CREATIVE LEARNING FESTIVAL

Friday 10 and Saturday 11 October 2025

creative
learning
festival

NEW

When?

FRIDAY 10 AND SATURDAY 11 OCTOBER 2025

Join us for two days of experimentation, discussion, and opportunities for networking and sharing ideas, in this event dedicated to innovation in STEAM.

The Museum is organising the inaugural edition of a Festival dedicated to creative learning!
The programme and invited experts have been curated by the Museum's Education staff, in collaboration with the founders of Tinkering Studio at the Exploratorium in San Francisco and the Lifelong Kindergarten Group at MIT Media Lab in Boston. The Festival is organised in partnership with **Bolton for Education Foundation** and with the support of Erasmus+ Programme of the European Union.

The event is free and open to teachers of all levels, including teachers in-training, educators of adult learners, museums educators, librarians, and other educators in out-of-school learning settings.
The programme includes two days of hands-on workshops, conferences, and discussions, with the goal of offering an opportunity for shared reflection on the role of creativity in learning, particularly in STEM.

Creative learning pedagogy includes a range of approaches and tools, supporting innovation and unexpected thinking as an important skillset for learners of all ages to find their own ways of exploring and understanding the world.

All sessions will be led by international experts from different fields: pedagogy, research, design, performing arts, coding, science and art from Italy, United States, Argentina, UK, France, Germany, Spain, The Netherlands, Denmark, and Japan, together with the Museum's Education staff.

Activities are held in Italian or English.
A translation service is provided via a web app for all events taking place in the Auditorium. Please bring your own mobile phone and headphones to access this service.
Informal language support is available for those participating in the interactive experiences taking place in other museum spaces.

A temporary cafeteria is open during the festival for the purchase of light meals and snacks.
It is located in the Sala Colonne and will be open at the following times:
Friday 10 October – 9:00 a.m. to 5:00 p.m.
Saturday 11 October – 9:00 a.m. to 6:00 p.m.

See below for the detailed programme of the Festival and **read the biographies of those who will be leading the activities**.

Agenda of the two days

You can filter the activities by day and time slot, type and audience.

Filter

Small Lights, Big Ideas: Simple Projection Mapping for Education (1)

Machiel Veltkamp

Friday 10 October, 10am-12pm | IN-DEPTH WORKSHOP

Secondary School | Max 25 participants, booking required | Future Inventors

The workshop explores video mapping and a playful approach to introduce secondary school students to digital creativity. A hands-on experience that uses storytelling and simple tools to transform complex concepts into opportunities for discovery, stimulating curiosity and enabling participants to experiment with light, space, and digital art.

Machiel Veltkamp's workshop is made possible by the support of the Embassy and Consulate General of the Kingdom of the Netherlands.

How Chaos Sounds – a WorkShow (2)

Maurizio Capone & Bungt-Bangt

Friday 10 October, 10am-12pm | IN-DEPTH WORKSHOP

Primary school, secondary school and adults | Max 35 participants, booking required | Sala Cenacolo

An event halfway between a performance and a workshop with Maurizio Capone, artist and inventor of sound objects made from upcycled materials. In a dialogue between live music and the environment, participants will explore how to transform everyday objects into musical instruments, opening up new perspectives on creativity, ecology and active citizenship.

From Tabletop to the screen: Breathing Life into Objects with Scratch (3)

Giuseppe Menegoz & Virgilio Pierini

Friday 10 October, 10am-12pm | IN-DEPTH WORKSHOP

Secondary school and adults | Max 24 participants, booking required | iLAB Leonardo

A workshop to transform everyday objects into magical controllers! Thanks to a Scratch extension and the use of a simple webcam, everyday objects become tools for interacting with the computer to control animations, games and multimedia effects on the screen. Each participant can bring interactive stories and creative physical interfaces to life, exploring a learning approach that combines programming, manual skills and imagination.

How to run musical workshops: A practical guide (4)

Playtronica & Sasha Pas

Friday 10 October, 10am-12pm | IN-DEPTH WORKSHOP

Primary school, secondary school and adults | Max 25 participants, booking required | iLAB Mathematics

A workshop designed for those who wish to integrate interactive musical experiences into their teaching. An opportunity to experiment with accessible and playful approaches to music, exploring tools for integrating analogue and digital and designing engaging and inclusive workshops, installations and performances.

