



Fondazione
Reggio Children
Centro Loris Malaguzzi

edizioni junior

Supported by The **LEGO** Foundation

PLAY EXPLORE RESEARCH



With contributions from
**Sidsel Marie Kristensen, Luca Vecchi, Carla Rinaldi,
Mitchel Resnick and Vanna Iori**

Reggio Emilia — Italy



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Reggio Emilia — Italy

Aesthetics of education
Directed by Annamaria Contini
and Lorenzo Manera

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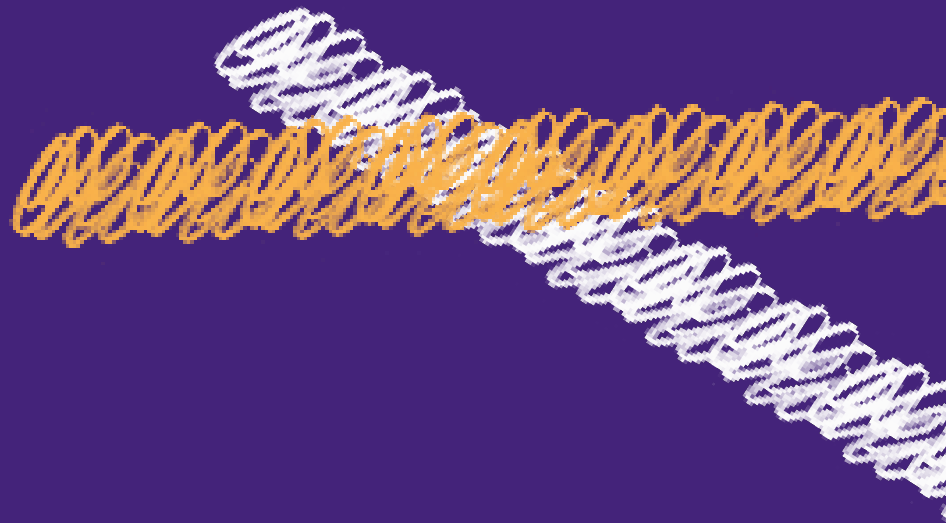


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Introduction



The P.E.R. – Play, Explore, Research project of Fondazione Reggio Children-Centro Loris Malaguzzi, made possible by the collaboration with The LEGO Foundation, is a platform to bring together educators, researchers and policy makers so as to further develop the relationship between play and learning and learning through play for children globally.

With the objective of pursuing Sustainable Development Goal 4 of Agenda 2030, 'quality, equitable and inclusive education' and 'lifelong learning opportunities for all', as well as in continuity with the TIDA-TInkering in the Digital Age and scintillae-play and learning in the digital age projects, the P.E.R. project of Fondazione Reggio Children

and The LEGO Foundation envisages the involvement of partners at international level in three areas of intervention over a three-

year time period.

Firstly, the organisation of several conference-actions in five countries addressed to teachers, educators, policy makers, families, NGOs, on the theme

of the relationship between play and learning followed by in-depth studies and workshops.

Secondly, the publication and dissemination of research results on learning and play with the involvement of the PhD course in 'Reggio Childhood Studies and Lifelong Learning' of the University of Modena and Reggio Emilia and Fondazione Reggio Children as partner.

Finally, the creation of a new research centre in Reggio Emilia in an old recovered factory, where playful approaches to learning can be experienced through workshops and meetings. The renovated building, known as the 'former Caffarri', will host the scintillae project, the PhD course and Remida, the Creative Recycling Centre.

This series of publications aims to shed light on the contributions that characterised each individual conference-action in the five countries, starting with the presentation of the P.E.R. project in Italy, in Reggio Emilia, on 16 and 17 November 2023 at the Loris Malaguzzi International Centre, accompanied, as a national preview, by the presentation with workshop of Octostudio, a creative coding app of the Lifelong Kindergarten at the MIT Media Lab.

Presentation



Sidsel Marie Kristensen
CEO of The LEGO Foundation



Ladies and gentlemen, esteemed friends, we are here today to celebrate the partnership between Fondazione Reggio Children and The LEGO Foundation.

Our journey together over the past three decades has been one of innovation, inspiration and collaboration and also true joy. It is also a story of close friendship and a shared passion for the well-being and development of children.

During this time, our organizations have embarked on a number of groundbreaking initiatives that have left a lasting impact on education, and, especially, the lives of countless children worldwide.

We have worked closely together, hand-in-hand, to pilot programs on robotics and tinkering in the digital age. We also formed a network of playful schools and conducted research on the link between play and learning in both physical and digital spaces.

In recognition of the amazing work of Fondazione Reggio Children, they received the LEGO Prize twice, in 1992 and 2015. I'm so truly happy to be joined today by one of the awardees, Carla Rinaldi.

Today, I am excited to represent The LEGO Foundation at the launch of a new

collaboration that is close to our hearts. The “Play, Explore Research” project will be a powerful platform for convening educators, researchers, and policy makers to advance learning through play for children globally.

What’s even more exciting is that the project will also involve children and their families as contributors to the research and advocacy on learning through play.

Children will engage in a unique environment that emphasizes peer relationships, iterative learning, passion, and motivation, helping them develop essential life skills and knowledge for future success.

This innovative approach gives them a voice and agency to experiment, learn, and develop, all while we, the adults, learn from their unique perspectives.

As you all know, this has been at the core of the Reggio Emilia approach since the 1960s. It’s about understanding the world through the eyes of our most precious resource, our children. We, at The LEGO Foundation, fully support this.

We at The LEGO Foundation share the aspiration that children develop into creative, engaged, lifelong learners who are able to thrive in a constantly changing world by experiencing the benefits of learning through play. We know that learning through play contributes to the fundamental and holistic development of young children; and we commit ourselves to place children at the center of everything we do.

This project embodies this shared aspiration and belief in the power of children to determine their own future. We believe children are our role models and so we embark on this work together with curiosity and fun as we approach new settings, challenges and learnings.

We will spread the wave of learning through conferences like this one, but also through different experiences that will be tailored to the different contexts in which children live and play.

We seek to understand what are the biggest challenges facing children’s learning and development and what can learning through play look like in different contexts. But, most of all, we want to bring the perspectives of





children front and center in the discussions and research of experts, practitioners, and the communities involved.

In conclusion, our journey of friendship and partnership has already left a remarkable legacy, but it is far from over. With the “Play, Explore, Research” project, we are taking our partnership to new heights.

Together, we are pioneering an approach that empowers children, values their perspectives, and promotes a deep understanding of play and learning.

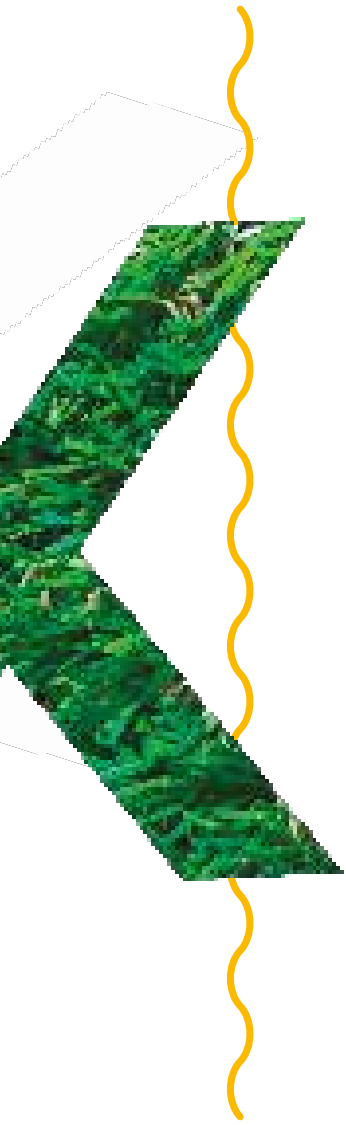
As we look towards the future, we are confident that our partnership will continue to be a force for positive change in the lives of children across the world.

Thank you for being a part of this incredible journey with us.

A statement
of trust and hope
about the future



Luca Vecchi
Mayor of Reggio Emilia (2014-2024)



As City of Reggio Emilia, we are happy that it is from here, and in particular from the Loris Malaguzzi International Centre, that the Fondazione Reggio Children's P.E.R. – Play, Explore, Research project with The LEGO Foundation has begun. An innovative project that, starting from the educational experience of our city, aims to focus on research on the relationship between play and learning, touching five continents, and today it begins its journey from the word 'Community'. Therefore, I would like first of all to thank Carla Rinaldi for her role as president of the Fondazione Reggio Children and for the way in which she brought the journey to fruition together with The LEGO Foundation, whose CEO Sidsel Marie Kristensen, along with the Kristiansen family, was in Reggio Emilia. To them our thanks for accompanying us over the years on a pathway of dialogue, collaboration and sharing, which has landed precisely in the P.E.R. project.

