Outside Classroom: Unstructured Outdoor Play in Early Childhood Education

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Unstructured Outdoor Play in Early Childhood Education

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Bank Street College of Education

Early Childhood and Childhood General Education

Sal Vascellaro

June 23, 2016
Outside Classroom:  
Unstructured Outdoor Play in Early Childhood Education  
By Valerie Lockhart

Abstract
This independent study examines the benefits of unstructured outdoor play in early childhood education through the lens of an original children’s book and correlative research. The purpose of the study is twofold: to encourage children, through story, to play and explore in nature, and to inform parents, educators, and child advocates about the many physical, cognitive, and social-emotional benefits of young children’s regular engagement in unstructured outdoor play. The fictional story, titled Outside Classroom, is conceived as a 5 x 8 inch hardcover trade book. Told through rhyming verse and ink and watercolor illustrations, it is the tale of a teacher, her 25 students, and their collective dream of a kindergarten class held entirely outdoors. Embedded in the work are realistic representations of early childhood education experiences in nature — from running to planting to digging to building — and an appendix that identifies the healthy developmental component of each activity. An accompanying rationale rounds out the study with an examination of the growing body of research on the necessity of unstructured outdoor play, how it applies to early childhood education and child development, and why we should all rethink how and where young kids learn best.
Acknowledgements

I have not always been a huge nature advocate. I was a bookworm growing up, content to be anywhere I could flip a page. But I've always loved being outside. Hot southern sunshine, grapefruit trees, saltwater… These are the things that made me and remain in me, the things that influence my aesthetic, help me feel calm, and affect my dreams (sleeping and waking). All this time later, these special parts of nature still keep me playful. I can honestly say that I am my most authentic self splashing around, looking for conch shells with my feet off the shores of Captiva, Florida. Presently, I am far away from those warm waters and tall palms, but the experiences I’ve had outdoors with children here in New York bring me right back to that peaceful feeling. Whether we were making up stories about the frozen Hudson River, flipping over logs to find creatures underneath, planting seeds from school lunch apples that I thought would never grow (they did!), or getting caught in a gorgeous rainstorm in Central Park, these children remind me of the importance, the surprise, the joy of nature. They teach me that no matter where I am, there is always some outside, somewhere, in which to play. And for that I’m incredibly grateful.

My conviction in nature play as a birthright also stems from the convictions of others, mostly educators and friends who have shown me the absolute necessity
of unstructured outdoor play — who went outside (and stayed outside) when most people would have stayed in — and have forever transformed me as a teacher. I am indebted to all of you.

First and foremost, I learned the true power of unstructured outside play during my years as a teaching assistant to the Best Kindergarten Teacher Ever, John Allgood. We took the children outside in all weather (save for freezing rain or lightening); I was hesitant at first, but rain boots, two pairs of pants, and a we-can-do-this attitude can work wonders; and trust me when I say that watching five-year-olds play in freshly fallen snow will transform even the fiercest outdoor play skeptics. This year, John and I initiated “Outside Classroom,” where, in addition to daily recess, we brought our public school kindergarten class to play in a nearby park for up to four hours every Wednesday, in all seasons. We collected fall leaves, counted trees, dug up worms, jumped in snow, opened a Mud Restaurant, rolled down hills, carried logs, read books, and so much more. John taught me what it means to observe and reflect on each child as an individual; how to step in and help when necessary, but mostly how to stay back and really see them.

During my brief experience at Brooklyn Forest School, I learned the effectiveness of simplicity; that with children our actions really can speak louder than words. In the middle of Prospect and Central Parks, my fellow teachers and I would build fairy houses, play in dirt, and pass out buttered bread without so much as a
whisper or two; in less than a minute, every child would happily join in. Usually the only noises we could hear were chittering birds and chattering nannies — and this in a class of a dozen three-year-olds!

I am indebted to Alicia Tait, a fellow bowler and unexpected ally in the fight for nature play. A few league games in, I learned Alicia singlehandedly started her own enterprise, Naturally Curious Nature Walks, where she takes groups of young children on sensory-based nature explorations in Prospect Park, Brooklyn. Alicia showed me that in this movement for outdoor play, we need to actually move! It is because of her drive and determination that we will inaugurate our Simply Summer Nature Collective this July, an outside-only “un-camp” experience where young children, through hours of unstructured play, will “take back their summer” and commune with nature. I cannot wait for the exploring and growing we will all undergo.

Finally, I wish to thank my parents, Carol and Doug, who knew I could benefit from seeing grass snakes in the morning and watching breathtaking sunsets in the evening long before I did. I dedicate this work to the both of you.
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You didn't come into this world. You came out of it, like a wave from the ocean.

You are not a stranger here. — Alan Watts

∞

Those who contemplate the beauty of the earth find reserves of strength that will endure as long as life lasts. There is something infinitely healing in the repeated refrains of nature — the assurance that dawn comes after night, and spring after winter. — Rachel Carson

∞

The voice of nature is always encouraging. — Henry David Thoreau

∞

You can’t say you can’t play. — Vivian Paley

∞

A hole is to dig. — Ruth Krauss

∞

Prepare to disembark! — My mother
PART I: Go Outside and Play!

Introduction

When I observe a group of children who are given the chance to play in nature, one aspect stands out more than any other: how effortlessly, how contentedly, how naturally the children engage with their surroundings. The experience is similar to what happens when you let a dog off its leash to run freely in a park, or how stars appear in a pitch black sky. When children play outdoors, they seem most like themselves — most childlike — easily, joyfully, and without struggle. Nature is unique in how it engages children. Whether climbing a tree, digging in mud, or observing a bird in a nest, children can find a place and rhythm in which to insert themselves. And they do so with little to no instruction from adults. There is a critical need to acknowledge that what comes naturally to children should be honored as significant to their growth and well-being. Every child on earth is born with the right to connect with nature; the promise and opportunity to see, touch, hear, sometimes taste, often speak with, and freely immerse in the natural world around them is integral to their health, happiness, and whole being.

So how do we quantify the well-being of a child? Most parents, educators, and child advocates, including psychologists and neuroscientists, are likely to agree
that it can be expressed as healthy, comfortable child development. As children grow physically, emotionally, and cognitively, they are also progressing from dependency toward increasing autonomy. This autonomy reveals itself through independence, self-confidence, and a rich inner life. The developmental process has a predictable sequence, yet a fundamental feature is that it unfolds at different times and ages for different children. Most people know that children learn to walk at different ages; in the same way, one child may have more developed hand-eye coordination, or one-to-one correspondence, or mechanisms for coping with separation than another child of the same age. Temperament, personality, and experience also play into development, as children of the same age will differ in how they interact and connect with others. Knowledge of these developmental shifts, and an understanding of the importance of meeting children on their own terms as they undergo these shifts, is crucial in supporting their well-being. The practical component of this support comes in the equally significant requisite that adults give children the space — literally — to experience and express these changes. Fortunately, the complex and engaging work of supporting child development is possible, and with a practice that is just as complex and engaging: unstructured outdoor play.

