Igniting Learning in Outdoor Classrooms

As COVID-19 took hold across our country, one of the safest places for people to be was the outdoors. This led to increases in people using outdoor recreation facilities, more people out walking, and more gardens being planted, among other activities. Experiences in nature and greater access to the outdoors are associated with reduced stress, greater mental and physical health, and well-being. In short, the outdoors serves as a recharging station for many.

The increased safety and benefits to emotional and physical health prompted schools and districts to consider the use of outdoor classrooms, not just as a means to improve health and safety during COVID, but also as a resource that has benefits beyond the pandemic. Research demonstrates that outdoor classrooms promote increased interest and motivation to learn and boost academic performance (Ardoin, et. al, 2017). The strong evidence-base for the benefits of outdoor classrooms and learning offer an important opportunity for schools and districts to ignite learning which addresses both socio and emotional well-being as well as learning loss.

Recommendations:

1. Ensure that every school develops a multi-functional and accessible outdoor classroom.
2. Ensure that every PreK-12 student, no matter where they live, learns in an outdoor classroom for at least one hour a day.

Evidence Base for Outdoor Classrooms

There is a large and growing body of research that demonstrates the benefits of outdoor learning for mental health and well-being, stress reduction, physical health, student engagement, and academic success. Outdoor classrooms are cost-effective and create unique learning opportunities. The evidence-based outcomes of engaging students in learning in outdoor classrooms includes:

- **Using the outdoor classroom as a context for learning produces academic benefits for ALL students.** In a review of 119 peer-reviewed studies, the following outcomes in multiple studies—these are a few highlighted in this report (Ardoin, et. al, 2017):
  - Consistently outperformed other schools on standardized tests in math, reading, writing and listening
  - Better performance on state science standards testing
  - Provides students with Attention Deficit Hyperactivity Disorder and other learning differences with opportunities to better understand complex concepts.
  - Reductions in dropout rates and academic failure.

- **Outdoor classrooms refuel students for learning when they return to their regular classrooms.** Not only is the outdoor learning experience effective, it helps “leave students more able to engage in the next lesson, even as students are also learning the material at hand, much like “refueling in flight” and underscores the importance of including more lessons in nature in formal education” (Kuo, Browning and Penner, 2018).

- **Students who learn in outdoor settings become better thinkers.** Student learning which takes place in outdoor settings fosters systems thinking, encourages students to become change-makers and choice-makers, and become adaptive in their thinking, able to create models for other contexts (O’Brien & Adam, 2016).

- **Outdoor classrooms improve student mental health.** Learning in the outdoors helps with improved mental health (Roe and Ashiphall, 2011), especially for students who are experiencing mental distress, have low perceptions of social and personal skills and for children on the autistic spectrum (Fiennes, et.al, 2015).
What are the Key Components for Success?

**Teacher, Staff and Community Engagement:** Having a broad-based team will increase buy in and usability of outdoor classrooms. This team should also include maintenance staff and if incorporating gardens for growing food, food service staff. Community engagement can provide support for creating and maintaining outdoor classroom spaces.

**Design for Learning:** Having your planning team consider who might use the space, how they might use the space and what learning opportunities could take place in the outdoor classroom space is critical for the place and design of the outdoor classroom space(s). For instance, a space that is relatively quiet might be ideal for creative writing and reading, while a space near gardens might be best used for science or art. Consider how the space could be best used—is there ample room for movement for more active learning, or could multiple groups use the space at the same time? How many students could be accommodated in the space, and what seating and shade/shelter would be needed for different learning uses (e.g. if students need to see a white board, is the area shaded or free of glare)? Learning will be successful in outdoor classrooms if these considerations are addressed.

**Teacher Professional Learning and Connections to Curriculum:** Teaching in an outdoor classroom can be highly engaging and rewarding for teachers and students. However, teaching and learning in the outdoors can be a new experience for both teachers and students, and professional learning can help teachers learn pedagogy and management strategies appropriate for outdoor learning. Just about any subject can be taught in an outdoor classroom with little adaptation. Outdoor classrooms also provide unique learning opportunities. Here are some examples:

- Exploring weather
- Looking for patterns
- Observing phenomena
- Mapping and topography
- Sorting and classifying natural objects
- Learning about wildlife and habitat
- Exploring environmental issues
- Learning about plant, plant growth and cycles

With planning and preparation, students can not only have engaging and meaningful learning opportunities, they can also experience all the benefits of learning outdoors on their academic performance, attention, engagement and physical and mental health.

**How?**

Allocate Recovery Act Funding to support the development and coordination of outdoor classroom space and professional learning:

**Materials and supplies for Outdoor Classroom:** $5000-$10,000 per space (one-time cost)

**Professional Learning:** 
$ \text{# of Teachers} \times $150, e.g. 125 educators per district $\times$ $150 = $18,750

Outdoor Classroom Coordinator = $50,000 - this position could be at the district level of a larger school district or at an education co-op to work with multiple school districts. It could also be combined with other sustainability activity coordination.