Professor Mitchel Resnick's keynote lecture and Professor Vanna Iori's talk marked an important launch for the project, considering also that it took place in the presence of the International Network in Reggio Emilia, that is, about 300 people

from more than 30 countries around the world.

I believe that what has happened is a historic transition. A further step forward in an experience that began many years ago in our city, which has put children, their education their rights to quality education from birth, at the centre.

This experience helped build a culture of childhood that gave legs to public policies that today allow Reggio Emilia to have 60% schooling as for children aged 0-3 years and nearly 100% as for children aged 3-6 years, in a country that is still lagging enormously behind in this regard. And it is a big problem that nowadays Italy is still not a country capable of having fully acquired a sense and awareness of how society can be better, to the extent that it was capable of starting from the right to education of children from birth. Instead, this is the experience and awareness that Reggio Emilia has brought with it to relations and dialogue with countries and cities around the world. Visiting preschools is always a very intense experience, as happened to me recently in California and Texas. They convey to you the flavour and air of home, because of the way they were thought out, inspired, organized, and implemented.

So, this is, I think, a very important moment, because the meeting with The LEGO Foundation, the theme of researching

play as an element of learning, is something very powerful and also very contemporary.

Each of us, thinking about play, can grasp its meaning and deep significance. For me, it has always been about helping to free a personality, to unleash a creativity and to go along with a process of growth and maturation, even when play means allowing yourself to disobey a little.

So, I think it is also useful to find today's reasons in a consistency with the original spirit of the Reggio Emilia Approach. That original spirit that ties it deeply to the history of this city.

I have repeatedly argued, and I believe, that there is no Reggio Emilia Approach without Reggio Emilia and there would not have been today's Reggio Emilia without the Reggio Emilia Approach. I mean, and I say this, knowing that it is a strong concept, I don't think it was simply pedagogy. Rather, I think there has been a very deep relationship between pedagogy and politics, politics in the highest sense of the word. Politics that puts the polis, people, communities and their destiny at the centre, starting, in this case, with children.

Therefore, I would like to recall some moments in the history that has brought us this far. A little bit for fun, but fun it is not, almost like a tale.

The first preschool was opened in this way.

It is the aftermath of the Second World War. Reggio Emilia has just been liberated from Nazi-Fascist occupation, German soldiers are on their way to retreat, abandoning a tank just outside the city. Women from a small hamlet of Reggio Emilia decided to take that tank, disassemble it, sell its parts, for what was then ITL 800,000, about USD 400, and with that money they built the first preschool in this town, which is still called, because of that historical moment, Scuola “25 Aprile” (Preschool “April 25”), the date in Italy that commemorates Peace and Liberation from occupying forces and Fascism.

Some time passed, and we come to 1963, to what was in effect the first preschool in this city, the ‘Robinson’, whose 60th anniversary we just celebrated in Tricolore Hall in the City Hall. I think at the end of the day, the words that Mayor Renzo Bonazzi spoke then are very consistent with today’s moment. Bonazzi said that experience was basically born out of a community’s need for redemption in its desire to appropriate knowledge and culture, which in the specific case was giving quality education to children from birth.

Then there have been over time, thanks to this history, very significant relationships

of the city of Reggio Emilia with influential personalities around the world, some of whom are part of this new P.E.R. project, some others are no longer there. I always remember very consciously what Jerome Bruner said, that he was struck by the way Reggio people, with friendliness and courtesy, had the ability to welcome. It was Jerome Bruner himself, who later became an honorary citizen, who noted and argued that there was a direct relationship between the pedagogical experience and the intrinsic values of this city.

After all, it was in later years another American thinker and friend of Reggio Emilia, Howard Gardner, who told us that Reggio Emilia had a distinctive character, which was to be identified as an ‘ethical community’, where children grow up in direct contact with taking charge of the common good.

Now, in the Reggio Emilia Approach there are many meanings, each of which, I believe, is connected precisely by that awareness of the centrality of the polis, the community, the person.

So is the square, which welcomes the children in the morning and which is basically nothing but the metaphor of the European city square, as a place of meeting, of relationship, of community. So is the atelier, which is capable of unleashing



creativity, capable of going out to encounter the many languages of children. So is the school kitchen, which has been able to grasp, decades in advance, the value and the relationship between education and good food in the quality of people's lives, and I say this because one of the problems of contemporary times is sometimes also childhood obesity. So are basically the 100 languages of Malaguzzi, which have been able to put the value bases in this community of a culture of pluralism, of a recognition of diversity as an element of value and not as a wall that keeps us divided.

17% of the resident population of this town, i.e., 25,000 citizens, belong to more than 100 nationalities. So, it is a town that has been able to build a culture of interfaith and intercultural dialogue. And in the Reggio Emilia Approach there is also that spirit, which Carla Rinaldi often mentions, of the pedagogy of listening, where pedagogy of listening does not simply mean a mutual willingness to listen to each other, but a way of living together and thus, to some extent, also a great message of peace.

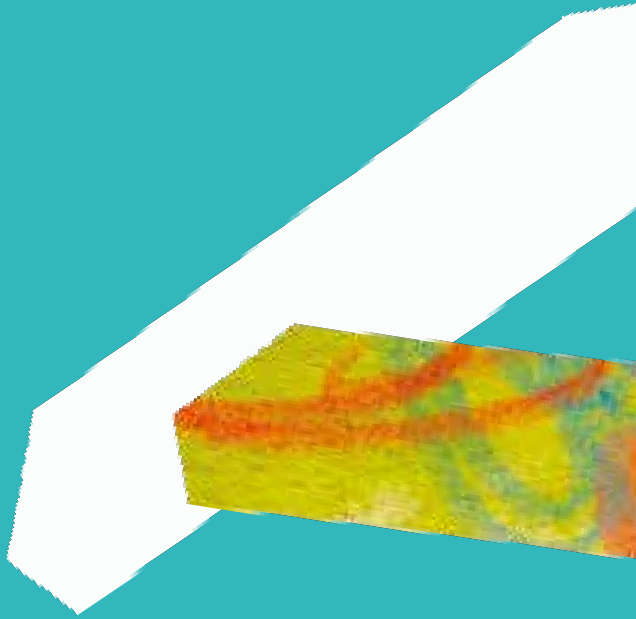
Here I believe that the P.E.R. project and its first conference in Reggio Emilia are an opportunity to connect this city and the Reggio Emilia Approach with the spirit and values that The LEGO Foundation has brought around the world to millions of children.

I do believe that this encounter, this journey that begins, has a historical meaning and significance, because it takes place at a particular time, when it becomes, alas, extremely topical again, to talk about war and to see the death of so many innocent children, as a result of the ability of men to wage war against each other.

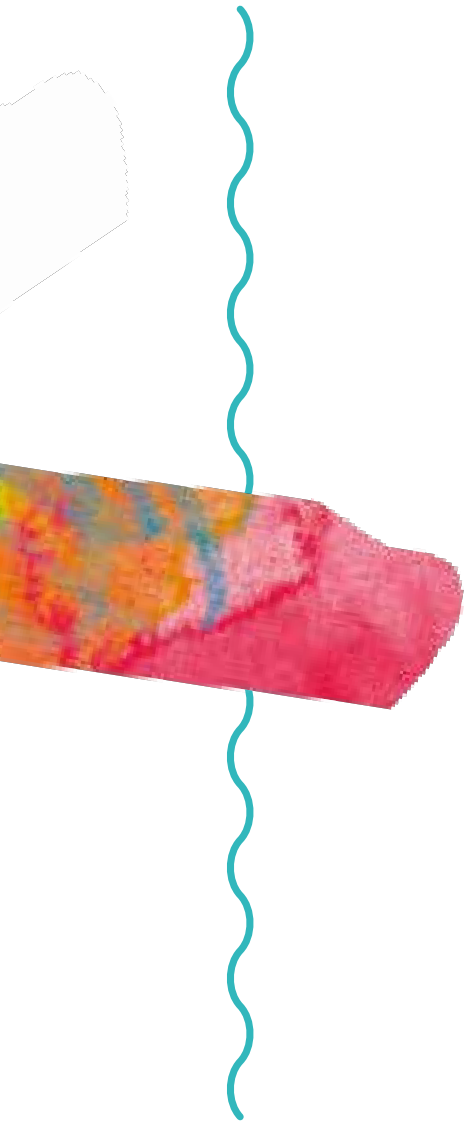
Then I don't think there are many places in the world like this where you have the strength and the ability to stop for a moment and build a future from the centrality of children and the quality of their education. Amid so many difficulties and complexities, the one we are building together, I believe, should be experienced as a shared statement of trust and hope about the future.

