming	New	Meaningful
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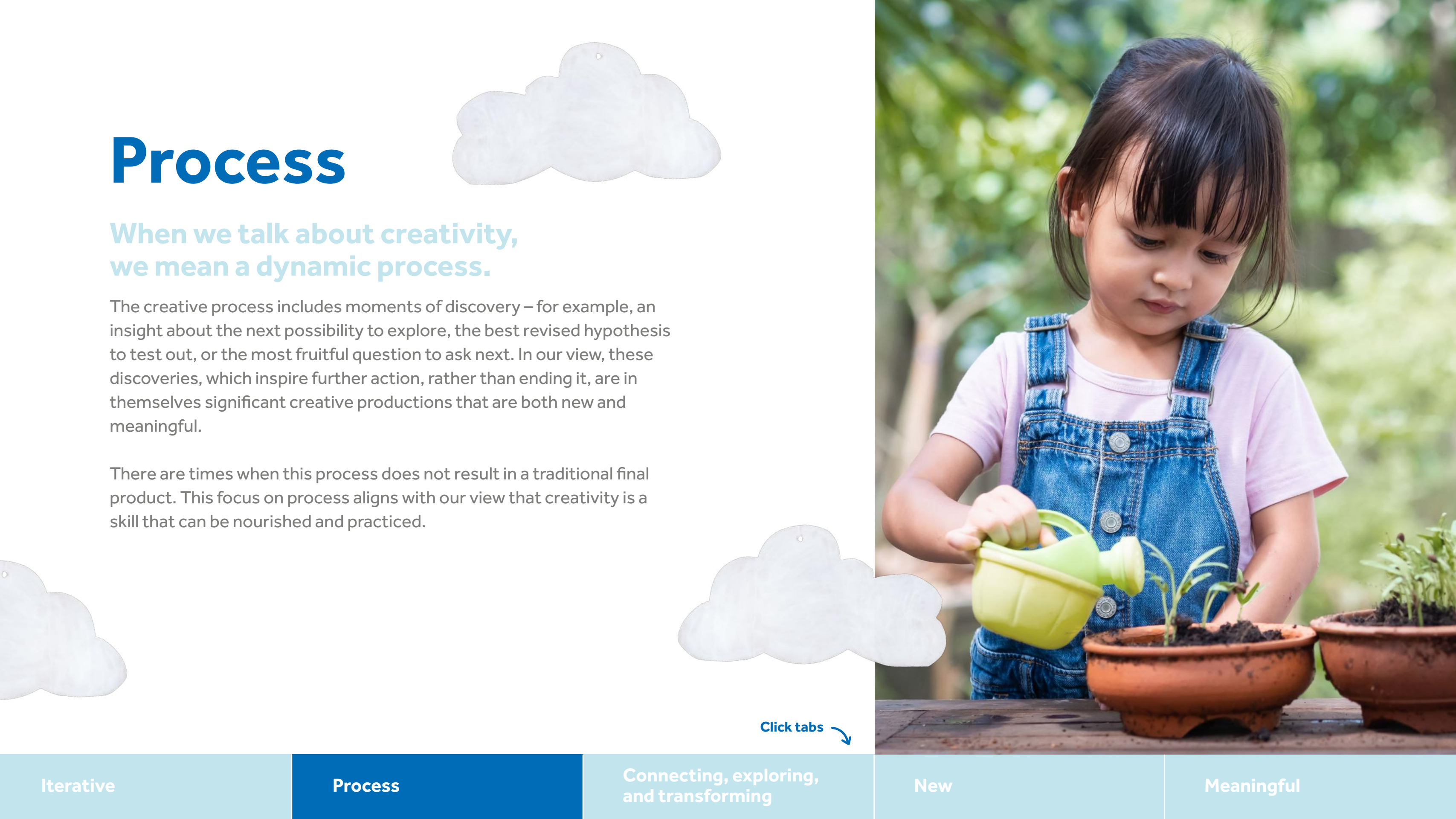
# Process

When we talk about creativity,  
we mean a dynamic process.

The creative process includes moments of discovery – for example, an insight about the next possibility to explore, the best revised hypothesis to test out, or the most fruitful question to ask next. In our view, these discoveries, which inspire further action, rather than ending it, are in themselves significant creative productions that are both new and meaningful.

There are times when this process does not result in a traditional final product. This focus on process aligns with our view that creativity is a skill that can be nourished and practiced.

