

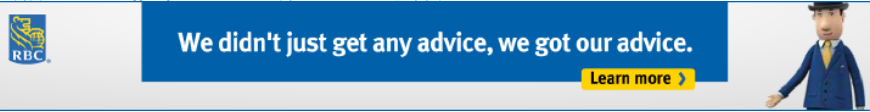
Poor working memory can slow learning

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CHICAGO — Defects in working memory - the brain's temporary storage bin - may explain why one child cannot read her history book and another gets lost in algebra, new research suggests.

As many as 10 per cent of school-age researchers said in a report last week.

"You can think of working memory as Britain's Durham University said in a



"Some psychologists consider working memory to be the new IQ because we find that working memory is the single most important predictor of learning," Dr. Alloway said.

Many children with poor working memory are considered lazy or dim. But Dr. Alloway said with early identification and memory training, many of these underachievers can improve.

Working memory allows people to hold and manipulate a few items in their minds, such as a telephone number. Dr. Alloway compares working memory to a box. For adults, the basic box size is thought to be three to five items. People who have more than that on a mental grocery list are likely to forget something.

"Since there is this limit, it is important to put in the right thing. Irrelevant information will clutter up working memory," Nelson Cowan, a cognitive psychologist at the University of Missouri-Columbia, said in a telephone interview.

The question researchers are struggling with is how to help people with this problem, which appears to be closely tied to attention deficit hyperactivity disorder, or ADHD.

Working memory allows a reader to remember what is at the beginning of the page when reaching the end of the page, explained Mel Levine, co-founder of All Kinds of Minds, a non-profit institute in Durham, N.C., that studies learning differences. Kids with trouble with active working memory get lost in the middle.

"One little girl told me recently, 'Every time I read a sentence it erases the one that was before it,' " Dr. Levine said in a telephone interview. "That's a perfect example of an active working memory dysfunction."

While he is not sure working memory can be expanded, Dr. Levine said children can be taught ways to function better in school.

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