

SUMMIT FOR
**EARLY SCIENCE
LEARNING 2022**

OCTOBER 29 | ALBUQUERQUE, NEW MEXICO





ENGAGE YOUNG MINDS



The Summit for Early Science Learning is brought to you by the Coalition for Science Learning in Early Childhood.

Early science learning transforms futures.

CSLEC is a coalition of professionals, family and community members, and like-minded civic organizations dedicated to connecting young children and families with STEAM early learning experiences. We believe in the power of early science learning to close opportunity and achievement gaps.

Our work helps bring more STEAM opportunities to our state's next great (and growing) minds by building systems and networks that increase access to early STEAM learning opportunities.

Learn more at explora.us/cslec/

AGENDA

8:00 BREAKFAST AND REGISTRATION | [DESAYUNO Y INSCRIPCIÓN](#)

8:30 OPENING PLENARY | [PLENARIA INAUGRAL](#)

Welcome | Bienvenido

Opening Demonstration | Demostración de apertura
Kevin Dilley, Explora

Land Acknowledgement | Reconocimiento de tierras
Natane Lim, Embracing Equity

KEYNOTE PANEL | [PANEL PRINCIPAL](#)

Moderated by | Moderado por **Tara Henderson, Explora**

Karissa Culbreath, Tricore Laboratories

Andrea Richardson, Cuidando los Niños

Joel Casas, Early Childhood Services Center

Hailey Heinz, Cradle to Career Policy Institute

9:45 BREAK | [PAUSA](#)

10:00 BREAKOUT SESSION I | [SESIÓN DE GRUPO I](#)

11:00 BREAK | [PAUSA](#)

11:15 BREAKOUT SESSION II | [SESIÓN DE GRUPO II](#)

12:15 LUNCH AT EXPLORA | [ALMUERZO EN EXPLORA](#) in the Rotary Pavilion

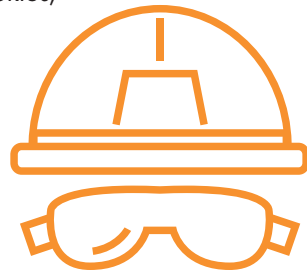
Please feel free to visit the museum exhibits!

1:30 BREAKOUT SESSION III | [SESIÓN DE GRUPO III](#)

2:30 BREAK | [PAUSA](#)

2:45 CLOSING SESSION* | [SESIÓN FINAL*](#) Explora, Rotary Pavilion

Join us for a sweet treat from Rude Boy Cookies, a raffle for fun prizes, and to receive your training hours certificate.



*You must be present at the closing session to win the door prize drawing and receive your certificate.

*Usted tiene que estar presente en la Sesión Final para recibir su certificado y ganar un premio.

BREAKOUT SESSION I

10:00-11:00

CS MEDLEY: COMPUTER SCIENCE FOR YOUNG LEARNERS

Melanie Maez, Shining Stars Preschool Community Room, Explora

What does computer science instruction look like in preschool? See it in action using digital tools as well as unplugged resources. Learn some computer science basics and how to incorporate them in developmentally appropriate opportunities. All levels welcome!

MUD PIES AND CLOUDY SKIES: CREATING AFFORDABLE, HIGH QUALITY OUTDOOR NATURE BASED LESSON PLANS

Cami Mallory, Paula VanderHee & Sierra Netz, Cuidando los Niños Outdoor/Environmental Education Lab A, Explora

This session focuses on using easily available and free materials for outdoor lesson planning and exploring community-based nature and ecological areas, such as open spaces, parks, and historic sites, as 'outdoor classrooms.' We will engage in dialogue and hands-on activities, through which every educator will leave with resources and a one-week outdoor STEAM lesson plan that is aligned with NM Pre-k and NAEYC standards.

