ECSTEM 2025 Workshop Schedule

To support your conference experience, workshop sessions have been categorized by content area (Science, Technology, Engineering and Mathematics) and target audience. Conference attendees may follow one content area to focus on a particular subject matter or may pick and choose among topics to sample the full complement of conference offerings. The listing of content offerings and their abbreviations can be seen below.

CONTENT	TARGET AUDIENCE
S – Science	l – Infants
T – Technology	T – Toddlers
E – Engineering	P – Preschool
M – Mathematics	TK – Transitional Kindergarten
	K – Kindergarten
	FG – First Grade
	SG – Second Grade
	A – Administration

Friday, February 21st, 2025

Keynote Speaker: 8:30am -10:00am

David Sobel

Will My Child Be Ready for Kindergarten or First Grade: A Review of Ten Years of Research on Nature-based Early Childhood Programs

In conjunction with researchers in Michigan and Minnesota, David has collaborated on research comparing the impacts on children in nature-based early childhood programs vs. children in traditional high quality early childhood programs. Research has focused on early literacy development, numeracy development, STEM learning, motivation, resilience, executive functioning and more. It has been conducted in private nature preschools, publicly funded Headstart programs, university lab schools and public preschool programs. In the spirit of "slow and steady wins the race," an interesting story has emerged about the benefits of nature-based programs. Spoiler Alert: The answer to the question, "Will My Child Be Ready?" is: a definitive "Yes!"

David Sobel is a Professor Emeritus in the Education Department at Antioch University New England in Keene, NH and he consults and speaks widely on child development and place-based education with schools, environmental organizations and the National Park Service. He has authored ten books and more than 90 articles focused on children and nature for educators, parents, environmentalists and school administrators in the last 30 years.

Session I: 10:30am - 12:00pm

"The Dynamics of Play: A Physics Perspective"

We will explore how children inherently engage with fundamental concepts of physics through their play and examine the critical role that educators play in nurturing and extending this natural curiosity. Through play, children instinctively encounter principles such as motion, force, balance, and energy. Educators, by recognizing these explorations, can provide intentional guidance and create learning environments that deepen children's understanding of these concepts.

Presenter: Sam Foreman, MA & Luis Salgado, MA

Growing Place
Target Audience: I T
Content: S E M

Location: Hilton Santa Monica, Malibu 1

"In Search of the Hidden Value: Playful Math Games"

Do you want to expand the variety of math games and experiences for small groups of children to meet the needs of larger groups? The presentation will feature a variety of creative and interactive games covering geometry, logic, measurement, grouping, order, series, seriation, classifying, number and operations. Hands-on and interactive experiences will be provided to tinker with some of these games and innovative ideas.

Presenter: Christine Richard, MA & David Moreno, MA

Growing Place

Target Audience: P TK K

Content: E M

Location: Hilton Santa Monica, Malibu 2

"G is for Garden"

Dig into the exciting world of plant structures. Use hand lenses to explore plant parts up close and get your hands dirty with fruit dissections to reveal hidden seeds and structures. Perfect for educators seeking fun, inquiry-based science activities.

Presenter: Kristin Brisbois, PhD & Sarah Thomas, MSW, MPA
The Huntington Library, Art Museum, and Botanical Gardens

Target Audience: P TK K FG SG

Content: S

Location: Growing Place, SMC Classroom 208

"What good is a stick? How Natural Loose Parts Sparks Creativity and Imagination in the Outdoor Classroom"

Natural loose parts are the bedrock of opportunities for creativity and imagination. What materials can educators add that will take children's imagination, creativity and problem-solving to the next level?

Presenter: Ellen Veselack, BA

Child Educational Center Target Audience: I T P TK

Content: STEM

"Partnering with Children to Co-Develop a Curriculum that Embraces STEM"

Young children offer us endless opportunities for enhancing our STEM curriculum, if we are willing to listen! Through a process of observation and documentation, educators can extend children's innate capabilities.

Presenter: Maureen Condon, MA & Alex Morgan, MA

Boulder Journey School
Target Audience: ITPTKKA

Content: STEM

Location: Hilton Santa Monica, Pacific 3

"Is 'Father Parenting' the Key to STEM Success?"