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Iterative

Process

Connecting, exploring,  
and transforming

New

Meaningful



# Connecting, exploring, and transforming

When we talk about creativity, we mean a dynamic and complex interaction between children's developing personal skills and the environment in which they develop.

By interacting with the world around them, they connect (link or combine two or more things), explore (adapt, or go one or more steps further), and transform (radically change) ideas and products that already exist around them.<sup>3</sup>

Creators bring their own creative skill level and perspective of the world to this process; and that skill and perspective are both influenced by and have an influence on the environment the creator lives in.

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Iterative

Process

Connecting, exploring,  
and transforming

New

Meaningful







# New

When we talk about creativity, we mean processes that change things in ways that are new, first and foremost, for the one creating.

In other words, we are referring to the everyday creativity<sup>4</sup> practiced by ordinary people as they interact with and make meaning of their world.

By trying out and developing things that are new to them in everyday contexts, creators learn about their world and gain practice taking risks in a safe environment.



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Iterative	Process	Connecting, exploring, and transforming	New	Meaningful
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# Meaningful

When we talk about creativity, we mean processes that are meaningful, first and foremost, for the one creating.<sup>5</sup>

For this reason, we do not focus exclusively on processes that are useful or valuable to society, history, or culture broadly.

When a child picks up a broom-stick and playfully transforms it into a horse, that child is responding to the familiar, internalized meanings in her environment, and adding a new and personal meaning to them.

In practicing this everyday process, children develop the skills necessary to participate in processes that will ultimately be meaningful for the world as well, and the skills needed to be engaged, lifelong learners.

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Iterative	Process	Connecting, exploring, and transforming	New	Meaningful
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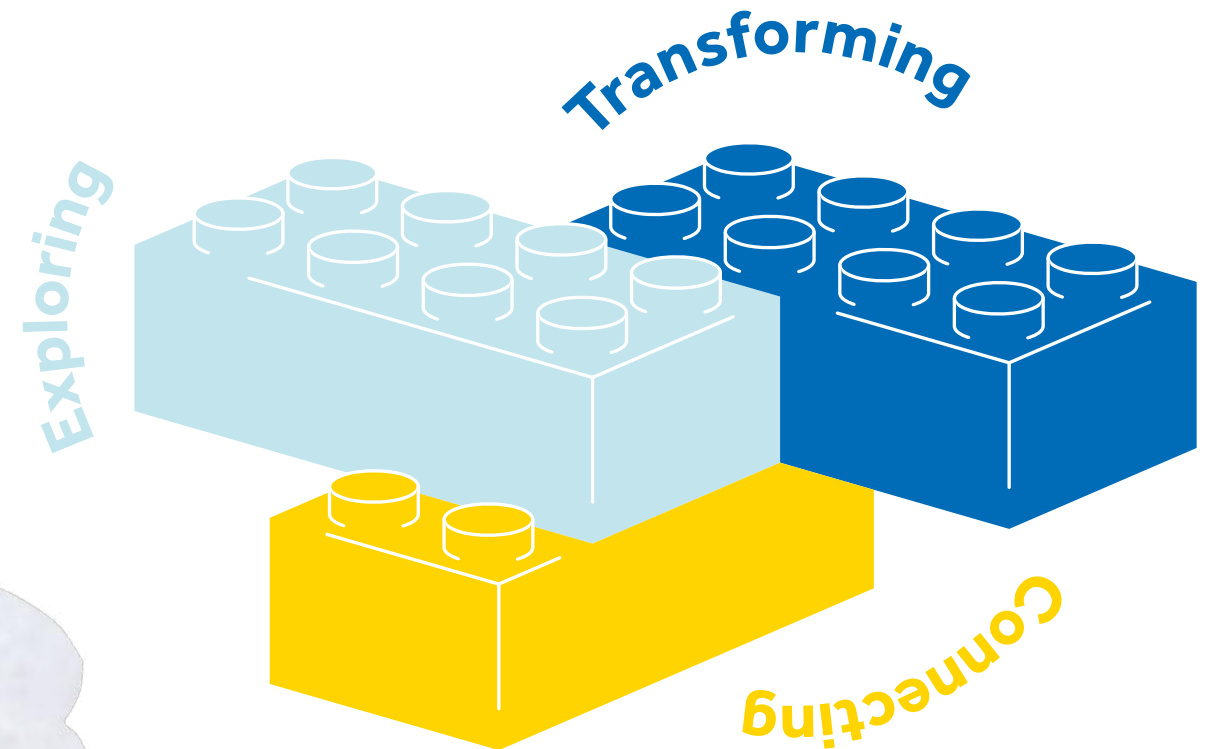




