

## Intense Reading Program 'Rewires' Kids' Brains

Agence France-Presse [is.gd/5id0Z](https://is.gd/5id0Z)

Children who undergo intensive remedial reading programs not only become better readers but can also end up with rewired brains that are better at communicating, a study published Wednesday said.

Carnegie Mellon University scientists Marcel Just and Timothy Keller scanned the brains of 72 children before and after they went through a six-month program to make them better readers.

The scans of the eight- to 10-year-olds' brains showed that the quality of white matter—the brain tissue that carries signals between areas of grey matter, where information is processed—improved substantially after 100 hours of remedial reading training, said the study, which was published online in the journal *Neuron*.

While the imaging indicated that the white matter had become more efficient at transmitting signals, testing showed that the children could read better.

"Showing that it's possible to rewire a brain's white matter has important implications for treating reading disabilities and other developmental disorders, including **autism**," said Just.

Thomas Insel, director of the National Institute of Mental Health, which helped fund the study, said the scientists' findings "suggest an exciting new approach to be tested in the treatment of mental disorders, which increasingly appear to be due to problems in specific brain circuits."