WE BUILT THIS CITY: COMMUNITY BUILDING THROUGH LOOSE PARTS **Michaela Fournier, Pando Little School**

Reggio Emilia Approach Lab B, Explora

Last year we wondered what community meant to children who had been largely isolated from one another during a global pandemic. Through an exploration of loose parts, children experimented with novel tools, building techniques, struggled with resource sharing and the rules of a collaborative worksite, and ultimately built a city that was a testament to a classroom community of their own design. This presentation explores engineering and building concepts, loose parts, the value of long-term project space, consensus building, facilitating group discussions, and using tools with young children.

COLOR-LISCIOUS

Macarena Blevins, Explora Theater, Explora

Combining colors can yield surprising results. What happens when you mix pigments? What happens when you mix colored light? Learn to use chromatography to separate colors and find the hidden colors in everyday objects such as markers and clear nail polish.

NATURE INQUIRY IN EARLY CHILDHOOD

*Juliet Staveley, Missy Agnew, Nature Inquiry Early Childhood Services
Outdoor/Environmental Education Classroom 1, Natural History Museum*

This session is an inquiry into the importance of connecting ourselves and children with the natural environment. We will introduce participants to nature-based early childhood education and mindfulness practices, and together explore how natural loose parts give us a window into growth and change, offering possibilities for inquiry, investigation, wonder, and learning through playful opportunities.

HACIENDO Y RETOCANDO CON STEM

*Jose Casas, UNM Early Childhood Services Center
Presentaciones en Español Classroom 2, Natural History Museum*

En este taller, tendrán la oportunidad de explorar los conceptos de STEM a través de la fabricación y el retoque. Construir, fabricar, ingeniar... resolviendo problemas de los personajes en los libros ilustrados de los niños. ¿Puedes construir una casa robusta que esté a salvo del lobo feroz? Imagina el coche de tus sueños. ¿Qué características especiales tiene? ¿Qué puedes utilizar para crearlo? La enseñanza y el aprendizaje de las materias STEM (ciencia, tecnología, ingeniería y matemáticas) son divertidas de explorar. Los niños se sentirán inspirados, motivados y desafiados al utilizar materiales cotidianos y conceptos STEM para diseñar y construir soluciones a los problemas que enfrentan los personajes de sus libros favoritos.

EXPLORANDO IDEAS CON LAS RECETAS

DE APRENDIZAJE DE STEAM

*Ybeth Z. Iglesias, UNM Family Development Program
Presentaciones en Español Classroom 3, Natural History Museum*

Explorando ideas con las recetas de aprendizaje de STEAM es una oportunidad divertida para explorar y obtener una experiencia práctica. Estas recetas de actividades se reunieron durante la pandemia para fomentar y apoyar el aprendizaje relacional de los niños pequeños. Las recetas usan elementos cotidianos que se encuentran en la mayoría de los hogares y centros de aprendizaje. Fomentan el concepto de aprendizaje STEAM, ciencia, tecnología, inglés, arte y matemáticas.

SWITCH ON YOUR BODY, MIND, AND SPIRIT FOR STEAM

*Marcia Lee Unnever, Kids Focus Bodies in Motion
MPR1, Natural History Museum*

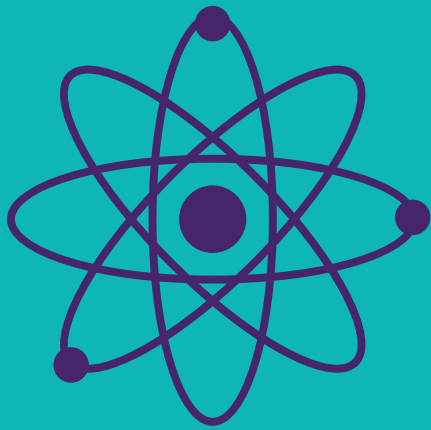
Switch on your body, mind, and spirit in minutes with a unique three-step strategy for every classroom. "Breathe-Move-Learn" combines brain-friendly movement to enhance focus and refresh the body, mindful breathing and sensory exercises for calmness and alertness, and inspiring social emotional learning for joy and understanding. "Breathe-Move-Learn" supports all the elements of STEAM for young children.