## The Creative Process

When we talk about the creative process, we mean a dynamic process that includes three interwoven experiences – **Connecting, Exploring, and Transforming** – based in the three types of creativity.<sup>3</sup>

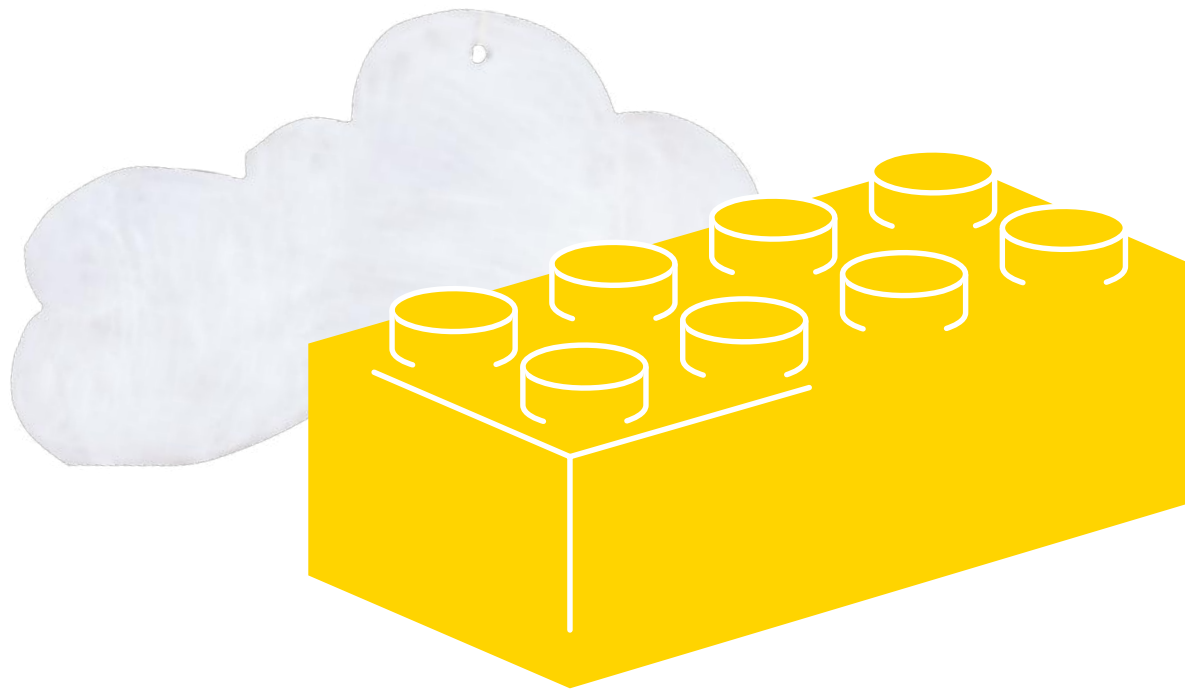
## The Creative Process



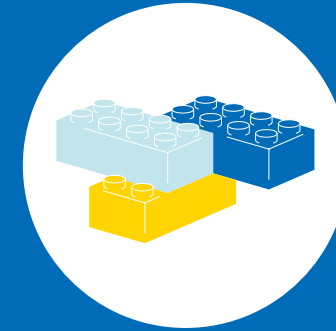


# Connecting

Being motivated and curious to investigate the world around you.



