

PLEYing Outside the Box: Using Loose Parts to Increase Physical Literacy in the Early Years

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What are loose parts and how can they impact children's health? Loose parts are open-ended, natural or synthetic materials that can be moved, manipulated, stacked, carried, and/or combined in various ways (Nicholson, 1971). Loose parts materials, like those shown in Figure 1, can vary from recycled tires and buckets, to twigs and pinecones, to fabric or planks of wood. Any object without a predetermined purpose that is age appropriate can be a loose part (Houser et al., 2016).



Figure 1. Example of loose parts play kit developed by the PLEY project.

Loose parts are about real-world learning for children. By engaging with loose parts, many aspects of children's health and development are enhanced (Maxwell et al., 2008). Research has shown an increase in children's problem-solving skills (Neill, 2013), participation, socializing and creative thinking; loose parts play has also been shown to promote situations that foster teamwork (Bundy et al., 2017). They also encourage children to act in a more physical manner (Drew et al., 2015) through the pushing, pulling, lifting and rolling of loose parts. This encourages the development of children's fine and gross motor skills, balance, and coordination. Loose parts play creates an opportunity to develop physical competence, confidence, motivation, and

the knowledge to participate in physical activity, collectively known as physical literacy (Tremblay et al., 2018). Loose parts play also introduces an element of risk taking in play, which is important for developing confidence and resilience, encouraging learning, and improving mental and physical health (Brussoni et al., 2015). Through this type of play, children are given the opportunity to play independently and discover, master and own their environments.

Physical Literacy in the Early Years (PLEY) Project

In 2015, the Lawson Foundation introduced a funding call through their Outdoor Play Strategy identifying projects that inform communities on how to improve opportunities for unstructured outdoor play. The Physical Literacy in Early Years (PLEY) project was one of the successful few. It aims to facilitate unstructured, active and risky outdoor play among Nova Scotian preschoolers (age 3-5) through the integration of loose parts into the outdoor spaces of 19 regionally-dispersed (urban, suburban, and rural), licensed, child care centres. The primary aim was to evaluate the efficacy of our loose parts intervention in enhancing children's physical literacy.

As the PLEY project unfolded, we were able to document how the introduction of loose parts, combined with focused educator mentoring, changed the way children played, as well as how the educators understood and supported that play. This was done at intervention sites through focus groups with educators, photovoice documentation of loose parts play, parent interviews, collection of environmental data, and assessment of children's physical activity and fundamental movement skills.

Many lessons have been learned, informing our next steps. One gap, and identified need, is the trained educators' lack of familiarity with the concept of physical literacy and concomitantly, its connection to healthy outcomes for children. Through informal discussions, focus groups with early childhood educators, and the delivery of a workshop at the Provincial Early Childhood Education conference last year, we gained valuable insight from parents, educators and other early years stakeholders. We discovered that there is insufficient focus on physical literacy and its role in children's healthy development in many early years settings. Furthermore, there is a need for greater support of children's risk-taking during play (while avoiding injury). Another identified need is to support communication between educators and parents on the value of loose parts play for enhancing children's outdoor play experiences and overall development. There are huge gaps in early learning service delivery that our work has been progressively filling. Admittedly and excitingly, there is still considerable work to be done.



Figure 2. Example of children engaging with loose parts materials.

Our overall mission is to build on the Lawson Foundation's investment in our innovative loose parts intervention work within Nova Scotia child care centres and expand this work into additional early years settings (home, school, and wider community). We look forward to taking the lessons learned into the next stage by scaling up our efforts and enhancing the sustainability of our work. This project

has been an impactful experience for parents, educators, and the research team alike. As the project continues, we hope to collaborate with more community members to help raise awareness of loose parts play and its role in increasing physical literacy.

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