Dads parent differently. Research shows how they drive the SEL needed for success in STEM ... and everywhere! "Father Parenting" can be done by anyone - how do we support it?

Presenter: Ben Swett, MA

Early Engagement
Target Audience: ITP
Content: STEM

Location: Hilton Santa Monica, Ocean Park South

"Celebrating Interconnectivity Through the Eyes of Children"

A long term investigation into how reciprocal relationships reflect the interdependence we share within the web of life.

Presenter: Cindy Nelson, AA & Octavia Leclerc-Jones

The New School West
Target Audience: T P TK K A

Content: S T E M

Location: Growing Place, SMC Classroom 209

"Nature and Nurture"

This workshop will enable us to understand the different abilities of the child. We will do a thorough scientific analysis of the concept of Nature vs Nurture and will explore the nurture of nature.

Presenter: Raquel Felici, MSc Hebrew Academy Miami Target Audience: P TK K FG

Content: STEM

Location: Hilton Santa Monica, Ocean Park North

"China ECSTEM Showcase Part I"

Building Learning Experiences for Young Children – STEM activities in different age groups at Soong Ching Ling Kindergarten. Soong Ching Ling Kindergarten is one of the top international kindergartens in China offers a blend of Eastern and Western teaching practice.

Exploration of Bee-Bot PBL Practice – by Hua Guo Tian Yu Education Technology Presenter: Teachers of Soong Ching Ling Kindergarten, & Heidi Luo, MA Hua Guo Tian Yu Education Technology & Soong Ching Ling Kindergarten

Target Audience: TPTKKFG

Content: S T E M

Friday Lunch Site Tour: 12:00pm - 1:30pm

Two-day and Friday registrants can tour **Growing Place**, **Lab School** at this time only. The tour site is located across the street from the Hilton, Santa Monica and will be self-guided.

GROWING PLACE, LAB SCHOOL

https://www.growingplace.org/lab-school

1802 4th St. Santa Monica, CA 90401

The Santa Monica Early Childhood Lab School opened in September 2021 and is Growing Place's newest campus through collaboration with Santa Monica College and the City of Santa Monica. The Lab School is a demonstration site for Santa Monica College Early Childhood Education students to observe our established teaching and learning practices.



Session II: 1:30pm - 3:00pm

"Living Things: Variation"

Explore how to create a nature based curriculum that is viewed through the lens of STEM and applies the Waldorf principles of focusing on rhythms and seasonal observations.

Presenter: Richard Ponce, BA
The Children's Center at Caltech
Target Audience: T P TK K

Content: STEM

Location: Hilton Santa Monica, Malibu 1

"What is the Importance of Object Play and Rough and Tumble Play in Early Development?"

As children, they are born into a three-dimensional world and spend their early years observing and moving in order to better understand themselves in relation to others and their environment. The purpose of this session is to review video together in order to see how children build relationships through movement and physical contact.

Presenter: Julia Vazquez, BA & Christine Richard, MA

Growing Place
Target Audience: I T P

Content: S M

Location: Hilton Santa Monica, Malibu 2

"Children's Books that Celebrate the Beauty and Power of Our Natural World"

Come and explore the beauty and power of nature presented through illustrations, and photography in children's books. Experience vivid illustrations, photography and digital media as a means to learn about and celebrate the natural world. As you flip the pages of the books we will discuss and contemplate how we can build on the concepts presented with follow-up activities and innovative materials. We will discover the use of specimens, and imagery to bring the real world into our classroom. Reflect on how you can use children's books to support the understanding of sustainability and stewardship.

Presenter: Jennifer Montgomery, EdD

College of Southern Nevada Target Audience: P TK K

Content: S

"Kindergarten Readiness Through the Arts"

STEM through the Arts? Atelieristas share methods and materials for classroom curriculum to support these foundational skills, nurturing creative ways of knowing while building fundamental tools for the future.

Presenter: Anna Forward, MA & Polly Hall, MA

Growing Place

Target Audience: ITPTKK

Content: STEM

Location: Hilton Santa Monica, Pacific 3

"Woodworking with Children Engineering a Strong Image of the Child"

This workshop aims to support participants to explore the various ways in which Woodworking can be integrated into our daily curriculum. Wood is a gift from the Earth that encourages us to slow down and utilize different tools to engineer our thinking.

