

Double cochlear implants improve student grades

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One cochlear ear can give a child the gift of hearing, but a new study shows two can help them excel at school.

A world-first study of deaf primary school students has revealed children with double cochlear implants performed much better on exams than children with only one.

The University of Melbourne study, released this week for Hearing

Awareness Week (August 23-29), measured academic performance of 44 profoundly deaf eight-year-old children across Australia and New Zealand.

Children using bilateral [cochlear implants](#) achieved significantly higher scores for maths, oral language and written language. And the younger the child had received the second implant, the bigger the improvement.

As a result of this research, the New Zealand Government now fully subsidises bilateral cochlear implants. There is still work to be done in Australia to achieve this.

Children with [profound hearing loss](#) have historically learned at about 55 to 65 per cent of the rate of children with normal hearing. They tend to fall behind further every year they are at school.

Bilateral (two) cochlear implants can be a huge benefit to those children, yet this operation is not publically funded in Australia.

Dr Julia Sarant from the University's Department of Audiology and Speech Pathology, is lead author of the new study. She says it's vital the Federal Government follow New Zealand's example and fund double implants, to allow hearing impaired children the best chance at school.

"Cochlear implants are not cheap. One implant costs just over \$30,000. But they make such a huge difference to the lives of children," Dr Sarant said.

"With two ears, the brain can use the auditory information from each ear to compare and process sound. Two implants give children the chance to locate different sounds, identify who is speaking in a group, and filter out background noise, even in noisy places.

"With only one ear, [children](#) find learning very difficult because they tend to miss information amongst the constant buzz of the classroom and in the playground.

"Low literacy, unemployment, social isolation, and depression can be lifelong repercussions of poor academic outcomes. It is crucial that our research leads to better government funding policy and best clinical practice."

In Australia, to get a second implant, parents need to have private health insurance, or they need a discretionary decision made to dip in to those government funds allocated for single cochlear implants, if there are enough.

More information: "Academic Outcomes for School-Aged Children With Severe–Profound Hearing Loss and Early Unilateral and Bilateral Cochlear Implants." *Journal of Speech, Language, and Hearing Research*, June 2015, Vol. 58, 1017-1032. [DOI: 10.1044/2015_JSLHR-H-14-0075](https://doi.org/10.1044/2015_JSLHR-H-14-0075)

Provided by University of Melbourne

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