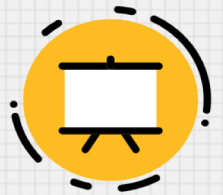




NEUROPSYCHOLOGY IN THE CLASSROOM



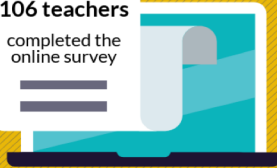
An Chomhairle
Mhúinteoireachta
The Teaching Council

Authors: Keenan, L., O'Sullivan, A., & Downes, M. (2018)

Supported by: The Teaching Council

In 2018, the **UCD Neuropsychology Lab** surveyed primary school teachers in Ireland to find out what they understand about neuropsychological issues in the classroom.

106 teachers
completed the
online survey



We asked teachers about executive functioning, neuropsychological reports, and implementing recommendations into the classroom.

• • • • • *So what did they say?* • • • • •

Teachers' understanding of EXECUTIVE FUNCTIONING

64%

Were unfamiliar with the term "executive functioning"

80%

Received no formal training in executive functioning

43%

Were unsure of the signs of executive dysfunction

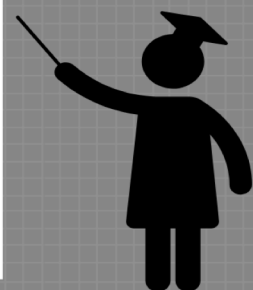
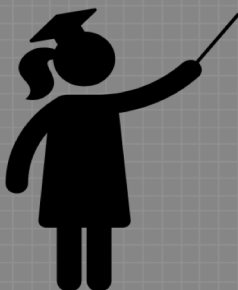
After reading a definition of the term "executive functioning"...



84%



Agreed that **teachers** play a *key role* in shaping students' executive functioning development



What is executive functioning?

Executive functioning is an umbrella term for several **goal-directed** skills



These skills begin to emerge in infancy, and continue to develop into adulthood

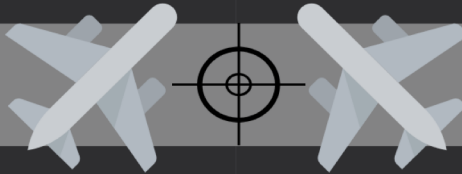


Specific executive functioning skills:



- Attention
- Cognitive flexibility
- Inhibitory control
- Organisation
- Planning
- Problem solving
- Working memory

Executive functioning is sometimes called the brain's "air traffic control system".



It allows us to pay attention, plan ahead, solve problems, remember important information, and change plans if necessary.



Executive functioning is a better predictor of **school readiness and success** than IQ – and teachers can help shape development!

What strategies are Irish primary school teachers using to help shape students' executive functioning skills?



Checklists
Short instructions



Visual cues
Visual timetables



Modelling skills
Repeating steps



Sensory breaks
Movement breaks



Praise
Rewards



Seating plans
Minimising distractions

Teachers were asked about the effectiveness of using these strategies in the classroom...

26%

felt that more support is needed in the classroom for the strategies to be effective

"Without extra support in a classroom it's very difficult to target and help children with executive dysfunction."

25%

felt that the large class sizes in Ireland results in time constraints, limiting the effectiveness of strategies

"Realistically with 26 students in the class, I cannot be with child the entire time."

21%

felt that teachers require more training in these strategies

"I don't believe that teachers are trained effectively to deal with such behaviours and end up learning on the job in a trial and error manner."

Sources:

Alloway, T. P., & Alloway, R. G. (2010). Investigating the predictive roles of working memory and IQ in academic attainment. *Journal of Experimental Child Psychology*, 106(1), 20–29. Centre on the Developing Child at Harvard University (2011). *Building the Brain's "Air Traffic Control" System: How Early Experiences Shape the Development of Executive Function: Working Paper No. 11*. <http://www.developingchild.harvard.edu>.



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