



Enriching the Physical Environment to Enhance Motor Skill Learning: A Framework for Practitioners

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Our practices take place in physical settings with defined spaces, objects, and equipment. We may set up our practice indoor on hard floor or outdoor on grass, with certain line markings and a series of fixed and mobile equipment. How do these physical elements influence motor skill learning and how can we modify them to maximise learning? This presentation will take you on a multidisciplinary journey to answer these questions. First, it will discuss how basic science has tackled this problem and the incredible results it has produced across the last 50 decades. Then, it will show how modifications of the physical environment are at the core of the work and pedagogy development of a world-renowned educational psychologist (no spoiler on who this is). At this point, the answer to the first question will be quite clear: the physical environment has an important effect on learning and development. This initial part of the presentation will also introduce the concept of enriching the physical environment and will emphasize that exploratory behaviour is the key process driving learning, in general, and particularly when an environment is enriched. Enriching involves modifications of the physical environment to shape opportunities for a variety of activities and exploratory behaviours. The second part of the presentation will present a framework, comprising a series of pedagogical principles, for guiding the enrichment of physical environments. Building on a recent review of enrichment strategies in basic science, 6 principles will be discussed: complexity, variety, novelty, alignment with individual's needs and capacity, learning tasks, and scaffolding. These principles will be interpreted and operationalized through a lens that places the interactions between an individual and features of the environment at the heart of behaviour. While the enrichment of a school playground will be used to exemplify the framework, the principles are intended to have a universal value and generalize to different contexts and settings.