

ANNUAL REPORT

2022-23

AIMS CENTER +
FRESNO EOC FRANKLIN
HEAD START PARTNERSHIP



Fresno EOC
Head Start
0 to 5

Early Care
— & —
Education



PROFESSIONAL LEARNING

Teachers engaged in monthly professional learning sessions that supported them as learners of STEAM. Sessions intentionally integrated pedagogy influenced by cultural responsiveness and funds of knowledge. Teachers had the opportunity to explore ideas about the theme. Using the engineering process, teachers made and explored content around the theme. They also explored other resources, curricular connections, and children's literature that supported children's learning.

GUIDING CONCEPTS

- 1 LEARNING AND PLAYING TOGETHER
- 2 ANCHOR TO NEW LEARNING
- 3 REFLECTION ON IMPLEMENTATION
- 4 DESIGN NEW IMPLEMENTATION



OUR PARTNERSHIP

The AIMS Center and Fresno Economic Opportunities Commission (Fresno EOC) continued its 8-year partnership during the 2022-2023 school year to provide professional learning for staff and enhance STEM engagement across the Head Start Franklin program. AIMS staff supported participants through hands-on STEM professional learning sessions, classroom coaching services, STEAM take-home kits for students, and community events.



I learned things myself throughout the activities. It was nice to watch the children have lots of fun.



PROJECT GOALS

- ENGAGE TEACHERS AS STEM DESIGNERS
- BRIDGE IN-SCHOOL AND OUT-OF-SCHOOL LEARNING
- DEVELOP, REFINE, AND ITERATE A SUITE OF EMBODIED AND PLAYFUL EXPERIENCES

COACHING

Coaching gave participants the opportunity to be teachers of STEAM by applying the concepts and activities they learned from the professional learning sessions into the classroom. Each classroom was assigned a coach that would offer support of planning and integrating activities as well as be available for questions. Coaches would visit in-person to observe the implementation of one or more activities and offer feedback. At the end of each professional learning experience, teachers made appointments with an assigned coach and decided on what activity they would like to try from the current module theme.

MODULES

Each month focused on a bodily-connected theme. Teachers and children were encouraged to use natural and intuitive ways to explore STEM ideas. They drew on these embodied experiences to observe how the concepts apply to the world around them.

GUIDING CONCEPTS



STANDARDS CONNECTION

Concepts connect to the Head Start Early Learning Outcomes Framework and Creative Curriculum, and the California Department of Education Desired Results Developmental Profile (DRDP).



CLASSROOM INTEGRATION

Teachers engage children in exploring the themes in the classroom. Teachers have the added support of coaches for planning, facilitating, and reflecting on the teaching experience.



FAMILY ENGAGEMENT

Families explore the themes using materials prepared in AIMS take-home kits and simple items that can be found at home. Each activity is based on a hands-on process: make, play, explore. All materials were translated in both English and Spanish.

EMBODIED MOVEMENTS: FORWARD & BACKWARD

Communicating directions effectively by deconstructing a sequence of steps into step-by-step instructions.

- How do we use spatial communication when moving around our environment?
- How can we separate a series of movements into individual movements?



ALT-REG 5: Self-Control of Feelings and Behavior

PD-HLTH 1: Perceptual-Motor Skills and Movement Concepts

LLD 1: Understanding of Language (Receptive)

COG 1: Spatial Relationships

COG 3: Number Sense of Quantity

COG 4: Number Sense of Math Operations

Students walked a line of painter's tape and guessed how many steps it would take them to get from start to finish.



EMBODIED MOVEMENTS: TURNS

Using symbols to communicate a sequence of steps.

- How can we use spatial communication to achieve a goal?
- How can we separate a series of movements into individual movements?
- Can you give the same directions using symbolic representation?