Thank you.

Play means
believing in the culture
of childhood



Carla Rinaldi
President Fondazione Reggio Children



In launching this project, P.E.R. – Play, Explore, Research by Fondazione Reggio Children and The LEGO Foundation, which moves into the area of the encounter-action between play and learning, and which has childhood as its beneficiary, we questioned ‘if’ and ‘how’ it is possible, today, to talk about play, at this dramatic time in the world, especially for children. Play that is pleasure, relationship, education, life. How can we, we asked ourselves, talk about children’s rights, rights to play, to emotional life, to quality education, without thinking about the childhood denied in fifty-nine countries in conflict around the world, including Ukraine and the Middle East, and in particular about the children who die every day. It is a pain. It is a pain all over the world and we feel it keenly where, in Reggio Emilia as in so many other cities, the value of the culture of childhood for our society and for peace is promoted.

We feel the loss of humanity, we mourn. Talking about creative learning, play and education may seem like utopia today. Yet we know how play is a fundamental human dimension. Where there is childhood, there is always play, as a faithful companion. Even in the saddest images that come in, it

is not difficult to find the signs of playing by children. Because playing is vital. For this very reason, taking action is a duty.

We must go beyond stillness, even beyond just compassion, and continue to act for education, because acting for education means acting for peace. Acting for quality education that digs into the motivations of each child to live in the present and better prepare for their future. Quality education to enable every human to become more human and to live together in harmony with all living things.

1. Playing well

It is precisely to accommodate this necessary dimension of research that we strongly wanted the P.E.R. project, to act, to react.

The project was born in the wake of deep research on 'playing well', as the word 'Lego' teaches, and on educating the others and ourselves well. It was born in the wake of the intense relationship, wanted, sought, cultivated over time, between the LEGO group and the city of Reggio Emilia, on education and play.

It is no coincidence that the project comes after reasoning about quality education as a response to educational emergencies in the world addressed in

the charter 'Quality Education, a Global Challenge' by Fondazione Reggio Children.

P.E.R. will have a strong incubation in Reggio Emilia, the city of origin of the well-known early childhood education approach, with the involvement of the Phd 'Reggio Childhood Studies – From Early Childhood to Lifelong Learning' with DESU-Unimore. It will find its first headquarters in a former industrial architecture, at the former Caffarri feed mill and carpentry factory, now a large open workshop, which we inhabit with Fondazione Reggio Children's projects and which also exists thanks to the support of The LEGO Foundation. A space in which to think together, in the context of quality education, creative play and learning, digital, sustainability and regeneration, together with the Remida Creative Recycling Centre, born in the beating heart of education in Reggio Emilia, the Preschools and Infant-toddler centres – Istituzione of the Municipality of Reggio Emilia, together with the utility company (now) Iren.

The P.E.R. project aims to plant seeds, leave a trace, and build a community of participatory research on five continents, starting with the issues we hold most dear. It wants to build new stories that have a future and can grow independently. As a red thread, we proposed that each conference adopt one of the words that the dearest

and that are expressed in the Charter for Quality Education. Mitchel Resnick, who is a constructor of bridges, knowledge, and relationships, has chosen, for this first key note speech and first conference-action, the word 'Community'.

2. Why play

Why play? It is important that we enter into the many meanings of play, developing questions, telling us why we want it to ally with us.

Play means believing in childhood and in the culture of childhood.

We need to talk more about play, we need to reflect more about play, considering also that play and playing are changing with unprecedented speed in this last decade, hand in hand with learning, with the development of digital technologies and the parallel drop out of what is material, for example, the drop out from direct, in-person relationship.

Play must enter much more into teacher training and school, family, and learning interaction with its characteristics of motivation, freedom, creativity, and emotional life.

In common sense, play has lost its deeper meaning, or rather distorted it, pushing it beyond risk to excess. Thus the passion

for play reaches pathology, the slow time, the unexpected, give way to the hyper organized and predictable time, the 'non-utility' of play is undermined by productivity if not profit, the possibility of making mistakes, being defeated is excluded by the need to be a winner, and so on.

To honour our project we need to ask the right questions and find in play an essential dimension for living, growing and educating ourselves well.

Certainly play, in its original meaning, has this basic characteristic of bringing fun, pleasure, the 'joke' as the Latin etymon says, the 'movement' and 'disguise' in the Indo-European context.

In 'good play' we find the dimension of freedom, an existential dimension of creativity, of reciprocity. Anything but, then, a trivial activity or a waste of time according to a capitalistic and competitive logic.

To play is to learn, to learn as a child and as an adult.

Play is an inherent dimension in all young people; it is a training for life and a lifelong attitude. Only the human being can choose whether to lose it, or to cultivate it, to continue living it, feeling and experiencing it as a right.

We have *game*, the play with rules, in which there is enormous knowledge not to be underestimated, as in sports games or



social games. We have also play, which is so-called free play, which is very difficult, and that you learn together and is almost more complex than game. But play always has rules, which children give themselves, they learn to play, and through these rules of play and by playing they build relationships of freedom with reality.

Play is also that possibility not of abstraction from the world, but of getting out of it by penetrating into another time. Children when they start to play, when they learn to play, they change the tense of verbs, they use the past tense: 'I was...' 'You were the princess and I was the dragon and together we went...'. Imagination, on which play feeds, is the engine of creativity and leads it to explore unexpected paths and solutions. Here, this is a magnificent signal, a signal of a kind of abstraction, a signal not of escape, but of freedom.

Children take reality, reconstruct it within canons, needs, freedoms, passions, and fears that they have, and when they come out of the game, they come out enriched on the emotional level, on the psychological level, and on the cognitive level. If we observe children and young people playing – whether game or play – when they come out, they are freer toward relationships with the world and with other children and young people.

That's where friends are born, friendships that stay with you forever because they stay with you, they are about you, the relationship with each other in which you reflect yourself. In this sense, then, playing well, in addition to being a personal identity-strengthening experience, educates and brings one closer to community relationships.

3. What questions

Given, then, summarily, the adherence of play to the fuller nature of the human being, which allows for the expression of all languages, those we have and those we did not know we had, we have a responsibility to create situations where we can try to build the flavour of play and enhance play in the educational field.

The project in which we drop these reflections of ours is the P.E.R. – Play, Explore, Research project where learning, creativity, and play are inextricably linked.

As educators, researchers, teachers, parents, caregivers, we know that Play, as Mitchel Resnick formulated, is a key element of learning, together with Peers, Passion, and Projects.

The playful and creative dimension of learning is the dimension with which we look, in this project, at the world's educational

emergencies – not only economic poverty, but, for example, emotional poverty, poverty of public beauty, poverty of relationships with nature and the community of living beings.

Studies and research will then generate, real and metaphorical places in which we will construct experiences and follow the construction of meanings.

Questions will arise and develop, in the encounters between cultures and in the educational experiences that will take place, in the relationship with digital and ecological culture. We have learned from Mitchel Resnick how important it is to connect quality research and education on technology supports, and how these can penetrate into poorer countries as a path for children's education.

How much can we contribute to spreading this quality of education in digital in advanced countries?

How much can we bring play back to a collective dimension, to slow time, to the development of personal research and creativity as both an individual and collective dimension?

How much can we accompany play in school to recover the emotional dimension, especially in adolescents? To learn how to manage risk, winning, and losing?

How can play and learning be deployed

as factors in generating cohesive communities?

How does play that relates to nature help generate a new relationship with the community of living beings?

Returning to these dark days, we are deeply convinced that education is the real way to bring to life and introduce the ethics of plurality, interdependence, and reciprocity. An experience in which one succeeds only together with the Other, starting from the principle that 'I exist because you are listening to me'. Play will be able to help us; it is deep within us and helps us grow. There is always a sign of play where a child has passed by, a sign of their desire to be. A pencil in a concentration camp, a ball of rags in the desert, a teddy bear in the rubble of a bombing raid, a report card at the bottom of the sea.

