TOGETHER, LEARNING MORE!

Interactive Family Learning in California's Libraries

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ABOUT THE AUTHOR

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INTRODUCTION

Across the state of California, libraries offer valuable experiences for young children and families. Storytime programs, with their focus on early literacy development, remain central and important to children's library services. Yet, libraries are thinking beyond the traditional storytime as they work to engage new audiences and responsively serve their communities. Youth services programs have expanded their reach through programming and outreach, and family literacy programs enhance offerings for low-literacy adults and the children in their lives.

Some libraries are focusing on creating safe and engaging spaces for parents to play with their children. Others are investing in resources that boost imagination or creativity, from costumes to 3D printers, art supplies to coding games. Some are community hubs, connecting adults to service providers and support. Still others offer longer-term programs like summer camps and school readiness programs to fill gaps in enrichment and educational opportunities.

Through these myriad approaches, libraries are providing essential learning opportunities for children ages zero to eight and their families.

This report highlights a few of the many examples of high-quality interactive learning happening in California libraries and shares a research background on cognitive and social-emotional development related to these efforts.

The California State Library engaged Learning Designs Consulting, a California-based education strategy firm with expertise in applying learning sciences and child development to out-of-school-time learning contexts, for this project. The firm conducted a related literature review, surveyed close to 400 library staff members across the state, and interviewed 16 library program leaders in 12 different jurisdictions. The findings are summarized here.

INTERACTION DRIVES LEARNING

SOCIAL INTERACTION AND LEARNING

Humans are inherently social beings. The need to connect and communicate is wired into us from birth, and the relationship that a baby builds with a parent* lays a critical foundation for verbal, social, and emotional development (National Academy of Sciences, Engineering, and Medicine 2016; Osher et al. 2020). For these reasons, the parent-child dyad is a significant focus in child development and essential understanding for those working with young children. When caregivers reliably respond to a very young child's needs and provide consistent support and protection, the child develops the confidence to explore the world and interact with others.

Messaging for families related to talking, reading, and singing are designed to promote the sorts of interactions that very young children need to develop a healthy bond with their caregiver. Of course, these interactive moments also support children's language skills. Children hear new words, observe facial expressions, and begin to interpret tone. As children build vocabulary to make sense of the world around them, their brains increase in processing power. In this way, the parent-child dyad is the foundation of both social-emotional and cognitive development (Ferjan Ramírez et al. 2019; Romeo et al. 2018). Every Child Ready to Read, produced by the American Library Association, provides a key resource to many library staff seeking to educate parents on children's early literacy development.

Many library staff surveyed and interviewed also identified Mother Goose on the Loose, a socially interactive early literacy program, as particularly important to their work developing storytime programs. The program's language-rich activities promote connection between young children and caregiving adults.

Libraries in California should continue to design programs that invite social interaction between very young children and their caring adults, using media such as books, music, and other sensory-rich exploration to prompt dialogue and connection.

El Dorado County Library

*Throughout this guide, we refer to "parents" as the adults providing primary care for children. This includes not only biological parents but also grandparents, foster parents, step-parents, and other caregivers who are serving a parenting role. We use this short-hand for ease of communication but intend an inclusive view of the many family structures that exist. When working directly with families, library staff in our study noted that they often refer to "your grown-up" when speaking with children as a way to avoid labeling relationships incorrectly.
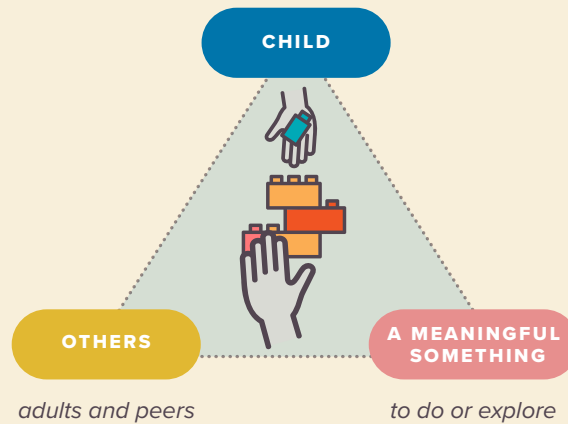
HOW LEARNING INTERACTIONS DEVELOP AS A CHILD GROWS

FROM DEVELOPMENTAL DYAD

CHILD

PARENT

Builds social bonds and language

TO LEARNING CONTEXT

CHILD

OTHERS
adults and peers

A MEANINGFUL SOMETHING
to do or explore

Promotes thinking and agency

BAvVY ·······> **ELEMENTARY AGE**

INTERACTING WITH A MEANINGFUL SOMETHING

While learning is inherently social, especially for young children, interaction is not just about emotional bonds and shared experiences. Children also, importantly, need to interact with materials and ideas in order to learn (Hawkins 2002). Particularly as children grow and become more aware of and curious about the world around them, interaction with a meaningful something—often something physical that can be manipulated—becomes increasingly crucial to learning. Interacting with interesting and novel materials, exploring cause and effect, and playing with physical objects all build children's thinking skills. Whether wondered out loud or communicated through behavior, children are expressing their curiosity. They are acting on the world around them and developing agency as learners, makers, and doers.

Of course, children will engage in this sort of manipulation naturally, as if wired to engage with the world as a scientist does (Gopnik, Meltzoff, and Kuhl 2000). When social interaction is coupled with children's natural drive to manipulate and explore, learning is amplified. Messing around with things and

then talking about their ideas increases language development and reasoning: children hear and use new vocabulary to describe experiences and make sense of phenomena.

As children move from very early childhood to later early childhood, the learning context must include a meaningful something to hold children's increasingly sophisticated attention and satisfy their growing curiosity. The three year old who was content to sit on her grandmother's lap to listen to storytime becomes the six year old for whom storytime is a launching pad of ideas to explore.

