"Sometimes I Pounce on Twigs Because I'm a Meat Eater"
Supporting Physically Active Play and Outdoor Learning

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This article looks anew at the important role of physically active, outdoor play in children's social and cognitive development and the role of adults in supporting active, child-directed outdoor play. The authors describe the concept of play ecologies to highlight how children experience their environment as enlivened by their interactive inquiry. Using two episodes of physically active play, the authors discuss the purpose and sequence of the play in the context of the children's peer culture. They make policy recommendations to help teachers, parents, and organizations increase and enhance physically active play among young children.

Introduction

When children play without relying on the accomplished skills of an adult, they practice language skills, perspective taking, representational thinking, problem solving, and taking turns as they work hard to keep their games going.[1] These skills are the predictors of academic achievement and school adjustment.[2] In outdoor play areas, children may make use of large accessible props and natural materials like sand, a climbing platform, and the shade of an overhanging tree to follow their own inventiveness. Large outdoor spaces allow children to use their whole bodies to explore, plan, and carry out their own inquiries with a flexibility of space and noise.[3] Sand and climbing structures provide physical challenges for such play but leave the theme of play up to the children.

When children playfully interact with their environment, they receive immediate information and feedback about how the world works, including how their bodies work in the physical world. During play, their own thinking, feelings, and experiences are tested again and again by the consequences of their actions. Playful interaction with objects and people in the child's world builds confidence, self-esteem, and an inner drive to seek out new information.[4] The outdoors beckons them to explore physical and emotional experiences, to practice the managing of risk, and to satisfy their initiative. Adults supporting and promoting outdoor learning can benefit from understanding the active interrelationship between children and their play environment.

In this article, we will first explore the concept of play-area ecologies and consider the role of physically active play in peer development. Next, we will share close observations of two physically active play episodes that occurred between students at the preschool where author Jane Perry teaches. Then we will discuss these episodes and how they enhance our ability to understand the significance of physically active play in children's lives. Finally, we will make policy recommendations to help teachers and organizations increase and enhance physically active play among preschool students.

Ecology of Play Areas

Physically active play is one important vehicle through which children express their desire for making things happen and through which they understand themselves in the world. Teachers design their preschool to encourage children's active inquiry outside on the playground as well as inside in the classroom. Teachers prepare defined areas that invite children to come, stay, play together, and experience feedback from their actions. These areas of play are ecologies, where the play environment is not just a physical area but a place of interrelations.[5] Teachers understand play events, like the two episodes included in this article, by interpreting the children's experiences within the context of the life of the ecology.

We use the term *ecology* to highlight the living, interactive nature of children's play environment. Ecology is different from a play area because we pay attention to four cues that stimulate the quality and meaning of play. We look at the suggestive features of available materials, objects, equipment,

people, and space (e.g., play props, nature artifacts, tools, shade and shelter, familiar or infrequent playmates, and room for fast-paced movement or quiet focus). Next we consider what children naturally enjoy doing with the materials and equipment (e.g., digging; mixing and damming with sand and water; collecting and arranging leaves, nutshells, bark, and sticks; scampering up a slide; writing; drawing and prop construction with paper, markers, tape and scissors; and using milk crates to build). We observe the kinds of social interactions that occur in an ecology (e.g., domestic or superhero, settled or fast paced, and large group or small group or solitary). And finally, we consider how children have played in this area in the past (children remember specific instances of interactive play triggered by the ecology; "'Member that time we did that?" is a regular opening bid for a theme suggestion in young children's peer culture).[6]

On the playground, an ecology suggests certain kinds of activities. A block and sand table suggests planning and construction. An art and writing area suggests self-expression, design, and small motor skills. Bamboo plantings invoke the greenery of the natural world and the hushed spirit of hiding within. A climbing structure suggests height, power, and large muscle challenges. Open spaces invite running and chase. The children's interpretations of the four ecological cues, often innovative, give an ecology its dynamic quality.

An ecology encourages children's active involvement by focusing their curiosity and initiative.[7] The four cues communicate a message to children regarding what is intended or expected in a particular ecology. Children participate in creating the suggestive message by how they use the ecology. A climbing structure can be a nest up in a tree for one play group and a knight's castle for another. The experienced teacher uses close observation to follow and support the intellectual and social skills of the children as they make sense of ecological cues day after day, month after month.