**Why Play?**

Research shows that play is the primary method by which children grow, comfortably and naturally. To reiterate the conviction of countless child development scholars and my personal philosophy as an early childhood
educator: play is a child’s work. Sadly, many adults hold the belief that play is frivolous and peripheral. They consider it a superfluous activity, confined to one’s “free time,” only after “real work” is done. Who hasn't been told, at some point in their life, to “stop playing around”? But children are not smaller, shorter grown-ups. Their ways are not our ways, and their perspectives are not the same as ours. “To understand children’s play,” said Barbara Biber (1951/2015), a leading researcher in child psychology and early education, “we must loosen our imaginations from the restrictions of adultness and the limitations of logic that is tied in with literalness and objective reality” (p. 29). The essence and coherence of every child’s play experience is subjective, and not always immediately decipherable, but within the action one can always find an advancement toward some form of understanding. Plus — it’s fun! Even Biber (1951/2015) was keen to take into account that “for a child to have fun is basic to his future happiness.” I like to think of early childhood play as similar to that dream job many of us adults always fantasize about: the one where we go to work, do something satisfying, and finish the day content. Even child development psychologists Erik Erikson and Jean Piaget agreed (as did that famous neighbor Fred Rogers) that play is not a respite from serious cognitive and creative learning; play is serious learning. It really is the work of childhood.

It's easy to miss the profound and complicated nature of what is occurring when children play, but with some knowledge of basic child development and the individual child, as well as time for observation, we can better understand the
processes taking place. Play is comprised of three main features: recasting of experience in symbolic form; exploration of the child’s environment and the materials within that environment; and the forming and deepening of interpersonal relationships, offering a time and place where children can collaborate, negotiate, and exchange information with each other (Nager and Shapiro, 2000, p. 54). When children play, they are synthesizing information and making meaning of the world around them. They are unpacking questions and elaborating on their ideas about the everyday; they are building, creating, exchanging information. What looks like a simple game of “family” or “ninjas” or “hot lava” is really a complicated activity with sophisticated rules that must be understood and followed. According to Wendy Banning and Ginny Sullivan, authors of *Lens on Outdoor Learning* (2014), when children play, they are “sifting through and testing out information and perceptions, working together to build an understanding of the world” (p. 9). Play is an investigation into one’s feelings, identity, and aspirations. Says Vivian Paley, author of *A Childs Work*, play “helps children achieve the goal of an open mind primed to tackle new ideas” (2004, p. 26). And isn’t that what early childhood learning is all about? A constant acquisition and synthesis of new ideas and information, about themselves and the people, places, things, and routines they encounter in their everyday.

Decades of research have demonstrated the effectiveness of play as a pathway to learning and development. An article by Paul Tullis published in *Scientific American Mind* (2011) about early childhood learning demonstrated the power of
children’s innate curiosity, which can lead them “to develop their social, emotional, and physical skills independently, through exploration — that is, through play” (p. 1). The motivational component within these playful contexts is important; young children are very serious about learning from the world around them. According to Edward Miller and Joan Almon (2009), founders of the nonprofit research and advocacy organization Alliance for Childhood, Young children work hard at play. They invent scenes and stories, solve problems, and negotiate their way through social roadblocks. They know what they want to do and work diligently to do it. Because their motivation comes from within, they learn the powerful lesson of pursuing their own ideas to a successful conclusion. Research shows that children who engage in complex forms of socio-dramatic play have greater language skills than non-players, better social skills, more empathy, more imagination, and more of the subtle capacity to know what others mean. They are less aggressive and show more self-control and higher levels of thinking. (p. 2)

These skills support cognition and ready children for academic success later in life. In a series of studies done over several years, the American Academy of Pediatrics has maintained that play is integral to the academic environment, helping children adjust to being in school, enhancing their readiness to learn, and developing their problem-solving skills. The association continues to insist that play is necessary for optimizing a child’s social, emotional, physical, and
cognitive development (Ginsberg, 2007; Pediatrics, 2013). Even neuroscientists are demonstrating the link between cognition and play. Recent neurological studies showed that young children “learn best through direct hands-on experience and through play, music, and art — in other words, those things that stimulate imagination and creativity” (Kenny, 2013, p. 11).

This research must be used to influence how we teach children at school and nurture them in life; play must become the foundation and context for early childhood education. “Play-based learning” or “playful learning” are the terms widely used for such practices, and are often process-based rather than content-based. It’s not about what the child knows, but the process by which he or she finds the answers. “Play-based learning encourages children to discover for themselves how to assimilate new information and increases problem-solving through divergent thinking” (Kenny, 2012, p. 12). Play-based learning processes directly address how children learn how to learn. “A key component of children’s learning involves them developing strategies around how they learn. To be effective learners, they must know how to best approach a task, break it down into manageable pieces, and anticipate what is coming next. They need occasions to develop resilience in the face of perceived failure and opportunities of inventiveness as they come up with new ways to approach a problem” (Banning and Sullivan, 2014, p. 2). Playful learning is also firmly rooted in relationships, with other children and with attentive adult caregivers, as well as in things that are meaningful to children. Interacting with friends, mentoring from
adults, curiosity about the world around them… these things all come together, naturally, outside.

**Why Outdoors?**

When I pare down the elaborate concept of play-based learning, I come away with a simple union: curiosity and creativity. In other words, *What things or ideas are children innately interested in, and what are all the ways they can experience them?* If we let children lead, they will be able to show us the answer to this question. As adults, it’s important that we seek to offer opportunities for curiosity and creativity, and I firmly believe that in nature — inherently complex and suited to open-ended experiences — we can find an unending source of wonder. Robin Moore, an expert in the design of play and learning environments and former President of the International Association for the Child's Right to Play, also contends that natural settings are essential for young ones because they stimulate all the senses and integrate informal play with formal learning. The multisensory explorations help build “the cognitive constructs necessary for sustained intellectual development,” while the “natural spaces and materials stimulate children’s limitless imaginations and serve as the medium of inventiveness and creativity” (as cited in Louv, 2008). When children are given the chance to explore and investigate in an environment with few restrictions on space and resources, their learning becomes that much more meaningful to them. They are curious, and find creative ways of investigating their wonder.
Early theoretical work in the field of natural play environments was done by the architect Simon Nicholson in the 1970s. Nicholson (1972) developed the “loose-parts theory,” which states that “in any environment, both the degree of inventiveness and creativity, and the possibility of discovery, are directly proportional to the number and kind of variables in it” (p.30). A “loose-parts” material is open-ended; children use their imaginations to work and play with it, giving it many different purposes or combining it with other loose-parts materials. Natural settings are full of them: sticks, rocks, trees, bushes, water, leaves, nuts, seeds, flowers, sand, grasses, mosses, lichen, feathers, rods, buds, berries, bark, and more. They become building materials, tools, private shelters, furniture, currency, clothes, food, art, and good friends. They become the play things and work things of children (no instructions included). Richard Louv, co-chair of the National Forum on Children and Nature and author of Last Child in the Woods (2008), agrees: “Nature, which excites all the senses, remains the richest source of loose parts” (p. 87). And nature to a child is not necessarily a lush forest or an idyllic meadow; an overgrown urban lot, a ditch, or even a patch of neglected grass next to a handball court can be a captivating place for extended play and investigation (I speak from experience on the latter).

A key feature of these seemingly limitless natural spaces is the types of behaviors they foster. Many studies have shown that green spaces promote more inventive forms of play than that which occurs on manufactured playgrounds. One analysis showed that natural (or naturally-enhanced)
environments inspired more fantasy play in children, which provided more opportunities for both genders to play together as equals. Another particularly interesting inquiry revealed that children who engaged in play spaces dominated by traditional playground structures “established their social hierarchy through physical competence”; but in spaces with more vegetation, children played more pretend games, “and their social standing became based less on physical abilities and more on language skills, creativity, and inventiveness” (Louv, 2008, p. 88). When children are not just running and climbing, but also pretending, observing, building, and communicating, more of them are able to shine.

