

ALPACA: A game-changer for dyslexia and reading difficulties in young people

This new digital tool identifies children at risk for dyslexia before they can read print.



The following article was published in the *Irish Examiner* a prominent Irish national daily newspaper, on 12 March 2024. Lifestyle Parenting Section – Helen O’Callaghan reporting.



Leitrim parents and children take part in activities in the sensory room at St Patrick’s NS in Drumshanbo, County Leitrim – Alan Kelly with his daughter, Sadhbh.

All Photos by Brian Farrell

The children are excited. A little band of six junior infant pals off with their teacher to find a quiet spot in the school. They’re going to play a game — on an iPad, with headphones, and a QR code that lets the fun begin. Alfie the alpaca will give them instructions.

The four and five-year-olds don’t know that this game is an early literacy screener — a new digital tool that can identify those who may struggle to read, well before they can even read print. Played on an iPad or other tablet device, ALPACA (Assessing Letter knowledge & Phonemic Awareness Class Assistant) is an evidence-based game that slashes testing time and saves on

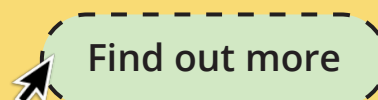
teaching resources while identifying potential future reading difficulties in children earlier — allowing interventions to be put in place.

It builds upon research undertaken by Dr Jennifer O’Sullivan, a lecturer in literacy in Marino Institute of Education, Dublin. Joe Fernandez — founder of Irish company, Early Intervention Tools Ltd — oversaw the creation of the tool, which has been tested in a year-long pilot with 1,000 junior infant children in 30 schools across five countries. An additional 5,500 infants have been screened since September 2023 in 100 schools across Ireland, the US, and UAE.

O’Sullivan has described the tool as focusing on prevention rather than remediation of reading difficulties: *“It aims to support children as early as possible in their reading journey [because] delayed reading intervention can negatively affect many aspects of a child’s progress through school.”* takes four times as long as it does with a five-year-old, who is in the early stages of learning.



For more information about the ALPACA Project please visit our website



Recent studies

80%

A 2014 study found that 80% of learners - struggling to read at six years - continue to face reading difficulties aged nine.

X4

Earlier research showed that intervening with a nine-year-old child takes four times as long as it does with a five-year-old, who is in the early stages of learning.

90%

And other research highlighted that 90% of children struggling with reading will reach appropriate literacy levels if they get support by six years old.

Orla Walsh is a special education teacher and deputy principal at St Patrick's National School, Drumshanbo. The County Leitrim school participated in the pilot and is now in its second year of using ALPACA. Walsh says the tool gives baseline data in October of where each child is at in five core early literacy skills — skills children need before they begin the formal reading process, such as recognising letter names and letter sounds, being able to blend sounds to make words, being able to identify sounds at beginning, middle and end of words.

"They're taught these skills in junior infants and we wouldn't expect them to know the skills [at outset of the year]. But we like that the assessment tells us where children are, at the beginning of their literacy journey, so we can devise learning programmes and tailor the pace to what they need."

St. Patrick's National School Drumshanbo

St Patrick's NS, Drumshanbo, Co. Leitrim parents and children taking part in activities in the sensory room at the school. From left: Orla Walsh, education co-ordinator and deputy principal, Clare McCabe and her daughter, Ailish, principal, Ruth McLoughlin and Alan Kelly with his daughter, Sadhbh.

For more information about the ALPACA Project please visit our website

Find out more



Regular assessments to monitor progress

The assessment is done three times during junior infant year - in January and May as well - thereby monitoring progress. Walsh says teachers get a full profile of where each child is at in the individual skill areas, as well as their overall reading score.

"Some children are very strong orally. Before [ALPACA] you'd have assumed their reading and writing would be on a par — then you'd do an assessment and be surprised at the results. This tool really gets us to focus thinking on what areas we need to address in the infant classroom [and for each child]."