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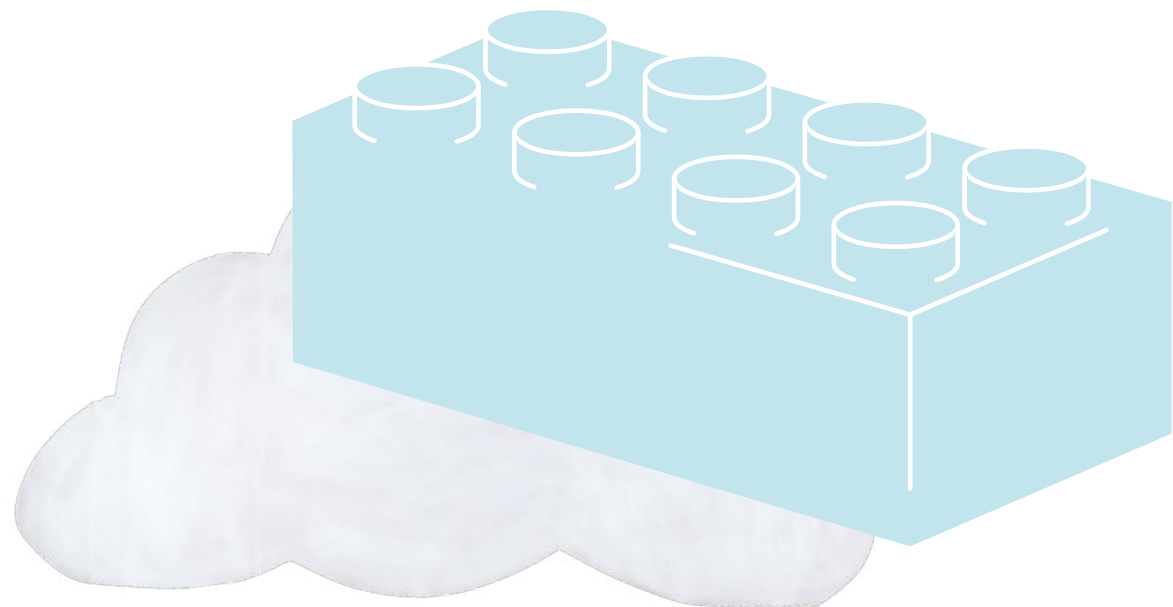


In responding personally to the world, we connect ourselves and others to it in meaningful ways with our attention, curiosity, and imagination. The experience of connecting can be internal (making a connection between ourselves and the world) or external (making a connection between objects, ideas, or other people).



# Exploring

Experimenting with, testing,  
and trying out new things.

