Everyone's heard of dyslexia but few people know exactly what it is.

The reading disability affects 7.7 percent of New Zealanders.

Auckland University department of psychology senior lecturer Dr Karen Waldie is studying dyslexia and its numerical equivalent, dyscalculia.

"A lot of people with dyslexia also have dyscalculia. If you have one disability you're more than likely to have another."

Dyslexia is defined as a selective impairment of reading and spelling not caused by hearing or vision problems. It affects people's ability to read even though they've had a good education.

Dr Waldie is from Canada where dyslexia is recognised throughout the school system. She says New Zealand still has some way to go.

"The Education Ministry finally formally acknowledged the existence of dyslexia at the end of 2006. Teachers in New Zealand aren't trained properly about dyslexia. Kids who struggled were seen as lazy and stupid. There are a lot of misconceptions and rumours about dyslexia.

"I'm trying to make it known that those with dyslexia and dyscalculia are bright and educated people."

Dr Waldie's study will involve the use of new non-invasive brain-imaging technology.

The high-tech gear will let her see clearer images of the brain and make it possible to map increases in oxygenated blood flow during reading.

"In the scanner we can see the structure of the brain. The person performs different tasks and the machine can see what happens. We need to understand what causes this and why so many people have the two learning disabilities."

Dr Waldie is looking for people who have dyslexia and no other disability to take part.

Participants will be given an in-depth clinical report explaining their strengths and weaknesses.

Email Dr Waldie on k.waldie@auckland.ac.nz.