Behind the curtain: shadow workshop (5)

Meg Amsden

Friday 10 October, 10am-12pm | IN-DEPTH WORKSHOP

Primary school, secondary school and adults | Max 12 participants, booking required | iLAB Biotechnology

Un workshop che usa il teatro delle ombre per esplorare gli elementi del lavoro in gruppo: gerarchie, cooperazione, collaborazione, ecc. Il laboratorio consente di sperimentare i modi per creare una storia, dalla progettazione dello story-boarding, alla realizzazione di marionette e scenografie e ogni aspetto della messa in scena. Consideriamo anche il contesto in cui lo spettacolo viene creato e usiamolo per raccontare temi personali e il vissuto di chi partecipa. Un'occasione per sperimentare e valorizzare la creatività collettiva come risorsa educativa.

Playing with the Sun: Solar Mobiles (6)

Amos Blanton

Friday 10th 10am-12pm | IN-DEPTH WORKSHOP

primary and secondary schools and adults | Max 25 participants, booking required | iLAB Genetics

Playing with the Sun invites people of all ages to engage with creative learning activites that invite them to build an intuitive understanding of how sustainable energy works. In this workshop we'll make solar powered mobiles and explore their relationship with artificial light and the sun. See more at PlayingwiththeSun.org

Tinkering for 3-5 year olds (7)

Ryan Jenkins

Friday 10th, 10am-12pm | IN-DEPTH WORKSHOP

Kindergarten school | Max 25 participants, booking required | Atelier Playlab

Tinkering designed for children aged 3 to 5. In groups, participants will experiment how to design age-appropriate tools and materials to create extraordinary opportunities for creative learning. They will enjoy building and testing roly-poly rollers and pom-pom factories, and reflect on how these experiences encourage very young children to explore art, science and technology in a playful and open way. These activities were co-developed by artist and exhibition curator Nicole Catrett and tested in kindergarten schools in California (USA) and informal educational settings in Freiburg (Germany).

Four seasons pizza and sustainability (8, 20 e 21)

Enrico Miotto
Friday 10 October, 10am-12pm and 3-5pm and Saturday 11 October 10am-12pm | IN-DEPTH WORKSHOP
Secondary school and adults | Max 25 participants, booking required | iLAB Sustainability
When we choose to eat a delicious, crispy pizza, we don't ask ourselves whether it is sustainable. By using a very common situation like this, participants will engage in a different way of looking at sustainability. Through a series of playful activities, they will experience the vast network of interconnected elements that must be considered when assessing the sustainability of a product. A workshop dedicated to systemic thinking as a tool for building competences, critical thinking and the ability to make informed choices.

Shadow Remix (9, 19 e 22)

Mike Petrich, Karen Wilkinson, Sebastian Martin
Friday 10 October, 10am-12pm and 3pm-5pm and Saturday 11 October, 10am-12pm | IN-DEPTH WORKSHOP
Kindergarten, primary, secondary and adult education | Maximum 50 participants booking required
Friday in Tinkering Zone, Saturday in Sala Cenacolo
A large creative workshop to experiment with Tinkering with the founders of Tinkering Studio in San Francisco. Participants will engage with the surprising shapes of shadows created by everyday objects and make original drawings guided by their imagination and inner vision.

The Dance of the Universe: when contemporary art meets science

Education Department, Castello di Rivoli Museum of Contemporary Art
Friday 10 October, 10am-12pm | DROP-IN ACTIVITY
Kindergarten, primary, secondary and adult education | No booking required | Sala Colonne
A meeting between art and science for an interdisciplinary cultural project. Starting from the work and spatial environment of Lucio Fontana, one of the greatest artists of the 20th century, we go beyond the physical limits of art, towards infinity and the depths of the cosmos in an immersive and all-encompassing dimension. We will create a collective installation, experiment with a new way of travelling and a different perception of space and light to bring alternative worlds together and experience infinite perceptions. The activity will conclude with a parade involving our whole being, transporting us to an imaginary world where 'the universe dances'.