Inside the classroom, ecologies can be quite explicit: the library, the block corner, the writing table. While such explicit ecologies can certainly exist outside with protection from weather, typically places of outdoor play are more open-ended. The degree of interpretation required on the part of the child depends on the degree of explicitness of ecology cues.[8] Flexible to innovative interpretation, outdoor ecologies challenge children to define specifically what it is they are doing when they interact with peers, which places more demand on children to communicate and negotiate during such play.[9]

Physical Activity Play with Peers

The playground is the place where children go to make sense of their world independently of adults. The open spaces and the flexibility of play themes on the playground are cues to children for self-initiated, active play. During outdoor play, children do not need to rely on the accomplished skills of an adult.[10] The playground is their time. Children seek out the playground for repetitive chasing and the bartering of friendships. Here they use feigned threats and pretend fear to integrate fragile interactions and signal and negotiate "this is pretend" from "this is real."[11] So predictable is physically active play when child initiated, that encouraging spontaneous peer play is one way to increase physically active play and health.[12] What does all this active peer play mean on the playground?

Physically Active Play as Peer Culture

Children learn and develop by organizing and interpreting information from their daily experiences as they play, often in the company of other children.[13] The playground is no exception. It is a place of busy social interaction, curiosity, pretending, and making something happen.

By directing their own fun and games, children—even as young as three and four years old—create a culture of peer play.[14] Two consistent themes fuel the play culture of young children on the playground: the strong desire to be in the company of other playmates and children's intent and desire to challenge and experience control.[15] Living in the shadow of adult authority, the peer culture provides children the security of peer company as they seek out feelings of expertise.[16]

Physically active play on the playground serves as a cornerstone of how children experience their dual desire for peer company and for directing their own actions. Close observation of physically active outdoor play provides evidence of children's early peer culture. Inclusion in play may rely on adopting designated roles—"We only have cheetahs in our game," a child might say, for example. Teacher organization and rules can be challenged—"Let's not go to lunch, okay?" Past episodes of play together loom prominently when negotiating current themes—"Hey! Mucky muck cakes! 'Member we did that?"[17] The peer culture offers children "fantasy, friendship, and fairness."[18]

Outdoor play, nevertheless, can be unpredictable. In the exuberant, fast-paced fever of the playground, a play episode may end without warning or recognition,

leaving a playmate suddenly without a partner.[19] Children respond with play routines intended to insure participation and some measure of control. Physically active play routines involving rough-and-tumble play establish and maintain affiliation, albeit through dominance.[20] The various forms of "flee" and "chase" serve an integrative function by coalescing and protecting peer play.[21]

Physically active play with others not only supports affiliation. Some researchers find a correlation between the duration of self-directed play interactions and the children's own independent negotiating skills.[22] When children are mutually involved in making sense of ecology cues, their social skills are more integrated.[23] Physically active play offers integrative glue precisely because children are actively interpreting rules and expectations with each other. Adults can use close observation and reflection of the children's peer culture on the playground to support children's development and learning through outdoor play.

The Role of Adults in Physically Active Play

Physically active play is instrumental in children's development. A significant feature of physically active play is that, from the children's point of view, it is fun, inviting, child directed, voluntary, spontaneous, and often involves strong elements of pretending.[24] From an adult point of view, these components of physically active play work together to complement healthy development. As their brains are refreshed in spontaneous fun, children work extra hard to devise their own ways of directing its complex interactions and negotiations.[25]

A next step in the study of play is to delineate the strategies for the adult in inviting and supporting such rich and healthy, child-directed, outdoor experiences. When adults understand that the physically active play of children is purposeful and follows a sequence, then grown-ups can better support what the kids have in mind as they play, which, in turn, enhances the learning value of the play.

Adults observe and facilitate children's initiatives through three phases of a play interaction: initiation, negotiation, and enactment.[26] To *initiate* the play interaction, children first need to agree that they are playing together. Children often initiate play episodes with a request to acknowledge the mutual friendship. "We're friends, right?" they ask, for example.[27]

Once children mutually acknowledge each other, they then *negotiate* an agreement of the theme of their play. Children establish play themes by securing permission from peers—"Pretend this was our cave, 'kay?"[28] Elaborations,

additions, or switches in themes also require recognition for play to proceed, sometimes requiring persistence—"Pretend this was our cave, 'kay? 'Kay? We were scared so we live in this cave, right?"[29]

"Right."

When these two features are established, children *enact* the third phase of play, which is the give-and-take of suggestions, agreements, alterations, negotiations, and problem solving involved as the play interaction proceeds.

