



## Disturbing insights

The world's most comprehensive study into myopia in schoolchildren is being conducted in Sydney by Professor Paul Mitchell of Westmead Hospital and Dr Kathryn Rose of the School of Applied Vision Sciences, writes Kate Rossmannith.

Dr Rose and Professor Mitchell have conducted eye tests for myopia, or short sightedness, on 2765 Sydney school children from randomly selected schools and will see another 1250 students this year.

The project, involving 6- and 12-year-olds, has so far revealed an increasing prevalence of myopia during a child's school years. They have also found that it appears to be particularly high in academically high achieving students.

Professor Mitchell explained: "We found 1.4 per cent of six-year-olds suffered from myopia. This is one of the lowest rates in the world. But there is a much higher rate in twelve-year-olds, suggesting that it develops during school years."

Three major factors determine the likelihood of developing myopia: genes, race and environmental factors, particularly the frequency of 'near' or close work such as intensive reading and study.

"We think one of the reasons behind this is that children today do a lot more near work, including increased study and greater use of computers and computer games," said Professor Mitchell.

The children selected for the study have been drawn from a representative range of schools, from different socio-economic areas, various religions and from schools in both semi-rural and urban areas.

While short sightedness is usually detected in children, no comprehensive study into its causes and the apparent increase among children has been conducted.

"The increased incidence of myopia in children means more adults with an increased risk of complications as they grow older," explained Professor Mitchell.

As well as investigating myopia, the Sydney Myopia Study is documenting other disorders such as poor vision in one eye and squinting. Professor Mitchell and Dr Rose are considering which of the determinants of eye problems are actually modifiable.

"It will be important to follow these kids over time, from six to 15, so we are hoping for further funding from the National Health and Medical Research Council," said Professor Mitchell.