Creativity in the vision of researchers, inventors and designers

Friday 10 October, 10am | IGNITE TALK
For everyone | No booking required | Auditorium
Researchers, inventors and designers experiencing creativity in all its rich facets present a new and powerful vision and many unusual and engaging ways to learn about and love STEM.

FIVE DANGEROUS THINGS EVERY SCHOOL SHOULD MEASURE - **Gever Tulley**, writer, teacher, revolutionary educator & **Luigi Anzivino**, senior educator at the Exploratorium
DEAD OR BAD: EXPLORING CREATIVE ENGINEERING - **Tim Hunkin**, engineer and inventor
GREEN (AND A LITTLE BIT PURPLE): A CREATIVE VISION FOR STEM - **Heather King**, professor of Science Education at King's College London
LET IT BE CREATED! AESTHETIC, AESTHETICS AND THE PROCESS OF ARTIFICATION AS A DISTINCIVE HUMAN ACTION - **Ugo Morelli**, professor of Cognitive Science at Federico II University of Naples

Creative learning for STEM: a new frontier

Friday 10 October at 12 noon | PLENARY SESSION
For everyone | Auditorium
The Creative Learning Festival aims to experiment with and discuss creative learning in STEM and STEAM, a theme gaining increasing attention internationally. We dedicate a plenary session to talking about it with the partners who conceived and organised the 2-day programme, and about how it fits into the Italian and international educational context.
Translation from English to Italian and vice versa will be provided.

COMO·Education: telling stories with sound and movement (10)

IRCAM
Friday 10 October, 3-5pm | IN-DEPTH WORKSHOP
Preschool and primary school | Max 25 participants, booking required | Playlab
What if children could become protagonists of stories with their bodies? The workshop invites participants to tell and experience stories in a new way through the movements of their bodies thanks to an app created by the Interaction-Sound-Music-Movement team at IRCAM-STMS and the MotionLab at CRI in Paris, which transforms gestures and movements into sounds. A collective, fun and engaging experience based on listening, imagination and body awareness that puts the body back at the centre of the learning experience as a paradigm for early childhood learning.

The Poetry of Motion: Gesture, Mark and Flow (11)

Segni Mossi

Friday 10 October, 3-5pm | IN-DEPTH WORKSHOP

Preschool and primary school | Max 25 participants, booking required | Atelier Playlab

A workshop that combines drawing and body movement: gestures, signs and movements starting from everyday gestures are transformed into marks traced on panels. The marks inspire movements of the whole body, which in turn generate new signs. A bouncing game to reflect on similarities, differences and possibilities for mutual transformation.

Universe in a box: Poetic Creations and Interactive Narratives with OctoStudio (12)

UdiGitalEdu

Friday 10 October, 3-5 pm | IN-DEPTH WORKSHOP

Primary school, secondary school and adults | Max 25 participants, booking required | Future Inventors

The workshop invites participants to explore the expressive potential of combining practical object construction and creative coding. Working in small groups, participants will build their own 'Universe in a box', poetic and metaphorical, integrating physical elements with the OctoStudio app. Each box will then be transformed into a small stage on which to tell their story. The activity encourages reflection on how technology, imagination and emotion can coexist in meaningful ways, opening to new forms of creative expression.

Expressive coding (13)

Roberto Agostini & Leo Izzo

Friday 10 October, 3-5pm | IN-DEPTH WORKSHOP

Secondary School | Max 20 participants, booking required | Sala Cenacolo

Live coding is a creative and performative practice in which the artist writes and modifies code in real time to generate music or images. In this workshop, participants will experience the expressive potential of this technique in education, through two experiences tested with secondary school students using the languages Sonic Pi and Strudel.cc. An opportunity to discover how coding can become a tool to stimulate creativity, listening and computational thinking.

Paper and technology: experimental self-production (14)

Libri Finti Clandestini

Friday 10 October, 3-5pm | IN-DEPTH WORKSHOP

Primary school, secondary school and adults | Max 20 participants, booking required | iLAB Leonardo

A workshop dedicated to the creation of an experimental booklet that combines paper materials and technological tools: a self-produced fanzine with a series of patterns acquired using portable scanners, digitally reworked and bound by hand.

