

EDITORIAL NOTE

Why are public school children still stuck inside? At a crossroad between teacher training and nature-based learning

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Decades of research articulates why nature-based learning is more than good for kids. It is essential to healthy growth and development. So why is learning still predominantly an indoor experience in public schools? Why are children still plopped behind desks, parked in front of digital devices, and seated inside classrooms for most of each school day?

Nature-based educators see this as a no-brainer. Children need to play and learn outside! We have directly experienced the power of outdoor learning and nature connection. The research clearly demonstrates how nature-based learning is complementary, if not superior, to traditional learning in public schools (Chawla, 2018; Kuo, 2019). So why are we still having this conversation in the context of public schools?

Apparently, research alone isn't enough. Teachers and administrators need proof to justify nature-based learning in the face of high stakes testing (often tied to teacher pay). Although there's no shortage of research that demonstrates its benefits, the onus rests squarely on the shoulders of professionals in nature-based education to spread the word. To that end, the following discussion considers nature-based learning and how we can improve our approach public school education.

GIVE ME A BREAK

Let's begin with recess. Defined by the American Academy of Pediatrics (AAP) as "a necessary break in the day for optimizing a child's social, emotional, physical, and cognitive development", we might assume that all public schools provide recess to boost performance and help kids recharge (AAP, 2013; Ramstetter and Murray, 2017). Yet as many as 40% of school districts have no formal policies on how much recess children are required to have daily (Ramstetter and Murray, 2017). This leaves a lot of wiggle room for individual teachers to decide whether recess can be nixed for punishment or used as time for students to do more work. The AAP firmly states that "recess should be considered a child's personal time, and it should not be withheld for academic or punitive reasons" (AAP, 2013). At minimum, recess is a starting point in our advocacy for unstructured outdoor play in public schools.

Unfortunately, the National Center for Education Statistics finds serious disparities in the amount of recess children are likely to have noting that, "the lowest minutes per day of recess (21 minutes in first grade to 17 minutes in sixth grade) occurred in schools where 75 percent or more of the students were eligible for free or reduced-price lunch" (Parsad and Lewis, 2006). In other words, children who attend the schools with the greatest socio-economic challenges may also face school with less relief from life's stress and academic pressures in the form of recess. (Dettweiler et al, 2017; Ramstetter and Murray, 2017). While recess is not the focus of our discussion, this provides context for the conundrum that outdoor learning may present. If teachers spend a little as 17 minutes a day outdoors with students for recess, how can we expect them to embrace greater doses of outdoor learning each week – or better yet – every day?

THE BENEFITS ARE UNDENIABLE

It may be that teachers and administrators need more information about the benefits of nature-based learning and its significant advantages for academic achievement. In a recent study, researchers plainly state that, "In academic contexts, nature-based instruction outperforms traditional instruction" (Kuo et al, 2019). This powerful declaration comes after analyzing a voluminous body of research to determine cause-and-effect relationships between nature-based learning and student achievement.

Kuo, Barnes, and Jordan identify eight distinct pathways between nature and learning:

- Nature has rejuvenating effects on attention
- Nature relieves stress
- Contact with nature boosts self-discipline
- Student motivation, enjoyment, and engagement are better in natural settings
- Time outdoors is tied to higher levels of physical activities and fitness
- Vegetated settings tend to provide calmer, quieter, safer contexts for learning
- Natural settings seem to foster warmer, more cooperative relationships
- Natural settings may afford "loose parts", autonomy, and distinctly beneficial forms of play

Of the eight pathways between nature and learning described in the Kuo, Barnes, and Jordan study, five pathways are learner-centered and three pathways are about the supportive context natural settings and features provide (Kuo et al, 2019).

Significantly, researchers find that, "In school settings, incorporating nature in instruction improves academic achievement over traditional instruction" (Kuo et al, 2019). The researchers reiterate, "experiences with nature do promote children's academic learning and seem to promote children's development as persons and as environmental stewards" (Kuo et al, 2019).

Given such thorough and conclusive research, isn't this the clear choice for more effective education in public schools?

NATURE IS CALLING

As the director of an association of forest and nature schools in the United States, I can attest to the transformation teachers experience when they kindle their own nature connection. More than adorable, muddy video clips; more than well-researched books or useful curriculum guides; more than even the most conclusive research findings: when teachers experience nature connection, they are more likely to engage in outdoor, nature-based learning with children.

But for many teachers, nature connection may be buried, lost, or yet to be revealed. Addressing this disconnect may transform classroom-bound public school education and ultimately get kids outside. The familiar Rachel Carson quote comes to mind, "if a child is to keep alive his inborn sense of wonder, he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement, and mystery of the world we live in" (Carson & Pratt, 1965). If we cultivate appreciation and respect for nature in teachers, they pass it on to children.

Teachers need direct training experiences to understand nature-based learning and its benefits firsthand. Through fun outdoor professional development, steeped in nature connection and best practices, teachers are inspired and encouraged. They are empowered to try a new approach to learning, vastly different than what they may have learned in their college courses or within the realms of public school. As teachers develop relationships with the natural world and with other teachers, these meaningful networks can lend support along the path of nature-based learning. Supportive and engaging teacher training helps teachers tap into the ways nature-based learning supports academic and personal development for children (Kuo, 2019). It's fun, accessible, meaningful, and welcoming.

Teacher training appears to be one vital missing link and one incredibly impactful solution.

We can either ignore the benefits of nature-based learning or reframe the conversation about public school education through our binoculars outside. Teacher training is central to the nature-based education movement and may be our best hope yet for all children to reap the benefits of outdoor learning.

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