Presenter: Amy Bice, AA & Susan Kim, BA

The New School West

Target Audience: T P TK K FG

Content: STEM

Location: Growing Place, SMC Classroom 209

"Training Educators to Design STEM Environments"

Join this reflective journey of engaging with STEM provocations and discover a replicable framework that ignites curiosity, inspiration, and fortitude in both entry-level and senior educators to design STEM curriculum.

Presenter: Beth Nakatsui, MA Magnolia Community Preschool

Target Audience: P A Content: S T E M

Location: Growing Place, SMC Classroom 208

"Storytelling as an Interactive Teaching Modality: How to use Felts, Puppets and Props to Build STEM Vocabulary and Enhance Literacy Through Multiple Disciplines"

Fun, interactive and STEMtastic! Unlock dynamic storytelling skills with the practical use of felts, puppets and props! Help build language skills so learners can express their STEM ideas effectively.

Presenter: Sundrina Cottrell, AA
Artfelt Puppets, Pieces & Props
Target Audience: I T P TK K FG SG A

Content: STEM

Location: Hilton Santa Monica, Ocean Park North

"The Art of Asking Open-Ended Questions"

Asking open-ended questions is one of the best ways to promote STEM learning without telling children what to do. Learn how to ask questions that promote development specifically in the areas of science and math, especially during observations for assessment.

Presenter: Angela Russ-Ayon, BS

Russ InVision

Target Audience: P TK K

Content: S M

Location: Hilton Santa Monica, Ocean Park South

"China ECSTEM Showcase Part II"

"Animal Homes" STEM Exploration Journey by Shanghai Institute of Early Childhood Education at Shanghai Normal University

"In the Chinese- English Bilingual Curriculum system how to combine STEM with IEYC and carry out teaching activities" by BeeMee Forest Academy

Examples: Roof Engineering Design; Simulated Rocket Launch and Pulsation.

Presenter: Heidi Luo, MA, Ms. Liu Ke, & Ms. Xiang Shanshan

Hua Guo Tian Yu Education Technology & BeeMee Forest Kindergarten

Target Audience: TPTKKFG

Content: STEM

Location: Hilton Santa Monica, Pacific 2

Friday Afternoon Tours: 3:00pm - 5:00pm

Two-day and Friday registrants can tour **Growing Place**, **Ocean Park** and **Palisades Preschool** at this time only. The tours will be self-guided, transportation is not provided, please utilize street parking.

GROWING PLACE, OCEAN PARK CAMPUS

https://www.growingplace.org/ocean-park

1 mile from Hilton Santa Monica

401 Ashland Avenue, Santa Monica, CA 90405

Growing Place was founded in 1985 with the Ocean Park Campus. Situated on an acre, Growing Place re-imagined and revived an old elementary campus to its full potential for our preschoolers. Six classrooms, an atelier, and a shared outdoor play space filled with nature contribute to our everyday experiences.







PALISADES PRESCHOOL

https://www.palisadespreschool.org/

1.4 miles from Hilton Santa Monica

958 Lincoln Blvd, Santa Monica, CA 90403

Palisades Preschool is a Reggio-inspired school community serving children, ages 24 months to 6 years of age, and their families. Their mission is to serve the community by offering a preschool experience for children and adults that celebrates diversity, creativity, kindness, and wonder. These values are embedded within a rich, child-centered curriculum that provides individuals and groups with opportunities to investigate and to express themselves.







Saturday, February 22nd, 2025

Keynote Speaker: 8:30am - 10:00am

Aaron Ames

Lessons Learned from Teaching Robots to Walk

We are at a critical juncture in robot technology—children today have the possibility of growing up in a world where robots are part of their everyday lives. This presentation will explore the duality of this potential: how we can we teach robots to do useful things, and how robots can be leveraged in positive ways. I will focus on robotic locomotion as a concrete instantiation of this duality. In particular, I will describe the process of making robots walk in human-like ways, and how we can take inspiration from children learning to walk. Conversely, I will demonstrate how the ability to make robots walk in natural and efficient ways leads to robotic assistive devices that can restore mobility. From this, we explore the broader question: how can robots be used beneficially? I will answer this question, in part, through examples of robot technology on the horizon, and what this might mean for education.

