

Dear Partners in Education,

The Hands-On Technology Education (HOTE) team would like to invite you to take an active role by facilitating a session at the upcoming 2024 San Diego STEAM Educators (SDSE) Conference to be held on May 16 & 17, 2025 in San Diego, California.

The conference is being hosted in collaboration with key sponsors such as *UCSD Extended Studies* & *the University of San Diego, Jacobs Institute for Innovation in Education.* We are pleased to *extend invitations* to influential content presenters like yourself so that your work can continue to make an impact on STEAM education leaders!

#### **SDSE Presenter Goals:**

- Professional Development for STEAM Educators throughout San Diego:
  - Provide overview of intriguing STEAM topic (listed below)
  - Demonstrate an activity of the topic with an audience whose expected skill level is 0+ years of experience

- All workshops must be hands-on/interactive
- Summary "Punch Card" Deliverable for all workshop attendees so that they can quickly understand implementation needs at their site

#### RFP Checklist (submission via Google Form):

- ✓ Completed 2024 Request for Proposals Form
- ✓ Tagline/Marketing description of session (not to exceed 50 words)
- ✓ Long Description of session (not to exceed 200 words)
- ✓ High resolution Logo
- ✓ Identify STEAM Areas of Focus

- ✓ Identify Type(s) of PD
  - o "Free": no vendor fee for educators
  - o "Pay for Play": client pays vendor to come perform STEAM activities
  - o "Pay to Teach": client pays vendor to teach educators specific activities
- ✓ Identify Cost Range

#### Once Accepted, you will be asked to submit:

✓ High-resolution professional headshot + bio of presenter(s)

- ✔ Presentation/Print Out Materials
- ✔ Punchcard Summary Sheet (details to follow)

#### **Workshop Timeline:**

Call for Workshop Form Submission Workshop Selection Notification Final Approved Session Materials Due December 29, 2023 January 16, 2024 February 16, 2024

Your leadership in our field is potent and your voices are important in this discussion. I hope that you'll agree to participate and I look forward to hearing from you!

Sincerely,

Deb Morales-Cordero, <u>outreach@handsontecheducation.com</u> Manager, Community Relations & Engagement



**Curriculum Areas of Focus + Tracks** (Please refer to workshop descriptions on page 3)

Curriculum will be presented in varying track levels; you may identify your workshop level on the workshop form.

TRACK LEVELS	TRACK 1: STEAM in a Box	TRACK 2: STEAM Series	
<ol> <li>Elementary School         (Grades K-5)</li> <li>Middle School         (Grades 6-8)</li> <li>High School         (Grades 9-12)</li> <li>All Grade Levels</li> </ol>	Science	Science	
	Technology	Technology	
	Engineering	Engineering	
	Arts	Arts	
	Mathematics	Mathematics	

Audience: Please note that the conference will be focusing on STEAM Educators (teachers, after-school & youth program staff, etc.) that are assumed to have 0+ years of experience in any subject area. Please target your workshops with that in mind.

#### STEAM in a Box:

- Interactive workshops featuring <u>"standalone" activities</u> in which students are exposed to STEAM concepts and/or practical application.
- Activities presented to participants are expected to be "plug and play" such that no prior experience or pre-requisite curriculum is needed for students to participate in the activity.
- Activities should have 1-2 high-level concepts for students to enjoy, with the goal of inspiring and empowering students to learn more about the subject area at the completion of the workshop.

#### **STEAM Series:**

- Interactive workshops presenting a *progressive series of activities* in which students build awareness and skill level in STEAM concepts and/or practical application.
- Activities presented to participants are expected to assume that no prior experience is needed to get started in the progressive curriculum series, and should start with introductory material in a STEAM Area.
  - For example, if a presenter would like to present on Topic B, but that topic has a prerequisite of Topic A, we request that the presenter dedicate time to show how Topic A leads to future activities in Topic B.
- Workshops should present the introductory activity in a STEAM series so that participants can understand teaching challenges and student-level excitement should they decide to take the curriculum series to their classroom.



