Research on the Go Podcast: Creative Learning Environments

Announcer: Welcome to "Head Start Talks," where big ideas support your everyday experiences.

Amelia Bachleda: Hello, and welcome to "Research on the Go," a podcast where we explore some of the latest research in the field of child development, its implications, and practical applications. I'm Amelia Bachleda.

Marley Jarvis: Hello, and I'm Marley Jarvis. We are both from the National Center on Early Childhood Development, Teaching and Learning, and we're based at the Institute for Learning and Brain Sciences at the University of Washington in Seattle.

Amelia: In this podcast, we want to not only talk about the research itself, but also to provide a space where we can talk a little more deeply about ways to incorporate it into your work supporting grantees. Marley, do you want to share today's topic with us?

Marley: Today, we'll be talking about building spaces that support infants' and toddlers' creativity and self-expression. Building an environment that supports creativity throughout the day, not just during art time, makes it easier for children and adults to think creatively.

Amelia: We say it all the time – children are so creative.

Marley: It's really true, and research backs this up as well. So, both experience and research shows us that young children are excellent creative problem solvers, sometimes even more than adults.

Amelia: Do you have an example of this? How would a child be even more creative at solving problems than an adult?

Marley: Sure. So, there's something so interesting about how young children are new in the world and they know a little bit less about how everything in the adult world works. They don't have all of these rules in place. I love that the example of maybe thinking of an infant who sees a spoon for one of the first times.

Amelia: Right, and so a child with a little less knowledge about how things are supposed to work, they can experiment in new and creative ways. They can take that spoon, and maybe it becomes a rocket ship. [Marley Laughs] Or maybe it becomes a doll or a microphone. It can be anything. There's no reason why a spoon is only for eating soup.

Marley: Right, exactly, and so with less knowledge about how things are supposed to work or what you're supposed to use something for, young children experiment in new and creative ways.

Amelia: And the ELOF includes creativity as a sub-domain, specifically: Children use creativity to increase understanding and learning. It's a key part of children's early development.

Marley: So, today, we're going to focus on this. We're going to talk about how our learning environments and also how our interactions with children can be intentionally designed to support children's growth and development around creativity.

Amelia: So, when we think about creativity in children, I think the most common thing that comes to mind is a preschooler who's drawn this amazing scene, maybe with purple trees and blue ducks, or maybe they've come up with this new clever game with rules that only they know about that are marvelously complex but don't make any sense at all to us.

Marley: [Laughter] Right. Yes. Some very creative games, for sure. [Laughter]

Amelia: Absolutely. But what about infants and toddlers?

Marley: Yeah, absolutely. I mean, infants and toddlers are so creative in their own right, so infants show their creativity in many, many ways. So, maybe, for example, an infant creates a new way to get food into their mouths.

Amelia: Right, and another way that they can show creativity is the way that they interact with adults.

Marley: Mm hmm, so it's not just about the arts with creativity. It's about something so much broader. It can also include how we interact with others or how we communicate our needs when we can't yet talk or use words.

Amelia: Right, there is this challenge that infants and toddlers need to come up with a creative solution for. They don't yet have all the words to communicate what they're feeling, and so they have to come up with new and different ways to express themselves every day.

Marley: And, of course, toddlers are creative too.

Amelia: Right, with the games they play to explore the world – again in their interactions with adults – how they solve problems, like getting up on a chair. That's a problem for a toddler.

Marley: Absolutely. Everything is built not to your size.

Amelia: Right, or even trying to climb out of a crib. What toddler has not tried to creatively solve that problem?

Marley: [Laughter] And many have succeeded. [Laughter]

Amelia: Absolutely.

Marley: So, it can be a really wonderful place here to support programs, so just recognizing the ways that even very young children, like infants and toddlers, really are creative.

Amelia: And I think a key thing to know here is that creativity is a practiced skill.

Marley: Mm, mm hmm.

Amelia: We all have the capacity to be more creative, but we have to practice. And there's something really interesting. Scientists can actually see evidence of different thought patterns, different ways that the brain works in the brains of people who regularly use their creativity.

Marley: Ugh, I love that, so it's not just that we have some people who are naturally born creative and the rest of us aren't. [Laughter]

Amelia: Right, and that's a really common myth, I think, and we say it all the time. "You're so creative. I could never do that." That's not true at all.