Session I: 10:30 am - 12:00 pm

"Supporting the Development of Executive Function through Outdoor Games"

Research over the past decade suggests that it's more important to focus on the development of executive functions in preschool children than to focus on early literacy and math skills. But what is "executive function (EF)" anyway, how do you measure it, and what can you do to develop it? After a brief review of the research on EF in preschool children, we'll engage in an array of outdoor games (some traditional, some new), and we'll analyze how different components of the games develop different aspects of EF. Be ready to play Simon Says, Red Light/Green Light, a variation of Head & Shoulders, Knees & Toes and other games used successfully in programs around the country.

Presenter: David Sobel

Professor Emeritus and Author, Antioch University New England, Keene, NH

Target Audience: ITPTKKFGSG

Content: STEM

Location: Hilton Santa Monica, Pacific 3 (this is the meeting location, limited capacity)

*This workshop will take place outdoors and will require a short walk & playing!

"Molding Minds: The Intersection of STEM Education and Clay"

Natural clay is a versatile medium. Shaping and molding clay invites children to consider fundamental concepts in engineering and geometry such as scale, dimensions, and spatial organization. Tactile experience with clay is a tangible way to find the intersection between creativity and problem-solving. This session includes documentation regarding civil engineering processes for motor planning through the use of full-body clay, to the creation of cakes for a community party planned by children.

Presenter: Julie Martin, BS & Teri Rawson, AA

Growing Place Target Audience: TP

Content: S E

Location: Hilton Santa Monica, Malibu 2

"Integrating Music as a Cross-Curricular Collaboration in the Classroom"

With pedagogical aspects of music educators as Carl Orff, Zoltán Kodály, Emile Jaques-Dalcroze and early childhood education advocate Friedrich Froebel, we will learn how music & movement curriculum can successfully collaborate with classroom curriculum, finding common threads such as cognitive, social-emotional, language acquisition, and spatial awareness to name a few.

Presenter: Dayita Datta, MA
The Children's Center at Caltech
Target Audience: ITPTK KFG SG A

Content: S T E M

Location: Hilton Santa Monica, Malibu 1

"Reaching for the Sky: Taking Toddlers Outside"

Being outdoors is magic in expanding toddlers' play and calming everyone's nervous system, including adults'. Learning outdoors binds children to their true nature. Come see how it works in RIE-inspired programs.

Presenter: Ruth Anne Hammond, MA Educaring® Consultant, RIE Mentor

Target Audience: I T Content: S E M

"Science After Preschool"

After students leave preschool, what happens in Science class? Well, as it turns out, many of the ideas and concepts that children learn at 5 years old carry with them through High School. That's right, HIGH SCHOOL! Let's take a peek at what Science class looks like for Kindergarten through 5th grade at an independent school in Pasadena CA. I will discuss topics, connections, materials, schedules, journaling, and hands-on experiences.

Presenter: Monica Dolan, MA

Polytechnic School

Target Audience: TK K FG SG

Content: STEM

Location: Hilton Santa Monica, Pacific 1

"Culinary Curiosities from Our Planet to Our Plate"

Through a culinary curriculum infused with connection, creation, and conservation, children engage with food to deepen their relationship with community and the natural world, expanding both palettes and perspectives.

Presenter: Madeline Friess, BA Evergreen Community School

Target Audience: P

Content: S

Location: Hilton Santa Monica, Ocean Park South

"Across the Pond Dipping! Nature Connection in a Modern World (A UK case study)"

This presentation will take you through a seasonal, project approach curriculum where children acquire knowledge and develop understanding of the natural world. Using wild spaces throughout the year, children interact with nature and learn its importance in our lives and for our future.

Presenter: Mandy Richardson, MA & Tom Richardson, BA PGDip

Naturally Learning Ltd
Target Audience: I T P TK K

Content: STEM

Location: Hilton Santa Monica, Ocean Park North

"Outside Your Door: Exploring the Arts in Nature"

Expand opportunities for STEM learning by using arts strategies to investigate the world around you. Explore earth, life, and physical sciences through drama, music, and puppetry.