Homemade speakers... made from crisp packets (15)

Tim Hunkin

Friday 10 October, 3-5pm | IN-DEPTH WORKSHOP

Secondary School | Max 24 participants, booking required | iLAB Mathematics

Nowadays, we take electricity for granted and forget how extraordinary and magical it really is. This workshop on speakers made from a crisp packet is a small example of this: even the simplest combination of magnets and wires can capture and reproduce sounds!

We could ask the tree (16)

Fondazione Reggio Children – Centro Loris Malaguzzi ETS

Friday 10 October, 3-5pm | IN-DEPTH WORKSHOP

Kindergarten and primary school | Max 25 participants, booking required | iLAB Genetics

A workshop for reading, interpreting and reinventing the world around us, searching for signs, symbols and hidden messages in everyday places, including nature. What is a code? And how many ways do we have to communicate without words? Starting from these questions, we explore different forms of expression to give shape to new narratives, imagine alternative ways of observing and communicating with our surroundings.

Flower Dissection (17)

Sofia Florio

Friday 10 October, 3-5 p.m. | IN-DEPTH WORKSHOP

primary and secondary school | Max 25 participants, booking required | iLAB Biotechnology

Exploring the world of plants in the classroom or all around us: lilies, roses, daisies, tulips. Using scissors, tweezers and a microscope, participants dissect flowers to discover their shapes and colours, compare them with each other, observe the differences, and learn about the organisation and function of their different parts. They engage in a slow process of taking them apart and creatively reassembling the various components. An active approach to science through different means such as drawing, construction and visual composition.

Wandering through OctoStudio (18)

Carmelo Presicce & Carolina Rodeghiero
Friday 10 October 3-5pm | IN-DEPTH WORKSHOP
Primary and secondary school | Max 25 participants, booking required | iLAB Chemistry
OctoStudio is a free app developed by the Lifelong Kindergarten Group at MIT Media Lab that invites children to create stories, animations and small video games directly from their smartphones. They can take photos, record sounds and bring characters and objects to life using simple and intuitive code blocks, then share their creations with friends and family. During the workshop, participants experiment, create and discover the educational and creative possibilities of OctoStudio, engaging with ideas and resources for parents and educators.

Música Dibujada: A collective drawing and music experience

Marcela Rapallo
Friday 10 October, 3-5pm and Saturday 11 October, 10am-12pm | DROP-IN ACTIVITY
Kindergarten, primary, secondary and adult education | No booking required
Friday in Sala Colonne, Saturday in Tinkering Zone
A digital drawing workshop and a collective experience. Participants will draw and animate their creations by projecting them onto columns, windows and walls. They will explore - through Trazos Club - how digital technologies can help transform freehand drawing into a collective performance based on a playful and interdisciplinary approach. Improvisations take shape as lines are projected and animated in real time, in dialogue with the language of music.
Live set music with Playtronica Orbita by Sasha Pas and Marvellous Catz.

Finding creativity inside learning

Friday 10 October, 3-4:30 pm | IGNITE TALK
For everyone | no booking required | Auditorium
Educators and researchers discuss creativity as a teaching and learning tool and share experiences, approaches and innovative tools for experimenting with STEM.

METAPHORS AND CREATIVITY IN LEARNING - **Alice Giuliani**, researcher at the University of Modena and Reggio Emilia
LOCALIZING THE TINKERING STUDIO'S LEARNING DIMENSIONS IN THE LIBRARY - **Amos Blanton**, educator, researcher and designer, Casper Munkgaard, Andrea Broe Haisley, Dokk1 Library in Aarhus Denmark
IN THE NAME OF ART - **Paola Zanini**, head of Education, Castello di Rivoli Museum of Contemporary Art
IMAGINATION IS OUR SUPERPOWER - **Penny Hay**, Professor of Imagination at Bath Spa University UK

Live Visual Coding with Hydra Video Synth (23)

Olivia Jack
Saturday 11 October, 10am-12pm | IN-DEPTH WORKSHOP
Secondary school and adults | Max 25 25 participants, booking required | Future Inventors
A workshop to learn about visual live coding with Hydra, an open-source web-based video synthesiser. Participants will create generative graphics and glitch effects in real time using basic JavaScript elements, while exploring the potential of live coding as a tool for collaborative and creative learning. No previous experience required: just curiosity and a desire to experiment!