As noted by many librarians we interviewed, serving families of older children requires increased attention to the way a program or resource provides a meaningful something, so that the learning context is both socially and cognitively rich. Importantly, libraries should remember that caring adults remain important to children's learning, especially out-of-school-time learning, as children transition from very early childhood

to later early childhood. As they do with early literacy initiatives, libraries can model for families how to support children's explorations and have conversations about their ideas, interests, and approaches to problem-solving.
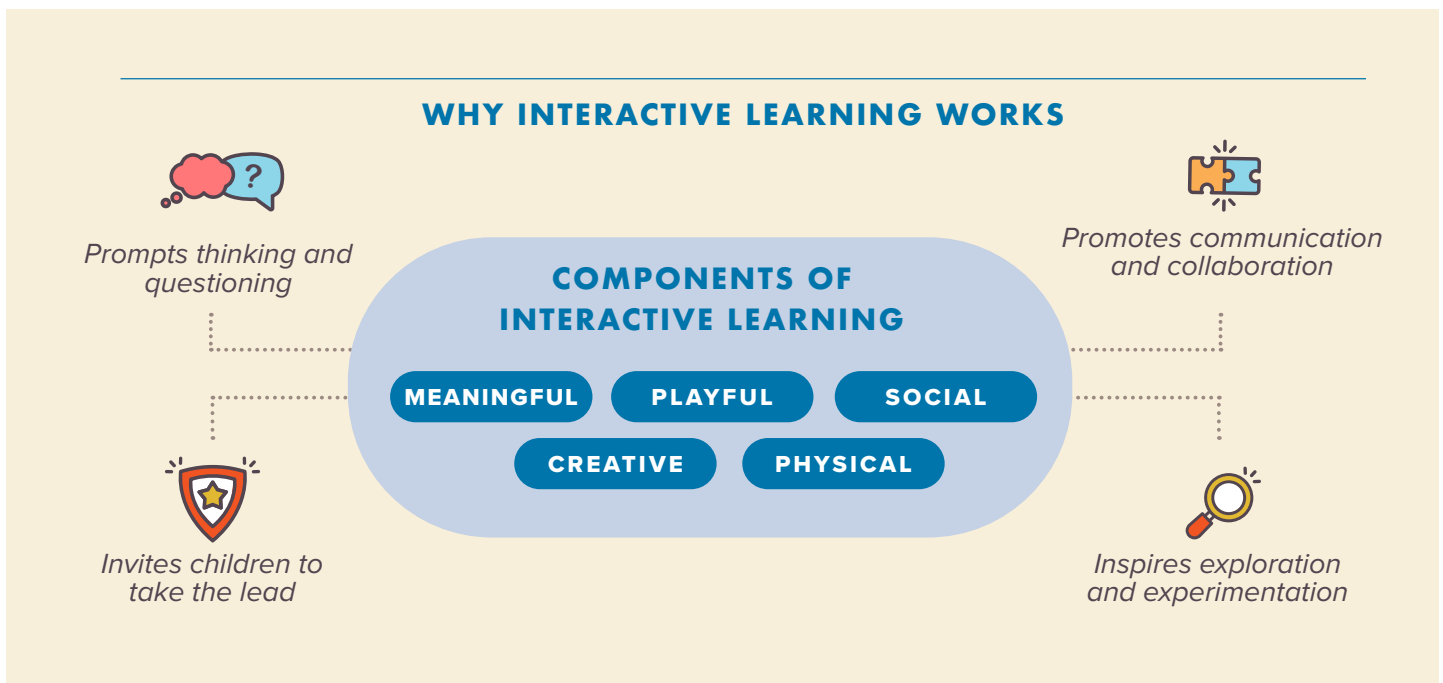
Importantly, research shows that high-quality interactive learning pays attention to both the social and the physical environment (Kirk and Jay 2018). A culture of playfulness, welcome, and support encourages children to take risks and drive their own learning. (See "Environment: the 'Third Teacher'" for more discussion.)

COMPONENTS OF INTERACTIVE LEARNING

Research on early learning demonstrates that educational goals should be focused on preparing children with what are often referred to as twenty-first century skills: communication, critical and creative thinking, collaboration, and confidence (Golinkoff and Hirsh-Pasek 2016). Learning experiences that are meaningful, playful, open-ended, social, and also physical help to develop these essential lifelong skills; they are the key components of interactive learning.

For this project, we talked to library staff about the outcomes they expect to see when designing high-quality interactive learning experiences and providing resources to their community to further children's learning. The themes we heard mirror recent research on the sorts of experiences that are most impactful for young children's learning (Fisher et al. 2013). They are also a strong starting point for program evaluation:

- Library programs and resources should prompt children's thinking and encourage children to ask questions.

- They should invite children to take the lead, driving their own problem-solving, discovery, or making.

- They should promote communication and collaboration, both with caregiving adults and fellow children.

- They should introduce children to interesting and novel materials, leading to exploration and experimentation.

WHY INTERACTIVE LEARNING WORKS

Prompts thinking and questioning

Promotes communication and collaboration

COMPONENTS OF INTERACTIVE LEARNING

MEANINGFUL   PLAYFUL   SOCIAL

CREATIVE   PHYSICAL

Invites children to take the lead

Inspires exploration and experimentation

Educators can deliver the daily doses of healing interactions that truly are the antidote to toxic stress. And just as the science shows that it's the cumulative dose of early adversity that's most harmful, it also shows that the cumulative dose of healing nurturing interactions is most healing.

Giving children the tools to understand how to recognize what's going on with them, then how to respond—especially to be able to calm their bodies down—truly is healing.

— Nadine Burke Harris, California Surgeon General

CONNECTION AND PROTECTION

As children grow, their bond to a reliable adult becomes an essential buffer to the challenges of the world. According to the Center for Disease Control (CDC), more than 60% of children experience an "Adverse Childhood Experience" or ACE; these may include abuse and neglect, drug and alcohol abuse in the home, exposure to violence in the home or community, and illness and death of loved ones. The higher the number of ACEs, the greater the risk for health issues far into adulthood (Bucci et al. 2016).

Additionally, many children are growing up in households struggling with persistent stressors, including financial challenges, concerns related to immigration status, and lack of opportunity and marginalization caused by racism and xenophobia. All libraries work with families facing stress; family literacy programs, such as those connected with California Library Literacy Services programs, sometimes work with families to ameliorate challenges over a long term period.

These sorts of persistent stressors can change brain architecture, particularly when experienced during sensitive periods such as early childhood. Although small amounts of stress are normal, stress becomes toxic when the nervous system does not release from its fight or flight mode (Harris 2018) which can lead to long-term health and learning issues.

The COVID-19 pandemic has undoubtedly exacerbated persistent stressors, particularly for children from low-income communities and communities of color. Experts predict that rates of ACEs will likely be higher for this current young generation, and community-based services need to be ready to support children and families in these difficult times (Center on the Developing Child 2020).