Our lives are interdependent and connected. Education is not just what you do at school or what you study, but it is what I breathe in the community in which I live.

Education is the key word for peace.

For differences to be embraced, it is essential to live a full education. A process, not a status, toward which all of us, school, politics, society must walk together. And this is by putting ourselves on the line, that is, by practising the oldest art of mankind, the one that allows us to transfigure the world from fierce reality. We must have the

courage to continue to imagine that the world is different, and act so that it can be.

To play is thus to invent a world, to create possible and conscious realities. For all of us and for the culture to which we belong, getting in the game means for us distancing from ourselves, from what defines us and from our certainties, but with the lightness and responsibility that accompany the great leap of the human spirit and the play of children.

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Cultivating communities of creativity and caring

Mitchel Resnick
Professor of Learning Research
MIT Media Lab





It is wonderful to come to an event¹ that's organized and supported by two of my biggest inspirations: Reggio and LEGO. Many of my ideas about children and learning and creativity have come from my collaborations with the Reggio Children Foundation and with the LEGO Company and The LEGO Foundation.

I appreciated that Carla asked me to speak on the theme of community, because I think that community is such an essential part of learning through play. I've seen the importance of community in the schools here in Reggio, and it plays a central role in the work of our Lifelong Kindergarten research group at the MIT Media Lab.

I want to start with a story from 18 months ago. In early March of 2022, I got an email from a Ukrainian educator, Olesia Vlasii, who I had never met before. The email came just 10 days after the invasion of Ukraine by Russia. Olesia wrote to me: "I'm Olesia Vlasii, a Ukrainian teacher, a mother, and a children's poet. Now is a very hard time for my native country. I decided to write to you and ask for help to create the largest wave of kindness."

¹ Presentation at the P.E.R. – Play, Explore, Research conference in Reggio Emilia, November 2023.

And she went on to describe what she meant. She wrote: “There are so many people on the planet who need help. What can each of us do? We can create our own wave of kindness to send to these people.” In other words, each of us needs to connect with others, to express some kindness and support. According to Olesia, these ripples of kindness could add up to a wave that brings about change in the world.

Olesia was writing to me because she had been using Scratch, a children’s coding platform developed by our Lifelong Kindergarten group at MIT. With Scratch, children can create their own interactive stories and games, then share their creations with other children around the world. Olesia suggested that children could use Scratch to create waves of kindness: “You can make a beautiful animation, a kind message, or simply draw a peaceful picture.”

I was really touched by Olesia’s message. I reached out to Olesia and set up a telephone call. As we had our conversation, I heard air-raid alarms in the background. Olesia told me about the difficult challenges that she was facing and her community was facing. But she believed that we could bring about change if we just had people make connections with one another around kindness.

Along with my colleagues at the Scratch Foundation, we decided to create a Scratch studio on the theme of “Spreading Kindness.” We encouraged children around the world to create Scratch projects to provide some happiness to someone, or to give advice on how to support others in difficult times, or to spread a little kindness in your community.

Within days there were literally thousands of projects from children around the world with ideas about how to share kindness and examples of things that they had done to help support others in their community. Some of the projects were explicit about supporting the people of Ukraine and particularly the children in Ukraine. Some of them did very sophisticated programming projects to make animations of the Ukrainian flag, and they added Ukrainian folk songs and artwork, and they brought it all together to give a message of hope to the people of Ukraine.

I think that Olesia realized that these projects alone were not going to stop the atrocities that were happening in Ukraine, or they would not end all aggression. But Olesia felt the projects were an important first step. When people start to think differently, over time it can create a new culture and bring about real change.

In Brazil, our colleagues at the Brazilian

Creative Learning Network, who work with schools and educators across all of Brazil, initiated a coordinated effort to support waves of kindness across the country. In classrooms across Brazil, the students discussed what qualities are needed to create and support a more peaceful world, and how they could support those qualities. They shared many Scratch products and other ideas with one another and ideas, both in their classrooms and online.

In our Lifelong Kindergarten group at MIT, we've been deeply inspired by Olesia's ideas, and by the waves of kindness initiatives in Brazil and elsewhere. These ideas and initiatives have provoked us to rethink some of the ways we describe our work and goals in the Lifelong Kindergarten group.

We call our group Lifelong Kindergarten because we've always been inspired by the way children learn in kindergarten. The kindergartens and preschools in Reggio have been a great inspiration for us. In kindergartens, children have opportunities to playfully create things in collaboration with one another, building houses and castles with blocks, making pictures with finger paints and crayons. In the process, they gain an understanding of the creative process: how to start with an idea, create something based on that idea, share

your creations others, reflect on your experiences.

Unfortunately, in many schools, the process is very different after kindergarten. Children spend their time sitting in rows, listening to lectures, filling out worksheets. They have few opportunities to continue to develop their creative capacities. In our Lifelong Kindergarten group, we want to extend the kindergarten approach to learners of all ages, so that students can continue to develop their creative abilities throughout their lives.

In the past, we've often described our work this way: we design tools and activities to engage young people in creative learning experiences, giving them the opportunities to create, design and express themselves – and to develop as creative thinkers and learners.

But in the past few years, we've realized we're not just about designing tools and activities. In fact, one of the most important ingredients to the success in our projects is the support of caring communities around these tools and activities. So now I describe our group a little differently. I say that we're designing innovative tools and cultivating caring communities to engage young people in creative learning experiences. Caring communities play a very important role in our efforts to support playful and

creative learning experiences. When people feel welcomed and supported and safe within a community, they are more willing to experiment, try new things, and take the risks that are an important part of the creative process.

The pace of change continues to accelerate in all parts of the world, in all parts of society. Today's children, as they grow up, will face a never-ending stream of unknown, uncertain, and unpredictable situations. So the ability to think and act creatively is more important than ever. But children will only develop their creative abilities if they are part by caring communities. I think that's an important part of the success of our Lifelong Kindergarten group – and the success of the Reggio schools.

To support the development of creative learning and caring communities, we've developed four guiding principles, which we call the four P's of creative learning: Projects, Passion, Peers and Play. That is, we want to provide children with opportunities to work on projects, based on their passions, in collaboration with peers, in a playful spirit.

When children work on projects that they are passionate about, they are willing to work longer and harder, and persist in the face of challenges, and they make deeper connections to the ideas involved. And creative learning is not a solitary process: children do their most creative learning when they are part of a community, collaborating and sharing with their peers, learning with and from their peers. And when we talk about play, we don't mean just laughing and having fun. We see play not as an activity but as an attitude. When children have a playful attitude, they're willing to explore and experiment and to try new things.

I hope that the four P's of Projects, Passion, Peers and Play will lead to an all-important fifth P: Peace. If children have opportunities to work on creative projects as part of a caring community, they will be more likely to generate waves of kindness and contribute to a world that is more equitable, more just, and more peaceful.

Let me give an example from the Scratch online community. In the United States, there's a terrible threat





of gun violence, with many more mass shootings than anywhere else in the world. It's a terrible problem for young people in the United States, with school shootings happening very often, and it tears at our hearts. A couple years ago, there was a mass shooting at a nightclub in Orlando, Florida, and most of the people killed were from the gay and lesbian community. It was a violent and hateful crime. One of the young people in the Scratch community, named Jinho, was very upset and sad about this shooting, so he organized a collaborative Scratch project that involved dozens of young people. Here's how he described it:

I thought why can't we as Scratchers create something together, to honor the people who died in the Orlando tragedy? We created a multi-animator project, which means that each part was animated by a different animator and we stitched it all together to create the final project. I think around 40 or 50 people were involved in making the project. Scratch is a really open place, where you can share anything you want. And you can express your feelings however you want. I think that's a really beautiful part of it. My hope for the project was to reach out to some of the other people in this generation, so they know there are other people who support them.

For me, this is an example of the amazing things that young people can do, given the right support and the right environment that allows them to work together and to express themselves. And it really shows that tight connection between caring and creativity: clearly these young people were learning creative skills as they created their animations. But the project also came from their hearts, from working together as a community, within the Scratch community, and doing something to support the community around them, to try to address one of the big problems and dangers in society.

We want to make sure that all young people, from all backgrounds, have the opportunity to express themselves creatively and to come together, to work together on projects that are meaningful to them and to one another, to make changes in their communities.