Once adults understand the progression of children's play, then adults can facilitate children's progression through the three phases of play when inexperience or developmental challenges present themselves. On the playground, adults seek to promote child-initiated peer play that is both focused (by either pretending or inquiry) and of long duration. They support the initiative and experience of children by preparing and protecting ecologies as spots for peer interaction and then by observing the progress of the play through the phases of initiation, negotiation, and enactment. When play loses focus, adults can step in to buttress the child-driven play with prompts for children's own verbal commentary, modeling pretend behavior and ideas, or reinforcing or elaborating on children's own ideas.

The following two episodes are evidence for just how richly engaging outdoor play can be when adults incorporate observation, reflection, and interpretation into their teaching strategies and use the information to encourage child-directed, physically active play.

Episodes of Physically Active Play

Method of Study

Jane Perry observed and supervised the following physically active play episodes on the playground at the full-day preschool where she teaches. The school is located on the campus of a large university, and the preschoolers are children of the students, staff, and faculty of the university. The playground includes an overhanging roof for weather-protected table activities involving art, writing, sand play, games, and constructive activities. A soft space for puppets and stuffed animals is also located here. The playground yard proper includes garden boxes, a sand kitchen for domestic play with sand and water, a sandpit for construction with props and/or water channeling, an adaptable ball/wheel play area, and a covered area with trees, a climbing structure, and

a tire swing. The playground is available to the children by their choice for the majority of the day, exclusive of naps and some gathering times. Teachers supervise both outside and inside the classroom while children move in and out following their own active inquiry.

The children Perry observed in the following two episodes were between three and five years of age. They all knew her well as she had been their teacher for one or two years and had also taught some of their older siblings. As she wrote her observations and transcribed their conversations, Perry often sat with her pad and pen next to their places of play to help make the children comfortable with her presence. The two episodes of physically active play with peers offer a glimpse into the world of young children as they make sense of outdoor learning opportunities.

Episode 1: "Do You Wanna Get into the Crate?"

This episode occurred in the sandpit, an irregular, oval-shaped area in the center of the playground in which up to six children could play comfortably. A water spout and hose were available nearby. Shovels, pails, sifters, water/sand wheels, tubes, trucks, milk crates, and dinosaurs were arranged accessibly nearby. Perry set up the sandpit with two sand mounds, each flanked by a pair of shovels. The history of this ecology was constructive (i.e., having a plan to make something happen) and imaginative.

When Perry arrived, Morgan and Emma were already playing with dinosaurs around one mound. Michael brought over a milk crate and then a board and placed both on the far side of the other mound. The sand, crate, and board were all accessible and suggestive cues, which guided Michael's experimentation and framed the thematic focus he created. The mounds created a focus of intention.

Michael placed the board on top of the crate at a sloping angle. On top of the board he positioned another milk crate that rested midway down the board's slope.

Initiation of the episode. Michael climbed onto the board, and it tipped precariously. He stepped down.

"Pretty shaky, eh?" Jane Perry commented with a tag question to prompt follow-up from Michael.

"Yeah," Michael agreed, acknowledging her question and thereby initiating the interaction of the episode. "I need to make it more stable," he added, struggling with the board.

"What are you trying to do?" Perry asked.

"Tryin' ta keep this down." Michael's response suggested a theme of balance and angle as he tried to secure the fulcrum's base.

Michael pushed the bottom crate into the sand. He climbed again up onto the board and into the top crate. The crate slid partway down the board. He climbed out of the crate, moved it up the board's incline, climbed back into it again, and together he and the crate slid partway back down the board.

"Morgan," Michael called out, extending initiation to a peer. His invitation included a suggested theme. "Do you wanna get into the crate?" Michael slid the crate up the board.

Perry stepped aside.

Negotiation of the episode. Morgan left her playmate Emma and ran over to climb into the crate, thereby completing the initiation and nonverbally acknowledging the theme.

Enactment of the episode. Emma walked over and registered her discontent at being left behind. "That's not nice," she said. This illustrates the jockeying for allegiance as young children quickly switch interactive attention without notice or marker.

At the same time, Michael jumped on the lower end of the board, and the top crate, with Morgan in it, slipped toward the edge of the board.

Morgan climbed out of the crate. "Too scary," she said. Danger and fear are dominant peer-culture themes for young children. Morgan might also have made such a judgment based on her familiarity with Michael and his play. Morgan had known Michael in child care since they were infants.