The creative thinking fostered in natural settings is not confined solely to enhancing fantasy play; inventiveness is important in problem-solving and cognitive processing. Children are constantly using different pieces of nature as imaginary tools. This stimulates their imagination better than modern toys, leading to better problem-solving abilities (Kenny, 2013, p.13). By engaging creatively with the physical properties of the countless natural materials available — rough tree bark, soft rocks, and frozen rainwater, for example — children are provided with endless opportunities for learning. To be creative is also to take risks. “In the less constrained setting of the outdoors, children feel freer to experiment and try new things. Because it is open-ended and children’s behavior within it is less prescribed, the outdoors supports valuable risk-taking” (Banning and Sullivan, 2013, pg. 2). Whether it’s physically, socially, or cognitively, children are much more likely to stretch their bodies and their minds in nature.
Lastly, nature grows with children. Unlike playgrounds, which are limited by size and material, nature is expansive. Very young children focus on the immediate, the rocks and earthworms in a green space close to home, for example. As they grow, the geography of their investigations may widen to a patch of wood or a stream nearby, and so on and so forth. The concept of nature as a play space can evolve with age and experience.

**Why Unstructured?**

Of the three, the first word in the *Unstructured Outdoor Play* trifecta is probably the most difficult for educators and parents to digest. It immediately catches us off guard: Where are the planned activities? What will children do? How will they learn? These are all valid questions, but they are marked by a cultural conditioning that emphasizes adult intervention and product over process. Children’s lives today are filled with structure. In school, they are made to follow a schedule, listen silently to direct instruction, adhere to a prescribed curriculum, do a specific project in a specific way. After school, they are often over-scheduled with after-school programs, sports practice, music lessons, or academic tutoring. Children today are constantly rushed from one adult-directed activity to the next. But outside, it is possible for a child to find respite from all this imposed structure and create their own. Kenny (2013) maintains the importance of letting children lead, explaining that the unstructured outdoor play model “allows these children to immerse in nature with no sense of rush and with no adults telling them what
The time slows as children find their own rhythm…” (p. 8). The idea of rhythm is essential. Children, like adults, have natural patterns of working, resting, eating, and sleeping. But developmentally, their need to move in and out of these patterns is greater than that of their elders, especially when it comes to learning. Science has shown that children require fluctuation between directed attention and restorative attention. Much like the tide of the ocean, continuously ebbing in and out, children thrive when they are able to move between active concentration and rest (specifically, rest that reduces stress and restores the capacity to focus). This ebb and flow can be as simple as singing songs in a group and then playing freely with friends in a field; the idea is that balance between the two contributes to optimal performance in both tasks. Joylynn Holder, founder of Brooklyn Forest, explains how her nature program for young children honors the idea of unstructured play within a rhythm:

The class is simple and that's intentional. We want each child's encounter with nature to be wonderful, so we try to not get in the way of that wonder. We've designed a class that lets children follow their own imaginations and gives them the freedom to explore on their own. And yet, as they learn the rhythms of the class and the rhymes of the songs we sing, as they learn the names of their classmates and the features of their forest classroom, the children also learn how to be together. (“Brooklyn Forest”, n.d.)
The teachers at Brooklyn Forest typically do not have to tell the children what do or how to do it; they facilitate the flow of the experience by keeping children’s developmental needs in mind (for example, they know that after a long period of sustained independent dirt exploration, a child will probably be hungry for adult attention and a snack) and modeling the rhythm of the class (after a lengthy worm investigation, we put it back under the dirt, get up, wash hands, and butter some bread).

Another benefit of unstructured time in nature is the ability to lose oneself in the experience. When people are fully immersed in nature, they have a tendency to lose track of time. This feeling of escape from the hustle and bustle of life can feel relaxing, even liberating. It can also lead to deeper thinking. Swedish researchers found that children on asphalt playgrounds played in short, interrupted segments; while in more natural playgrounds, children played more developed scenarios for longer periods of time, leading to elaboration of thought and meaning-making (as cited in Louv, 2008). These large amounts of uninterrupted time are crucial for the ability of children to bond with a place and the things that live in that place. Nature has its own pace, its own speed; children can only learn about this pace if they are allowed to experience it for themselves, uninterrupted. “Children are sensitive to feeling rushed,” says Wendy Banning and Ginny Sullivan (2013). “They need ample time to engage meaningfully with an idea or activity. Hurry creates stress and limits the imagination” (p. 12). In their guide to creating natural learning environments for children, Robin Moore and
Herb Wong (1997) argue that the quality of interaction between children and the environment depends directly on extensive time outside and the diversity of opportunities and materials available. Over and over, the experts reiterate the same equation: free time + free space + free play = meaningful learning.

**Trepidation, Technology, and Testing**

It seems unthinkable given all the research, but these days, more than ever, children’s playtime is disappearing. The kindergartens many of us remember — days filled with art, music, movement, building, playing, discovering, *learning how to learn* — have been replaced with lengthy academic lessons from a highly prescriptive curricula. It seems there is a war on children’s right to be children, and outdoor playtime in particular has been a casualty of the attack. Three major issues have contributed to the decrease in unstructured nature play: an irrational fear of the outdoors; the massive amount of time people spend with media and technology; and the overvaluation of early academics. Many specific factors contributed to these trends, some cultural, some political, and others personal; the good news is that we have the power change the course of all of them.

Concern for the safety of a child is by no means irrational; most educators and caregivers would likely, and rightly, claim that keeping a child safe is their most important duty. But sometimes the best of intentions have unfortunate consequences. “Fear is the most potent force that prevents parents from allowing their children the freedom they themselves enjoyed when they were young,” says
Richard Louv (2008). “Fear is the emotion that separates a developing child from the full, essential benefits of nature. Fear of traffic, of crime, of stranger-danger — and of nature itself” (p. 123). (To this, I would also add the fear of litigation regarding injury on playgrounds and other structures.) Studies show that these fears are restricting the range in which children can play freely. They are not playing outside as much, or for as long a period of time. They have fewer and less diverse playmates. Regrettably, the real hazard of keeping children indoors is “the risk to psychological and physical health, risk to the child’s concept and perception of community, risk to self-confidence and the ability to discern true danger — and beauty” (Louv, 2008, p. 124). The truth is, yes, playing in nature can sometimes be dangerous and children can get hurt. But this is true for many other places, too; in fact, children are actually more likely to be injured in an automobile, on staircases, or in shopping carts than they are playing outdoors! (Finch, 2012). And thus, another equally important truth: children need to take risks. According to Ken Finch, author of Risk and Reward in Nature Play (2012), Risk is “a powerful catalyst for growth that helps them develop good judgement, persistence, courage, resiliency, and self-confidence. But kids are not born with the gift of informed judgement, nor with awareness of their own abilities and weaknesses. Instead, they must learn their capabilities, their vulnerabilities, and their good decision-making skills through real-life experiences — sometimes happy, sometimes harsh, but always instructive” (p. 2). Developmentally informed nature mentors and educators treat risk as beneficial to child development. Children are able to experience their own limits, exploring those that can be
stretched and accepting those that cannot. For example, when teachers at the Forest Gnomes program in Natick, Massachusetts allow children to climb trees, “the majority of children are self-limiting — they know when to not climb any farther” (Sobel, 2016, p. 69). When we give them the opportunity, most children seek out challenges in nature suited to their interest, need, and ability. Of course, a young child’s firsthand experience is not the only thing that will protect him or her from potential danger when playing in nature. Attentive, trained adults, knowledgable about the specific risks of the play site (from poison ivy to blocked lines of sight), are crucial to safe play.