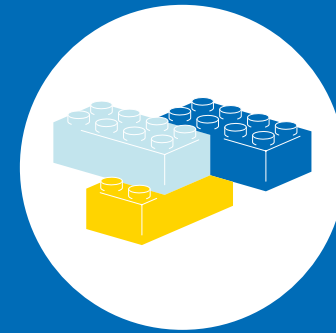


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Connecting

Exploring

Transforming

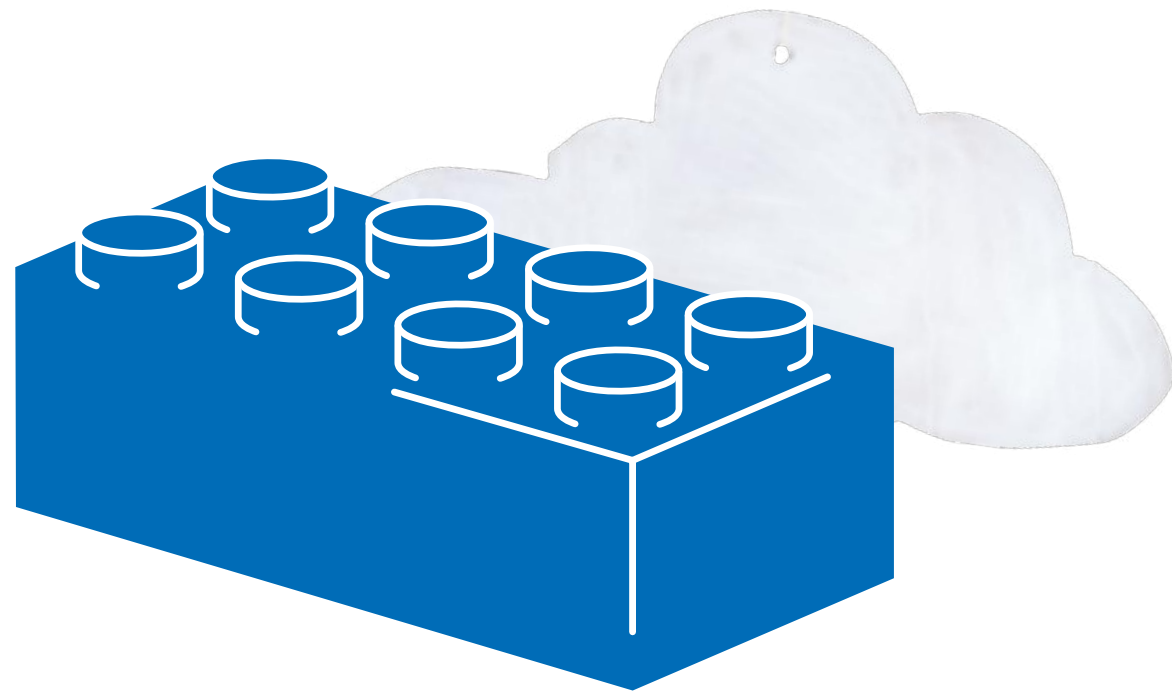


In exploring the initial connection further,  
we begin playing with the possibilities  
of this relationship, trying out what  
happens when we add our own personal  
and unique contribution to what already  
exists, and responding flexibly when our  
expectations are challenged.

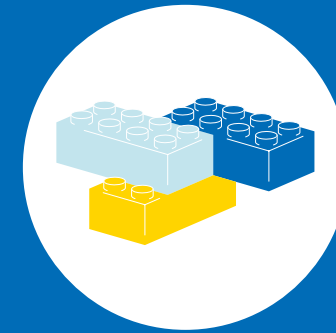


# Transforming

Communicating, reflecting,  
and sharing ideas with others.



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When, through reflection and discovery, our own understanding of the world is changed, we ourselves are transformed internally. When we change the meaning or form of something else by altering it, or our relationship to it, we show or experience that transformation externally.

In both cases, we engage in a deeper level of agency, daring to take ownership and challenge the constraints of our own understanding, or of the object, idea, or relationship we originally discovered.

Connecting

Exploring

Transforming

# How creativity, play and learning connect





# The connection between creativity & play



Play and creativity are so interwoven that some have claimed that play is necessary in order to be creative,<sup>6</sup> and others have found evidence that play – and the expression of emotion during play – is a facilitator and predictor of creativity.<sup>7,8</sup>

We believe that the creative process is infused with the 5 characteristics of Learning through Play, though all may not be present in each instant: It is Actively Engaging, Socially Interactive, Iterative, Meaningful, and Joyful.<sup>9</sup> In other words, when creators connect, explore, or transform ideas and objects, they do so by **actively engaging** with those ideas, **interacting with the social environment, iterating** on what they find, and **making meaning** of what they encounter and create. The agency they experience in this process results in higher levels of well-being<sup>10</sup> – in other words, even when much of the process is challenging or even frustrating, they ultimately experience the **joy** of having interacted with

the wider world, of changing and being changed by it. At the LEGO Foundation we call this the pride of creation.

When children learn through play, they are given the best opportunity to fulfil their potential to become creative, engaged, lifelong learners.



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# The connection between creativity & learning



Because child development is beautifully complex, we take a holistic view of learning, highlighting how children learn by weaving cognitive, physical, social, emotional, and creative skills together across development. Holistic learning of a breadth of skills is critical to children's creativity – because creative choices are not always good choices. For example, finding new and meaningful ways to bully a classmate may be a creative process, but it harms the victim and the classroom culture. While challenging existing constraints is an important part of transforming themselves and the world, children must learn the social-emotional skills to determine which constraints – like those prohibiting the harming of others – should not be challenged. They must also learn the cognitive and physical skills to holistically forecast whether their creative choices may have unintended negative consequences, whether now or in the future.

In other words, creativity must be developed in concert with a sense of ethics, an understanding of how one's choices may affect others or a greater good.<sup>11</sup> By giving children opportunities to take risks, explore uncertainty, and

iterate on their choices in safe environments – in other words, by supporting their creativity through high-quality playful experiences – we are giving them opportunities to practice the holistic skills they need to learn not just creativity, but when various creative choices are appropriate and when they may harm others. This practice incorporates the context of creativity and the importance of choice into learning, enabling children to weave strong, flexible skills ropes, and helping them to develop the self-reflective capacity to become creative agents for the good of their communities and society.

**This understanding of creativity and learning necessitates a holistic approach to assessment.** To evaluate the development of everyday creative skills in such personal contexts, we must collaborate with children, involving them in criteria development, self-assessment, and reflection. Considering, with children, the development of their creative practices and habits of mind – such as being imaginative, inquisitive, persistent, disciplined, and collaborative<sup>12</sup> – can support deeper engagement in the creative process.