The need for community became even greater in the last few years during the pandemic, when people were disconnected and isolated and it was even more difficult to form connections with one another. It was interesting to see how young people responded in the Scratch online community.

I want to highlight one project created by a Scratcher with the username "helloyowuzzup". She had created more

than 600 Scratch projects, so she was very active in the community. She had left Scratch a couple years before the pandemic because she was getting older, she got interested in other things. But during the pandemic she came back to Scratch, partly because it was a safe and familiar place, like coming back home. She was feeling disconnected and isolated, so she came back to a familiar community where she could feel a connection. She also wanted to help other people make those types of connections. So she created and shared a project called “Random Acts of Covid Kindness.” She wrote that it was more important than ever to support other people during this time when people were isolated.

In her project, she suggested that other people could write to her if they were going through a difficult time and needed some support – or if they wanted to offer some support to other people. She offered to act as a type of matchmaker between people who said they needed some support and those who wanted to offer support. Hundreds of young people participated in making projects to lend a little bit of hope and kindness to other people.

I think young people will rise to the task if they are given the opportunity to support one another and build community. Of course, although some of these examples

are online, this is just as important when young people gather together in person. We have seen this in Computer Clubhouses, the network of after-school learning centers that our Lifelong Kindergarten group co-founded 30 years ago.

There are now more than 100 Clubhouses in 20 countries around the world, all located in marginalized communities, where young people have not had as many opportunities to engage in playful, creative learning experiences with new technologies. We worked with local community centers to open these Clubhouses as safe spaces where young people, ages 10-18, can come and learn to create together with new technologies. Young people from South Africa, Mexico, Jordan, Taiwan, Brazil, India, and many other countries are going to these local Clubhouses to create and share projects in collaboration with one another within a caring environment.

I think these Clubhouses have been successful because they aren’t just rooms full of technology but caring communities where young people can collaborate and share with one another, with support from adult mentors.

I want to highlight one Clubhouse initiative called Youth Activism and Advocacy. Clubhouse members were

asked to propose projects where they could actively work to bring about change in their local communities. This initiative was organized by Jaleesa Trapp, a graduate student in our Lifelong Kindergarten group, who participated as a Clubhouse member as a youth, then later served as a Clubhouse coordinator, and is now a graduate student at MIT giving back to the Clubhouses. Jaleesa organized Youth Activism initiative with ten different Clubhouses. At each of the Clubhouses, members are working on projects to address challenging issues in their own local communities. Different communities are facing different challenges.

But in all cases, young people identified and worked on issues that they were passionate about. Here are some of the issues that youth at the ten Clubhouses addressed in their projects: Environmental Justice, Food Insecurity, Immigrant Rights, LGBTQ Education, Economic Opportunity, Youth Voice in Local Government.

Last week, Clubhouse coordinators from around the world gathered in Boston for the Clubhouse annual conference. There was a keynote panel the projects from the ten Clubhouses that participated in the Youth Activism and Advocacy initiative. The panel generated great interest and excitement. But in a sad reminder of the challenges of today's world, only nine of the ten Clubhouse coordinators participated in

the panel, since the Clubhouse coordinator from Palestine could not come to the conference due to the tragic violence in that region.

With all the challenges in the world, from gun violence to pandemics to wars to climate change, we need better ways to support caring communities.

Let me end by going back to Olesia Vlasii from Ukraine, who continues with her efforts despite the ongoing challenges that she and so many others are facing in Ukraine. As I've talked with Olesia over the past year, she recognizes that the things she's doing will not, by themselves, end the war in Ukraine. She says that we need a long-term strategy for change. In my conversations with Olesia, we've identified two things that are needed for long-term change.

First, we need to engage the next generation. Second, we must work together to foster a culture of creativity and caring. If we hope to bring about long-term change, we must keep these two goals in mind in whatever we do. You are already doing that here in Reggio. I've often heard Carla say that children are citizens from birth, and they can play an active role in bringing about change to their communities.

We try to think about these two goals, whether we're designing a new technology or designing a new activity or designing

a new space for learning. We're always trying to think "How can we support children's creativity and cultivate a caring community?"

Bringing about long-term change is a big effort that will require many people and many years. It will require efforts from parents and educators and researchers

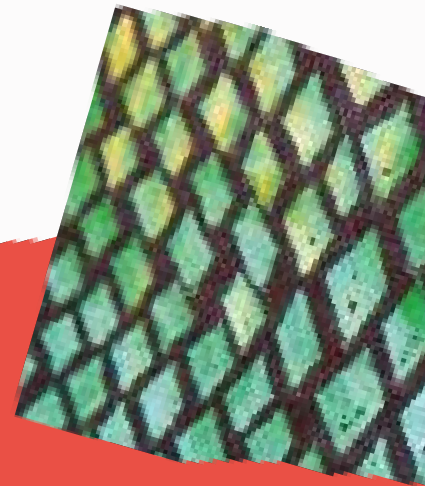
and administrators and policy makers. It's a difficult challenge, but it's the most important thing we can do.

We need to help young people develop as creative learners and caring members of their communities, so that they can help build a society that is more equitable, more just, more sustainable, and more peaceful.



Importance of play in cognitive and emotional education

Vanna Iori
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1. The formative value of play

The history of learning and of educational and schooling institutions has been based for centuries on the primacy of notions, of codified knowledge, as opposed to playful experiences, that is, on the dichotomy between study and play, between learning and leisure. One emblematic case is the book of *Pinocchio*, written by Collodi in the late 19th century and still ranked among the world's best-selling books, originates precisely from a symbolic gesture: *Pinocchio* sells his spelling book to go to the puppet theatre instead of school, an institutionalized building as a place of formalized knowledge. This stark indoor/outdoor juxtaposition has for decades represented the idea of schools as anonymous tetrahedrons, “non-places”¹ separated with a closed door or gate, from the outdoor community context where one could play, run, sing in freedom.

Since the 19th century, studies on child development have begun, which describe the fundamental importance of play and recreational activities in cognitive and emotional growth, motor development,

¹ Augé M. (2023).

relationships, and communication with others.

The pedagogue Friedrich Fröbel was among the first to give play an important role in children's development, believing it to be a tool for learning and relating. His conception of the well-known "childhood gardens", used teaching tools for learning numbers and shapes through, for example, geometric solids employed as a means of knowledge, creativity and openness to the outside world.²

Freud also explored, on a psychological level, the possibility of children to express emotional life by inventing games that enable them to release desires or to know and master fears.³ And in this regard we need to cite the text *Homo ludens* by Johan Huizinga⁴ which points to play as the foundation of culture and social organization. It was then pedagogue Jean Piaget⁵, in his descriptions of developmental stages in education, who pointed to the transformations that occur in play: from early exercise games (such as clapping hands), to symbolic and imaginative games (identifying with a character), to rule games that require adjusting to norms in order to

"get into the game". There are many other authors it would be important to mention, such as Donald Winnicott⁶ who attributes the development of self-awareness to play. Most importantly, we cannot ignore Maria Montessori⁷ whose method fostered child-friendly environments and the use of suitable materials to make constructive play.

Through the quick reference to the aforementioned authors, it thus emerges how play has become an important and closely related aspect of learning for growth, so much so that even the UN Convention on the Rights of the Child⁸ recognizes, in Article 31, the right to play and recreational activities.

"Play, explore, research" (P.E.R.), the subject of today's conference in collaboration with The LEGO Foundation, we must therefore consider them relevant educational pillars. Play is an experience that has an important role in early childhood and throughout life. Its close relationship with learning, exploring, and research is underscored by a growing number of studies and experiences. Indeed, in the Charter of Values of Fondazione Reggio Children⁹ we read the importance of

² De Giorgi F., Grazzini M. (2018).

³ Freud S. (1909).

⁴ Huizinga J. (2014).

⁵ Piaget J. (1953).

⁶ Winnicott D.W. (1971).

⁷ Montessori M. (2019).

⁸ UNICEF (1989).

⁹ Fondazione Reggio Children (2021).

promoting “the joy of learning through play with the mind, hands, and heart; integrating the different dimensions – real and virtual – of knowledge”.

Education is a practice in which experience is linked to reflection and enhances creative flair. Animating educational action means giving it soul and presupposes preparation, research, experimentation, careful evaluations.¹⁰ The centrality that animation plays in educational experiences with children and young people, as well as with adults, finds in playful forms a valuable contribution to stimulate the growth of the person in the plurality of their existential dimensions. The connotation of play activities helps the expression of ideas and experiences capable of strengthening the content and modes of learning and relational dynamics, renewing enthusiasm and offering stimuli for inventing and experimenting with rewarding and effective paths.

