

REIMAGINING LEARNING THROUGH OUTDOOR PLAY



What happens when we take learning outside and make it playful?

This infographic is based on a systematic review of 21 empirical studies exploring active outdoor play-based learning (AOPL) in formal school settings.

WHAT STUDENTS GAIN THROUGH AOPL

ACADEMIC GROWTH

- Supports literacy, numeracy, science, and critical thinking ^{1,2}
- Encourages curiosity, creativity, and inquiry ³
- Fosters STEM learning through real-world exploration ^{4,5}

SOCIAL-EMOTIONAL GROWTH

- Builds resilience, confidence, and self-regulation ^{1,6}
- Promotes teamwork, empathy, and collaboration ⁷
- Encourages joy, wonder, and playfulness in learning ^{3,8}

ENVIRONMENTAL AWARENESS

- Deepens connection to place and nature ^{7,9}
- Fosters environmental stewardship and sustainability thinking ^{2,10}



PHYSICAL WELL-BEING

- Improves motor skills and coordination ¹¹
- Increases physical activity and risk-taking in safe, meaningful ways ^{8,12}
- Boosts mental health through nature exposure ¹³

THE EDUCATOR'S ROLE

Facilitator, guide, co-learner ^{6,14}

Plans play with purpose ¹¹

Connects outdoor experiences to curriculum ^{5,15}

Observes and extends learning based on student interests ^{6,16}

WHERE IT HAPPENS

- School Gardens
- Tree Lines and Fields
- Sidewalks and Neighborhood Parks
- Gamified Playgrounds and Tech-Enhanced Outdoor Spaces
- Any Natural or Local Outdoor Environment

WHAT MAKES AOPL SPECIAL

- Blends academics with playful exploration ^{1,4}
- Aligns with curriculum and wellness goals ²
- Fosters student agency, joy, and curiosity ^{3,8}
- Uses existing spaces—scalable and low-cost ^{9,10}

As schools balance academic goals and student well-being, AOPL offers a way to do both. Students thrive when learning is playful, purposeful, and connected to the world around them.

You don't need to be an outdoor expert—just step outside, observe, and plan with intention.



Want to Learn More? The full research synthesis was conducted by the following authors: Steph N. Dean, Peter Bakalár, David W. Chorney, Peter Kačúr, Summer Landreth, Dani M. Larson, & Megan Zeni. If you'd like to view the full manuscript to explore how AOPL might look in your school or classroom, reach out to Steph Dean at sn dean@clemson.edu.



REFERENCES