Indoor school environments, physical activity, sitting behaviour, pedagogy: a scoping review

Richard Andrews

University of East Anglia (UEA), UK

The aim of this scoping study is to scope the literature on the influence of the indoor school environment on pedagogical approaches and on physical activity and sitting.

Regular participation in physical activity and limited sitting are beneficial for children’s health. However, physical activity levels in children are low and sitting time high. Children spend a large proportion of their time at school. Whilst some aspects of school buildings, their layout and furniture may influence children’s physical activity and sitting, these effects could be intertwined with pedagogical approaches. Literature on these aspects has not been collated.

Methodologically, upon agreement of search terms and inclusion/exclusion criteria, potential papers were first identified via a search platform (OvidSD) and specific journals, and suitable ones selected for review.

Results showed that in primary/elementary schools, physical activity can be integrated into lessons with some benefits on academic behaviour and possibly academic performance. The role of the indoor built environment is poorly investigated, although a handful of studies suggest that a radical change in primary school classroom environments may increase physical activity and that stand-biased desks may be promising. Overall, a dearth of research was found,
especially on sitting, accompanied by a lack of relevant conceptual frameworks on the indoor school environment.

The study has implications for children with obesity and for the general health and wellbeing of young people.

• Author Biography (200 words each):

Richard Andrews is Professor in English Education and Head of the School of Education and Lifelong Learning at the University of East Anglia (UEA) Norwich, UK. He has held a previous and similar position at the University of York, and was Dean of the School of Childhood and Pedagogy at the UCL Institute of Education, London. He has taught at New York University and been a Visiting Research fellow at the University of Illinois, Urbana-Champaign. The work in the current proposed presentation stems from collaboration with the Bartlett School of Architecture and the School of Epidemiology at UCL, London.


His research interests include architecture and learning theory; poetry and poetics; contemporary rhetoric; argumentation; writing development; and e-learning methodologies. He is external examiner for the Chinese University of Hong Kong and Hong Kong University; and co-series editor of the Cambridge School Shakespeare (Cambridge University Press) and of its forthcoming Chinese edition (Beijing Language and Culture University Press).