

Transcript: Integrating Computer Science in Play (3–5 years)

Text on screen: Integrating Computer Science in Play (3–5 years).

Logo: Count, play, explore—for early education.

Text on screen: Observing Balls (8–18 months).

Maria Ramos, Preschool Educator: Computer science is embedded in our everyday practice with every study.

Text on screen: Dash Robot.

On screen: As Maria speaks, a video clip shows an educator watching two students in a classroom as they use tablets to control their Dash robots. Each robot is a single plastic object, that's in the shape of a small pyramid, with three plastic balls on the bottom and one plastic ball nested on top. Small motorized wheels under the pyramid shape help the robot move around the floor.

Maria: For example, if we go to block area, we take Dash and a device. The students create tunnels using blocks, foam blocks. They maneuver Dash using positional words and they also learn letter knowledge. Sometimes they create their own scenery. They talk amongst themselves, like, "We're going to move Dash forward, backwards, behind, underneath."

Child 1: I'm going to go under.

Educator 1: Okay, let's see.

On screen: The child's Dash robot moves along the floor, under a block structure, and then attempts to go around a small plastic cone, but gets stuck. The educator counts out loud as a way to time how fast Dash completes the course.

Educator 1: One, two, three, four, five, six, seven, eight. It's going around.

Child 1: No!

Educator 1: No, no, no. Say go forward. Go forward. Oh, but pink is there.

On screen: The other child's dash robot (which has a pink sticker on it) moves quickly across the floor and bumps into the cone. The child looks intently at the robot and their tablet as they crudely maneuver the robot between two plastic cones.

Educator 1: Pink is going to be in between. He's going around and around.

Text on screen: Sphero BOLT.

On screen: As Maria speaks, video shows her sitting with three children. Each child is holding a tablet in their lap. In front of them, there is a small plastic kiddie pool filled with water and small floating objects, including three clear, plastic, sphere-shaped robots called "Sphero BOLTs." The robots float.

Maria: The way the students use Sphero BOLT, they use the tablet to maneuver going forward, backwards, left, right. They also use positional words. The students also use words as if it sinks, it floats. Does it go fast? Does it get slow? So amongst themselves, they also help one another to problem solve with their activity.

On screen: Maria sits with a child named Roger as he uses the tablet to control his robot. He drags his finger in circles around the screen, causing the robot to spin in the water.

Roger: [Spanish] With this thing, you can help.

Maria: Oh, with that one, with your finger?

Roger: [Spanish] Oh look!

Maria: It's going around. Do it faster, faster. There you go.

Roger: [Spanish] It's good.

Maria: What are you going to do? Go to the other side. Go to the left.

Roger: Oh, yeah. Oh, yeah.

Maria: Got it. You got it, Roger.

Text on screen: A special thanks to the children, families, and staff of Sylvan Park STEAM Early Education Center, without whose help these videos would not have been possible.

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