Fortunately, research shows that the single most important protection from the stressors of life is a consistent caregiving adult (Lopez 2018). Libraries, as community partners, can promote the joyful bonding and moments of centered calm that children need with their adults. High-quality interactive learning spaces not only support children's cognitive and social development; when focused on building a caring relationship between adults and children, they also provide critical inoculation against life's stress and challenge.

Research also shows the important role of mindfulness approaches, such as yoga and meditation, in supporting children to develop self-regulation skills and manage stress (Ortiz and Sibinga 2017). Coupling a shared family experience with important social-emotional learning provides key support to families and children during difficult times.

DESIGNING FOR WHOM?
KEEPING YOUR AUDIENCE IN MIND

PARTICIPATORY DESIGN

Creating engaging programs and building relevant library collections requires human-centered design: that is, a librarian must know the audience well, find ways to involve participants in the imagining of offerings, and seek feedback to continuously re-tool and re-invent. As a survey respondent noted, one of the most important aspects of success is: "buy-in from the public...all the preparation/promotion in the world does not guarantee an audience." Participatory design, centered on community engagement, is being used to hear from communities and design with their voices and perspectives at the center, rather than assuming what community members want or need.

Patrick Remer, branch manager at Pleasant Hill Branch, Contra Costa County Library, takes participatory design seriously. For years, his library has used the "Idea Box" to encourage ideation and feedback from the community. Children write their ideas on paper (as with any suggestion box, Remer notes), but the magic happens next: children place their written suggestions inside a ball and send the ball, via a crank, through a homemade chain-reaction machine.

The interactive design of the suggestion box inspires lots of engagement. More importantly, every new children's offering at the Pleasant Hill Branch Library can be traced back to suggestions shared through the Idea Box and then tested and strengthened through program delivery.

Contra Costa County Library is currently building a new facility for the Pleasant Hill branch, and this approach to participatory design was central to conceiving their new space. "Let's build it around people!" rather than around the books, Remer reflects. "We have to keep in mind that space changes over time. There are multiple lives, multiple phases of the library. In the morning, it's noisy with kids. Then it's quiet until after school. Every single space can be multiple things."

How are they designing this responsive, flexible space? By putting everything possible on casters and choosing furniture that can easily be moved around. They want community members to feel that the "heart of the library is a communal living room" for them.

DESIGNING WITH ADULTS IN MIND

Programs for children have two main audiences: the children themselves and their parents. Although library staff may naturally design with children in mind—seeking evidence of engagement from children's enthusiasm—it's important to remember that, ultimately, it is an adult who makes the decision to come to the library. So what motivates parents to participate? What needs do they have that the library can fill?

Many libraries we surveyed and interviewed noted that the [Brazelton Touchpoints Training](#) has been instrumental in helping staff engage thoughtfully with caring adults. Multiple interviewees described the training as sparking a mindset shift in their systems. Nina Lindsay, associate director of Oakland Public Library (OPL), explains that the Touchpoints Training helps people move from a transactional exchange, where the goal is to solve a patron's need, to a relational approach with families.

As OPL designed with caring adults in mind, they recognized that they needed to think about the library's environment differently and "literally change the space," notes Lindsay, "so that they know it's their space, it's their home. It helps to envision the library in a different way, providing space for these kinds of interactions." Though refreshments are often a "sticking point in libraries," OPL committed to welcoming families to programs with a hot drink or food. Wanting families to come into the library for the purposes of playing with their child, each branch established play areas, "really clearly invited spaces where you can get on the ground and touch," equipped with a rug, toys, and caddy full of materials.

Lindsay recalls the initial questioning response from unsure adults when the materials were moved out from behind the desk and the coffee was made available: "Can I have some of this?" Now visitors understand it is for them; no permission is needed. These small moves significantly change families' sense of ownership of the space.

DESIGNING FOR A RANGE OF CHILDREN'S AGES

Children's services in libraries also require library staff to think about a diverse audience of children. Based on the survey results from this project, most programming is currently designed with preschool-aged children in mind. There are, particularly, opportunities for adding in interactive learning for very young children, focused on STEM and art exploration, just as there are opportunities for engaging elementary-aged children with more hands-on, creative, and active learning to spark new interests and ensure all children have access to enrichment. A number of respondents noted that maintaining audiences as children move into elementary school requires libraries to think beyond storytime. As Lauren Kratz, children's librarian at Studio City Branch, Los Angeles Public Library, reflects, there is special importance to working with elementary-aged children as they begin developing self-directed motivation as learners: "I love working with elementary-aged children because they come to the library for independent learning. We want them to have a place at the library." As children move into school and experience less choice in learning, libraries become essential connectors between children and their interests.

> **I love working with elementary-aged children because they come to the library for independent learning. We want them to have a place at the library.**
>
> *— Lauren Kratz, Studio City Branch, Los Angeles Public Library*

Oceanside Public Library

PROGRAM HIGHLIGHT: EXPANDING REACH THROUGH ONLINE OFFERINGS

INNOVATING THROUGH A PANDEMIC

Like many community-facing organizations, libraries have been forced to innovate to serve their audiences responsively during COVID-19. The growth in online programs has been widespread, and a number of librarians interviewed as part of this project noted that offering services virtually expanded reach and audience during the early days of the pandemic.

San José Public Library takes its "Stay and Play" work seriously. When the pandemic hit, Araceli Delgado-Ortiz, early education manager, wasn't quite sure how their early childhood programs would work virtually. But their virtual offerings have been a great success, "We are reaching folks we hadn't before. We didn't use to see a lot of preschoolers. Now we are doing preschool classes every day at 9:00."

MEETING FAMILIES WHERE THEY ARE

San Francisco Public Library (SFPL) has also received surprising positive interest in their online offerings. As Cristina Mitra, family engagement coordinator, notes:

> There's been a lasting lesson that we can do this online. We might have eighteen live views of our program, but then four hundred YouTube views afterward. We are seeing more people. And we also know that people are craving in-person interactions. Hybrid will likely be the way in the future.

Knowing the tremendous stress that families have faced during the pandemic, SFPL designed a virtual yoga class, offered weekly, during afterschool hours. Mitra notes that a particular success of this experiment was that family units were taking part in this opportunity together. The fact that families regularly returned for subsequent weeks of the online program indicated that it was making a positive difference in a difficult time.