Michael tried to balance his fulcrum so that the lower, inclined end of the board would be off the ground. He turned back and looked at Morgan, establishing facial engagement. "I think you're too heavy," he said, offering a hypothesis for the board's persistent downward angle.

"Why don't you try me," suggested Emma. "I'm a little lighter than her," she added, picking up on the element of weight as these children interpret Michael's arrangement.

"'Kay," said Michael, accepting Emma's involvement in the interaction. Emma got into the crate. Michael jumped on the lower end of the board. Emma laughed as her crate jumped and slid downward.

"Do that again!" she said. Michael's game was fun for Emma, in part, because she and Michael were experimenting with a novel thrill, a thrill Morgan

had labeled as scary. Making something happen is a significant feature of the mutual bond experienced by children in physically active play together.

Morgan sat on the board next to the crate. "I sit here," she said, turning the focus back to herself. "And you get everybody else on, then we go up."

Michael was not ready to take her suggestion. "Can you both get off?" he asked. With Emma still in the crate, he moved her higher up on the board to Morgan, and then he jumped on the end.

Morgan bumped and teetered. "Bad Michael," she chastised in a stern voice. "You almost made me fall." Morgan highlighted the danger and added responsibility to the theme.

"Both you guys get off," Michael persisted. Emma and Morgan ignored him. Here we can see a jockeying for leadership in directing the progress of this interaction.

"Both of you guys get off, I want to try something," Michael persisted. Emma got off. Morgan did not.

"This is my experiment," Michael said, jockeying for position by referring to a peer-culture routine, one which held that whoever starts a game is the leader. Morgan jumped off the edge of the board. Michael almost lost his balance. Risk and danger remained salient in this game.

"Morgan, you almost made me crack my head," he chided in one-upmanship.

"Sorry," Morgan replied.

Perry was interrupted before the episode ended, thus ending her monitoring of it.

Episode 1: Interpretation

"Do You Wanna Get into the Crate?" involved some precarious experimentation, experienced as both scary and pleasurable. Though Perry was close by to monitor, Michael and his playmates independently managed this outdoor play experience. The children benefited from Perry's arrangement of accessible materials and organization of space to allow children to create a spot for something to happen and experiment with its consequences. Perry watched nearby, assuring herself of Michael's intentions by asking a few pointed questions and emphasizing his problem-solving process.

The game propelled the classroom into a series of inquiries about fulcrums and catapults. This specific game was played again and again during the next

several months in the sand ecology, the recollection of it becoming as much a suggestive cue as the accessible physical materials.[30] Perry supplemented the children's inquiry with hand-sized, thin, rectangular, wood blocks available on an outside table so children could build their own catapults.

The episode is a good example of outdoor inquiry, including the skills of observing, questioning, investigating, analyzing, reaching conclusions, and communicating to others.[31] Michael, Morgan, and Emma used an open sand space with available constructive materials to interpret and manage not only the physics of gravity, but the peer themes of danger, safety, and control. When Morgan added the threat of dangerous wrongdoing, she transformed the experiment into a complex interaction in what it means to be responsible for one another. Morgan's comments were also relevant because she was making sense of the mixed gender component to the outdoor interaction.[32]

Episode 2: "Sometimes I Pounce on Twigs"

The next episode of physically active play occurred in and around a climbing structure and was infused by the natural materials of the ecology. Perry encountered Mollie in a back area of the playground under the shade of trees. It was raining lightly, and Mollie was wearing a raincoat. Anna had a water-resistant jacket and hood. Mollie was walking in the tanbark with Anna at her side. Farther out from the sandpit, this ecology also includes a tire swing attached to a two-tiered climber with hanging bars to swing on and a net. Children seek out play interactions generally independent of adults in this area, where running and chasing occur frequently and physical challenges requiring gross motor skills are coupled with the pretend of superheroes and animals.

The interaction was clearly mutual. Mollie and Anna had recognized each other as playmates and were already talking together. For young children, this first step in a play interaction is not always so clear. Rampant running of a pack of many children can leave some of them unclear as to who is, in fact, in the game.[33] This twosome offered opportunity for exchange in a simple taking of turns. Perry began her observation by listening for a theme to the activity.

Negotiation of the episode. Mollie turned to Anna. "I'm very slow right now because I'm a turtle." She then picked up speed and said, "But right now I'm a lion." Mollie's physical movement was linked to her imaginative thinking. Mollie was experiencing a new coordination, one in which her movements did not suddenly produce unpredictable and upsetting results the way they sometimes had in the past. So maybe she did feel strong and magnificent like

a lion. And she had found a ready partner with whom to practice new leadership skills as a lion.

