

# Using PLT Outdoors With Children Who Have Autism

*This paper and tools were created by Valerie Coduto in her capstone project submitted in partial fulfillment of the requirements for the degrees of a Master of Arts in Education: Natural Science and Environmental Education, at Hamline University in St. Paul, Minnesota, May 2019.*

## Overview

Research demonstrates that time spent outdoors has positive effects on a person's health and well-being. Children exposed to the outdoors receive vitamin D, fresh air, and gross motor development, all in turn correlate to skeletal and muscle development and strong immune systems (Bento & Dias, 2019). Increased attention spans, a decrease in undesirable behaviors and data recall have been shown to coincide in young children are associated with time spent in nature (Children and Nature Network, 2016).

Many of the outdoor components of each PLT early childhood experience contains one to eight elements:

1. Mobility
2. Fine motor skills
3. Receptive communication
4. Expressive communication
5. Visual
6. Auditory
7. Sensory
8. Social

For children who are on the autism spectrum, you can modify the outdoor components using some of these tools and strategies.

## Ways to Modify Activity Elements for Children on the Autism Spectrum

Activity Element	Definition of Element <sup>1</sup>	Modifications
Mobility	The ability to move in one's environment with ease and without restriction.	<ul style="list-style-type: none"><li>• Walking sticks</li><li>• Jogger</li><li>• Vehicle transport to/from activity</li><li>• Stick to ADA-accessible trails if possible</li><li>• Stay on flat, even ground</li><li>• Designate a specific role within a game (ex. Recorder, leader, etc.)</li></ul>

Activity Element	Definition of Element <sup>1</sup>	Modifications
		<ul style="list-style-type: none"> <li>• Modify rules (ex. May walk instead of run)</li> <li>• Allow for fidgeting during downtime or during a high “sit and listen” portion of the activity.</li> </ul>
Fine Motor Skills	The use of precise coordinated movements in such activities as writing, buttoning, cutting, tracing, or visual tracking.	<ul style="list-style-type: none"> <li>• Use larger crayons, markers, pencils, paintbrush, etc.</li> <li>• Modify using clay or silly putty around the shaft of the art supply for greater dexterity.</li> <li>• Diction/verbalizing to a partner or adult</li> </ul>
Receptive Communication	Sensitive or responsive to communication.	<ul style="list-style-type: none"> <li>• Repeat directions several times.</li> <li>• Role model directions and expectations.</li> <li>• Use simple, limited language</li> <li>• Allow extra time for processing.</li> </ul>
Expressive Communication	Showing or communicating meaning or feeling effectively.	<ul style="list-style-type: none"> <li>• Use a whiteboard or note pad</li> <li>• Use pictures</li> </ul>
Visual / Auditory	<p>Visual: Pertaining to the sense of sight.</p> <p>Auditory: Pertaining to the sense of hearing.</p>	<p>Visual</p> <ul style="list-style-type: none"> <li>• For art projects use progressive examples (what the project should look like at different stages)</li> <li>• Show example of intended outcome</li> <li>• Use umbrellas on sunny days</li> <li>• Use sunglasses on sunny days</li> <li>• Use a visual time</li> <li>• Write out activity instructions</li> <li>• Show a visual schedule of day and activity</li> <li>• Use visual boundaries for activities: cones, ropes, flagging tape, etc.)</li> </ul> <p>Auditory</p> <ul style="list-style-type: none"> <li>• Repeat instructions</li> <li>• Position yourself closest to intended participant(s)</li> <li>• Intentionally place specific participants in the front of the line.</li> </ul>