Play and the art of world-making (24)

Ryan Jenkins
Saturday 11 October, 10am-12pm | IN-DEPTH WORKSHOP
Primary and secondary school | Max 25 participants, booking required | iLAB Leonardo
Starting from Edith Ackermann's quote, "Play is the art of world-making," we explore a classic book by Gianni Rodari through a practical tinkering activity. The book "I Viaggi di Giovannino Perdigiorno" (The Travels of Giovannino Perdigiorno) becomes a source of inspiration for manual exploration, building mechanisms with cardboard, string and creative materials. Participants work in pairs to create imaginative prototypes to reflect on how stories, imaginary worlds and playful contexts contribute to rich learning experiences.

Learning like a forest (25)

Andrew Amondson & Penny Hay
Saturday 11 October, 10am-12pm | IN-DEPTH WORKSHOP
Primary and secondary school | Max 25 participants, booking required | Playlab
Look into learning through nature and imagination. Based on the Forest of Imagination project in the UK, the workshop invites participants to engage with two immersive installations as stimuli to experiment with innovative learning approaches that focus on creativity, well-being and active participation. An opportunity to reflect together on how to integrate art and nature into everyday educational practice.

Paper Stories: Art and Science through the Eyes of Bruno Munari® (26)

Beba Restelli & Annalisa Masala, Cristina Bartolozzo, Roberta Isola
Saturday 11 October, 10am-12pm | IN-DEPTH WORKSHOP
Primary school, secondary school and adults | Max 25 participants, booking required | iLAB Biotechnology
What is paper? Is it just a writing medium or something more? Bruno Munari argued that paper "is the skin of a variable surface". Through the wide variety of papers, participants will use their senses and emotions, to engage with the structural and organic characteristics of paper. A creative design process, leading to the discovery that paper is not just a support medium but a prime one full of harmony and beauty.

How does water find its way? (27)

Bestiario Immaginario con Damatra Onlus
Saturday 11 October, 10am-12pm | IN-DEPTH WORKSHOP
Primary School | Max 25 participants, booking required | Atelier Playlab
"Children and scientists have at least two things in common. Both possess the gift of wonder at seemingly mundane natural phenomena [...] And both respond to wonder by asking questions" (Piero Bianucci). A perceptual workshop to explore water, observe with wonder and patience, and cultivate the pleasure of asking questions as the first seed capable of generating knowledge. Participants will experiment with water that slides, digs and leaves a mark as it passes creating a book along a river that each participant can continue to write.

Touching the Transcendentals: Curve Constructions and mathematic inventions (28)

Pietro Milici
Saturday 11 October, 10am-12pm | IN-DEPTH WORKSHOP
Primary school, secondary school and adults | Max 25 participants, booking required | iLAB Mathematics
Today, drawing mathematical curves is very easy: all you need is a computer and you can create any shape. But before the digital age, how did people represent abstract curves, such as the exponential or the tractor curve, on paper? In this fascinating workshop, we will find out exactly that! Participants will discover the tools and techniques used by mathematicians and inventors to draw these shapes by hand, try them out with practical materials and discover a whole world of shapes and relationships.

The Selector. Improvising and building knowledge (29)

Pirelli Hangar Bicocca and The Cool Couple (Niccolò Benetton e Simone Santilli)
Saturday 11 October, 10am-12pm | IN-DEPTH WORKSHOP
Secondary school and adults | Max 25 participants, booking required | iLAB Genetics
The workshop explores the potential of chance through The Selector, a playful system designed by The Cool Couple that helps us reflect on our role as educators. Faced with thousands of slides prepared over years of teaching, the artists decide to turn themselves into DJs of their own teaching content to devise a system that forces improvisation and helps to identify novel connections between a range of teaching materials, activating new creative processes. The workshop takes inspiration from two tools dear to many artists: chance and games. Marcel Duchamp was a great chess player and often conceived his works from the infinite movements of the pawns. The well-known composer Brian Eno, in order to overcome creative blocks, had devised a pack of cards with instructions that, drawn at random, he would follow slavishly. Similarly, teaching itself can be often interrupted or altered by an unexpected question or a spontaneous discussion on topics seemingly not connected to the curriculum, but it is those opportunities that should be exploited to open up a new, creative learning path.