Marley: So, this means that through practice, we can all train our brains to think in ways that may help us come up with more creative ideas and solutions.

Amelia: And this starts early, helping children begin a creative practice from a really young age, even as infants and toddlers, builds this skill that will last a lifetime. One really important thing to think about when we're supporting children's creativity is setting up the learning environment. Marley, can you talk a little bit about what it means to have a creative learning environment?

Marley: Yeah, a key element here we can think about in supporting a creative environment is having a space that is open-ended.

Amelia: Right, that's so important to have a space that doesn't have so many constrictions or rules.

Marley: Yeah, so this means an environment that has open-ended materials, of course, but also flexibility within the physical environment itself.

Amelia: So, open-ended materials ... I'm thinking blocks, for example – things that don't have a set use – and items that really encourage creativity, investigation, problem-solving, these types of items.

Marley: Exactly, and kind of a key guiding principle here is you're looking for materials that don't tell children what to do, but instead, that the children get to tell the materials what to do.

Amelia: I love that. That's a really nice frame for thinking about what is an open-ended material.

Marley: Mm hmm, yeah. Exactly, so you might think building materials or art materials, even scraps of fabric.

Amelia: Yeah, loose parts and pieces that can be used to dump and fill, close and open. These are all examples of open-ended materials. But other objects can also be used in ways that are open-ended, right?

Marley: It's not just a variety of open-ended materials, but also having an open mind that objects and toys have many uses than perhaps we as adults had in mind.

Amelia: Maybe a child decides to use a garbage truck as a pet that day.

Marley: Right. [Laughter]

Amelia: Or maybe a stuffed animal as a cape. There's so many options.

Marley: And so you can help programs allow for some of this kind of flexibility in their learning environments.

Amelia: Blocks don't always have to stay in the block area, for example.

Marley: And this really allows children to move from space to space with items or toys, and this is perfect for young children as they're mastering crawling, cruising, and walking.

Amelia: Exactly. However, this can be a challenge, right? It can be a little stressful to feel like the materials are all over the place, but helping programs brainstorm creative and flexible storage solutions can ease this worry about mess and clutter. What other tips do you have, Marley?

Marley: You can remind programs that they can rotate materials in and out of the play areas.

Amelia: Right, it really keeps things fresh.

Marley: Mm hmm, so recent research indicates that young children actually play longer when there are fewer toys available to them.

Amelia: Which is really interesting.

Marley: Yeah, so the novelty of new items to explore when you rotate items in and out can be a really great creativity boost.

Amelia: Now, of course, there still should be plenty to explore in the learning environment, and enough materials for all children to play with. But what we're talking about here is that with fewer options, children tend to be more creative with what they have, right?

Marley: Yeah, and they tend to spend longer in this sort of high-quality play.

Amelia: And this can be a great strategy to spend with caregivers at home too. OK, so far we've talked about how infants and toddlers are naturally creative, and some ideas for setting up the physical learning environment that can really support children's creativity through open-ended

materials and spaces. But what else should we be thinking about when we're creating an environment that supports children's creativity and their creative exploration?

Marley: Another way that you can support children's creativity and flexible thinking skills is by setting up the learning environment in a way that builds their autonomy.

Amelia: And autonomy, what does that means in this context?

Marley: Yeah, so when I'm saying "autonomy," I'm talking about a child's ability to do things on their own and solve problems independently really as much as possible. So, as much as their interests and abilities developmentally allow.

Amelia: OK, so I'm thinking, for example, providing a visual set of cues for children to use that help them understand where the lunch cups and the bowls go after a meal so that they can put things away once they're finished.

Marley: Yes. Exactly, and so that is a great example of setting up a learning environment in a way that fosters each child's autonomy.

Amelia: And what about for infants and toddlers? What's an example of a way that we could provide some autonomy support for infants and toddlers?

Marley: Yeah, you might think about something like a toddler that's still working on being able to grasp their spoon and feed themselves out of a bowl, you might be able to attach a suction cup to that bowl so the bowl can stand alone and the toddler is able to work on actually eating independently.

Amelia: Right. how is this related to creativity, though? If I'm thinking about telling children where to put bowls and cups, how is this related to creative thinking?