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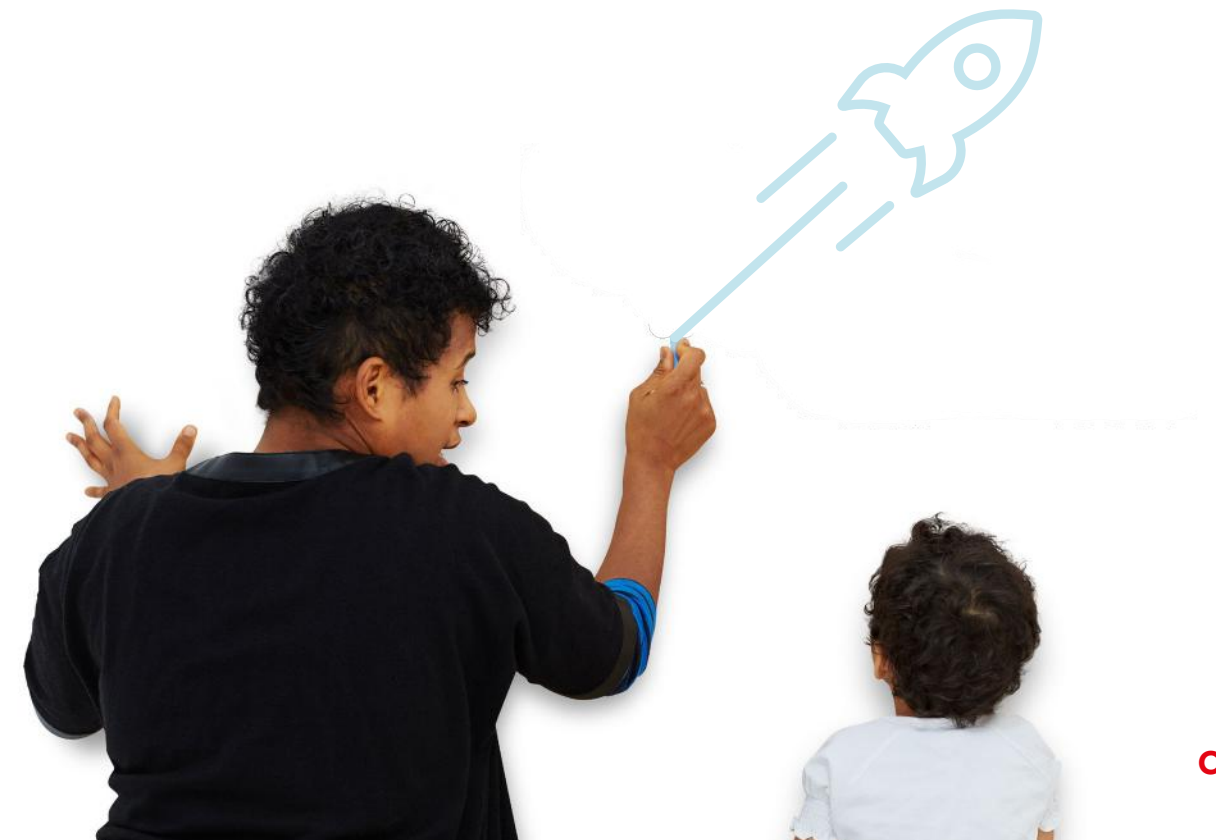
# Inspiring and developing the builders of tomorrow



We believe that practicing everyday creativity through play is the best way to help children develop strong creative skills, including the history- and culture-changing creativity that is most valued by society.<sup>13</sup> Adults, whether parents, caregivers, or educators, play a key role in this by providing opportunities for children to practice their creativity in everyday situations. To do this, adults, too, must take a risk – the beautiful risk of allowing for uncertainty to unfold in their daily lives,<sup>14</sup> and inviting children to take agency in those occasions to connect, explore, or transform their surroundings.

We believe that when adults and children work and play together, their collective creative skills are increased. With the playful guidance of adults, children are challenged to think about constraints, to problem solve, and to select high-quality ideas. And under the leadership of children, adults can rediscover their cognitive flexibility, cultivate an openness to difference,

and consider unusual ideas they wouldn't entertain otherwise. Developing these creative skills provides a co-creative context for meaningful and engaged learning today, and will inspire and develop the builders of tomorrow.



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