

By connecting visual images, children can develop impressive memory skills and learn to focus their thinking, says Helen O'Callaghan

**A** BOY, 11 years old, steps on stage. He's asked to spell a tough word — 'loquacious' or 'plebiscite'. It bursts out of his mouth.

"You can see he has sat down and learned it off by rote," says Carmel O'Doherty, who, as Eason spelling bee master, is attuned to the ways children remember.

"Some kids don't look at you, they shut their eyes, and mouth the letters before they even say them. You can see them almost nodding as each letter comes out. They're clearly visualising the word. They have an impression of it on their mind's eye," O'Doherty says.

Eight hundred schools in Ireland have entered the 2013 Eason spelling bee. The final is in June.

In Britain, 11,000 children have signed up to the Junior Memory Championship (now in its fifth year) where, at the final in London in May, ten- and 11-year-olds will perform such remarkable feats as recalling a random sequence of 35 words or memorising 36 digits.

The founder of the Junior Memory Championship (JMC) is Jonathan Hancock, pictured right, a former world memory champion and a primary schoolteacher.

JMC shows children how the ancient Greeks and Romans taught their students to remember, using strategies similar to today's interactive computer games and social-networking sites.

"Without realising it, most children have developed a range of powerful learning strategies from the [computer] programs they use. They think in pictures, remember complex landscapes, explore information efficiently, make quick decisions and plan intricate strategies for success," says Hancock, who says it's easier to remember something that you've seen.

"All the ancient systems

worked on pictures."

In ancient Greece, they realised that place links closely to memory — if you knew a journey around a building, such as a temple, you could mentally walk around it leaving images to remind you of bits of information.

"Imagine walking around your home and putting objects in different places, images to remind you of jobs you have to do or factual information you have to learn, like the longest rivers or the states of America," says Hancock.

There are three aspects to memorisation — the brain remembers visuals better than it remembers anything else; it's better at recalling the bizarre and the surreal than the ordinary; and it remembers stories over lists.

So, if Hancock wants to help a pupil be more organised in the classroom — to hang his bag on the peg, bring his book to class, sit at the front of the room, wear his glasses and use capital letters — he'll invite the child to build an imaginary story, with key images to jog memory.

"The world's biggest backpack will be hanging on the child's front door — he has to squeeze past it. In the hallway, there will be racks of books, with some thrown on the floor.

"In the kitchen, there will be seats pushed right to the front of the room. In the living room, you sit on the sofa and crunch into a pair of spectacles.

"You go to the bathroom and there's graffiti in capital letters on the wall. You get the child to walk through it in their imagination and, instead of saying 'remember what you should be doing', you ask 'what's hanging on your front door?'"

If Hancock wants his pupils to remember a series of digits — as in a password, such as 2084 — he'll invite them to turn the digits into the pictures they look like. "So the '2' is like a swan, the '0' like a football, the '8' resembles a snowman and

# Pictures in their minds

BY THE BOOK: visualisation is key to remembering.



the '4' the sail of a yacht. You build up a chain of connections — a swan kicks a football, it knocks the head off a snowman and is scooped up by the sail of a yacht."

Hancock says the techniques especially appeal to boys. "Boys often struggle to control their energy and find it hard to

concentrate, and stay on-task in lessons. When I show them what they can do in their imagination — how energetic and adventurous they can be — they start to put all that energy into their learning."

Hancock cites other advantages, too: children can quickly visualise journeys and

adventures. It's an imaginative, fun way to learn, so it puts children in a positive frame of mind.

The more they build connections, the more their thinking is focused. "It's very useful — to teach them to be creative and logical, at the same time. And, somewhere

along the way, they may also absorb a lesson about how to make themselves memorable," Hancock says.

Dr Emer Ring, head of reflective pedagogy and early childhood studies at Mary Immaculate College, says if we want children to recall well, we must be vigilant and observe them closely to see what interests them.

