

High school whiz kids may face reading comprehension issues in university

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Everyone knows a high-school high achiever who has floundered in university. Now U of A researcher and Reading Research Lab director George Georgiou may have an explanation for the problem.

Georgiou and co-researcher J. P. Das say it is likely that some of these <u>students</u> may have undetected <u>reading comprehension</u> difficulties. Using funding from a Killam Cornerstone grant, Georgiou and Das screened about 400 University of Alberta students and found that five per cent of them were experiencing difficulties. Georgiou says that, while they were reading fluently, they had trouble making sense of what they were reading. Georgiou and Das analyzed the students' <u>cognitive skills</u> such as working memory, attention, planning ability and processing, and found that that even though these students had good fluency skills, they experienced pronounced difficulties in <u>working memory</u> and simultaneous processing of information.

"When they were doing the test, I noticed some of them were highlighting, writing ideas on the margins of the page. It was obvious that they had developed a strategy to help them with the ideas," he said. "But they still had a significant difficulty looking at the full picture, as reflected in poor simultaneous processing."

Organization: Make a mental map

The journey towards better reading comprehension starts with a single



paragraph; the key, says Georgiou, is organizing the ideas in the texts and keeping them in mind. Students can start with a single paragraph then move to longer and harder texts. He says getting the students to identify and write down the main idea of a paragraph as they read is helpful. While it may be time-intensive, it helps them learn to decode the meaning of the text as they read it and appreciate the fact that, in order to comprehend, one needs all the information that is available in a text, not just part of it. He says that learning to create that mental map of ideas while reading can lead to improved reading comprehension.

"The students invest most of their time on reading and they forget the meaning. They read and they decode the whole passage. So, by the time they get to the end, they forget what the first paragraph was talking about," said Georgiou. "We want to break that massive task of decoding the text into smaller, manageable steps."

Solution: Read more often

While it may seem counterintuitive for someone with reading comprehension challenges to read more, Georgiou says that reading outside a known subject area – and outside the classroom in general – is an excellent way to develop <u>background knowledge</u> that can be helpful in reading and decoding different texts. He says that this practice improves the basics of memory and retention as well as simultaneous processing, the skills needed to overcome comprehension problems. Further, Georgiou added that reading helps students build a muchneeded content knowledge base.

"Read beyond your coursework. Get a magazine and read outside of the field of your own study," Georgiou says, adding that reading creates a background knowledge that's necessary to comprehend general ideas involved in all kind of texts.



"If you don't read, then basically you reduce the exposure to print. It's like you deprive yourself of all the background knowledge that people have about different topics."

Provided by University of Alberta

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