Presenter: Penny Russell, BA

Wolf Trap Institute for Early Learning Through the Arts

Target Audience: ITPTKK

Content: S

Location: Growing Place, SMC Classroom 209

"Fostering Ecological Mindfulness & Sustainability in ECE"

This hands-on workshop highlights some foundational arts & nature-based learning concepts. Participants will work with recycled and natural materials creating nature journals and discovering the connections to ESTEM.

Presenter: Sylvette Frazier, MA Ed.
Connecting Children to Art in Nature
Target Audience: P TK K FG SG

Content: S T

Location: Growing Place, SMC Classroom 208

Micro-Session II: 1:15pm - 2:00pm

"Ramps and Pathways"

Children's interests and desires to figure out how the physical world works makes ramps and pathways exploration ideal for early childhood settings. Through building systems to move objects, children engage in open-ended play experiences that encourage creativity, problem solving, and integrates science, technology, engineering, and math principles. Learn how versatile these materials can be and how you can create opportunities for experimentation and discovery while learning through physics.

Presenter: Susan Wood, MA & Melissa Samples, MA

The Children's Center at Caltech Target Audience: ITPTK

Content: S T E M

Location: Hilton Santa Monica, Malibu 1

"Supporting Young Children Through Crisis"

In the wake of the recent California fires, early childhood educators face the critical task of supporting children who may be experiencing stress, fear, or grief. This workshop equips educators with practical tools and compassionate strategies to engage in age-appropriate, meaningful conversations with children in crisis.

Presenter: TBD

Target Audience: ITP TK FG SG A

Location: Growing Place, SMC Classroom 208

"Exploring STEM in Children's Literature"

Participants will learn ways to look at children's books through the lens of STEM (Science, Technology, Engineering and Math). The audience will understand and appreciate the link between the use of props in literature and the reading ability of children; they will also understand the connection between receptive language and productive language and explore ways to link STEM topics with children's literature.

Presenter: Christina Cho, BA

De Anza College Target Audience: T P TK

Content: S T E M

Location: Hilton Santa Monica, Pacific 1

"Learning from Nature: Patterns and Biomimicry"

This workshop invites participants to learn about patterns in nature and biomimicry through presentation of work that took place with TK students in 2023/2024 and create their own biomimicry invention.

Presenter: Eriko Arakaki, MA & Valeria Vacchi, BA

Palisades Preschool Target Audience: P TK K A

Content: S M

Location: Growing Place, SMC Classroom 209

"Inquiry as a Pathway to Love - for children and adults!"

As humans, we are naturally curious and full of wonder. Through pedagogical documentation, we will examine strategies for engaging in inquiry as a means to falling in love with the world around us.

Presenter: Alex Morgan, MA & Anna Vertun, MA

Boulder Journey School Target Audience: T P

Content: S

"Creating a STEM-based Woodworking Program!"

Children love Woodworking! It's cross-curricular, involves all areas of learning, and makes links and connections between them. Curious about how Woodworking can be incorporated into a broader STEM program? Let's do this!

Presenter: Paul Ellis, MA
Brentwood Sunshine Preschool
Target Audience: P TK K

Content: T E M

Location: Hilton Santa Monica, Pacific 3

"Planting The Seed of Curiosity: Cultivating Wonder Through Life Sciences"

Explore how hands-on gardening experiences foster children's innate curiosity, observation skills, and STEM learning while connecting them to nature and environmental stewardship.

Presenter: Hope Petrozzi, MEd & Erika Garcia, MA

St. Margaret's Episcopal School Target Audience: T P TK K

Content: S T E M

Location: Hilton Santa Monica, Malibu 2

"Go-To Guide to a STEM Environment for All Ages"

Take a comprehensive guide with tips to set up an inviting STEM classroom. Take ideas to make it easier to choose the right resources for every age and development, while staying on budget.

Presenter: Lourdes Ochoa, BA & Mariana Contreras, BA

Harmon Oaks Nursery School Target Audience: T P TK K FG

Content: STEM

Location: Hilton Santa Monica, Ocean Park South

<u>Micro-Session III: 2:15pm – 3:00pm</u>

"Scale and Structure: Balance and Stability with Toddlers"

Take a look into how our toddlers balanced their way throughout the year, using their bodies and creating various structures.