"Come in at the point of what interests them. Taking a multi-sensory approach will strengthen recall — it'll enable the child to experience learning in a multitude of ways," she says.

So, if you're a parent trying to help your child learn about the Spanish Armada, use the internet to show them the type of boats. Perhaps they can make models of the ships, or take a field trip to where the Armada might have arrived.

Use real objects for teaching tables — Ring taught mathematical sets by using an old clothes line, cut up and arranged in circles, with bricks as the objects in the sets. Create mime and sound around

the poem junior is being asked to learn.

Seán Ó hArgáin, is principal at Gaelscoil Osraí, where last year's Eason spelling bee winner, Liam Ó Lionáird, was a sixth-class pupil. "We place a lot of emphasis on mental maths, which we do at the start of maths class each day — 'is 24 a multiple of four?' or '6 + 4 - 2 = ?'."

"The emphasis went off mental maths in the 1980s and '90s. Over the last 10 years, we've come back to it — it's important for memory development and to give kids practical memory skills," Ó hArgáin says.

While there's debate about whether children should memorise poems and songs, Ó hArgáin says there's a place for it. "We feel it's very beneficial from a language point of view. Children get very rich language from songs and poems that they wouldn't get otherwise."

Brian Fox, Liam's sixth-class teacher at Gaelscoil Osraí, says giving children an opportunity to predict what will be in a piece of text makes it more

## Mind maps and my success

■ Tammy Strickland is a first-year student at Trinity College, where she's doing a BSc in human health and disease. She scored nine As and two Bs in her Junior Cert and got 605 points in her Leaving Cert. She attributes her immense powers of recall to mind-mapping, developed by educational consultant Tony Buzan.

"When I was eight or nine my dad showed me how to do mind-mapping. It's a visual representation of a lot of data, where you organise information on a single page.

"You do it in a structured way so you'd put your core topic in the centre of a broad page. It ends up looking like a tree or a spider-web. You'd have your sub-topics and everything you need to know about those topics.

"It's a structure you can visualise and structure does help recall. If you're learning a concept in class and you make a mind-map from scratch, there's creativity involved.

"This kind of learning is visual and that's the main thing for me — a lot of people are visual learners. "After you've created

your mind-map, you go back after an hour and really study it and know what goes where. You go back after a day and do the same thing — really look at it and study it. You do the same after a week and after a month. The repetition is what helps you commit this mind-map, this information, to your long-term memory.

"Another tip for recalling information is to look upwards and to the left. That's how you commit to memory, to the storage area of your brain. So if you look up and to the left it's a way of accessing what you've stored in your memory. Looking up and to the right is about creativity.

"At the end of third year, I had a lot of mind-maps. My dad said it might be worth sharing these notes with other people. I used software on my computer to re-create ones I'd made for my own Junior Cert and put them into 10 products. I've started to do the same for Leaving Cert. I never thought it would take off but I've managed to sell between 4,000 and 5,000 mind-maps," says the Lucan woman.



Making connections: Tammy Strickland was taught mind-mapping techniques by her father during primary school.

Picture: Maura Hickey.

## Get a better memory in minutes ...

- Eason Spelling Bee master Carmel O'Doherty makes up silly rhymes with her son: 'Mummy is sitting on the tree,' she says. Her son chimes in with 'She nearly got stung by a little bee.' Repeating nursery rhymes and rhyming songs helps develop memory skills.
- Place four to six items on a tray. Get child to close eyes as you remove an item. Ask child to say what's missing.
- Provide opportunities to

- play games with rules — Simon Says, Hide & Seek, I Spy.
- Have your child look at a picture for 30 seconds (longer if appropriate). Remove from sight and get child to describe what the picture contained.
- Get child to put elements of a story in sequence.
- Place picture, letter or number cards face down on table. Children take turns to turn over two at a time and collect matching pairs.

- Help them to remember by linking words. If you want them to remember 'adjective' is a describing word, remind them it sounds like 'detective'. Get them to imagine detective looking for clues to describe somebody.