2. Playful experience in the major socio-economic transformations of our time

By proposing the relevance of playful experience, creativity and dynamism

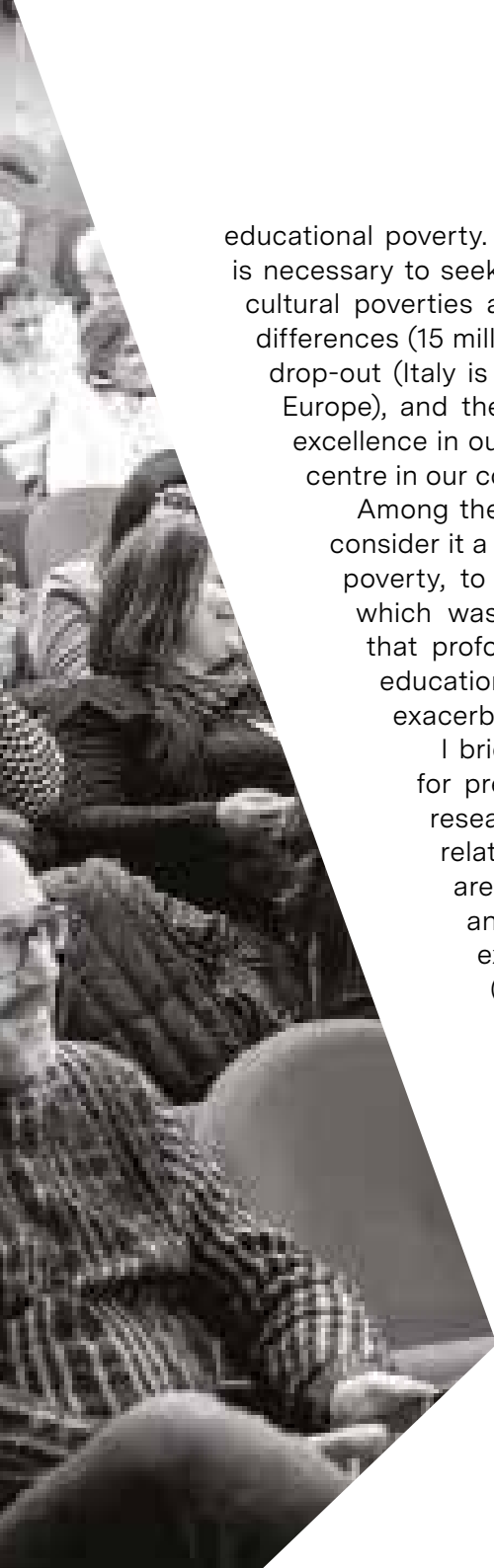
in relation to formal acquisitions, we begin to lay the foundations of the new educational pathways for the development of skills necessary for the profound transformations taking place in the fourth industrial revolution and in the **digital transformation** that are changing the ways of working, thinking, relating and living. This perspective is also mentioned, not surprisingly, by the **World Economic Forum**¹¹ which, in its latest edition 2023, proposes a linking of educational instances to the increasingly articulated and complex socio-economic reality, even drawing up a list of skills that education systems must begin to provide already today so as to overcome a passive knowledge of technologies. And it proposes precisely a lively acquisition to achieve new skills with the enhancement of **soft skills** and a more varied mix of skills capable of devising innovative responses such as **problem solving**, creativity, inventiveness, critical thinking and interpersonal skills. Skills and abilities to the acquisition of which various forms of play contribute as well.

Indeed, changes in the economic, labour and social macro-scenarios strongly challenge us to renew educational strategies and orientations in which play thus also becomes a tool to counter

¹⁰ Iori V. (2012).

¹¹ World Economic Forum (2016).





educational poverty. In fact, the socio-economic context is worsening globally, and it is necessary to seek effective responses by acting on multiple fronts where different cultural poverties are intertwined: geographical differences, social poverty, gender differences (15 million girls will never have the chance to set foot in a school), school drop-out (Italy is one of the European countries with the highest drop-out rate in Europe), and the lack of early childhood education services that see a level of excellence in our city, while less than 2 out of 10 children attend an infant-toddler centre in our country, with huge differences between north and south.

Among the many faces of educational poverty – tangible and intangible – I consider it a priority to point out the emergencies of “new” social and relational poverty, to be found even in contexts of economic wealth. The **lockdown**, which was followed by wars, resulted in isolation, fears and insecurities that profoundly changed the face of our communities. We are observing educational fragilities, already present before the pandemic, but now greatly exacerbated, requiring further interventions to counter its dramatic effects.

I briefly touch on this issue because play is one of the decisive tools for preventing and combating these new difficulties. Unfortunately, all research studies tell us that today web-based rather than face-to-face relationships prevail, and that existential suffering and emotional malaise are multiplying in the experiences of many children, adolescents and young people, resulting in disturbing behaviours. There is an exponential increase in anorexia and bulimia, social withdrawal (Hikikomori), forms of self-harm and hospitalizations, alcohol and hard drug use, violence on the web and in daily life, cyberbullying and baby gangs. But even more worrisome has become suicidal ideation, with more than 3,700 requests for help in six months of 2023 (37% more than in the first half of 2022) (source: Telefono azzurro), and especially suicide attempts between 10 and 17 years of age (constituting 70% of hospitalizations in this age group) and suicides doubled in one year in adolescents. UNICEF (October 2023 report) shows us that 2 young people die every day in Italy. Extreme and terrible acts then circulated on the web.

A bleak picture that expresses emotional experiences of emptiness in young people who seem to live daily without resources to cling to, isolated, as if life is exhausted in the present moment and offers no real prospect of meaning, of a project, of a future. A widespread insecurity, fear of not matching expectations, inability to manage emotions, disorientation.

This very picture of distress leads us to emphasize the value and meaning of educational and preventive work that makes use of **playfulness** because it helps creativity, passion, relationship, cooperation and builds existential well-being. In most cases, **parents** are themselves unaware of the dangers their children are encountering on the net or not attentive in warning them. And this, of parenting education, is another urgency of the new educational poverties, as they are lost, insecure, competitive or absent, in front of their cell phones, losing opportunities for playfulness and for communication, for sharing with their bodies, objects, hands, looks. In the willingness to relate, in the ability to convey signals of affection and reassuring interest about their learning, without being intrusive, they teach them to know how to learn even from disappointment and failure. Developing emotional skills is essential, in order to grasp, evaluate and manage feelings and recognize them in shared play and learning.

3. Play unites and enriches emotional and cognitive life

Indeed, a serious emergency today is, in adults and children, **emotional illiteracy**, the inability to recognize and name the feelings experienced, to **take care of the words** and to take responsibility for the behaviours enacted as a result of the feelings faced. A school and family that are more attentive to the education of the **heart** teach not to deny or silence emotions, not to repress those states of mind, but to explore them, reprocess them through different experiences for different contexts and situations where the experience of playful activity and the knowledge of feelings is fundamental.¹²

The characteristics of play related to emotional learning foster the priority perspective of prevention because emotions are always linked to reason. And the great resource to prepare education systems for is just that: holding emotional intelligence together with cognitive intelligence and using fun and structured knowledge. Education is constitutively relationship and unites heart and mind.

That is why you cannot improvise to be educators. Taking care of emotional life

¹² Iori V. (2009a).

is a pedagogical resource¹³ made difficult by the primacy of reason that has largely dominated the path of knowledge: the Cartesian view of ‘cogito ergo sum’.¹⁴ Despite Pascal’s contemporary pointing out its limitations, according to his well-known statement ‘the heart has its own reasons, which reason knows nothing of’,¹⁵ the dominance of Cartesian reason continued to prevail as the only path to learning. Instead, you also learn through play.

However, we must reach the second half of the 20th century to conceive of the construction of integral human formation. Where gaiety is a tool to be used, because it allows you to break out of isolation and revive dull knowledge where the codified lexicon of the web increasingly ‘traps’, even from early ages, children connected at all hours, relating to the world, but alone.