TRUSTED CONVENERS:
LIBRARIES' ROLE IN THE COMMUNITY

AN INCLUSIVE SPACE FOR ALL FAMILIES

Library staff members and partners who were interviewed as part of this project recognize that libraries hold an important role in their communities: they are often trusted conveners of people, recognized as places where all are welcome. As a result, libraries play an important role in connecting the public to community services. And, increasingly, libraries are serving a key role as community hubs where families are able to access and learn about wide-ranging, wrap-around services available to support them and their children. Community hubs reflect local needs, and have different models based on those needs; as Carolyn Brooks of El Dorado County notes, "community hubs provide a human social safety net through a network of intentional partnerships."

At the same time, especially given California's great diversity, libraries must build relationships with communities who might not otherwise find and use their services. This connection requires creativity, community partnership, and attention to culturally relevant practices.

Daisy Flores, youth services supervising librarian at the Ontario City Library, shared the work that Ontario

has done to reach her community's Latinx, largely immigrant families. She notes that, in many Spanish-speaking countries, libraries are exclusive or reserved for academic purposes, rather than community-based agencies, so outreach and relationship building is essential for newcomers who may not feel welcome. This outreach is centered on the caring adults in children's lives: "For us, the focus on the grown-up was very important," so they started out by holding Spanish-language focus groups at convenient spaces in the community, asking parents what they "wanted for their children and what they wished they had known." From there, they designed storytimes and held them in the community. An apartment building with seven hundred units and a communal space provided a great location, and over time a large and consistent audience grew.

Flores notes the critical role of staff language skills and, specifically, the value of having Latinx staff members lead the outreach work. Having fluent Spanish-speaking staff who mirror the cultural background of the community proved essential to their participatory design work.

Terry Lorant Photography, CA State Library LSTA grant

PROGRAM HIGHLIGHT: COMMUNITY HUBS

ONE CITY'S EQUITY WORK

The City of Pasadena has an ambitious goal: to be recognized as an "Early Learning City" where the needs of their youngest community members are prioritized, and services for families with very young children are well-coordinated and organized. Toward this goal, the city created an Office of the Young Child, which, importantly, is hosted at the Pasadena Public Library. A primary function of this office is to coordinate a network of non-profit organizations, libraries, and preschool sites serving families in Pasadena and the neighboring communities of Altadena and Sierra Madre.

A key initiative of the Office of the Young Child, working with the Pasadena Unified School District (PUSD) and UCLA's Center for the Study of Healthy Families and Communities, has been to conduct kindergarten readiness assessments, known as the Early Development Index (EDI), for children across the community. As their 2018 report, *EDI Conversations* notes: while the community-wide measures found that close to half of PUSD kindergarteners had "EDI vulnerability," many parents were surprised to learn how many children were entering kindergarten without all the foundational skills they needed to thrive. In a series of community conversations, led by the Office of the Young Child, parents and educators identified a range of possible root issues, including lack of quality time with their children, parent knowledge about child development, and stress from financial strain and racism.

The importance of programs being offered to families for free, such as those of the library, was seen as critical to increasing the numbers of children ready for kindergarten. Jennifer Driscoll, senior librarian of youth services for Pasadena Public Library, shares that a key to success has been to think about how library programs promote the five asset-based practices identified by the **Strengthening Families Protective Factors Framework.** In particular, the library's eight-week registered storytime program was designed to build social connections among adults, as research shows that this is one key way to support parents with young children.

Imperial County Free Library

EARLY LEARNING HUBS

Most residents of El Dorado County, which reaches from the Central Valley foothills to the shores of Lake Tahoe, live outside of the two incorporated population centers of Placerville and South Lake Tahoe. As a less affluent county relative to others in California, coordination of services is not just best practice; it is essential. Debbie Arenas, early childhood literacy specialist at the El Dorado County Library who leads the library's community hub work, sees her partners at First Five and county offices of education and health as teammates. "We can't work in silos. We have individual goals that all contribute to a collective vision for how we support families."

Elizabeth Blakemore, who oversees the County Office of Education's early learning and family support work, knew that the library was trusted among early care providers and decided to leverage that goodwill toward expanded professional development offerings for early childhood providers. They offered storytime programs to preschools and family-based daycares as the hook, understanding that the true goal of these efforts was modeling practices: librarians demonstrated how to incorporate social-emotional learning and interactive elements into early literacy work with children.

Arenas notes social-emotional development is an explicit, intentional goal of the programs offered through the Community Hubs. They have created social-emotional learning backpacks with books and related activities for children, along with a parent education component and parenting books. In their storytime programs, library staff members incorporate many social-emotional concepts to give children and parents alike strategies for learning to manage their emotions. These efforts reflect research that shows that caring adults can support children's development of regulation by explicitly talking about emotions and strategies they use (Housman 2016). The library has built a strong social media presence (e.g., a Facebook page, Facebook Live, and Zoom events) to share parent tips and programing with families and providers who are unable to physically come to the library; during the COVID-19 pandemic these resources have been instrumental to continuity of service.

> When you watch a library storytime, they are constantly infusing parent education. I see them promoting brain development, naming feelings, boosting vocabulary.
>
> — *Elizabeth Blakemore, El Dorado County Office of Education*

Terry Lorant Photography, CA State Library LSTA grant

CELEBRATING NEW FAMILIES

San Francisco Public Library's Community Baby Showers represent another way that libraries are connecting families to services. (This approach is highlighted as a model for systems interested in developing foundational relationships with service providers, potentially toward a goal of launching a community hub.) These branch-hosted events are designed to feel like a party for expecting and new parents. They include cake and presents (a bag with a book, music, t-shirt or blanket) and time for parents to meet each other and mingle. To incentivize parents to engage with the agencies tabling at the event, parents receive tickets in exchange for their queries, to be used in a drawing to win interactive toys.

Baby storytime, with simple parent education about the benefits of reading with babies, is always included. Other aspects depend on recruited community partners. A recent Community Baby Shower, for instance, included a lactation specialist as part of Black Breastfeeding Week, the California Highway Patrol showing parents safe and proper car seat installation, and Help a Mother Out, providing free diapers. Parents who attended last year's Community Baby Shower expressed interest in creating a Spanish-speaking mothers' group following the event.

A local family resource center that had previously held its own event for new and expecting parents noted the huge benefit of partnering with the library for this important outreach work. When the resource center previously held the event on their own, fifteen families attended. By comparison, the 2019 event, which they partnered with the library to hold, including a range of service providers, drew 325 people in a low-income community of color.