ALT-REG 5: Self-Control of Feelings and Behavior

LLD 1: Understanding of Language (Receptive)

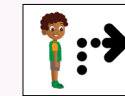
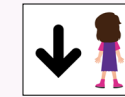
LLD 3: Communication and Use of Language (Expressive)

PD-HLTH 1: Perceptual-Motor Skills and Movement Concepts

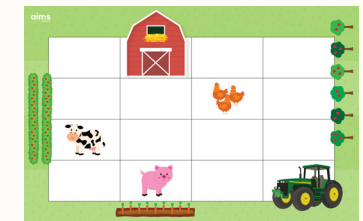
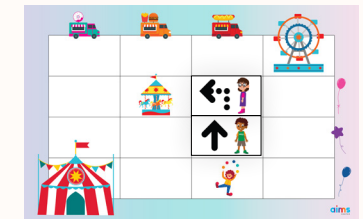
COG 1: Spatial Relationships

COG 3: Number Sense of Quantity

Students played a life-size version of their take-home kits using a tarp grid and story cards.



Children used direction cards to move their game piece to specific locations on their game boards.



ROBOT MOVEMENTS

Using symbols to communicate to a robot a sequence of commands.

- How do robots work?
- What is a code?



LLD 3: Communication and Use of Language (Expressive)

COG 1: Spatial Relationships

COG 8: Cause and Effect

COG 9: Inquiry through Observation and Investigation

Each class was given a Matatalab Coding Robot kit. Students were introduced to the concept of coding by exploring different command tiles, pushing the button, and seeing what happened.



SHAPE WALKING

Understanding the attributes of lines and shapes to help us program the robot to draw shapes.

- What characteristics do shapes have?
- How can your body help you communicate spatially?
- What are different ways I can build shapes?



ALT-REG 5: Self-Control of Feelings and Behavior

PD-HLTH 1: Perceptual-Motor Skills and Movement Concepts

COG 1: Spatial Relationships

COG 5: Measurement

COG 7: Shapes



Teachers used AIMS shape cards to give students a visual of various shapes. They then used painter's tape to create lines and shapes for students to walk, hop, and jump on the lines, around the outside, and along the inside.



ROBOT DRAWING

Programming the robot to move along a specific path using straight lines.

- How does the robot move?
- Can I program the robot to draw a design or shape?



LLD 3: Communication and Use of Language (Expressive)

COG 1: Spatial Relationships

COG 4: Number Sense of Math Operations

COG 5: Measurement

COG 7: Shapes

COG 8: Cause and Effect

COG 9: Inquiry through Observation and Investigation

VPA 4: Visual Art



Teachers first reviewed the different tiles by having students create their own sequences and watching what the robot did. Students were then invited to add a marker, observe the lines the robot made, and explore different sequences for the robot to perform. After verbalizing his plan to make a rectangle, one student was able to do so with little prompting.



EMBODIED LOOPS

Using loops to program a robot to meet a goal by repeating a pattern of commands.

- How can I use my body to demonstrate patterns and loops?
- Where do you see patterns and loops around you?
- Can you extend the pattern?
- Can you repeat the pattern many times as a loop?



PD-HLTH 1: Perceptual-Motor Skills and Movement Concepts

PD-HLTH 2: Gross Locomotor Movement Skills

LLD 1: Understanding of Language (Receptive)

COG 3: Number Sense of Quantity

COG 6: Patterning

VPA 4: Dance



Students were guided through the Dancing Patterns activity and used "magic" words to indicate the beginning and end of each loop. After identifying and practicing the sequence of movements, more movements were gradually added to the pattern. Students were able to identify and extend the patterns as well as use their bodies to demonstrate the loops.



Children used a spinner, cards, and game mats to create a pattern of movements. Then they danced their patterns.



SEQUENCING WITH ROBOTS

Deconstructing, sequencing and communicating commands to a robot through code.

- What spatial language do I need to use to program the robot to move along a specific path?
- Can I identify and fix any errors in my code?
- How can I use the robot to tell a story?



ALT-REG 6: Engagement and Persistence

LLD 3: Communication and Use of Language (Expressive)

COG 1: Spatial Relationships

COG 3: Number Sense of Quantity

COG 4: Number Sense of Math Operations

COG 8: Cause and Effect



Students worked together in sequencing commands to program the robot to travel to different farm cards. Programming one command at a time and drawing the path on the grid before the robot moved seemed to help the children visualize each step.