Another obstacle to outdoor play is the pervasiveness of media and technology the daily lives of children and adults. There are many examples of the usefulness of technology to teach, to help, to entertain, and to connect, but it cannot and should not be a replacement for reality. The electronic digitization of young children’s lives — even babies and toddlers — has significantly reduced outdoor free time and imaginative play. The nonprofit Common Sense Media studies screen time beginning from birth; in 2013, they found that children under 8 were spending more than two hours a day in front of a screen. (But, on average, less than 30 minutes playing outside.) Studies have linked screen time to an increase in childhood obesity and an increase in psychological variations in children¹, including ADHD (attention deficit hyperactivity disorder), emotional and

¹ A study by the Children’s Hospital and Medical Center in Seattle asserts that each hour of television watched per day by preschool aged children increases by almost 10 percent their risk of developing attention problems, such as ADHD, at age seven (as cited in Louv, 2008, p. 102).
behavioral disorders, and difficulties with peers (Page, et. al., 2010). The issue is
not whether or not children should be exposed to screens, but how much time
and for what purposes they are using them. “We don’t want to demonize media,
because it's going to be a part of everybody's lives increasingly,” says Marjorie
Hogan (2014), a pediatrician at Hennepin County Medical Center in Minneapolis
and a spokeswoman for the American Academy of Pediatrics. “We have to teach
children how to make good choices around it, how to limit it and how to make
sure it's not going to take the place of all the other good stuff out there” — good
stuff like face-to-face interaction, language development, physical activity,
observational skills, self-regulation, problem-solving, strong eyesight, and more
(as cited in Summers, 2014). The best way to teach children how to make
healthy choices about media begins with role modeling; mindfulness about our
own use of electronic devices— like prioritizing the power-off button — will
demonstrate the significance of interacting with the “real world.”

The third barrier preventing children with the right to play is the push for direct
academic instruction in early childhood education. Research has proven the
serious need for play in early learning, but the trend among preschools and
kindergartens has been just the opposite. So why is this happening? One reason
is that many teachers know play is important, but they do not necessarily know
how to facilitate rich, experiential, play-based learning in their classroom. The
second reason is the unfounded notion that teaching academics to children at an
earlier age will prepare them for more learning later in school. An early start in
subjects like reading and math, the thinking goes, will give kids a head start and prevent them from falling behind later on (or give them an advantage to be “at the top”). Much of this rigid direct instruction is geared to the Common Core State Standards, a detailed set of educational guidelines linked to standardized tests. Federal acts such as No Child Left Behind and Race to the Top contributed to more teacher-directed instruction and standardized testing in an impossible effort to quickly close the achievement gaps between advantaged and less advantaged children. The most recent education overhaul, the Every Student Succeeds Act, rewrites some of the laws that contributed to the testing push and puts some power back into states’ hands; it does not, however, reduce an emphasis on high-stakes testing, nor does it require what educators should be most accountable for: developmentally-sound practices in schools.

Research has shown that this early push for academic learning has little long-term success. Perhaps most disturbing is that it can have the opposite effect\(^2\), disrupting a child’s social-emotional and cognitive development and creating unhealthy levels of anxiety. And mentally, emotionally, or physically, young children just aren’t built for that kind of stress. “The more serious science we do,” says Alison Gopnik (2011), a professor of psychology at University of California,

\(^2\) From *Let the Kids Learn Through Play* by David Kohn (New York Times, May 2015): “Other research has found that early didactic instruction might actually worsen academic performance. Rebecca A. Marcon, a psychology professor at the University of North Florida, studied 343 children who had attended a preschool class that was “academically oriented,” one that encouraged “child initiated” learning, or one in between. She looked at the students’ performance several years later, in third and fourth grade, and found that by the end of the fourth grade those who had received more didactic instruction earned significantly lower grades than those who had been allowed more opportunities to learn through play.”
Berkeley, “the more it comes out that very young children are not designed to do focused, goal-directed behavior we think of [as appropriate] for older children” (as cited in Tullis, p.1). Edward Miller and Joan Almond of The Alliance for Childhood (2009) agree that these practices — lengthy lessons, test preparation, and the like — “violate long-established principles of child development and good teaching. It is increasingly clear that they are compromising both children’s health and their long-term prospects for success in school” (p.1). Other studies reveal that these practices can affect a person well after graduation; there is a direct neurological link between infant brain chemistry and adult psychology. As Scott D. Sampson, author of *How to Raise a Wild Child* (2015) explains, genetics do not determine adult success, but rather “those first few years of life, when the brain is rapidly growing and transforming. Toxic stress — for example, physical or emotional abuse — turns out to be a far better predictor of success (or the lack thereof) later in life than IQ” (p. 159). Depression, anxiety disorders, memory loss, cardiovascular disease, and diabetes are also potential problems. Imagine an entire generation of anxious, unhealthy, and socially maladjusted adults… all so that some children can learn their ABCs a few years earlier than necessary. This seems more like criminal negligence than educational progress.

Here is a proposal I have for concerned parents, caregivers, educators, education reformers, and child advocates: we must let young children be young children. Let us stop confusing schooling with learning. Let’s change the way we think about early childhood education by focusing on the learning process itself.
Let’s consider the whole child. To echo Erika Christakis (2016), author of *The Importance of Being Little*, “Childhood is by its very nature dynamic, and embodied in the definition of child development is the possibility of — no, the mandate for — change” (p. iii). We must embrace these changes. We have the power to improve the things that have gone wrong for kids, “if we can just get out of their way.” Let’s get out of children’s way, encourage play, and celebrate youthful curiosity (and confusion). Let’s *demand* joyful childhoods. Let’s go back to the garden.
PART II: Outside Classroom

An Original Book

The following pages are *Outside Classroom*: a book written to encourage children to play and explore in nature (*not that they really need any coaxing from a grown up*), and to inform adults about the many physical, cognitive, and social-emotional benefits of regular engagement in unstructured outdoor play. This work is conceived as a 5 x 8 inch hardcover trade book, told through rhyming verse and ink and watercolor illustrations. It is the tale of a teacher, her 25 students, and their collective dream of a kindergarten class held entirely outdoors. Though it is a work of fiction, almost every detail was inspired by a real-life experience outside with a child.
OUTSIDE CLASSROOM

written and illustrated by
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for my friend John

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It was a brand new day, yet the same as before. Twenty-five kindergarteners squirmed on the floor, tugged on their shirt sleeves and poked at their friend while Miss Goodall tried to teach a lesson.
Everybody was trying,
but trying just wouldn't do!
Their bodies grew squirmier
and her frustrations grew too.
She did all she could
to steady the class,
but their eyes moved
to the windows
and the world behind the glass.
So Miss Goodall
capped her marker
and let out a little sigh,
    And thought,
_The children think that things_
_are more interesting outside._

Then she asked a question
(one she never asked before):

"_Just what_
_would we do_
_if our classroom_
_was outdoors?"
Giggles stopped.
Wiggles froze.
50 eyeballs grew wide.
Everyone began to picture
a kindergarten outside . . .
Rug spots turned to grass spots.
The ceiling changed
from white to blue.
And the four walls disappeared
as their imaginations grew. . .

Then little Henry raised his hand
and said, "I do declare!
I'd move and jump and run,
cause there's way more
space out there!"
And Kate chimed in and told the class,
"I think it would be pleasing
to invite the birds
and bugs
and squirrels
to our Morning Meeting."