BEYOND THE BOOK:
TOWARD A BIG PICTURE OF CHILDREN'S DEVELOPMENT

We need training that will improve our services... making the transition from story time to learning time.

— Survey Respondent

FROM EARLY LITERACY TO EARLY LEARNING

Throughout this project, library staff members reflected on an emerging consensus: libraries can best serve families with young children by embracing a more holistic perspective on children's development and by connecting children to a diverse range of learning experiences. In particular, while storytimes are central to libraries' offerings for families, attention should be paid to designing these programs so that they foster children's social, emotional, and thinking skill development. Additionally, programs focused on art, science, making, or building can provide well-rounded enrichment opportunities to children who may not otherwise have equitable access. Given libraries' focus on closing opportunity gaps, providing these sorts of diverse experiences for children in under-resourced communities is particularly essential.

At the same time, many of the librarians interviewed discussed the challenge of being asked to attend to children's holistic development needs when they are generalists or when their expertise lies, primarily, in literacy development. Daisy Flores of the Ontario City Library shares:

> We were holding storytimes that were at capacity. So we worked in partnership with the schools to see where we should focus our efforts. They saw early learning as the area with the greatest need.
>
> At first, there was a lot of fear associated with doing our school readiness work differently. We thought, "We're not qualified to talk about this." But as we started drafting the activities, we realized they were simple.

Flores credits the Reimagining School Readiness Toolkit as being instrumental in making the shift from early literacy to early learning for the Ontario system.

San José Public Library

BUILDING FROM ASSETS OF EARLY LITERACY WORK

Interviews indicated that quality early literacy programs, particularly *Every Child Ready to Read* and *Mother Goose on the Loose*, support library staff to shift to a broader view of child development. Such programs emphasize that interaction is at the heart of young children's learning. Person to person interaction supports the development of social-emotional skills, and, as noted previously in this report, the parent-child dyad is of particular importance for very young children. But interacting with materials and ideas is also essential to build children's thinking and language skills.

Library staff are often quite skilled at embedding simple messaging for families about early literacy development into their storytime programs. This report finds that this skill can be leveraged toward more general communication with caring adults about

children's development. Key messages that libraries may consider how best to embed include:

- Helping children to recognize and name feelings supports social-emotional development.

- Families today experience a lot of stress, and stress can harm growing brains and bodies. Fortunately, caring adults protect a child from the harm of stress.

- Play is essential and should be encouraged far into elementary school! It builds the brain and teaches children to work with others.

- The best learning takes place when children are interested, ask lots of questions, and are excited to think and talk.

SHIFTING FROM OUTPUTS TO OUTCOMES

One approach that libraries are using to shift how they engage children and families is to agree on the outcomes that matter most for their work and then design programs with these in mind. Many libraries track program participation, and output metrics can shed light on how a community is responding to a program. Yet, ultimately, looking for evidence that programs are making a meaningful difference in children's lives requires a focus on outcomes; in other words, it asks libraries to identify the changes they hope to see as a result of a program or initiative.

San José Public Library made a significant shift toward outcomes when, a few years ago, they developed system-wide early education standards for programs. Informed by quality expectations for early education, the early learning team worked to articulate goals and best practices for children's programs, not just in the library but for any city-run program. Araceli Delgado-Ortiz explains that she was committed to respecting the autonomy of the branches but also knew that "most librarians are generalists, so our job (as the early education

services unit) was to curate for them" and help them do their work well. Her team developed curriculum boxes that include a suggested program framework with related books and manipulatives.

This shift in approach has led to meaningful change for San José Public Library. Delgado-Ortiz notes:

> For us, it's not the quantity. It's the quality. People had previously gauged success on the numbers, but the qualitative piece is about interacting with the community. We had to support people to shift from filling out a survey to having conversations and gathering stories. And we got tons of great feedback.

Delgado-Ortiz explains that focusing on program quality and creating space to hear from the community about the ways that programs were meaningful to them have led to a staff culture of constant reflection and improvement. It has also led to key insights: through the qualitative feedback they were gathering, they learned of an important audience of family, friend, and neighbor caregivers who they needed to better serve.

PROGRAM HIGHLIGHT: STEAM PROGRAMS

FULL STEAM AHEAD

Interdisciplinary, hands-on STEAM (science, technology, engineering, arts, and math) programs, through which children tinker, make, or explore, are gaining considerable traction in library services. These sorts of programs are a strong fit for libraries seeking to extend reach to elementary-aged children, as they can be rich with playful learning. Still, with content that is new for most library staff, from coding to hands-on science to design challenges, it's no surprise that many library staff interviewed spoke about the initial anxiety they experienced when creating their programs.

Oceanside Public Library decided a few years ago to start a drop-off summer camp with a STEAM theme. Marie Town, youth services principal librarian, reflects, "It's been an educational experience for us. We started off thinking 'that it's not our realm.' But we saw that there was a need, and we've seen that we can do it well!" The goals of the program were to have children "learn something new, feel more empowered in their learning, more comfortable using the library and its services, and to read more."

Through grant funding, the library was able to hire a teacher to help write the curriculum. Part-time staff, along with recruited volunteers, delivered the program to nearly thirty campers at a time. With weekly themed sessions, offered for five weeks, the program has included science activities, coding challenges, robotics, and 3D printing. "We made sure they had variety. They are using their hands, they are moving. Making sure it's very student-driven. Making sure we're just there to support."

It has been a great success: not only does the program fill the day that registration opens, but many children are also returning as repeat campers. The library staff is seeing clear indicators that children who participate feel a sense of ownership of their learning and the library space.

Town reflects on what set them up for success: "With grant funds, we bought new technology then realized we didn't know how to use it. We had to not be afraid to take the time to learn. We had to be open to learning and continuing to learn. That's set us up well for transitioning to virtual camps during the pandemic."

Oceanside Public Library

> We made sure they had variety. They are using their hands, they are moving. Making sure it's very student-driven. Making sure we're just there to support.
>
> *— Marie Town, Oceanside Public Library*

A SCHOOL-AGED STEAM COMMUNITY

Lauren Kratz, children's librarian at the Studio City branch in Los Angeles Public Library (LAPL), has built a "tight-knit community" through serial programs that include coding and 3D printing and weekly storytimes for school-aged children that have a hands-on art, making, or science component. As is the case with most librarians, STEAM is not Lauren's background, but through online resources like YouTube, Lynda.com, and Scratch, she built her knowledge base and sought funding through Google Mini-Grants and ALA to purchase needed equipment. When asked about her favorite coding toys, Kratz unequivocally shares, "Ozobots is my favorite for use with in-person programs. With a set, you can get twenty children in a program. It's the best bang for your buck and is very popular with kids."