FROM STEM TO STREAM

*Heather Slayton Summers, Project ECHO for Education
Putting the A in STEAM—Sessions About Art Education
STEM Lecture Hall, Natural History Museum*

In this session, we will look at ways to incorporate STREAM (Science Technology Reading Engineering Art Math) into each day by layering these activities into the daily schedule so that teachers are meeting the needs of their students in a variety of ways.





PLANNING TEAM

Elizabeth Becker, Albuquerque Museum
Miskee Blatner, Educators Rising/Eldorado High School
Chris Brown, Southwest Regional Education Cooperative
Sarah Candelaria, Nature Niños/NM Wildlife Federation
Joel Casas, UNM Early Childhood Services Center
Kathy Chilton, Libros for Kids/Read to Me Network
Paloma Patricia Gonzalez, UNM Early Childhood Services Center
Amy Greene, UNM Health Sciences
Tara Henderson, Explora
Ybeth Iglesias, UNM Family Development Program
Stacey Johnson, Arroyo del Oso Elementary School
Malanie Maez, Shining Stars Preschool (Rio Rancho Public Schools)
Nan Masland, ABQ International Balloon Museum
Sarah McKinney, PhD, Coalition for Science Learning in Early Childhood
Deb Novak, NM Museum of Natural History and Science
Andrea Richardson, Cuidando los Niños
Victoria Roanhorse, Explora
Christian Soto, UNM Family Development Program
Justin Spielmann, NMAEYC
Beverly Torres, YDI/Head Start
Cheri Vogel, ABQ BioPark
Laurel Wyckoff, KNME/NM PBS
Gigi Yu, UNM Art Education Department, CTI

BREAKOUT SESSION II 11:15-12:15

COOKING AND BEYOND WITH CULTURAL AWARENESS

Melanie Maez & Crystal Davis, Shining Stars Preschool & Natane Lim, Embracing Equity Community Room, Explora

Cooking with young children teaches many STEAM objectives such as creativity, measurement, and states of matter. But how can we ensure our cultural awareness is not limited to cooking alone? Come and learn some popcorn science, incorporated with lessons on the Three Sisters crops, Indigenous People's Day, and celebrating the many cultures of our communities with sensitivity, equity, and inclusiveness year-round.

FRUIT FOR THOUGHT: A SCIENCE EXPLORATION

FOR BABIES AND TODDLERS

Amber Vasquez Thomas & Sandy Emory, Twirl Play and Discovery Space Infant/Toddler Education Lab A, Explora

Science for infants and toddlers?!? It might sound impossible, but in this workshop we will discuss how educators and adults can support early science learning through play and hands on interaction. Using a baby's familiarity with and natural curiosity about food, we will explore fun science activities through the senses.

POTATO PARTY

Maddie Foy & Hollie Putnam, Pando Little School Reggio Emilia Approach Lab B, Explora

This workshop will explore the intersections of gardening, cooking, art and science, by sharing an experience of a week-long "potato party" with children aged 18 months to 5 years resulting in home-grown potato chips. In sharing this documentation, the presenters will illustrate the ways their work with the Reggio Emilia Approach guides children towards their own scientific investigation of the natural world and facilitates aesthetic expressions, storytelling, and community building. In addition to offering documentation, this workshop will invite participants to embark on their own food-based project, practicing tenants of the Reggio Emilia approach along the way.

COLOR-ICIOSO

Macarena Blevins, Explora Presentaciones en Español Theater, Explora

La combinación de colores puede producir resultados sorprendentes ¿Qué pasa cuando mezclas pigmentos? ¿Qué pasa cuando mezclas luces de colores? Aprende a usar la cromatografía para separar colores y encontrar los tintes ocultos en objetos cotidianos, como plumones y esmalte transparente de uñas.

SOULFUL SCIENCE: EXPLORING STEM LEARNING IN THE CIBOLA THROUGH A FOREST SCHOOL LENS

Sally Stevens, Brienne Stout SOL Forest School

Outdoor/Environmental Education Classroom 1, Natural History Museum

In this session, we will play with sticks, stones, and pinecones and discuss the many benefits of bringing more natural loose parts into the early childhood classroom. Participants will get an opportunity to engage with materials themselves in a playful, joyful way while also thinking of the STEM learning that takes place when “just playing” with natural loose parts.

