



Media Release

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Sound-field systems helping close the gap in classrooms

With a high prevalence of hearing loss among Indigenous communities, sound-field amplification systems are helping many Aboriginal children in the classroom hear their teachers.

According to Professor Harvey Dillon, Director at the National Acoustic Laboratories (NAL), the research division of Australian Hearing, many children are unable to hear their teachers properly due to reverberation and classroom noise.

“Hearing problems can apply to any child in the classroom, but is particularly common among Indigenous children,” Prof Dillon said.

The sound-field system consists of a wireless microphone worn by the teacher which is transmitted via loudspeakers placed strategically around the room. The system increases the teacher’s voice level and also decreases the distance from each child to the teacher’s voice, which removes the problems associated with reverberation.

“Sound-field systems offer benefits to children with conductive or mild hearing loss who do not wear hearing aids. They also benefit children with middle ear infection, those who speak English as a second language and those with an auditory processing disorder. Sadly, many Indigenous children will have several of these disadvantages at once. Without these sound-field systems, it would be near-impossible for children in this situation to hear anything in class,” Prof Dillon said.

In an experiment conducted by NAL, the use of sound-field systems resulted in a 41 per cent increase in the rate of attainment of educational indicators during the terms the systems were installed.¹ This was averaged across all children in the classes and across reading, writing and numeracy skills and occurred despite most of the children having no problems with their hearing.

“We anticipate that benefits would be even greater for classrooms that have a high proportion of children with hearing loss such as those in remote areas,” he said.

A study conducted at primary schools in Victoria indicated that 11 per cent of children have a hearing loss of some type in one or more ears at any given time.²

Australian Hearing provides free hearing services for children and young adults aged under 21, and has an outreach program to reach Indigenous Australians living in urban, rural and remote areas. Call 131 797 to be connected to your nearest centre.

Visit www.hearing.com.au for details on eligibility criteria.

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¹ Massie and Dillon, 2006a, 2006b

² Wake et al, 2006