It was Howard Gardner¹⁶ who pointed out that there is not one intelligence but different forms of thinking and feeling, developing a theory of multiple intelligences, pointing, among them, to emotional intelligence. After him Daniel Goleman¹⁷ reiterated the importance of

knowledge of emotions to manage their control and implement socially appropriate behaviours. While Stanley Greenspan¹⁸, recovering the concept of ‘emotional tones’, spoke of an intelligence of the heart, which is essential to make sense of experience. The path of psychological knowledge has shown that a ‘pure’ logical capacity cannot be taken into account. But it is especially Antonio Damasio and the theories of neuroscience that have highlighted that to subtract value from emotional life and give it solely to rational experience was precisely ‘Descartes’ error’¹⁹ with the repercussions that still affect the relationship with emotional life and the nexus between emotion and reason, while emotions are even necessary to make rational choices. It is therefore self-evident today that there is a need to reunite mind and heart, intelligence and feeling, subjectivity and objectivity, play and sense.

In conclusion, playful activity is not only an optional experience of leisure and recreation but an indispensable form of knowledge of human existence. And it is the very principle of education that enriches emotional and cognitive life in group participation and socialization, teaching

¹³ Iori V. (2009b).

¹⁴ Descartes R. (2017).

¹⁵ Pascal B. (2005).

¹⁶ Gardner H. (2006).

¹⁷ Goleman D. (2006).

¹⁸ Greenspan I.S., Benderly B.L. (1998).

¹⁹ Damasio A. (1995).

to conform to rules in the construction of new spaces and roles, to create bonds of trust toward adult figures of reference, to know material objects and handle them, as well as enriching intuition, imagination, and creativity, to build projects in relationship with the world.

Being deprived of the experience of learning through play, on the other hand, becomes a form of educational poverty, because without experiencing joyful emotions, it is not possible to reduce marginalization, discomfort and violence or instead increase improvement in the quality of life.²⁰

Therefore, there is an urgent need to train educators and pedagogistas²¹ in these new educational modalities, include ad hoc pathways to provide responses to emergencies, and foster good educational practices aimed at children, parents, teachers, and educators.

A greater widespread well-being can be strengthened through efforts to generate an **Educating Community**, weaving networks among different educational realities, strengthening opportunities for widespread parenting in territorial solidarity. This means actively involving sports centres, play centres, oratories, educational services

and all areas that interact with the play dimension, working on different projects involving in new skills children, guiding their games and activities, through collaborative educational alliances, and co-constructing inclusion through co-designing and co-responsibility. Cooperate on the playful-cognitive experience, starting immediately to take action to restart. Together.

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²⁰ Iori V. (2003).

²¹ Iori V. (2018).

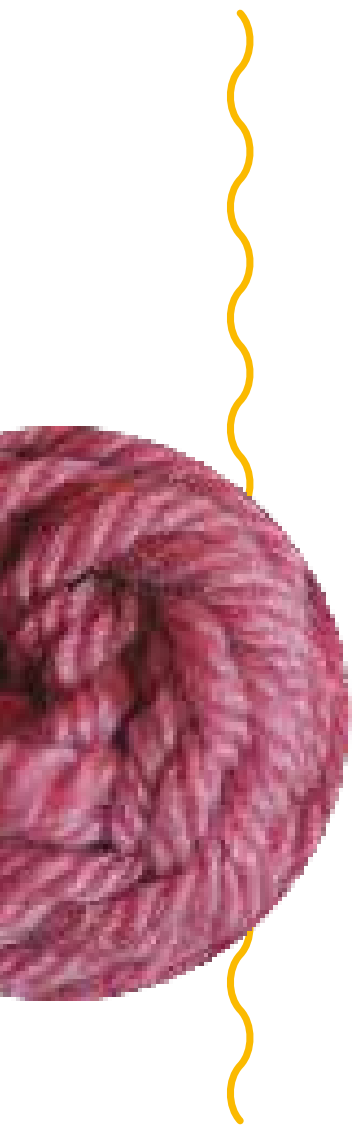
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Workshop

P.E.R.'s first conference-action
in Reggio Emilia: insights on play and community
and experiences with OctoStudio





On November 16 and 17, 2023 at the Loris Malaguzzi International Centre in Reggio Emilia, the P.E.R. – Play, Explore, Research project, promoted by Fondazione Reggio Children-Centro Loris Malaguzzi thanks to the support of The LEGO Foundation, was officially presented with the aim of promoting the relationship between play and learning and the right to quality education for all, involving teachers and educators around the world in a creative learning journey.

The project was then launched from Italy in November 2023 with a double event: the first of 7 conferences with national and international guests and the Italian premiere of the MIT Media Lab's creative coding app, OctoStudio.

The launch conference on November 16 was addressed by speakers whose speeches have been transcribed in this publication: Luca Vecchi, mayor of the Municipality of Reggio Emilia, an entity that is among the founders of Fondazione Reggio Children; Carla Rinaldi, president of the Fondazione Reggio Children; Sidsel Marie Kristensen, CEO of The LEGO Foundation; Vanna Iori, of Istituto Toniolo-Università Cattolica of Milan; and Mitchel Resnick, director of Lifelong Kindergarten at the MIT Media Lab.

The conference held in front of an international in-person and online audience

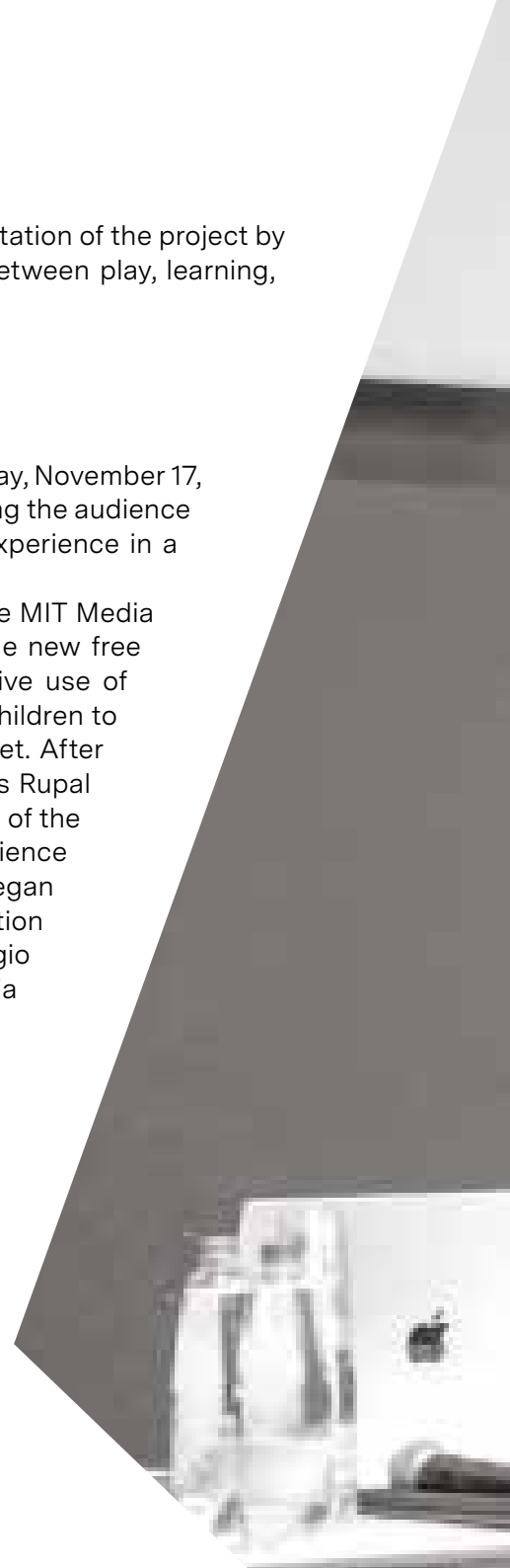
of teachers, policy makers, and scholars allowed for both a presentation of the project by the promoting subjects, and an exploration of the relationship between play, learning, and the educating community.

1. OctoStudio app presentation

The second part of P.E.R.'s launch event in Reggio Emilia on Friday, November 17, was devoted to the exploratory part of the project, both by involving the audience that attended the conference-action and by having a specific experience in a middle school, which continued in the following months.

On second day of the event, Professor Mitchel Resnick and the MIT Media Lab's Lifelong Kindergarten research group launched for Italy the new free creative coding app OctoStudio, designed for active and creative use of mobile devices, created to meet the demands of educators and children to be able to use coding even if they don't have a computer or tablet. After the presentation of the app's functions together with researchers Rupal Jain and Carmelo Presicce from Lifelong Kindergarten, the spaces of the Malaguzzi International Centre were peacefully invaded by the audience of teachers, educators and researchers of various ages who began experimenting with the app in small groups with the collaboration of experts, PhD fellows and atelieristas from Fondazione Reggio Children, Remida-The Creative Recycling Centre of Reggio Emilia and PAUSE-Atelier dei Saporì, following different suggestions.