Walsh loves that the assessment saves hugely on time. In a school of 250 pupils with three special education teachers, she says: *"Until now we didn't have anything to assess junior infants that didn't involve taking them out of class and doing it one at a time. With this, one teacher can assess a whole class in a day. We take them out in groups of six and they play the game in 20 minutes."*

Parents are kept in the loop from the get-go and supported in helping their child at home. *"All parents get two tools, an app and board game - to help their child with mastery of these early literacy skills."*

Alan Kelly's daughter, Sadhbh, is in junior infants at St Patrick's NS. *"She's our first child at school. She's very chatty and sociable. When she was two, she attended speech and language [therapy] — we had a little concern about a stammer."*

The dad-of-two says with any child you naturally look to the future and what potential needs they might have.

"You never know. You could have one child at home and a different child at school — sometimes things don't make themselves visible until the child's in a different setting."

"At the parent-teacher meeting, Sadhbh's teacher said they were using the ALPACA assessment tool. She showed us Sadhbh's results — she was strong in certain areas but in others needed to develop. We were a little concerned by some of the scores, but the teacher assured us this was a baseline assessment — where Sadhbh was starting off. She reassured us all the skills would be taught and worked on."

The five-year-old's second assessment showed an *"incredible jump"*, says Alan. *"She has come up in all categories. Her overall reading score has nearly doubled."*

Sadhbh loves to read, he says. *"They did a book swap at school. Sadhbh brought in The Cat in the Hat — she came home with A Lark in the Ark. Last night our reading was The Messy Book by Maudie Powell-Tuck and Richard Smythe — you'd hear her laughing next door."*

For more information about the ALPACA Project please visit our website

Find out more





Identifying areas to work on

Mum-of-four Clare McCabe says her daughter, six-year-old Ailish, also a pupil at St Patrick's NS, loved the ALPACA game.

"The iPad really was the big draw." Clare had noticed that Ailish's older sister had been quicker to pick up vocabulary. "English came easier to Cliona. So you'd be wondering, with Ailish, is it an attention thing, or does she have difficulty with reading? What is it?"

The assessment "picked up nothing major, just different phonetic [needs]", and Clare was advised on ways to help Ailish. "She's doing well now. I wouldn't say she finds English particularly easy but she doesn't have any serious difficulties either. It's great ALPACA picked up on areas for us to work on." The assessment "picked up nothing major, just different phonetic [needs]", and Clare was advised on ways to help Ailish. "She's doing well now. I wouldn't say she finds English particularly easy but she doesn't have any serious difficulties either. It's great ALPACA picked up on areas for us to work on."

Meanwhile, at Killashee Multi-Denominational School in County Kildare, Conor Flynn, dad to Sophie, 11, and Morgan, five, was "a bit nervous" that his son's reading wouldn't be as strong as his sister's. "He's much better at numbers and likes blocks, games, adding and subtracting." The ALPACA assessment put Conor's mind at ease. "I got a lot more confidence after seeing the results," he says, adding that he also likes the non-intrusiveness of the assessment. "Morgan didn't have a clue he was being tested."

With 10% of children having dyslexia, Fernandez says: "If children don't have a foundation for early literacy, it's a look into the future — that they may have dyslexia. When a child exhibits signs of reading failure, typically aged eight or nine, then the invisible has become visible. During that time the child will have had early literacy issues that can lead to low self-esteem, feelings of shame, inadequacy, and helplessness." During ALPACA's pilot phase, research found — despite early identification and intervention being key — 85% of four-to-six-year-olds in Ireland, Britain, the US and the UAE were not being assessed for emergent literacy issues. Early identification, says Fernandez, means moving from a 'wait-to-fail' to an 'embrace-and-support' approach. "If we can identify a child's difficulty early, we can intervene early. The result will be three times better learning outcomes for the child — and, for schools, four times less resources to achieve that result."

Two years ago, ALPACA was awarded Enterprise Ireland funding to support an 18-month research project between The Learnovate Centre at Trinity College, Marino Institute of Education and TCD's School of Education. Learnovate director Nessa McEniff says the problem of undetected literacy difficulties goes beyond clearly disadvantaging the child. "[It] cascades out to overburdened and expensive remedial resources. This digital tool not only helps solve the problem of assessing young children's early literacy skills in a time-efficient, consistent, and evidence-based manner, it provides [data] to intervene during the critical early years."

Alan Kelly says teachers have big classrooms of children with lots of different abilities and needs. "This tool allows the needs of our child in that classroom to be identified for a bit of extra work. As a family, we value that — a stitch in time saves nine."

For more information about the ALPACA Project please visit our website

Find out more