#### 2024 SDSE Content Details

Please keep in mind when submitting your workshop form, including a short description, that your material covers all the learning objectives for each workshop topic. Selection for a workshop will be dependent on it.

**Bold** = Workshop Topic

#### **Learning Objectives:**

#### STEAM in a Box

 Activities presented to participants are expected to be "plug and play" such that no prior experience or pre-requisite curriculum is needed for students to participate in the activity.

#### • STEAM Series:

 Activities presented to participants are expected to assume that no prior experience is needed to get started in the progressive curriculum series, and should start with introductory material in a STEAM Area.

#### PROPOSED CURRICULUM AREAS & EXAMPLES (# of Topics)

#### Science

- o Physics
- o Biology / Chemistry / Marine Science
- o Astronomy / Space Science

#### Technology

- o Medical / Biotechnology
- o Manufacturing / Construction / Architecture
- o Artificial Intelligence / Machine Learning

#### Engineering

- o Engineering Design Principles
- o Biomedical & Chemical Engineering
- o Naval Engineering / Ocean

#### Art

- o Graphic Design: Comic / 3D Renders / etc.
- o Physical Arts
- o Fine Arts

#### Mathematics

- Applications of Mathematics in Nature,
   Sports, Society, etc.
- o Visual & Audio Engineering

#### STEAM + Diversity, Equity, & Inclusion

o STEAM Activities that particularly emphasize D.E.I. within the implementation of curriculum

- o Nature / Zoology / Animal Science
- o Agriculture / Earth Science
- o Propose your own!
- o Computer Science / Coding / Robotics
- o Photography / Videography / Social Media
- o Propose your own!
- o Mechanical Engineering
- o Environmental / Civil Engineering
- o Propose your own!
- o Music / Dance
- o Social Studies
- o Propose your own!
- o Data Analysis / Information Science
- o Propose your own!
- o Propose your own!



# **Sample Friday Agenda**

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Track	Workshop Name	Presented By	Time	Room
STEAM Series	Adventures Under the Sea	Sally Ride Science	9:00 AM - 10:00 AM	115
STEAM In a Box	Building Bridges	Play-Well TEKnologies	9:00 AM - 10:00 AM	308
STEAM In a Box	Starting with STEAM: Icebreakers & Short Activities to Engage & Excite!	НОТЕ	9:00 AM - 10:00 AM	316
STEAM In a Box	Animal Science – You Are What You Eat!	Helen Woodward Animal Center	9:00 AM - 10:00 AM	210
STEAM In a Box	eSports + STEAM: A New Era in Engaging Students in Inclusive Activities	НОТЕ	9:00 AM - 10:00AM	208
	BREAK / TR	ANSITION		
STEAM Series	How to Teach Science Like a Scientist	XplorStem LLC	10:15 AM - 11:15AM	115
STEAM Series	Inspiring Math Beasts	Art of Problem Solving	10:15 AM - 11:15AM	210
STEAM In a Box	Bringing Coding to the Youngest Learners! Coding with Scratch Junior	La Jolla Country Day School	10:15 AM - 11:15AM	308
STEAM In a Box	See Like a Designer, Think Like an Engineer	Kid Spark Education	10:15 AM - 11:15AM	316
STEAM Series	The Science of Music	UCSD	10:15 AM - 11:15AM	208
	BREAK / TR.	ANSITION		
	DIVERSITY, EQUITY, & II	NCLUSION (DEI) HOUR		
STEAM Series	Make a Move!	San Diego Civic Youth Ballet	11:30 AM - 12:30 PM	115
STEAM Series	Peering into the Profession of Pharmacy – Bringing STEAM Careers to the Classroom	Sally Ride Science	11:30 AM - 12:30 PM	210
STEAM Series	Mechanics, Electronics, Optics and Innovation	UCSD Extended Studies	11:30 AM - 12:30 PM	308
STEAM In a Box	Reflections of Ourselves: Photography and Science	Outside the Lens	11:30 AM - 12:30 PM	316
STEAM In a Box	Tinker Time: Integrating Engineering with Social Emotional Learning	San Diego Children's Discovery Museum	11:30 AM - 12:30 PM	208
STEAM Series	Adventures in Code: Practical Coding Activities for Middle & High School Students	НОТЕ	11:30 AM - 12:30 PM	304
	LUNG	СН		
STEAM Series	Creative Programming with Scratch	Sally Ride Science	1:45 PM - 2:45 PM	115
STEAM In a Box	Integrating Art and Data for a Personal Approach to Understanding Climate Action	California Global Education Project, Jacobs Institute for Innovation in Education	1:45 PM - 2:45 PM	210
STEAM Series	Mflow. Learning Computing by Playing with Sound	UCSD	1:45 PM - 2:45 PM	316
STEAM In a Box	Lunar Habitat Engineering	San Diego Air and Space Museum	1:45 PM - 2:45 PM	208
	BREAK / TR.	ANSITION		



