Kindergarten kids in motion: Rethinking inclusive classrooms for optimal learning

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Background / Rationale

Contemporary neuroscientific evidence indicates that unrestricted movement and gesture are necessary for optimal cognitive and communicative development. Such movements enhance learning because they allow children to freely engage with external properties of their environments. In-depth understanding of children's interactions with physical features of schools and other indoor environments is limited. This knowledge gap is particularly problematic for physically disabled children because gross motor impairments, exclusionary attitudes, safety concerns and environmental barriers curtail their ability to explore and interact with their surroundings. Hence, all children's physical health, social abilities and cognitive development may be jeopardized if physical environments inhibit rather than enhance children's movement capacities.

Study Objective & Conceptual Framework

The objective of this study is to describe disabled and non-disabled children's interactions with the physical features of an integrated kindergarten classroom. Children's bodies are conceptualized according to Deleuze's philosophical premise that any body's potential is unknown until it is allowed to demonstrate 'what it can do'. The classroom is conceptualized using Gibson's theory of affordances, which posits that environments are inherently discoverable and that people and their environments are inextricably interrelated.

Methods & Preliminary Findings

8 disabled and 12 non-disabled children participated in an interdisciplinary, ethnographic study. Data elicited through observations, video recordings and interviews is being used to describe classroom objects and features according to the functions they afford, and to analyze children's movement according to its dynamic and emergent properties. Preliminary findings from a partial analysis accentuate the link between movement and the physical environment, and suggest that certain environmental features trigger dynamic, non habitual ways of moving.

Significance / Implications

Findings may increase understanding about environmental features that enhance or inhibit children's movement capacities. Furthermore, they could contribute to a reconceptualization of children, their bodies, and body - environment interactions. Ultimately, this knowledge could be used to optimize *i)* the design of learning environments that support children's ability to move freely within them and that are redolent in new movement possibilities, *ii)* interventions to develop their social, cognitive and physical capacities, and *iii)* educational and rehabilitation strategies that encourage children to explore, navigate and shape their everyday environments.

Coralee McLaren

In a career spanning two decades, Coralee was a lead dancer with the Toronto Dance Theatre, a faculty member at the associated School, and a course director at York University's Dance Department. Following her retirement from the arts in 2000, Coralee completed her BScN at the University of Toronto and worked as a registered nurse at the Hospital for Sick Children. In 2005, she 'fast tracked' through the MN program and is now a PhD candidate in Nursing Science at U of T. Supported by a CIHR Doctoral Fellowship, Coralee is studying the relationship between children's movement and the built environment in an integrated kindergarten classroom.