DAILY DISCOVERIES

Claudia Alderete, UNM Early Childhood Services Center

Infant/Toddler Education Classroom 2, Natural History Museum

Throughout this presentation participants will be able to identify parts of the daily routine as opportunities for exploring scientific concepts in the infant and/or toddler classroom. In order to promote the effective planning of scientific experiences for infants and toddlers, the following areas of exploration will be discussed: a) Object Exploration b) Assembly Exploration c) Instrumental Exploration d) Locomotion and e) Action. To conclude, participants will be asked to reflect on the daily opportunities they encounter to promote scientific understanding in the infant and toddler classroom, through a large group practical activity.

COOKING UP IDEAS WITH STEAM LEARNING RECIPES

Christian Soto, UNM Family Development Program

Classroom 3, Natural History Museum

Cooking Up Ideas with STEAM Learning Recipes is a fun opportunity to explore and get a hands-on experience with UNM’s Family Development Programs’ Everyday JUNK Recipes. These activity recipes were pulled together during the pandemic to encourage and support relational learning

for young children. The recipes and activities are designed to use everyday items available in most homes and learning centers. They encourage discovery, investigation, and sheer fun in support of Science, Technology, English, Art, and Mathematical learning.

GUIDING ACTIVE BODIES

Andrew Martinez, NMAEYC Bodies in Motion

MPR1, Natural History Museum

This interactive workshop provides early childhood educators with different strategies to support children’s gross motor skills that lay the foundations for learning. Educators will become familiar with various large and small group activities and environmental supports that engage creativity and foundational numeracy skills and exercise executive functioning skills.

DISCOVER HEALTH!

Amy Greene, Inter-professional Health Outreach Program, UNM HSC Office for Diversity, Equity, and Inclusion

STEM Lecture Hall, Natural History Museum

Discover health and wellness activities you can implement in your classroom with your early learners. This hands-on workshop led by UNM Health Sciences students will demonstrate common tools and roles in the health field while sharing terms for the body in multiple languages.



BREAKOUT SESSION III

1:30-2:30

FULL STEAM AHEAD: MUSIC AND MOVEMENT IN INFANT AND TODDLER SETTINGS Jackie Shipley, Michelle Vigil, Judith Gonzalez, Ursula Maloney, Fernanda Tena, Georgeanna Bruch, Angelica Mendoza, Andrea Zaragoz, CNM Infant/Toddler Education Community Room, Explora

Not only is music and movement enjoyable for infants and toddlers, but it can also provide a connection to science, technology, engineering, arts, and math. In this session, learners will have the opportunity to discover how CNM practicum students have successfully integrated STEAM concepts into music and movement activities in their practicum settings. Presenters will provide hands-on activities, so come ready to rock and roll!

BIOPARK BEGINNINGS: MAKING A CREATIVE MESS THROUGH CREATIVE MOVEMENT, IMAGINATION, AND NATURE

Jeanne Frye-Mason, ABQ Bio Park Outdoor/Environmental Education LAB A, Explora

Come leap with the lions, giggle like the jellies, and polka like a poppy. Join us for a fun adventure of observing animals, creative movement, music, games, nature doodling, stories, and sharing to celebrate, connecting, and spreading kindness. In this session we will talk and model about the importance of STEAM learning through exploring nature, art, movement, and creativity and modeling early childhood learning for our children, as we learn to help them take the lead in philosophies and explorations about STEM learning. Our main message is learning by observing and creativity to value differences and appreciation of our world.

USING ARTISTIC LANGUAGES TO SUPPORT PRESCHOOL CHILDREN'S RESEARCH INTO SEX AND GENDER

Emily Holzknacht, The Transgender Resource Center of New Mexico Putting the A in STEAM--Sessions About Art Education Lab B, Explora

Preschool children research sex and gender all the time. Adults unconsciously teach about sex and gender all the time. Unfortunately unconscious teaching about sex and gender most often perpetuates myths and inaccuracies that lead to harmful prejudices and the policing of bodies, genders and gender

expression. Join us for hands-on, art-based activities that support intentional, inclusive, and accurate sex and gender research in the preschool classroom.

