



# Defining and Measuring Quality in Outdoor Learning Environments in Early Childhood Education Settings

**Professor Michal Perlman**

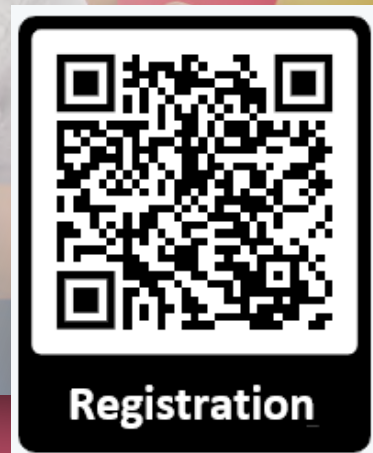
Professor of Applied Psychology and Human Development  
Ontario Institute for Studies in Education (OISE)  
University of Toronto

**March 10, 2026 (Tuesday)**

**16:00-17:15**

**Room 408-410, Meng Wah Complex, HKU**

**Chair: Professor Stephanie Chan**



Registration

## Abstract:

Playgrounds and other outdoor spaces in early childhood education and care (ECEC) settings are recognized as important for children's physical, social, and cognitive development. However, they have been under-studied and under-supported compared with indoor environments/ classrooms. Our work contributes to defining and measuring quality in outdoor environments (OEs) in ECEC. Specifically, using focus group methods we identified nine core attributes of high-quality OEs—including physical space, natural elements, programming, interactions, safety, and professional development. Building on this information we developed and validated two new OE quality measurement tools: the Responsive Interactions for Learning–Outdoor Environment (RIFL-OE) and the Outdoor Environment–Assessment for Quality Improvement (OE-AQI). Both instruments capture the quality of educator–child interactions while the OE-AQI also captures structural features of outdoor spaces as well. Both measures show strong psychometric performance. Our findings show that outdoor quality tends to lag behind indoor quality. Furthermore, our findings highlight that educator responsiveness outdoors is generally low, varies substantially across educators, and is supported by factors such as staff qualifications, compensation, favourable ratios, engaged supervision, and even cooler temperatures. Collectively, this work offers clear, evidence-based guidance for improving outdoor practice, investment, and policy in ECEC.

## About the speaker:



Michal Perlman is a Professor in the Department of Human Development and Applied Psychology at the Ontario Institute for Studies in Education. She is the chair of the Atkinson Centre for Society and Child Development at the University of Toronto. She studies how early environments are associated with children's wellbeing. She is particularly interested in the quality of interactions that children have with their caregivers both at home and in Early Childhood Education and Care (ECEC) settings. She has helped develop efficient ways of measuring the quality of interactions between family members and in the ECEC context and is developing interventions to improve the quality of interactions children experience. She also studies how to conceptualize and measure ECEC quality more globally, parents as consumers of ECEC services, associations between ECEC quality and child outcomes and a range of policy questions related to ECEC. More recently Michal and colleagues who co-lead the Equity in Education centre at the University of Toronto have been identifying key skills needs for success in the 21st century and how to teach these skills to young children. Michal has published her work in a variety of peer-reviewed journals and her work has been funded by the Social Sciences and Humanities Research Council of Canada, the Canadian Institutes of Health Research, the McCain Foundation, the Lawson Foundation a range of government counteracts and many others.

**All are welcome!**