# **Sample Saturday Agenda**

Track	Workshop Name	Presented By	Time	ROOM			
STEAM In a Box	Down with Plastic Pollution!	High Tech High Graduate School of Education	9:00 AM - 10:00 AM	316			
STEAM In a Box	Strengthen knowledge in STEM while Building Mindfulness	San Ysidro School District	9:00 AM - 10:00 AM	115			
STEAM Series	Unveiling the Wonders of VR: A Pactful Prototype Workshop	Jacobs Institute for Innovation in Education	9:00 AM - 10:00 AM	208			
STEAM Series	E-Sports Interactive Demo Lab	GameSync	9:00 AM - 10:00 AM	304			
STEAM In a Box	Brown Bag Innovation	Fleet Science Center	9:00 AM - 10:00 AM	308			
STEAM In a Box	The Mind Meadow Technique: Al Development	The Spectral Theory	9:00 AM - 10:00 AM	210			
BREAK / TRANSITION							
STEAM Series	Hands-On Cardboard Superhero Arts and Crafts Creations	Cardboard Superheroes	10:15 AM - 11:15AM	115			
STEAM Series	Interdisciplinary connections between Art and Science: An Immersive Installation Space	Avenues: The World School - São Paulo Campus	10:15 AM - 11:15AM	210			
STEAM Series	Visuospatial Reasoning Through Paper Play	Jacobs Institute for Innovation in Education	10:15 AM - 11:15AM	316			
STEAM In a Box	Sending Love!: Optimizing Care Package Contents	Qualcomm Black Inclusion Group	10:15 AM - 11:15AM	308			
STEAM In a Box	Power of Two Cards: Intro to Binary Numbers	Qualcomm Black Inclusion Group	10:15 AM - 11:15AM	208			
STEAM Series	E-Sports Interactive Demo Lab	GameSync	9:00 AM - 10:00 AM	304			
	BREAK / TR	ANSITION					
	DIVERSITY, EQUITY, & II	NCLUSION (DEI) HOUR					
STEAM In a Box	The Air We Breathe: Air Quality and Environmental Justice	Strategic Energy Innovations (SEI)	11:30 AM - 12:30 PM	316			
STEAM Series	Make a Move!	San Diego Civic Youth Ballet	11:30 AM - 12:30 PM	210			
STEAM In a Box	Elementary Science & Spatial Skills	Science Delivered	11:30 AM - 12:30 PM	115			
STEAM In a Box	Foundation of Innovation: Intro to Arduino Microcontrollers	Qualcomm Black Inclusion Group	11:30 AM - 12:30 PM	308			
STEAM In a Box	A Confidence Booster: Engaging Parents + Caregivers with STEAM in Every Day Life	Fleet Science Center	11:30 AM - 12:30 PM	208			
STEAM In a Box	Comic Book Drawing	Aubrianna Robinson	11:30 AM - 12:30 PM	304			
LUNCH							
All	CURRICULUM CURATION	All Partners	1:30 PM - 2:45 PM	116 - 118			