"And everyday we’ll read the message
written in the sky," said Doug.
"I'm pretty good at reading clouds,"
he added with a shrug.
Hazel pictured
an outside classroom in Fall;
red, orange, and gold.
She could almost feel
the damp forest floor,
covered with mushrooms and mold.
Leaves started falling
as kids starting calling out
all there is to explore:
living things under rotting logs,
berries, beehives, and more.
Quinn said, "I’ll look for a bit of dirt and a twig from a maple tree, and just like they were paper and pen, I’ll practice my ABCs."

"Think of all the building," Geet said, "We could do out in a park! Instead of blocks, we could use some rocks, and sticks and pits and bark!"
A frosty wind blew suddenly in
and they pictured the Winter snows.
While Jack chittered on
about snowflakes,
one landed on Jill’s nose.

Bill thought of the friends
he'd make in the snow –
fat and round and glistening . . .
(They might not have a lot to say,
but they’re really good at listening.)
Shirley said,
"Surely, I'll get my hands dirty,
but I really, really won't mind,
Cause of all the ways
to learn about things –
this is my favorite kind!"

The children agreed
and continued to dream
about a school outdoors.
Of days spent digging
for shells and fossils
and bones of dinosaurs.
Of time to search for treasure
buried far beneath the land,
hidden by pirates
or sea captains
or maybe even quicksand.
Of room to breathe in
all the playing and pretending
that comes
with being a kid in kindergarten
and just wanting to have fun.
"In Spring," said Mei, "I’ll plant some seeds and care for them as they grow. The roots will shoot down, the shoots will sprout up, and soon the leaves will show."

Carol asked Harold if he would help her make a flower mask. Harold said, "Carol, my buddy ol’ pal, I thought you’d never ask!"

Jen raised her hand and told the class, "I want to make dirt stew." And then Ben, who never played with Jen, shouted, "I would make that with you!"
As the sun rose high
in the kindergarten sky,
Elizabeth said, "I propose:
Let's play outside all Summer long,
cause outside classrooms can't close!"
And from somewhere within that crowd of kids came a tiny, trembling arm. Shyly, but bravely, Raymond softly announced, "Nature makes me feel calm."
The discussion went on,
about soil and nests,
about searching for worms
and other such quests,
about digging real deep
and running real far,
and knowing exactly
where wild things are,
about looking for fish
and frogs in streams,
climbing up trees,
balancing on beams,
exploring alone and exploring in teams,
and believing that nature
can be more than it seems;
and Miss Goodall listened
to all of these dreams . . .
Then she had a thought . . .
She realized her children
were at their best
when they played outdoors a lot.
The class looked around,
blinked their eyes;
the room was the same as before.
Twenty-five curious kindergarteners
sitting restless on the floor.
Plus one hopeful teacher –
who would follow their lead –
and announce with a smile so wide –
Zip up your jackets!
Tie your shoes!

*It’s time to go outside!*
for Grown-Ups

The essence of young children’s play is not always immediately decipherable. And viewed through the lens of child development, it’s actually quite complex. It’s no surprise then that nature — intricate, expansive, diverse — is a complementary setting for a growing child. Open space, fresh air, living things, and “loose materials”... these and more contribute to rich play and a healthy mind, body, and heart. The following experiences may be inspired by fictional kindergarteners, but they reveal many of the very real benefits to be gained with regular unstructured outdoor play. Next time you take your child outside, you might see what Miss Goodall did — that nature (and play) can be more than it seems!

“kindergarteners squirmed on the floor”

Young children need to move their bodies! Developmentally appropriate practice demands that children’s schedules include plenty of child-guided experiences. When adults need to lead activities, clear and compact ones tend to be most meaningful, as children are just beginning to develop self-regulation and attention skills.
“their eyes moved to the windows and the world behind the glass”
Seeing the outdoors — even through a window — has positive effects on people’s mental health. Studies show that a view of nature can reduce stress, improve focus, and even enhance mood!

“I’d move and jump and run cause there’s way more space out there”
Opportunities to run, jump, balance, climb, practice hand-eye coordination and more improve children’s physical health and gross motor development. With plenty of time and space, these activities also contribute to core strength, muscle control, spatial awareness, grip, and flexibility.

“birds and bugs and squirrels”
Living things teach children about empathy. As they become more aware of the sentient parts of nature and their right to life, their awareness of — and compassion for — other people’s feelings also expand.

“pretty good at reading clouds”
Observational skills increase when children pay attention to the inevitable changes and intricate details of the natural environment. An activity as simple as watching clouds to predict the weather is a chance for cognitive growth!
“pictures an outside classroom in Fall...”
(and Winter, Spring, and Summer)
Repeated experiences in nature improve children’s introspective abilities; as they witness the natural rhythms of the seasons and the cyclical changes that occur outdoors, they refine their ability to reflect on an experience, break down significant aspects, and inform future practices.

“I’ll practice my ABCs”
Research shows that children learn through movement, touch, and play. Outside, organic academic learning opportunities can arise (such as building letters with sticks or counting leaves), but it is important to remember that these activities are most worthwhile when they are initiated by children and explored without pressure.

“instead of blocks, we could use some rocks, and sticks and pits and bark”
Nature is full of “loose parts” — open-ended materials that can be moved, carried, changed, combined, taken apart, and put back together. Outdoors, loose parts can empower creativity and critical thinking in dramatic play, building, construction, art, and a whole lot more. And best of all, there are plenty of loose parts for everyone!
“surely, I’ll get my hands dirty”
Did you know that playing in dirt can help build immunity? Research shows that regular outdoor experiences provide much-needed, low-level exposure to bacteria that generate the development of antibodies in the immune system. It can also aid in the production of the brain chemical serotonin, which enhances feelings of well-being!

“hidden by pirates or sea captains or maybe even quicksand”
The cognitive, social, and emotional benefits that develop when children engage in pretend play are seemingly endless. They are acting out unfamiliar feelings, ideas, and experiences; making meaning of the world around them; consolidating and extending knowledge; practicing language; problem-solving; expressing themselves, soothing themselves, and, most of the time, really enjoying themselves. The outdoors is inherently suited to open-ended forms of play; it really is the perfect place to pretend!

“just wanting to have fun”
Young children learn better when they are deeply engaged, and they are deeply engaged when they are having and creating fun. Happiness and excitement are crucial to engendering lifelong learners!
“plant some seeds”
Gardening, planting, foraging, collecting, and other biological explorations are an essential part of the outdoor experience. These hands-on activities provide a range of cognitive development benefits, including curiosity, inquiry, observational and classification skills, and solid natural science principles.

“help her make a flower mask”
A major part of early childhood is the deepening of interpersonal relationships; in unstructured outdoor play, children have more time, space, and incentive to collaborate, negotiate, and exchange information with one another. Working with others also supports oral language development, one of the best indicators for later reading success.

“and then Ben, who never played with Jen, shouted, ‘I would make that with you!’”
Studies show that, when compared with more traditional play settings (like playgrounds), children in “green spaces” engage in more pretend play and thereby develop friendships based less on gender and physical ability and more on language skills, creativity, and inventiveness.
“outside classrooms can’t close!”
Outside play is a right, not a recess. Fortunately, natural spaces (from a park to a patch of dirt) are available to nearly every child and cost absolutely nothing. The only requirement: you!

“nature makes me feel calm”
Intuition and experience can attest to the calming effects of exposure to nature. Outdoors, children are able to be quiet and still on their own terms, which can reset their internal stimulation and help them relax physically and emotionally.

“soil and nests... searching for worms and other such quests”
When children are given the chance to explore in an environment with few restrictions on space and resources, they really tap into their innate curiosity. They find creative ways of investigating their wonder, and their learning becomes so much more personal.