The application makes it easy to create stories, games, animations at anytime and anywhere, without the need for an Internet connection, account or personal computer. With OctoStudio, you can capture images, record sounds, and bring lots of ideas to life through simple blocks of code. The ease with which projects and final results can be shared with friends and family stimulates collective creativity, generating new ideas and uses of the app, opening up interesting forms of virtual sharing.





2. Exploratory workshops

Collective experimentation with the OctoStudio application was a pretext for actively investigating what playful, group-based learning with digital technologies means. For this reason, a multidisciplinary research team, involving atelieristas, teachers, pedagogistas and university researchers, co-designed different contexts to relate the application to four domains of experience and different

expressive languages: materials and sonority, body and architecture, plant and digital, and taste and sound.

Each context was set up with deconstructed materials, natural and man-made elements, in strong connection with the space (furniture, architecture, environmental qualities of the space) with the aim of fostering participants' creativity and interest in the application by designing immersive environments that support synaesthetic learning.



Plant and Digital Design your own jungle

In this environment characterized by a strong co-presence and integration of plant elements and Lego bricks, participants had the opportunity to create immersive jungles, animate elements, and carry out projects with the help of OctoStudio, which enriched and enhanced their perception of the sensory qualities of the context.

Within the digital interface of the application, the presence of nature emerged prominently, and participants interacted with it in unexpected ways.





Body and Architecture

Virtual Bodies in Real Spaces

In this context, a number of evocative materials of different sizes were selected and offered to participants to give them the opportunity to explore small-scale architecture.

These materials, and/or the architectural space, became the environment in which participants could create a raster graphics image (Sprite) depicting their own body, that of a friend, or using an archive photo, that could move and interact.

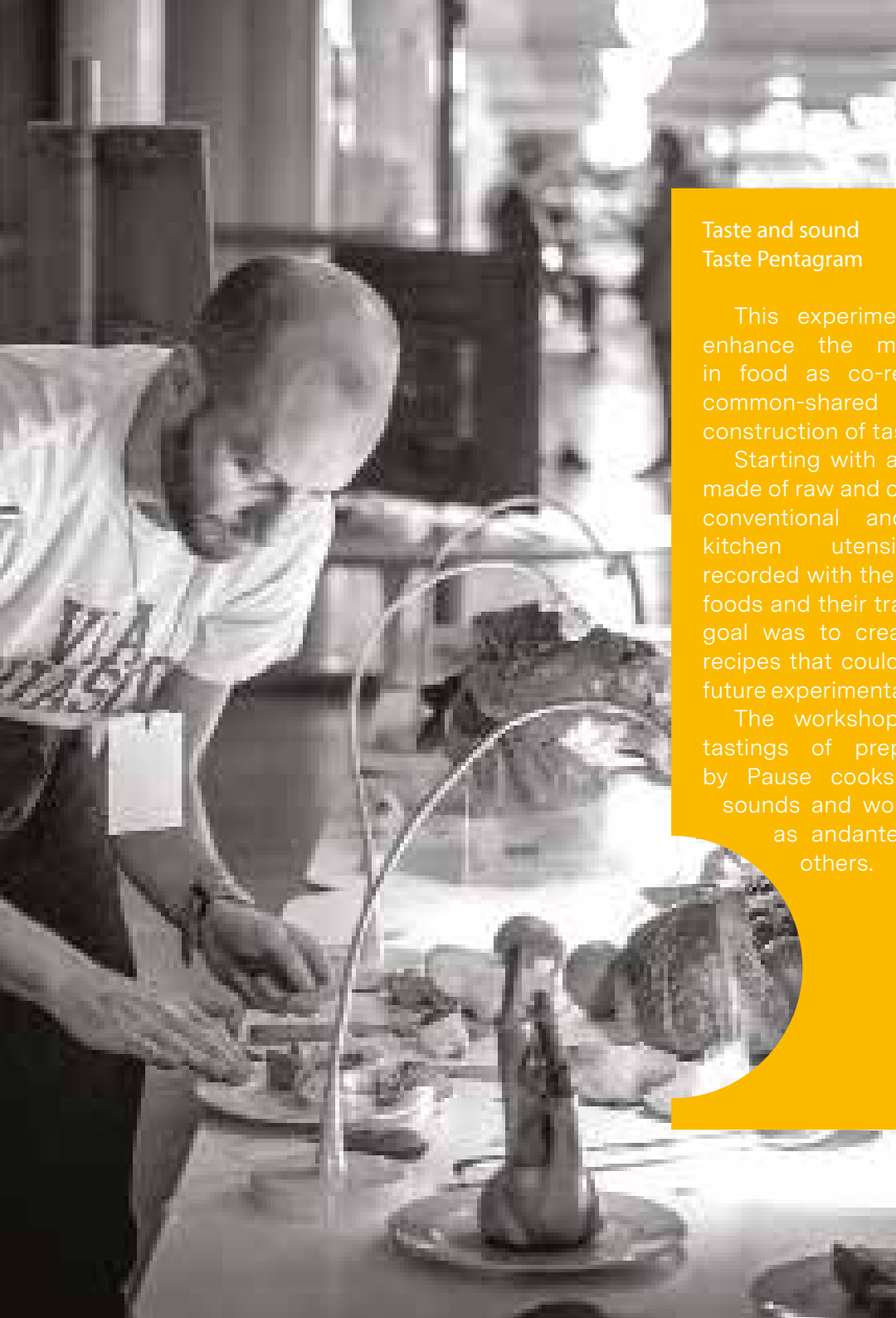
The represented body was thus able to virtually experience other possibilities than physical ones, playing with different laws, without weight or consistency, being able to take on different dimensions, disappear and appear, and much more.

Materials and sonority Making materials sound and sounds bewilder

In this context, various types of materials were made available to the participants, divided into shapes (cutouts to be used as a subject), sounds (to be crushed or rubbed to produce a noise) or volumes (to create boxes or containers in which to hide the device).

During the exploration, smartphones became tools to augment the experience, programming OctoStudio to make things happen in material reality.

For example, it was possible to use the device inside a material to make it “play” or “talk” or to give voice to sprites already in the app with textural or other sounds.



Taste and sound Taste Pentagonram

This experimentation aimed to enhance the musicality inherent in food as co-responsible in the common-shared and subjective construction of taste.

Starting with a set of equipment made of raw and cooked ingredients, conventional and unconventional kitchen utensils, participants recorded with the app the sounds of foods and their transformations. The goal was to create original sound recipes that could be interesting for future experimentation in the kitchen.

The workshop concluded with tastings of preparations devised by Pause cooks inspired by the sounds and words of music such as andante, allegro, flat and others.

3. Dialogue with schools

The experiential part of the project launch also included a meeting with Reggio Emilia school children along with teachers, educators, pedagogistas and atelieristas, and was led by Professor Mitchel Resnick, Professor of Learning Research at the MIT Media Lab in Boston, director of the Lifelong Kindergarten research group and a member of the Scientific Committee of Fondazione Reggio Children, along with his staff. During the two mornings, an initial meeting at the Loris Malaguzzi

International Centre involved a class from the Loris Malaguzzi Primary School of IC Galilei, during which the pupils presented their projects created on the app launched by Lifelong Kindergarten.

A second meeting featured a morning of work on OctoStudio by MIT experts together with some classes from the IC Marco Emilio Lepido middle school and atelieristas and pedagogistas from Officina Educativa, a project of the Municipality of Reggio Emilia, laying the groundwork for continuing the experience during the school year.



The *P.C.R. – Play, Explore, Research* project of Fondazione Reggio Children Centro Loris Malaguzzi, made possible by the collaboration with The LEGO Foundation, is a platform to bring together educators, researchers and policy makers so as to further develop the relationship between play and learning and learning through play for children globally.

This series of publications aims to shed light on the contributions that characterised each individual conference action in the five countries, starting with the presentation of the P.C.R. project in Italy, in Reggio Emilia, on 30 and 31 November 2023 at the Loris Malaguzzi International Centre, accompanied, as a national preview, by the presentation with workshop of Qeiosstudio, a creative coding app of the Lifelong Kindergarten at the MIT Media Lab.