During the pandemic, Kratz has continued to provide coding programs and has been thrilled that online programming allows her to engage children from all across the LAPL system. Using Code Monkey, she is able to see what the kids are doing, and is convinced that her virtual coding programs will continue even after in-person programming is able to return: "Coding works very well virtually. It's interactive. We can go through the lesson hands-on. In the library, it's actually harder, and I am limited to twelve participants because that's how many computers I have."

HOW PLAY MATTERS

Kids learn and develop skills from all kinds of play, but they learn best when learning goals are intentionally integrated into play from the start, and when they are guided by an adult, or the environment itself, toward a particular learning goal.

(Playful Learning Landscapes Action Network 2020)

THE DEVELOPMENTAL ROLE OF PLAY

Play is the way that all intelligent, social animal species learn. Its ubiquity demonstrates to scientists that, although play is characterized by fun and apparent purposelessness, it is actually central to both social and cognitive development. Play promotes brain plasticity, readying the growing brain to take in and adapt to new information and novel situations (Hassinger-Das, Hirsh-Pasek, and Golinkoff 2017).

A recent study with families at a Head Start site looked at the correlations between parents' playfulness with their children when they were toddlers and those children's later skills in kindergarten. Parental playfulness was a significant predictor of skill: in families where fathers played more, children developed stronger vocabularies; in families where mothers played more, children developed strong self-regulation skills (Cabrera et al. 2017).

Importantly, there are different types of play and different characteristics among play patterns. Like a balanced diet, a range of play experiences is important for well-rounded development. Libraries can promote a healthy diet of play through their programs, resources, and messaging to parents.

PLAY AS A CONTINUUM

When most adults think of play, they picture a child-led activity without adult interference or specific goals. This kind of play, often referred to as free play, is what keeps children busy in playgrounds, backyards, and bedrooms around the world. It is also the kind of play that libraries encourage when they provide resources such as puppet theaters and dolls, blocks and tracks, and costumes. Parents may play along, often being assigned a role in the unfolding storyline.

But play can also be rule-bound and with specific end-goals, such as in gameplay or with sports. Rule-bound play that requires children to use their memory (e.g., keeping rules straight or recalling key information needed for strategy) or to inhibit their impulses (e.g., thinking through different options before making a move or maintaining composure after a loss) can be particularly helpful to children's development of "executive functions," an interrelated group of cognitive skills that amount to the brain's command and control capacity. These skills are highly correlated to school readiness as well as a host of positive long-term outcomes.

Generally speaking, in rule-bound play, some external "other" sets the rules, and the point is to advance, or beat an opponent, or earn a badge. Much educational technology is built on gamification of learning tasks. Although children may build skills from this sort of play, it is important that they also have the opportunity for more child-directed, free play experiences and to remember that rewards for play and learning can erode intrinsic motivation.

GUIDING PLAY

These two kinds of play—free play and rule-bound play—might be thought of on a continuum. A significant emerging body of research focuses on a third kind, "guided" play, which is situated somewhere in the middle (Zosh et al. 2018). Particularly relevant for libraries, guided play occurs when an adult sets up an experience for children with materials and/or prompts and then steps back to allow children to drive the play forward with their own interests, ideas, or imagination. Adults take cues from children about needed scaffolds, offering questions that focus problem-solving, models for inspiration, or other non-intrusive nudges.

Guided play has been shown to be effective at helping children not only learn new concepts and build new skills but also problem solve. Because of its effectiveness as a learning tool, and its experience for children as open-ended and more self-directed, guided play should be a key approach used in children's out-of-school-time experiences where building a lifelong love of learning and intrinsic motivation are prioritized.

CHARACTERISTICS OF PLAY PATTERNS

Additionally, different play patterns may include one or more notable characteristics. These are important to understand, for the underlying characteristics of play influence how that experience shapes a child's cognitive or social-emotional development.

Imagination is a hallmark of play. This characteristic is evident in the two-year-old pretending to be a cat, the kindergartener whose stuffed animals come to dinner, and the third-grader who builds a shadow puppet play inspired by *Harry Potter.* Not surprisingly, imaginary play in childhood predicts creativity in adulthood (Center for Childhood Creativity 2015). More surprisingly, imagination is also important to the development of reasoning. Researchers theorize that our elaborate imaginations help us make sense of what is (and what isn't) real, reasonable, and factual (Gopnik and Walker 2013). In this way, imaginary play may support the development of critical thinking. Additionally, children who engage in more pretend play may develop skills in empathy, as they practice imagining what others may be thinking or feeling.

PLAY AND DEVELOPMENT

Play develops cognitive, social, and emotional skills

PLAY CHARACTERISTIC		INFLUENCE ON DEVELOPMENT
IMAGINARY PLAY		*Creativity* *Reasoning* *Empathy*
SOCIAL PLAY		*Self-regulation* *Pro-social skills* *Language development*
PHYSICAL PLAY		*Fine motor skills* *Scientific thinking* *Language development*
GAME PLAY		*Executive functions (e.g., memory and inhibition)* *Reasoning* *Creativity (when open-ended)*
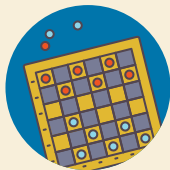
Oftentimes play is social. Very young children may play in close physical proximity to one another, similarly but separately engaged, while older children may collaboratively design or imagine extensive worlds. Through social play, children develop essential lifelong skills such as helping others, negotiating conflict, and seeing the world from another person's perspective. Children also learn to regulate emotions and develop vocabulary through social play. Children's social skills at the outset of preschool are correlated to a host of positive life outcomes.

Physical play is particularly important to children's cognitive development. Whether making rainbows on a wall, a really tall magnet tile tower, a habitat for worms, or a new texture of slime, children learn by messing around with the physical world. This sort of play is important for children's fine motor skills. It also develops science thinking skills, such as making predictions and reasoning about cause and effect, and helps children build vocabulary to make sense of abstract characteristics such as *heavy* or *smooth* and hard-to-understand phenomena like *gravity, light*, or *life*.