<b>Activity Element</b>	<b>Definition of Element<sup>1</sup></b>	<b>Modifications</b>
Sensory	Pertaining to sensation or to the response of the senses (hearing, sight, touch, etc. ) to incoming stimuli.	<ul style="list-style-type: none"> <li>● Be situationally aware of areas that are muddy, wet, loud, etc.</li> <li>● Use <ul style="list-style-type: none"> <li>○ Sunglasses</li> <li>○ Gardening gloves</li> <li>○ Noise-cancelling headphones</li> <li>○ Rain ponchos</li> <li>○ Extra pair of socks for wet feet</li> <li>○ Umbrella for sunny days</li> <li>○ Fidgets</li> <li>○ Baby wipes</li> <li>○ Facial tissue</li> <li>○ Hand sanitizer</li> </ul> </li> </ul>
Social	The social dialogue that a person has with family, friends, colleagues, acquaintances, and others	<ul style="list-style-type: none"> <li>● Allow staff to facilitate social interactions</li> <li>● Provide option for breaks</li> <li>● Allow for opt-out of activity (can they describe/draw what they see?)</li> <li>● Arrange for purposeful partnering</li> </ul>

<sup>1</sup> Source: Mosby's Medical Dictionary, 8<sup>th</sup> edition. (2009). Retrieved from <https://medical-dictionary.thefreedictionary.com/>

## Assessment

You can assess your modifications through on-site observation. Assessment looks different because it is individualized to each child. Generally, achievement in modifications are observed through a reduction in negative and undesirable behaviors and an overall positive demeanor. An increase in social interactions, such as increased eye contact and sitting/standing next to peers would also be part of the assessment.

Formal classroom educators can use information from a student’s Individualized Education Program (IEP) or ask these questions of the student’s parent/guardian.

## Individualized Student Profile for Outdoor Learning Tool

Use this tool to:

1. Critically reflect on the program and adapt activities ahead of the program.
2. Assess student needs before a field trip, and then modify the program. Non-formal educators can use this tool with a student’s formal educator to guide questions about their student before a program.

### Individualized Student Profile for Outdoor Learning

<b>General Information</b>	<b>Notes</b>
Outdoor likes/dislikes	
Environmental allergies	
Outdoor fears, if known	
Preferred/non-preferred outdoor activities	
Behavioral rewards or incentives used	
<b>Mobility</b>	<b>Notes</b>
Assistive mobility device(s)	
Tires easily/low stamina?	
Poor balance?	
Ability to traverse difficult terrain? (uneven, hilly, rocky, etc.)	
<b>Social</b>	<b>Notes</b>
How does participant act in social situations?	
Participant respond better to males or females?	
Does participant share or take turns/	
How does participant interact with peers vs. adults?	
Shy or withdrawn?	
<b>Communication</b>	<b>Notes</b>
How does participant communicate?	
Verbally	

## Individualized Student Profile for Outdoor Learning

Sign language	
Points or gestures	
Visual aids	
Communication device(s)	
Other	
How does participant communicate hunger, thirst, tired, upset, etc.?	
<b>Sensory</b>	<b>Notes</b>
Participant sensitive to sensory input?	
Participant seeks certain type of input? (see below)	
Sounds	
Visual	
Textures	
Smells	
Movement	
<b>Behaviors</b>	<b>Notes</b>
Does participant display any need-to-know behaviors that may affect the safety or wellbeing of participant or others?	
Short attention span	
Running/wandering off	
Emotional meltdowns	
Tantrums	
Self-harm or harm to others	
Verbal outbursts	
Self-stimulatory behavior(s)	
Other	
<b>Transitions</b>	<b>Notes</b>
What is the best way to assist transitioning from one activity to the next?	
Schedules	
Countdowns	
Warnings	
“First/Then” statements	
Visual timer	
<b>Learning Styles</b>	<b>Notes</b>
How does participant learn best?	
Small/large groups	

### Individualized Student Profile for Outdoor Learning

Visual	
Kinesthetic	
Auditory	
Verbal	
<b>Safety</b>	<b>Notes</b>
Is participant aware of safety or lack safety awareness?	
Include any site-specific safety concerns (bodies of water, busy roads, high-traffic areas, etc.)	
<b>Additional Information</b>	<b>Notes</b>