

Living Arts

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THE NEW TERM

With a fresh grasp on — and label for — an academic block, some slow achievers are eager to return to school

By Barbara F. Meltz
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Ellie Honan of Concord is excited about starting fourth grade this week. That's a new feeling for her. In previous years September was something to dread.

Child Caring For Ellie, going to school meant feeling stupid.

"Second grade was tough, but by third grade she was painfully shy and self-conscious," says her mother, Christine. Teachers reported that Ellie seemed bewildered in

the classroom. She daydreamed and never raised her hand. Testing revealed a bright child with some reading difficulties. The school provided a specialist, and Ellie began to do better, even scoring in the 90s on spelling tests.

In third grade, the help ended, but problems persisted. Ellie's frequent refrain was, "I just don't get it." Homework almost always involved tears and hours of mom sitting by her side.

Turns out Ellie has a problem with working memory, a term used to describe the ability to retain in-

formation from the top of a page to the bottom. Working memory comes under the umbrella of executive function, a thinking skill that refers to the tasks executives tend to excel at, such as prioritizing, organizing, and mentally shifting information around. It's a skill that develops progressively, starting in the elementary years and continuing into adulthood.

If you've never heard of executive function, brace yourself. It's bursting onto the educational scene.

"We're seeing a lot more referrals for executive

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Gain is made to help slow-achieving student

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function than ever before, kids who are disorganized and planning poorly," says Kevin D. Kennedy, coordinator of the Harvard Vanguard Medical Associates Educational Assessment Center in Braintree. There are so many referrals that his center is planning to offer workshops on executive function skills in elementary, middle, and high school, starting next January.

The concept of executive function first surfaced about 20 years ago in neurological research as a way to describe the activities that take place in the brain's frontal lobe. Now psychologists are using the term to explain why some children may have difficulty doing homework or completing projects.

Hold on. Children have struggled with homework for decades. They've been disorganized forever. Why do professionals suddenly have a label to describe it?

One factor is that more sophisticated neuropsychological testing can pinpoint a specific skill deficiency, not just a broad learning or behavioral disability, says clinical psychologist Michael Neeson of Children's Hospital.

Skeptics don't buy it. They say this is about entitled parents, not challenged children.

Several local teachers who did not want to speak for the record, for fear of offending parents, say a label of executive function is a way to assuage high-achieving parents' anxiety. "When their kids aren't doing as well as they expect, parents want reasons," says Stephen Gould, associate executive director of the National School Leadership Network.

Gould is describing the grumblings he hears around the country from teachers who don't think executive function is real. He thinks it is. He works with principals to solve problems that are affecting large numbers of students. Executive function is at the top of his list.

He and other educators and psychologists say increased academic demands in the last five years or so are straining students' developmental abilities to remember facts and organize thoughts. What may look like a learning disability or a behavioral disorder may be neurological wiring that needs to mature. Some children grow into it or manage to get by. Others, such as Ellie Honan, just can't keep pace with the academic demands despite the internal struggle.

"At first, we thought she was bored," says her mother. "Then we thought it was a learning issue. But she didn't fit the con-



ARAM BOGHOSIAN FOR THE BOSTON GLOBE

Christine Honan says lessons that develop a child's executive function have helped her daughter Ellie's working memory. "It was like a light bulb went on for Ellie, it was that dramatic," she said.

stellation of issues for any diagnosis. I found out about working memory on the Web. It was like a light bulb went on for Ellie, it was that dramatic."

Too many demands, too early

Lynn Meltzer, a Lexington educational psychologist, was among the first in the country to link executive function to day-to-day academic performance. She's been diagnosing learning disabilities in children for 25 years, but about three years ago she began to notice more children coming to her who scored well on tests but couldn't organize their thoughts for projects or essays. Many had other learning or behavioral issues such as Attention Deficit Hyperactivity Disorder, but some did not. Some didn't even have a diagnosable learning disability.

She began to describe these kids as having weakness in executive function.

Here's how she describes it: "Think of a mountain. If you stand at the top looking down, you see the whole mountain. If you stand at the bottom looking up, you see branches and leaves. Executive function is what allows you to shift back and forth from the big ideas to the details and back again."

Consider a fifth-grader who has a project to do. He spends hours gathering information, but when it comes time to sit at the computer and write his report, he can come up with only one or two sentences.

"The information is there. He just can't figure out how to put it on paper," says Meltzer, who is founder and president of Research Institute for Learning and Development, which develops software to help children with learning issues. She also edited a book called "Executive Function in Education, From Theory to Prac-

tice."

Chris Whitbeck, principal at the Douglas School in Acton, says more academics are being loaded onto younger students in a drive for high scores on standardized tests such as MCAS, but the students don't have the organizational skills to meet the demands. A former science teacher, he points to that curriculum as an example. "We've moved from hands-on science, where seventh-grade students in a lab get a recipe to follow, to minds-on science, where students get a problem and materials and have to figure out what to do."

Schools out of sync with child development could well be spawning executive function problems, as placing too many demands on the system too early can short-circuit it, says Andrea Masterson, a psychologist in Needham who also works with young students.

"I see some schools giving third-grade

ers long-term projects before kids what a project is," she says. "I see first second-graders who get a packet on day morning with their week's assignment. They have no idea how to br down. Hello?"

Sharpening an unused skill

Ellie Honan is a case in point. He says they watched her academic culities became a self-fulfilling prophecy. "We knew she was smart," her mother says. "We just couldn't convince her the worse she did in school, the more believed that she couldn't do it."

The Honans turned to David Got a Newton school psychologist in private practice in Needham who identified the problem as an aspect of working memory. He plugged her into a 25-session soft program developed in Sweden called Cogmed, which teaches children to create their working memory capacity.

"I'm seeing tons of kids like this," she says.

He says students today don't get a opportunity to train their memory. "From early age, they're bombarded with information from TV and videos, from the Internet. There's no need to memorize cause they can instantly go back refresh or replay. The old-fashioned of memory has been deleted from repertoire."

Executive function weakness — it's not a label — is so new there's no consensus on what it is — is neither a disability nor a drome, and it's not listed in any diagnostic reference.

"It's not that there is anything inherently wrong with this child," says Ne neuropsychologist Penny Prather. "If er, if you ask a child to do a skill she when they are ready for it, the skill gets the chance to develop the way should, the child can't perform, a starts to look more and more like a cit."

Meltzer's organization, Research offered two courses this summer for middle and high school students on executive function skills and has developed a program, Drive to Thrive, that includes organizational and memory tools to the day-to-day curriculum.

Last year at this time, Christine H says, "My hair would stand on end thinking about Ellie going back to school. This year, an animated Ellie says, 'I ched about going to fourth grade. It ing to be my best year ever!'"

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