LOOPS IN THE NATURAL WORLD

Identifying and experiencing loops during daily routines and in the natural world.

- When do I experience loops in my world?
- What cycles in the natural world are repeated as loops?



ALT-REG 5: Self-Control of Feelings and Behavior

LLD 1: Understanding of Language (Receptive)

LLD 3: Communication and Use of Language (Expressive)

COG 1: Spatial Relationships

COG 3: Number Sense of Quantity

COG 6: Patterning

COG 8: Cause and Effect

COG 11: Knowledge of the Natural World

PD-HLTH 1: Perceptual-Motor Skills and Movement Concepts

HSS 3: Ecology



Teachers read *Plant the Tiny Seed* by Christie Matheson before facilitating the seed planting activity. As a group, the children filled a pot with soil, used their finger to poke a hole in the soil, placed two seeds in the soil, covered the soil, then watered the seeds. After the activity, the teacher reviewed the steps for planting seeds, the basic needs of the plant, and how to care for the seed.



ROBOT PLAY

Using our creativity to create playful games and stories with the robot.

- What goal(s) can I create for the robot?
- What kind of "Coding Story" can I create with the robot and my goal(s)?
- What kind of challenges can I include in the "Coding Stories"?



ALT-REG 6: Engagement and Persistence

SED 5: Symbolic and Sociodramatic Play

LLD 3: Communication and Use of Language (Expressive)

COG 1: Spatial Relationships

COG 3: Number Sense of Quantity

COG 4: Number Sense of Math Operations

COG 8: Cause and Effect

COG 9: Inquiry through Observation and Investigation



Students created a robot challenge and story using simple object(s) found in the classroom as supporting props. In the picture below, the robot had to move around the city to rescue his ladybug friend.



“

We teach the kids here at school but the parents don't get to participate. We get to send things home and that's a blessing for them. Sometimes parents just can't afford the materials. They can really do this stuff with their kids and have a good time.

”

“

AIMS activities teach children even though for them they see it as playing. They're still learning. They're seeing. They're exploring.

”

COMMUNITY EVENTS

PARENT MEETINGS

NOVEMBER 8, 2022
DECEMBER 13, 2022



FATHER ENGAGEMENT EVENT

APRIL 23, 2023



EXPRESS ENROLLMENT FAIRE

JULY 15, 2023



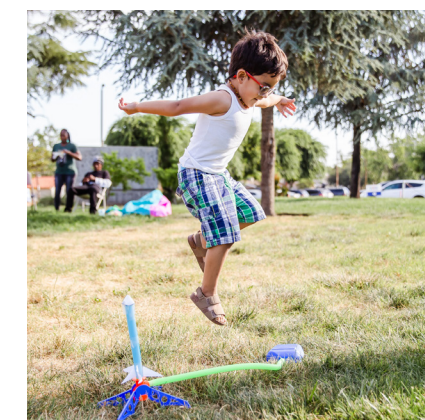
FRANKLIN HEAD START
MAKER FAIRE
1189 MARTIN AVE. FRESNO, CA 93706
TUESDAY, MAY 16 | 4PM - 6PM
A FREE, FAMILY-FRIENDLY EVENT FOR MAKERS OF ALL AGES!
fresno_eoc



fresno_eoc Last week, @aimscenter and Fresno EOC Head Start 0-5 partnered up to host The Maker Faire at Franklin Head Start! AIMS Center is a local organization that supports imaginative, human-centered, and socially-informed approaches introducing young children STEAM. Thank you to the AIMS Center, all of our students, and parents/guardians who came out for a night of exploration and discovery! #fresnoeoc #fresnoeochadstart



- Coding Games
- Giant Soma Cubes
- Geosticks
- Hexbug Mazes
- Jumbo Tangram
- LEGO Wind-cars
- Maker Handprint Mural
- Parachute
- Spin Art
- Spun Chairs
- Stomp Rockets
- Tubes and Tunnels
- Wind Tunnels





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