“exploring alone”
Nature is an excellent setting for quiet times of concentration and reflection. It’s also a great place for kids to explore what really interests them at their own pace and rhythm.
“and exploring in teams”
The depth and diversity of nature provides so many chances for children to work together. As they build friendships and community around the games they play and the things they investigate, children also create opportunities for social and emotional growth. Regular outdoor group play helps children develop self-awareness in relation to others, the ability to respect different viewpoints, and important life skills like listening, compromise, and cooperation.

“children were at their best when they played outdoors a lot”
Nature is unique in how it engages children. Whether climbing a tree, digging in mud, or observing a bird in a nest, they can find a place and rhythm in which to insert themselves, and can do so with little to no instruction from adults. After repeated experiences, insight, independence, and the benefits of this engagement really flourish.

There is a critical need to acknowledge that what comes naturally to children should be honored as significant to their growth and well-being. So don’t wait! Put on your jacket, tie your shoes, and make an outside classroom today.
A Seed is Planted

The impetus for the children’s book *Outside Classroom* came from a question I asked myself a few years ago, when I started teaching and learned to really tune in to the subtleties of young children’s outdoor play. It was the same inquiry that the fictional (yet inspired!) Miss Goodall asks her kindergarteners in the story: “Just what *would* we all do if our classroom was outdoors?” It may be surprising to know that the very first kindergartens started answering this question from Day 1. *Kindergarten*, a name that literally means “child’s garden,” was coined and created by Friedrich Froebel, a teacher in Germany in the 19th century, in response to his belief that children have unique needs and capabilities that could be best nurtured through self-directed play — what he called “free work” — in a socially and emotionally supportive setting with access to the natural environment. The name “kindergarten” signified both a garden of children — like flowers, “varied and in need of care” — and a garden for children — a place where they can observe, interact, and connect with nature (“IFS: The International Froebel Society”, 2016). His belief in developmentally oriented, play-based, natural experiences for children influenced theorists and practitioners that came after him; from Loris Malaguzzi’s Reggio Emilia philosophy to Bank Street College’s Developmental-Interaction approach, leading progressive educators emphasized play and exploration outdoors in the local community to engage and inform children. These ideas soon became standards of early education. Even in schools that would be considered “more traditional,” kindergarten classrooms were based on activities like dancing, singing, art-
making, block-building, and recess; the essence was on learning through play and socialization. They were purposefully different than the grades that came after them. Recently, however, the concept of a child’s garden has started to wither. Far too many present-day kindergartens (and preschools) are keeping children indoors to focus on academic instruction and neglecting the social and emotional relationships that help them thrive. Therefore, it is imperative that we think again on what is actually important for young children to experience in school.

**A Fresh Look at Kindergarten Priorities**

Most kindergarteners are four, five, or six years old. For many, the kindergarten classroom is their first experience in school. It is their first time being with 20-plus children for six-plus hours, five days a week. And they have 12 years of learning ahead of them! It makes sense, then, that their education should start at the very beginning. The primary goals for kindergarten educators, and their families, should be helping children with the basics of *learning how to learn* and *how to interact successfully with others*, while nurturing their innate sense wonder and developing sense of self. In order to “start at the very beginning”, we must consider the educational experience at it’s most fundamental level. What skills will children need to navigate school and life successfully? What tools can we give them so that they can spend the day feeling confident, alone and with others? What does it mean to learn? First, we have to consider where children are at developmentally, and how, as individuals, they might make physical,
social, emotional, and cognitive growth. Next, we must remember that the kindergarten and preschool years are when the foundation for learning is built; children are not pre-programed with tactics for being in school. Therefore, developing strategies around how to learn must be the crux of this foundation.

Pushing academic skills like reading, writing, and math is valueless if children do not have ideas on how to approach and assimilate information. Learning behaviors must develop first. Banning and Sullivan (2014) assert, “To be effective learners, [children] must know how best to approach a task and break it down into manageable pieces, and anticipate what is coming next. They need occasions to develop resilience in the face of perceived failure and opportunities for inventiveness as they come up with new ways to approach a problem” (p. 2).

The ways in which children set about learning is critical to their future success; in this respect, it’s paramount that educators base these early years around developing and strengthening aptitudes in children that will make it possible for them to engage in school and the world around them successfully. Aptitudes like initiative, persistence, invention, and problem-solving are appropriate kindergarten priorities, and children need plenty of diverse opportunities to practice them. Banning and Sullivan (2014) elaborate,

> Early learning behaviors are not static. They are not short-term measurable outcomes like learning objectives that can be tested, quantified, and checked off as completed on a child’s learning profile. Rather, these critical long-term outcomes and behaviors
need to be encouraged and supported because they significantly influence all future learning. Standards are dynamic: they are qualities, attitudes, and habits that teachers can promote and extend in children by planning environments that purposefully focus on them. (p. 10)

The outdoor environment naturally lends itself to the type of play that extends these standards — play that supports the physical, social-emotional, and cognitive development and that prepares children for a lifetime of learning.

Reading Between the Vines

Nothing can hold children’s attention and ignite their curiosity quite like nature, except, perhaps, a good story. To return to the origins of Outside Classroom, it seems fair to wonder why I would decide to write a book after all my championing of making mud and collecting sticks. The educators and parents who rely on the singularity and magic of children’s books, however, may understand. There is a connection between the two; the captivating and calming effect that nature has on children can also be said of books. They are mesmerized by reading or hearing a story. Louise M. Rosenblatt (1982), a leading researcher and theorist in the teaching of literature, attested to children’s corporeal delight in “the sound and rhythm of words,” despite their age or understanding. “That they are often limited by lack of knowledge, by immature cognitive strategies, in no way contradicts the fact that they are living through aesthetic experiences, their
attention is focused on what, in their transaction with the words, they can see and hear and feel” (p. 271). Rosenblatt’s idea of a transaction, a give-and-take between the story and the reader, is congruent with my hope that Outside Classroom is an undertaking that continues on even after the book has been closed. The transaction is maintained by contributions from both the text and the reader. Rosenblatt continues, “The words in their particular pattern stir up elements of memory, activate areas of consciousness. The reader, bringing past experience of language and of the world to the task, sets up tentative notions of a subject, of some framework into which to fit the ideas as the words unfurl…” (p. 268). The reading may fall anywhere on a continuum of information-gathering (efferent reading3) to reading for the senses (aesthetic reading). For children, it typically falls more toward the aesthetic, sensorial end, the type of reading that makes one feel and do. My aim in creating Outside Classroom is to evoke a response in children — that they feel a sensation in the rhyme and rhythm, they identify with the characters and their ideas, they find a connection based on their own feelings about playing in nature. If “words are primarily aspects of sensed, felt, lived-through experiences” (p. 271) for children, then I hope the young readers that come across my book are ready to get their hands dirty.

The versatility of the medium is another reason I chose to write a book. As much as Outside Classroom is meant for children, it is also for the adults who care for

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3 Efferent is primarily used in the anatomical sense, meaning ‘a taking away from a center’ (such as efferent arterioles). Rosenblatt coined the term efferent reading to describe reading which focuses on taking away specific information from a text.
them, the ones who have the power to plan trips to the park, to organize a day by the lake, the time to pass an afternoon in a backyard / on a front stoop / under an old tree. It is an appeal to grown-ups who remember being children, and who can reflect on the research and advocate for unstructured playtime outdoors. Almost every eager wish that the kindergarten characters in Ms. Goodall’s class have about playing outside has a corresponding explanation of its developmental relevance in the book’s appendix. Thus, reading it can be both an aesthetic and efferent experience for adults, eliciting a dual awareness about outdoor play’s joy and its empirical benefits.