Mollie ran around our climbing equipment. Perry followed her, taking notes, and she heard Mollie add: "Sometimes I pounce on twigs because I'm a meat eater." She ran around the climbing equipment a second time with Anna following. Although the two players were engaged in an interaction, they had yet to agree about what they were playing. So far, Mollie had only referred to herself. The peer culture operates on collective acknowledgement to maintain cooperation and mutual understanding.

"Why don't you like horses?" Anna asked. They were still bartering over a theme. Michael, Morgan, and Emma had used props to negotiate what they were playing. Mollie and Anna now used imaginary roles to direct theme negotiation.

"Lions only like magical horses," Mollie acceded, recognizing Anna's inclusion of horses in the game, with a controlling caveat.

"Real life is magical because we got some fairy dust, right?" Anna confirmed. She uses the pronoun "we" to underscore the mutual nature of the game and added imaginary content as an appeal for agreement, hoping the tag question would prompt acceptance.

"Right," Mollie agreed, and the theme was settled.

Enactment of the episode. They ran around the climbing equipment again, with Mollie in the lead. "Why don't we play lion vertebrae?" she suggested. Mollie was demonstrating her new leadership skills by renegotiating the theme, not an uncommon practice in young children's interactions where planning for the game can often take precedence over actually enacting the game.[34] By running in front, Mollie reinforces her leadership status.

Emma and Michael arrived, saw Mollie running, and chased after her.

Perry interrupted. She wanted Mollie and Anna to have an opportunity to continue with what she considered an already successfully challenging interaction. "Emma, Michael," Perry said.

They did not stop.

"Emma. Michael," Perry repeated. "Mollie and Anna are taking a turn playing together. You can play someplace else till they're done, okay?" Perry used the tag question to prompt a negotiated acknowledgement of her request.

"'Kay," says Emma, and she ran off. Michael followed her.

"How 'bout we play fairy?" asked Anna, offering up the magical component again as a question.

"How 'bout lion vertebrae?" Mollie reiterated, asking for Anna's acceptance. "I'll be the lion, you be the vertebrae."

"Yeah," Anna agreed. "I'll be the bird of prey." Anna and Mollie were also playing with the sound of words.

This is an example of how important acknowledgement is in the world of peer play. Language is absorbed at a dramatic rate in the early years, and playmates do not always share the same vocabulary, so interactive progression sometimes relies on acceptance alone. Receiving it, Mollie offered a squeal, a cue to the pretend nature of the game and ran off, including the chase as a means to cement affiliation.[35] Anna chased after Mollie.

Mollie slowed down and said, "Anna, now I need to talk to you." Mollie interrupted the imaginary play to offer direction. As a cognitive skill, signals of "pretend" or "real" involve sophisticated shifts between the real world of objects and people and the fantasy world of transformations.

"Pretend you are tricking me, okay?"

"Okay."

"You say: 'Come on, I will eat you.'"

"Come on, I will eat you!" Anna repeated. "Then what do I do?"

"Then you lead me to your home," Mollie added. She ran to a tree and looked up. Anna followed. The tree became a prop that facilitated Mollie's imaginative progress.

"You have a nest up in the tree," Mollie said.

"Then what do I do?" Anna asked.

"You . . ." Mollie began, and then ran to the net in the climbing equipment. Here was another example of how landscaping and physically active play props buttress imagination and the momentum of interaction. The net would be the bird's nest. Mollie finished: "You try and put me in the oven, but I could really get out with my sharp claws." Mollie offered a dramatic element of danger to the game, though she had yet to get explicit agreement with this elaboration. Instead, she crawled into the net.

She turned to look at Anna. Facial engagement holds a powerful effect in integrating interactions.[36] "Still look at my face, but you were a little bit scared."

Looking at Mollie, Anna nodded assent.

Episode 2: Interpretation

"Sometimes I Pounce on Twigs" is an example of how outdoor ecologies can complement children's experience of control and expertise. Mollie and Anna

chose the most fast-paced, independent section of the playground in which to practice demonstrativeness. In Mollie's case, she played a lion that has sharp claws and pounces. The rain was not a deterrent for either child. Mollie used leadership skills to direct the interaction. Her skills were inspired by the physical coordination she experienced. This episode included examples of how children signal and negotiate "this is pretend" from "this is real" so typical in physically active play. Mollie referred to Anna by name and interjected the directorial cues "pretend that" and "I need to talk to you." The interaction included use of feigned fear, "You were a little bit scared," and a tight back-and-forth underscored by tag questions and acknowledged permissions to negotiate the game's progress.[37] Physically active play, in this case, a low-key version of the chase routine, functioned to underscore Mollie's status as well as to inform her theme. This episode is an example of how, in peer play, children can perform with new indications of competence while playing in the company of others.[38] Mollie and Anna's skills were scaffolded by the collaborative interaction.