Marley: Yeah, so research suggests that when adults provide autonomy support – so allowing children to do things to their best of their ability on their own – this actually boosts children's school readiness and executive function skills.

Amelia: OK, and so executive functioning skills are linked to creativity, right? When we think about executive functioning skills, we're thinking about flexible thinking, for example, which is a key part of creativity, right?

Marley: Exactly, so ability for children to use a new material in a different way or to solve a problem creatively, this all comes back to these really important cognitive skills, such as executive function.

Amelia: So, autonomy support sounds like it's this really important thing that we can do to help children build cognitive skills, build executive function skills, which are linked to creativity and creative problem-solving. What can home visitors do around this idea of autonomy support?

Marley: So, home visitors can help caregivers identify where these opportunities to support autonomy at home might be. So, for example, you might ask, "When do children seem to need the most support at home? Are there things where caregivers find that they need to help their child with again and again?" And this can be sort of a signal that there's an opportunity perhaps for some modifications that you might be able to make to the home environment there so that that child is better able to do those things for themselves.

Amelia: And that doesn't mean that a child's not going to need any support at all, right? It's just like a little extra addition, like if you think about the footstool that allows them to get up to the sink, these kinds of tiny modifications that allow children to do that one extra step.

Marley: Yeah, absolutely, and this all comes back to autonomy support, which is a great way to boost creativity and flexible thinking.

Amelia: We've talked a lot so far about setting up a creative environment – the fact that children are really creative, supporting their autonomy – but we haven't talked a lot about the actual experience of being creative itself, right? So, I know that I feel most creative when I'm comfortable, safe, supported, and I imagine that this is the same for young children too.

Marley: Yeah, absolutely, so feeling comfortable and at home – this really boosts children's creativity.

Amelia: And creative experiences can be particularly meaningful for children.

Marley: And it's especially impactful when these creative experiences are connected to culture.

Amelia: Right, and there are many ways to do this, but the arts and creativity provide an amazing way to explore and really engage with a child's culture. So, for example, is there a favorite book that could be used as an inspiration for an art project or music or a dance that's really meaningful that we can incorporate into the day?

Marley: And, of course, we don't want to make assumptions about what songs or experiences might be meaningful or culturally relevant to the children and families in our program. We want to be authentic in these connections. We want to ask families and ask community members about what kinds of music or languages or other pieces that can be brought into the classroom or at home that really authentically connect and help shape meaning for children in our programs.

Amelia: And there are many different ways to do this as well. Have conversations with families and community members about their own experience with creativity. Do they have any creative practices that they do at home that could be modified to be also used in the classroom or during a home visiting session? Or do they have a story or a book that they'd like to share? Is there a way to invite parents and community members in to recite that story or read a story to share with the children?

Marley: And partnering with families in this way is a really great way to honor and incorporate home language as well.

Amelia: Right. And once you've had this rich experience, hearing this story, or doing this activity, help programs think about ways that this experience can be extended. Can you do another project that echoes the story or an art project that really allows children to dig more deeply into this meaningful, creative, cultural experience?

Marley: Yeah, absolutely, Amelia, and all of this adds to feeling comfortable and at home and with a sense of connection and identity for children, and this ultimately really boosts creativity.

Amelia: Absolutely. It's true for children and adults alike. Today, we talked about just a few of the many ways that adults can help young children build creative skills by creating environments built to support creativity. Children are already so creative, but with support and practice, we can help children continue to build creative skills that will last them a lifetime.

Marley: In your work supporting programs, consider creating or encouraging specific opportunities for training around how young children express creative thoughts and how environments can be used to support creative skill-building throughout the day.

Amelia: Focus on environments and materials that are open-ended, flexible, meaningful, and allow children to build independent skills. Spend some time talking about how asking open-ended questions and allowing time for children to explore, rather than telling them or showing them what to do, supports creative thinking. So, for example, asking, "How will you get that ball into a tube?" rather than, "Let me show you. You put the ball here."

Marley: It may also be helpful to support programs to partner with families to identify ways to incorporate a child's home culture or languages into the classroom environment in creative ways, so maybe storytelling, food, or other creative projects.

Amelia: For more information on practices that support effective, engaging, and accessible environments, visit ECLKC and search for "environment." We hope you join us for our other podcasts in this series, "Research on the Go" for more information about the practical applications of some of the latest research.

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