*Outside Classroom* is a story about a kindergarten class whose dreams of being outside make it so. It is also a guide for real children and grown-ups, to be used in much the same way — to spark imagination and offer practical possibilities. The truth is, it matters little where the book in read on the efferent-aesthetic spectrum. “What matters,” to quote the author and poet Gabriel Zaid, “is how we feel, how we see, what we do after reading: whether the streets and the clouds and the existence of others mean anything to us; whether reading makes us, physically, more alive.”
PART III: And Care for Them as They Grow

Natural Benefits of Unstructured Outdoor Play

Child development is complicated: physical, social, emotional, and cognitive changes occur at different rates and in different stages, within a predictable sequence but unpredictable timetable, and is influenced by genetic processes and environmental factors, but expressed uniquely for every single child. It’s no surprise then that nature – complex, expansive, diverse — is a complementary setting for a growing child. Open space, fresh air, plants and animals… these things and more contribute to a healthy mind, body, and heart. The following sections catalog many of the overlapping, process-oriented benefits to be gained with regular unstructured outdoor play:

“I’d move and jump and run, cause there’s way more space out there!”

Physical Benefits

Physical activity improves children’s health and helps them gain control of their bodies from their heads to their fingers to their toes. (Moving around even increases blood flow to the brain, which gives their minds a work out too!) The physical benefits of outdoor play include:
- **Gross motor skills** — large movements like running, hiking, jumping, climbing, tumbling, balancing, and carrying heavy loads improve body development

- **Core strength, muscle control, and flexibility** — these are related to gross motor skills and contribute to body control and coordination

- **Fine motor skills** — dexterity of small muscles in coordination with the eyes; these skills improve as children pick up, pinch, mold, build, press, tie, fold, collect, and manipulate nature

- **Reduced likelihood of childhood obesity**

- **Increased blood flow to the brain** — improves concentration and cognition

- **Stronger immune system** — research shows that regular outdoor experience provides much-needed, low-level exposure to bacteria that generate the development of antibodies in the immune system (and bacteria in dirt can also prevent inflammation, improve cardiovascular health, and even aid in the production of the brain chemical serotonin, which enhances feelings of well-being and improves the ability to learn a new task)

- **Reduced likelihood of common illnesses** — a result of children handling the same materials less frequently, as well as the increase in physical space between children's play

- **Improved vision** — the risk of myopia (nearsightedness) is reduced when children spend less time in front of screens and more time outdoors where they naturally refocus their eyes quickly from near to far sight
- **Stronger, healthier bones** — being outside in the sunshine increases levels of vitamin D, critical for healthy bone growth in children

“I would make that with you!”

**Social and Emotional Benefits**

Social-emotional growth is the bedrock of early childhood education. The following skills and behaviors, commonly nourished through play, contribute to the socialization and emotional maturity that allow for quality learning experiences. Opportunities for children to form relationships and practice the following behaviors particularly flourish outdoors, behaviors such as:

- **Personal initiative and self-expression** — with space and time, children are able to thoughtfully figure out their interests and attend to them (whether it’s playing tag, building fairy houses, or searching for rocks)

- **Self-awareness in relation to others, including the ability to respect others’ viewpoints, negotiate, communicate, cooperate, and compromise** — the stimulation and ever-changing diversity of nature provide so many chances for children to problem solve and work together, whether it’s figuring out how to carry a branch down a hill, sharing space on a boulder, or deciding who will be the Mother Squirrel

- **Social bonding and diversity of social experience** — children move fluidly among different peer groups more often than they do in an indoor classroom

- **Points of reference and enhanced individuality**, as children observe and work with others and get feedback on their own ideas
• **Reduced anxiety and personal coping strategies** — these develop as children practice expressing their feelings and handling stress when they play

• **Focus** — the natural environment has been shown to increase relaxed, grounded behavior in children, which, in turn, improves concentration and awareness

• **Pretend play therapy** — children act out unfamiliar emotions or experiences as a way of self-soothing and meaning-making (and when this play unfolds in nature, inherently therapeutic, the healing is twice as powerful)

“Think of all the building we could do out in a park!”

**Cognitive Benefits**

Cognitive skills are the core abilities of a brain to think, learn, remember, reason, and pay attention. Playing in natural environments holds nearly unlimited potential for the type of multisensory experiences that contribute to cognitive development in young children (and build the cognitive constructs necessary for sustained learning). Some cognitive skills that are promoted during unstructured outdoor play include:

• **Inquiry, inventiveness, and creative thinking** — these attitudes are nurtured by natural materials that provide for open-ended interpretation and manipulation, such as tools for building, pretending, making art, and playing games
• **Executive function** — this higher-level skill integrates attention, planning, organizing, sequencing, and decision making, and develops when children have the space, time, and open-ended tools for working on projects outdoors

• **Language development** — this process is vital to cognitive development, and matures when children hear and use language in conversation, storytelling, song, and verse; the intensity of a child’s desire to communicate spurs language growth

• **Problem-solving and critical thinking skills** — abstract thinking develops when children have multiple chances to learn to work through issues they have with each other and with the physical world

• **Inquisitiveness** — children’s innate curiosity about the natural world is preserved and allowed to grow

• **Attention restoration** — green spaces boost attention spans and enable children to think more clearly

• **Observational skills** — increase when children pay attention to the intricate details and inevitable changes of the natural environment

• **Classification skills** — improve as children naturally sort and categorize nature’s loose parts

• **Dramatic play** — or recasting experience in symbolic form, which is both a form of expression and a prime means for consolidating and extending knowledge; play is also the foremost way that children use the language they are hearing
• **Capacity to follow simple instructions** — grows proportionally to a child’s deep engagement in outdoor activity (motivation is a great influencer!)

• **Resilience** — outdoor play challenges children to do and think for themselves; whether climbing a tree or digging a hole, they build perseverance and grit

• **Independence** — whether putting on jacket or carrying a backpack on a hike, outdoor experiences help children build independence, confidence and ownership of their decision-making

“**Nature makes me feel calm.**”

**Mental Health Benefits**

Intuition and experience can attest to the calming effects of nature exposure, the way it can be a healthful salve for our frequently agitated, anxious minds. And now studies suggest these effects can go even further for a child’s mental health, reducing the symptoms of some neurobehavioral disorders, improving resistance to depression and other negative stresses, and preventing the phenomenon many are referring to as *nature-deficit disorder*. More research is needed — and some aspects, such as the spiritual benefits of nature, may elude measurement — but it’s growing more and more clear that time outdoors is critical to self-care and a balanced mind. The mental health benefits of nature immersion are:

• **Empathy** — as children become more aware of the sentient parts of nature and their right to life (from beetles to birds to tree branches), their awareness
of — and compassion for — other people’s feelings also expand; simply put, experience in nature and connection to a range of living things teaches children to think about their impact before acting

- **Reduced symptoms of ADHD** — researchers recommend natural, green spaces as a form of therapy to support attentional functioning and minimize the symptoms of children with Attention Deficit Hyperactivity Disorder (symptoms include restlessness and trouble listening, following instructions, and focusing on tasks)

- **Rejuvenation** — research shows that children’s stress levels fall within a few minutes of being outside; going outdoors also promotes “restorative attention”, the antidote to what researchers call “directed-attention fatigue” (a neurological occurrence that results from overuse of the brain’s inhibitory attention mechanisms and surfaces in children in the forms of impulsive behavior, irritation, and an inability to concentrate)