CONFRONTING WHITENESS AS A BARRIER TO LEARNING: USING REGGIO EMILIA PRINCIPLES TO GUIDE EQUITABLE ENVIRONMENTS FOR STEAM EDUCATION

Sarah Mellin, Explora Reggio Emilia Approach Theater, Explora

Even the most innovative education models require constant, community-centered revision in order to best serve all students in an ever-changing world; this collaborative session directs educators in adopting an explicitly anti-racist methodology in their classroom, guided by the seven core principles of the Reggio Emilia approach. By confronting the racist and colonial structures prevalent in education fields, we can mitigate the effects of racial bias on our students and tailor STEAM education plans that challenge historical barriers and drive equitable access. Join us as we reflect on meaningful classroom and lesson plan design, challenge exclusive classroom policies in order to maximize student and family participation, and crowdsource resources that can support us, our colleagues, and our students in the classroom and beyond.

NATURE PLAYTIME: SENSORY-BASED SCIENCE LEARNING FOR PRESCHOOLERS AND THEIR FAMILIES

Mitsi Willard, Pajarito Environmental Education Center (PEEL)

Outdoor/Environmental Education Classroom 1, Natural History Museum

At PEEC, we offer a weekly one-hour session for preschoolers and their families to play and learn about the Pajarito Plateau in our outdoor classroom. This session will give an overview of what Nature Playtime looks like at PEEC, with an emphasis on sensory play for very young children. Early childhood educators may take away ideas for location-based outdoor education, themed sensory bins, and integration of literacy for outdoor learning.

DESCUBRIMIENTOS COTIDIANOS Claudia Alderete, UNM Early Childhood Services Presentaciones en Español

Classroom 2, Natural History Museum

Durante esta sesión los participantes podrán explorar partes de la rutina cotidiana para identificar oportunidades de exploración científica con infantes y niños pequeños. Para ayudar con la efectividad del planeamiento

BREAKOUT SESSION 3

1:30-2:30

de experiencias científicas se presentará sobre áreas de exploración de objetos, movimiento, acción como así también las áreas de exploración al agrupar materiales y exploración instrumental. Para finalizar esta presentación reflexionaremos sobre las oportunidades cotidianas para promover conceptos científicos en el salón de los mas pequeños a tras ves de una actividad de practica en conjunto.

MATH MILESTONES: THE EARLY YEARS

Andrew Martinez, NMAEYC Classroom 3, Natural History Museum

This interactive workshop provides early childhood educators with strategies to support children's skill growth as they lay foundations for learning mathematics. As math can be a very abstract concept, educators will become familiar with concept milestones related to math and techniques to support understandings that guide children to understanding and the next steps.

DANCE IS SO MUCH MORE!

Natane Lim, Embracing Equity and Dancing Turtle Bodies in Motion MPR1, Natural History Museum

Dance and movement is often not discussed in many classrooms or how to best use it with little ones. It does not have to be a formal lesson, dance should be joyful, engaging and used to uplift your little ones. Through music and dance, educators can truly support young children. In this session we will look at the why, how and when to dance and move in your class!

EXPLORE SCIENCE WITH PBS KIDS SHOWS, CURRICULUM AND ACTIVITIES *Laurel, Wyckoff, Andrea Quijada, KNME/NM PBS STEM Lecture Hall, Natural History Museum*

The Sid the Science Kid on-air series and online resources provide many opportunities for teachers to introduce or reinforce early science concepts in the classroom. The resources shared in this session will help you explore science concept cycles with activity ideas, video clips, and online games. Help your students think, talk, and work like scientists do with activities that explore science tools with the Science Adventures curriculum. Participants will learn about some of the tools that scientists use including magnifiers, charts, measuring tools, and science journals.

Thank you partners!



BE CURIOUS.
DISCOVER.
EXPLORE.



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new ideas and updates!**

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