We shall build together: the 100-storey house! (30)

Toshio Iwai
Saturday 11 October, 10am-12pm | IN-DEPTH WORKSHOP
Primary School | Max 50 participants, booking required | Sala Cenacolo
Together with Toshio Iwai, author of the popular illustrated book 'The 100-Storey House', participants will build their own house and stack it with those of the other participants to create a house taller than 100 storeys. Let's imagine a vertical world made up of animals, fantastic tools and planets that coexist in respect and freedom.

Practising creativity in different learning contexts

Saturday 11 October, 10am | IGNITE TALKS
For everyone | No booking required | Auditorium
Professionals working in different learning contexts, from schools to museums to libraries, share their experiences and approaches to learning that value collective creativity and the richness of each individual.

TINKERING TOGETHER WITH CREATIVE LEARNING - **Karen Wilkinson**, designer, curator, author of the book 'The Art of Tinkering'
A SCHOOL WHICH SPARKS - **Teresa Grange**, professor of experimental pedagogy at the University of Valle d'Aosta
SELF-EXPRESSION IN CODE - **Leonardo Izzo**, secondary school teacher and musician & **Roberto Agostini**, Servizio Marconi TSI USR-ER
TINKERING TOWARDS COLLECTIVE CREATIVITY: GROUPS THINKING TOGETHER - **Amos Blanton**, educator, researcher and designer

→

Round table: Creativity comes from afar: Malaguzzi, Montessori, Munari, Rodari and their vision

Saturday 11 October at 12 noon Auditorium

Creativity is not a new concept, nor is the learning that values agency. These are concepts we find in the philosophy of internationally renowned and influential pedagogists such as Loris Malaguzzi, Maria Montessori, Bruno Munari and Gianni Rodari. Together with those who know them well, we will investigate how these ideas have been interpreted and valued in their thinking and what they mean today.

Claudia Giudici, Coordinator, Research area, Reggio Children
Andrea Lupi, Director of the Montessori Italia Foundation, on Maria Montessori
Beba Restelli, student and collaborator of Bruno Munari
Pino Boero, Vice President of the Parco della Fantasia in Omegna, for Gianni Rodari

Discussion facilitated by **Maria Xanthoudaki**, Director of Education, National MUseum of Science and Technology Leonardo da Vinci

1 / 13

Types of experiences

IN-DEPTH WORKSHOPS

UPON RESERVATION AND SUBJECT TO AVAILABILITY

Experiment and experience creative learning through activities, tools and approaches aiming to analyse knowledge and skills, transferability and sustainability in formal and informal education practice.

Will be carried out with informal language support.

IGNITE TALKS

NO RESERVATION NEEDED

How do we define creativity and what does creative learning mean? What is the added value for STEM education? Educators, researchers, artists and inventors contribute their perspective and experience in short dynamic inspirational talks.

A translation service from English into Italian and vice versa will be provided.

DROP-IN ACTIVITIES

NO RESERVATION NEEDED

Experiment with new tools and participate to build collective installations during activities with no time or duration limit.

Will be carried out with informal language support.

Plenary meetings

NO RESERVATION NEEDED

Opening event to contextualise the theme of the festival and a final round table to reflect on creativity, from its origins to innovation today.

A translation service from English into Italian and vice versa will be provided.

In partnership with

BOLTON
FOR EDUCATION
FOUNDATION

Co-funded by the Erasmus+ Programme of the European Union (Action K121 - REF 2025-1-IT02-KA121-ADU-000318410).

Co-funded by
the European Union

Keep in touch:

Subscribe to the newsletter

MUSEO
NAZIONALE
SCIENZA
E TECNOLOGIA
LEONARDO
DA VINCI

Museo Nazionale Scienza e Tecnologia Leonardo da Vinci

Via San Vittore 21, 20123 Milano - Italy
Tel. +39 02 48 555 1

© Museo Nazionale Scienza e Tecnologia Leonardo da Vinci, 2025