- **Reflection** — repeated experiences in nature improve children’s introspective abilities; as they witness the natural rhythms of the seasons and the cyclical changes that occur outdoors, they refine their ability to look back over an experience, break down its significant aspects, and inform future practices

- **Prevention of NDD** — *nature-deficit disorder* is a hypothesis, not a clinical term, proposed by Richard Louv (2008) that describes “the human cost of

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4 Erin Kenny (2013) of Cedarsong Forest Kindergarten has witnessed more relaxed, grounded, focused children, with or without ADHD, following quality time in nature, and is known for her motto, “Children cannot bounce off the walls if we take the walls” (p. 17).
alienation from nature, among them: diminished use of the senses, attention difficulties, and higher rates of physical and emotional illnesses”

“Believing that nature can be more than it seems…”

The Human-Nature Connection

Nature-deficit disorder is just one of many theories that seek to validate the human-nature connection and its implications on our health. This concept is relatively new, but the truth is, humanity has a lengthy heritage of intimate, emotional contact with nature. In recent decades, scientists and researchers have begun to explore this relationship more distinctly. In 1984, the biologist E.O. Wilson proposed the biophilia theory, which postulates that human beings the world over have an innate “urge to affiliate with other forms of life.” Biophilia posits that our “love of life and lifelike processes” are biologically based and integral to our development as individuals and as a species. The field of ecopsychology examines the human-nature bond through ecological and psychological principles, seeking to develop and understand ways of expanding the emotional connection between individuals and the natural world. Similarly, place-based learning is a growing educational philosophy that affirms the nature and culture of local community as the foundation for curriculum, and that firsthand experiences in places relevant to children (the neighborhood park as opposed to the Amazon rainforest, for instance) foster a sense of authentic human attachment and belonging.
If the nature-connection theory is correct, and I believe it is, it has broad implications for society, including how we raise and educate our children. The first thing to consider is that forming a connection with nature is most effective if initiated in early childhood (from birth to age six), when critical emotional and cognitive development takes place. Thus, it is imperative to take children outdoors as early in life as possible, and to seek out early education that values time out of the school building. Secondly, children must have multiple hands-on experiences in the outdoors, in a place that is accessible and meaningful to them. “True nature connection thrives only when there is a strong experiential component,” says Sampson (2015). “Just as falling in love with a person usually requires time in the presence of that individual, so too falling in love with nature is based on felt encounters” (p. 99). A final implication is that when kids access that vital bond with nature, a love of place will be instilled in them that can go far beyond their community. The attachment can evolve — from curiosity, to empathy, to morality, to love — from exploring the backyard, to consciously working to protect it. Many believe that it is the heart, not the head, that motivates behavior. And as the fate of our planet becomes increasingly vulnerable, the way our children treat nature is more important that ever. “The key lesson here,” says Sampson (2015), “is that childhood brains are literally shaped by experience, so we’d better be thoughtful about the kinds of experience we expose our children to” (p. 56). But let’s not get ahead of ourselves; before we worry our children about the planet’s troubles, let us give them a chance to enjoy it. When they connect, they will care, and protection will follow.
PART IV: The Role of Grown-Ups

To Mentor is to Marvel

Generally speaking, our job as parents, caregivers, and educators is simple: take our children outside and let them play. However, I suspect that after repeated experiences outdoors, even adults will develop a penchant for playing in nature. And it will move us to do more. Those who campaign for the children-in-nature movement demand it, claiming that kids’ connection to the outdoors is based on relationships — to nature and people. This task is nearly impossible for children without grown-ups’ support. The little ones — naturally curious — will lead; our role is to marvel alongside them. That’s actually the first step to being a nature mentor: value the natural world and stand in awe of its wonder. Nature mentors (or “outside play mentors”) do not have all the answers; they are not field guides or forest rangers or scientists. A nature mentor is just a grown-up who seeks out nature — and feeds that yearning in young children. By regularly modeling enthusiasm, curiosity, and dedication to the outdoors, mentors can motivate children to deepen their own innate interests.

The other task of being a nature mentor is asking questions. Again, most people typically assume that advising children outdoors means giving a biology lesson,
identifying trees or lecturing about birds. But true nature mentoring is about artful questioning that increases inquiry. In fact, the fewer answers you have for a child, the better. Sampson (2015) explains,

> When a child asks a question and you know the answer, it's natural to want to share it. Providing the answer makes us feel good and we presume that kids really want to know. But this inclination can lead us astray. Oftentimes, our response ends their interaction by cutting off curiosity. Counterintuitively, children are often looking for engagement more than our answers, hoping that the focus of their attention will become ours too… By turning the question back on them, we crack open a learning opportunity, a chance for them to actively participate in solving a mystery. (p. 86)

We may not always know how to phrase the “thick” questions that extend thinking, and it may be hard to abstain from correcting their confusion, but its worth the effort, for both their curiosity and their confidence. And in terms of how we can mentor children’s people-relationships, or socialization, outdoors, the questions — not the answers — remain essential. *How can I help you? What have you tried so far? Do you need to solve a problem with [the friend]? Do you know why you are frustrated? What are some ways you can fix it? Can I suggest some words you can use? How do you think the problem-solving went?* These are just a few inquires that adults can use so that children can actively practice autonomy and agency in their experiences with others — outside and in.

Whether we’re working to connect children to people or nature (or both), the
heart of being a mentor is about taking children outdoors to *experience* on their own, then following behind until they *understand* on their own.

**Advocate!**

*Zip up your jackets and tie your shoes!* — a movement is taking place and all child advocates need to be a part of it. A growing body of scientific research is proving the physical and emotional health benefits of playing outside. Around the country and the world, forest kindergartens, nature preschools, and other outdoor immersion programs are on the rise. Back-to-nature books like Richard Louv’s *Last Child in the Woods* (2008) and Scott D. Sampson’s *How to Raise a Wild Child* (2015) are flying off shelves. A political movement called “No Child Left Inside” has finally succeeded in getting language into the newly passed federal education bill that, for the first time, supports opportunities that provide students with environmental education and field-based learning experiences. But this is only a start. In order for there to be deep and lasting cultural change about unstructured outdoor play, we must work the front lines — in our homes, schools, and local communities. Here are some recommendations for parents, caregivers, and educators on how to get on board with the outside play program:

- Encourage children to tell stories about their outdoor play adventures; this can take on multiple forms, from storytelling and journaling to art, photography, or nature collections.

- Be an example to children and other adults by curbing screen / media time and replacing it with outside time.
• Have an good attitude about being outside in all weather; make sure you and your children are dressed appropriately in order to maintain the positivity!

• Make outdoor play at school a priority; find out how much time the children spend outside each day and advocate for the importance of more of it.

• Endorse educators who already make outdoor play a prime concern (including green recess, outdoor classroom activities, and field trips); speak to administrators about your support for their work and its positive effect on children.

• Make play places greener with the addition of trees, plants, and other growth, or design and build an ecologically diverse play space from the ground up.

• Work for outdoor play legislation by supporting bills that reinforce outdoor experiential learning.

• Regularly revisit research on developmentally appropriate practices, especially as they pertain to unstructured play and restorative attention.

• Take (or create) outdoor immersion courses that will help you feel comfortable taking children into nature.

• Nurture a nature community in your school — go outside together and share ideas, research, articles, and anecdotes in an effort to support one another and reaffirm the importance of unstructured outdoor play.

• Rethink the learning system. There are so many ways that children benefit from unstructured outdoor play, at home and at school; isn’t it time we redirected our focus from how to make them “smart” to how to make them well?
References


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