PROGRAM HIGHLIGHT: FAMILY PLAY

EQUITY AND PLAY

For Crystal Duran, county librarian for Imperial County Free Library, enabling family-based play is mission-critical. An agricultural region, inland from San Diego and along the border with Mexico, Imperial County had a 2019 unemployment rate more than four times the state average (State of California 2020). And, as Duran explains, "there just aren't enough opportunities for families." Indoor spaces for families to gather are crucial and needed in a geography that is often unbearably hot and where the mall provides the only other sheltered play area. The library system may be small, but it has big goals of promoting lifelong library use by creating welcoming, enriching spaces for families, 85% of whom speak Spanish.

"We are doing the most we can with the least amount of resources," explains Duran, who has secured funding from First 5 Imperial turn two of the four county libraries into **Family Place Libraries** that provide play areas and serve as a community center. "We removed shelving to create a play area with manipulatives and soft blocks. It's a tiny space but it's made a huge impact in the community. Families come in to play then would check out books."

With a staff well versed in child development, Imperial County Library focuses on encouraging quality interactions through play. Their toy lending library provides "high quality toys that are developmentally appropriate and that families couldn't afford," explains Duran. The resources include bilingual messaging about the important role of play. "Our goal is to use the library in non-traditional ways. Babies playing and banging is a success."

INNOVATIVE PROGRAM APPROACHES

In 2013, Los Angeles Public Library (LAPL) established IDEAS@LAPL (standing for Innovation, Discovery, Empowerment, Aspiration, and Service), a mini-grant intended to spark innovative approaches to programming and services in the system. One of the recipients was the West Valley Regional Branch Library, which used funds to create "Story Play," a weekly play-based offering with durable soft toys, baby gym equipment, and a semi-structured program in a multi-purpose room. According to Joanna Fabicon, senior librarian for children's services for LAPL, the program was effective at offering a needed safe and clean space for families with very young children to play while also providing an opportunity for staff to build skill and experience communicating about child development with parents in a comfortable and natural setting. One of the most promising outcomes of the play-based program was the social interactions that occurred between caregiving adults in attendance.

> We don't have effective signage or other ways to communicate the benefits of play, parallel play, the developmentally appropriate books/manipulatives. We also need more staff education on how to communicate concepts to the community partners, parents, caregivers and early learning community.
>
> *— Survey Respondent*

MESSAGING FOR PARENTS

Libraries we interviewed for this report talked about the desire to leverage library services toward parent education, particularly around the benefits of play and other experiences important for healthy development. Many also shared a reticence about claiming unearned expertise and a desire to demonstrate respect for families, particularly across differences of culture. *Brazelton Touchpoints* and resources from *Every Child*

Ready to Read were recognized as important. At the same time, many participants noted a need for greater training related to implicit bias and culturally responsive practices. A key finding of this report is that additional training related to working across differences of race, ethnicity, and class may enable library staff to feel more comfortable and equipped to support families coming from diverse backgrounds.

San José Public Library

ENVIRONMENT:
THE "THIRD" TEACHER

Environment should not be an afterthought in children's learning; indeed the environment is an active force that educators can design to inspire children's creativity, build children's agency, and encourage children's inquiry and problem-solving. Developmental theorist Loris Malaguzzi, whose writings inspired the Reggio approach to learning, refers to the learning environment as the "third" teacher. (The first and second teachers are a child's caring adults and peers.)

Recently, researchers who are part of the Playful Learning Landscapes network have investigated whether changing a library's environment to include more playful learning opportunities changes how families make use of the space. The findings are encouraging: interactive, playful elements lead to both more use of the library and an increase in the kinds of dialogue between caregivers and children that translate into learning gains (Hassinger-Das, Zosh, et al. 2020).

> We place enormous value on the role of the environment as a motivating and animating force in creating spaces for relations, options and emotional and cognitive situations that produce a sense of well-being and security
>
> —Loris Malaguzzi, Reggio Emilia

Rancho Cucamonga Public Library

THE ENVIRONMENT SHOULD	LIBRARY STAFF MIGHT CONSIDER
INSPIRE CURIOSITY AND INQUIRY	*What resources or materials get children interested, wondering, and excited to play, make, or do?* *How might you make frequent, small changes to your space to keep it fresh and interesting?* *What activities in your children's area spark adults' intrinsic interest? How might you introduce more elements that encourage them to interact alongside their kids?*
PROVIDE SAFE WELCOME AND RESPECT	*How are kids encouraged to be kids (e.g., playful, active, social)?* *How might you change your space over the course of the day or week to accommodate the community that is there?* *How do you honor children's work and learning?*
COMMUNICATE YOUR CULTURE OF LEARNING	*Your space may already communicate a love of books and reading. What else is valued? How is this shown?* *How might the importance of play, social interaction, emotions, questions, etc., be communicated in your space?* *How do you provide examples or support to children while also communicating that you value their unique ideas and creativity?*

FINDINGS AND RECOMMENDATIONS

Libraries can and should focus on facilitating interactive family learning, creating spaces and programs that engage children in meaningful ways and inspire their caregiving adults to play and explore alongside them. Program design and resources should consider both the social and the physical environment, and libraries should invest in comfortable, flexible furniture as well as interesting toys and materials. Gestures such as providing refreshments and putting resources in a location the public can access without permission communicate welcome and encourage adults to see the library as a valuable place for family interactive learning, not just transaction.

Training for staff—on both child development and partnership building with diverse parents—is essential. Professional development related to implicit bias and trauma-informed practice may strengthen efforts to provide asset-based parent education related to play, learning, and development. Recruitment of staff who mirror the community's cultural and racial identity will equip libraries to responsively serve diverse families.

Research demonstrates the importance of play, including for elementary-aged children. **Libraries should provide a range of play experiences to support robust cognitive and social development, including opportunities for free play, game play, and playful learning.** Program staff can think of their work as guiding children's play and discovery; they can model for parents what it looks like to gently support child-directed experiences with intentional set-up of materials, thoughtful scaffolds, and open-ended questions. The library space should communicate that play is welcome and important, not just for very young children. The toys and resources provided should be selected to offer opportunities children may not have at home.

Expanding online offerings, developing community hubs, offering robust STEAM programs, and focusing on family play are some current trends of note and promise. Libraries may not have the resources to develop programs and offerings in all these areas; a thoughtful outcomes-based alignment process can help a system focus on key strategies toward a goal of interactive family learning.