Presenter: Marlene Garcia, BA & Linh Phu, BA

The Children's Center at Caltech

Target Audience: I T Content: S E M

Location: Hilton Santa Monica, Pacific 1

"Making Makerspaces Work: Designing Curriculum to Promote Spatial Literacy"

What is 'spatial literacy' and why does it matter in the 21st century teaching practice?

What does a Design/Build curriculum look like and why is it beneficial? How does one begin to set up a basic makerspace in order to support these types of activities? From principles and materials to programming, this workshop covers the basics to promote spatial literacy and creative engagement in the classroom and beyond.

Presenter: Benjamin Gramann, B.Arch

Beta Design / Syracuse University

Target Audience: K FG SG

Content: STEM

Location: Growing Place, SMC Classroom 208

"Connecting with Nature"

This workshop presents a long-term exploration of leaves and trees in our two-and-three-year-old classroom that integrated hands-on experiences and diverse materials and will invite participants to explore these methods themselves.

Presenter: Lisa Wesley, BA & Valeria Vacchi, BA

Palisades Preschool Target Audience: P Content: S M

Location: Growing Place, SMC Classroom 209

"The Value of Adult Learning: A Framework for Strengthening STEM Education"

The value & impact of building out organizational structures and program frameworks to foster adult learning and internal professional development opportunities with a STEM focus for faculty development.

Presenter: Alysia Gonzales, MA & Lily Schwartzman, BA

Former Leads from Google Children's Schools

Target Audience: A Content: S T E M

Location: Hilton Santa Monica, Pacific 2

"Growing With Our Garden"

The opportunities for meaningful growth across multiple domains are ever present as early learners care for their class gardens in joyful collaboration with families and community friends!

Presenter: Raissa Lee, MS Ed

Irvine Valley College

Target Audience: ITPTKKFGSGA

Content: STEM

Location: Hilton Santa Monica, Malibu 2

"Bridging Classroom and Community: Our School's Journey to Nature-Based Learning"

Learn ways to foster a deeper connection to nature by embracing our local ecology. Attendees will gain insight and strategies into how to become a passionate and thriving nature-based program.

Presenter: Amy Chiu, MSEd & Alec Harrison, BA

Methodist Preschool of Pacific Palisades

Target Audience: T P TK K

Content: S

Location: Hilton Santa Monica, Pacific 3

"Caring for Creatures"

Do you have a love of animals and want to share that with your students? Learn how to foster environmental stewardship through the care of classroom pets. See examples of pet care and set up in the early childhood education setting at Pacific Oak's Children's School.

Presenter: Bryana Casas, MA Pacific Oaks Children's School

Target Audience: P

Content: S

Location: Hilton Santa Monica, Ocean Park South

"Nature Connection"

Discover the transformative power of nature in early childhood education. This workshop explores strategies to foster nature connection, enhancing children's development, curiosity, and environmental stewardship through immersive, hands-on activities.

Presenter: Cristina Taratchila, MA

Little Finch Forest School Target Audience: T P TK

Content: S

Location: Hilton Santa Monica, Ocean Park North

"Backyard Life Science Experiences for Future Scientists"

This presentation will give you an insight of STEAM exploration for young children emphasizing on the life science, arts, and math. We will be sharing some exciting strategies to bringing STEAM excitement from outdoor into your classroom through our project-based approach and Reggio Emilia inspired program experiences. Learn and see how you can bring life science, arts, and math exploration for your young learners in your program.

Presenter: Nancy Duran, MA
East Los Angeles College
Target Audience: I T P TK K

Content: S T E M

Location: Hilton Santa Monica, Malibu 1

<u>Saturday Afternoon Tour: 3:00pm – 5:00pm</u>

Two-day and Saturday registrants can tour <u>Canyon Crest Preschool</u> at this time only. The tour will be self-guided, transportation is not provided. *Please allow yourself time for traffic, 4:30pm will be the last entry, carpool recommended.

Canyon Crest Preschool

https://canyoncrestpreschool.com/

10 miles from Hilton Santa Monica

2323 N Roscomare Rd. Los Angeles, CA 90077

Canyon Crest Preschool embraces play-based learning, encouraging children to explore nature, tinker, wonder, and learn about the real world through meaningful experiences and relationships. Children's early experiences are fundamental in the foundation and framework for kindergarten and beyond.