Perry protects Mollie and Anna's new steps in interactive, physical activity by steering Emma and Michael away to avoid their interruption. At the preschool age, children are still practicing interaction skills. While this dyad is successful, a foursome may have proven too stimulating. Perry's hope was that with repeated, successful outdoor experience, Mollie and Anna would seek out additional playmates on their own. Observing their play in the following weeks and months, she found that Mollie and Anna did, in fact, feel comfortable including other play partners, adding a dimension to the complexity of their learning and experiences.

This episode was infused with the inspiration that the physical activity generated. Mollie in particular found balance a challenge and often became distressed with her own injuries. Part of Perry's role as the adult was to prepare Mollie for more rigorous play with peers by coaching her in steps she could take to recover after small injuries—deep breaths, getting ice for her injury, and wearing sturdy shoes. With these small steps, Perry helped Mollie to claim her independent, outdoor initiative. Sturdy now in the fast-paced regions of the playground, Mollie gained access to the learning value of the peer culture.

Just as for Michael, Morgan, and Emma, peer play for Mollie and Anna provided the support and the motivation that drove their experience not only of social and linguistic skills but of physical and cognitive skills as well.

Conclusion

Physically active play with peers offers important intellectual, social, and physical skill development for young children. When children play without relying on the accomplished skills of an adult, they engage not only in physical challenges but also in complex challenges in language, representational thinking, and negotiating. What did Michael, Morgan, Emma, Mollie, and Anna learn out of doors that they could not have learned inside? They employed large, accessible props, materials, and the shade of a tree to follow their own curiosity in spaces large enough to use their whole bodies to carry out their self-generated plans and fantasies. With imagination complemented by nature, these children exploited the playground to explore themes of danger, safety, risk, power, and control.[39]

In sharing our close observations of physically active play, we hope not only to remind adults of the educational and social benefits of outdoor play, but to help adults remember their own play as children. In short, we want to reengage adults with their own childhoods. If adults remember what it is viscerally like to be a child in play, they can better understand the need for outdoor play in childhood.

Policy Recommendation

All children need several periods of daily, outdoor, active play to be healthy, to grow, and to learn. Adults in charge of children's daily experiences must ensure that space is available for children to concentrate their curiosity and develop their abilities to plan as they settle into the pleasure, exuberance, challenge, and spontaneity of physically active play with peers.

The daily schedule for children in group settings must include morning, midday, and afternoon play periods with sufficient time in each period for children to plan, pretend, and enact their play. Children need at least forty-five minutes to accomplish these important features of their play. The physical space and schedule can work together to complement children's active inquiry by an indoor-outdoor design, in which children are free to follow their own curiosity inside or out.

Playgrounds should be designed to promote children's relationships with each other. Playground spaces need to give children access to natural materials and to space sufficient to manipulate their bodies, play props, materials, and

tools. Water, sand, wood, sun, shade, height, slope, and growing plants are essential requirements for developing children.

Adults must support and encourage outside time for all children because in all development areas—physical, social, aesthetic, affective, cognitive, and language—children learn best outside. Adults responsible for children's academic development should receive professional training in using outdoor ecologies as part of their classroom curriculum and in addressing their own thoughts and feelings about being outdoors.

Adults should support play outdoors in all weather and make sure children have appropriate clothing. If adults protect children's health, outside play in inclement weather offers kids the chance to explore and investigate the unique learning opportunities in nature of temperature changes, rain, snow, and blustery wind.

Parents and parent advocates should also be mindful of the dangers to children's health and welfare in some physically active settings. Unsafe neighborhoods or neighborhoods without access to green, growing spaces for active play need attention from city planners, local health officials, and community leaders. Campaigns to support a child's right to play and a child's right to play safely outside offer tools for such community efforts.[40]

Promoting physically active play outside is especially important today when young children's lives are increasingly structured by organized activities.[41] Outdoor play ecologies offer one place where young children can follow their craving for control in a multisensory environment of inquiry unfettered by adult wants.

Notes

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