REFERENCES

Bucci, Monica, Sara Silvério Marques, Debora Oh, and Nadine Burke Harris. 2016. "Toxic Stress in Children and Adolescents." Advances in Pediatrics 63, no. 1: 403-28. Accessed December 7, 2020. https://doi.org/10.1016/j.yapd.2016.04.002.

Cabrera, Natasha J., Elizabeth Karberg, Jenessa L. Malin, and Daniela Aldoney. 2017. "The Magic of Play: Low-Income Mothers' and Fathers' Playfulness and Children's Emotion Regulation and Vocabulary Skills." Infant Mental Health Journal 38, no. 6: 757-771. Accessed December 7, 2020. https://doi.org/10.1002/imhj.21682.

Center for Childhood Creativity. 2015. Inspiring a Generation to Create: Critical Components of Creativity in Children. Accessed January 5, 2021. https://bayareadiscoverymuseum.org/resources/publications.

California Employment Development Department. "Unemployment Rate and Labor Force." Accessed December 7, 2020. https://www.labormarketinfo.edd.ca.gov/data/unemployment-and-labor-force.html.

Center on the Developing Child at Harvard University. 2020. "Protecting Our Children: COVID 19's Impact on Early Childhood and ACEs." Webinar. Accessed December 21, 2020. https://developingchild.harvard.edu/resources/protecting-our-children-covid-19s-impact-on-early-childhood-and-aces/

Ferjan Ramírez, Naja, Sarah R. Lytle, Melanie Fish, and Patricia K. Kuhl. 2018. "Parent Coaching at 6 and 10 Months Improves Language Outcomes at 14 months: A Randomized Controlled Trial." Developmental Science 22, no. 3.

Fisher, Kelly R., Kathy Hirsh-Pasek, Nora S. Newcomb, and Roberta Mitchnick Golinkoff. 2013. "Taking Shape: Supporting Preschoolers' Acquisition of Geometric Knowledge through Guided Play." Child Development 84, no. 6: 1872-1878. Accessed December 7, 2020. https://doi.org/10.1111/cdev.12091.

Golinkoff, Roberta Michnick and Kathy Hirsh-Pasek. 2016. Becoming Brilliant: What Science Tells Us About Raising Successful Children.

Gopnik, Alison, Andrew N. Meltzoff, and Patricia K. Kuhl. 1999. The Scientist in the Crib: Minds, Brains, and How Children Learn.

Gopnik, Alison and Caren Walker. 2013. "Considering Counterfactuals: The Relationship betwenn Causal Learning and Pretend Play." American Journal of Play 6, no 1: 15-28.

Harris, Nadine Burke. 2018. The Deepest Well: Healing the Long-Term Effects of Childhood Adversity.

Harris, Nadine Burke. 2020. Interview with Stephen Merrill. "Trauma is 'Written Into Our Bodies'—but Educators Can Help." Edutopia. September 11, 2020. Accessed December 7, 2020. https://www.edutopia.org/article/trauma-written-our-bodies-educators-can-help.

Hassinger-Das, Brenna, Kathy Hirsh-Pasek, and Roberta Michnick Golinkoff. 2017. "The Case of Brain Science and Guided Play: A Developing Story." YC Young Children 72, no. 2: 45-50. Accessed December 7, 2020. https://www.jstor.org/stable/90004121.

Hassinger-Das, Brenna, Jennifer M. Zosh, Nicole Hansen, Meghan Talarowski, Kate Zmich, Roberta Mitchnick Golinkoff, and Kathy Hirsh-Pasek. 2020. "Play-and-Learn: Leveraging Library Spaces to Promote Caregiver and Child Interaction." Library and Information Science Research 42, no. 1. Accessed December 7, 2020. https://doi.org/10.1016/j.lisr.2020.101002.

Hawkins, David. 2002. "I, Thou, It." The Informed Vision: Essays on Learning and Human Nature. 51-64.

Housman, Donna K. 2017. "The Importance of Emotional Competence and Self-Regulation from Birth: A Case for the Evidence-Based Emotional Cognitive Social Early Learning Approach." ICEP 11, no. 13. Accessed December 21, 2020. https://doi.org/10.1186/s40723-017-0038-6

Kirk, Gill and Jennifer Jay. 2018. "Supporting Kindergarten Children's Social and Emotional Development: Examining the Synergetic Role of Environments, Play, and Relationships." Journal of Research in Childhood Education 32, no. 4, 472–485. Accessed December 7, 2020. https://doi.org/10.1080/02568543.2018.1495671.

López, Meghan E. 2018. "In Danger at the Border: Parents Are Children's Best Tool Against Toxic Stress." ZERO TO THREE Journal 39, no. 1: 22–26.

National Academies of Sciences, Engineering, and Medicine. 2016. Parenting Matters: Supporting Parents of Children Ages 0-8. Washington, DC: The National Academies Press. Accessed December 7, 2020. https://doi.org/10.17226/21868.

Ortiz, Robin, and Erica M. Sibinga. 2017. "The Role of Mindfulness in Reducing the Adverse Effects of Childhood Stress and Trauma." Children 4, no. 3: 16. Accessed December 7, 2020. https://doi.org/10.3390/children4030016.

Osher, David, Pamela Cantor, Juliette Berg, Lily Steyer, and Todd Rose. 2020. "Drivers of Human Development: How Relationships and Context Shape Learning and Development." Applied Developmental Science 24, no. 1: 6-36. Accessed December 7, 2020. https://doi.org/10.1080/10888691.2017.1398650.

Playful Learning Landscapes Action Network. 2020. "Playbook 2.0." Accessed December 7, 2020. https://playfullearninglandscapes.com/wp-content/uploads/sites/7/2020/11/PLLAN-Playbook.pdf

Romeo, Rachel R., Julia A. Leonard, Sydney T. Robinson, Martin R. West, Allyson P. Mackey, Meredith L. Rowe, and John D. E. Gabrieli. 2018. "Beyond the 30-Million-Word Gap: Children's Conversational Exposure Is Associated with Language-Related Brain Function." Psychological Science 29, no. 5: 700-710. Accessed December 7, 2020.

Zosh, Jennifer M., Kathy Hirsh-Pasek, Emily J. Hopkins, Hanne Jensen, Claire Liu, Dave Neale, S. Lynneth Solis, and David Whitebread. 2018. "Accessing the Inaccessible: Redefining Play as a Spectrum." Frontiers in Psychology 9, no. 2: 1–12. Accessed December 7, 2020. https://doi.org/10.3389/fpsyg.2018.01124.