

An Chomhairle
Mhúinteoireachta

The Teaching Council



Title: The Successful Translation of Neuropsychological Assessment into Everyday Classroom Environments

Name: Dr Michelle Downes, with Aisling O Sullivan



Contact details: michelle.downes@ucd.ie

Relevant key words: ADHD; Attention; Behavioural Control; Brain Development; Brain Injury; Executive Functioning; Intervention; Neuropsychological Assessment; Self-Regulation

Summary:

The first objective of this project was to establish teachers' experiences with neuropsychological assessment and intervention and to gain input from teachers on the best way to translate neuropsychological reports into everyday action in the classroom. In particular we were interested in teachers' understanding of 'executive functioning.' Executive functioning is an umbrella term for skills such as attention control, working memory, and cognitive flexibility and is more of a predictor of school readiness and academic attainment than IQ. This is because these skills are important for a child to focus and follow through with classroom activities successfully. This was a two part study. The first component involved an online questionnaire that quantified levels of understanding and flagged some commonly reported issues as reported by 106 primary school teachers. The second component aimed to uncover richer data by using a qualitative approach and involved two focus groups comprised of 10 primary school teachers. Results highlight several important barriers to successful implementation in the classroom including language, training, and resources. Executive functions are slow to develop over the first decades of life as the brain areas underlying these skills have a protracted period of development and don't reach maturity until late adolescence. Due to this protracted period of development, the skills are particularly vulnerable to environmental influences, particularly during the first few years of life and despite no formal training on what executive functions are, teachers play a big role in promoting the development of these skills. A downloadable PDF resource that summarises some of our findings can be found at the following link:

<https://ucdneuropsychologylab.wordpress.com/public-engagement/>

The second aim of this project was to communicate relevant and current neuropsychological research to teachers so that they can integrate these learnings into their everyday practice. To this end, we organised a workshop for primary school teachers with a series of sessions. This included dissemination of study findings, informational talks including a talk from Dr Cathy Madigan, Principal Clinical Neuropsychologist at Temple Street Children's Hospital, on reintegrating children with brain injury back into the classroom, open discussion, and an interactive activity about the brain.