Sound amplification systems

A Sound amplification system (SAS) is a device that amplifies the teacher’s voice in the classroom. It works by providing an amplified signal in an area of the classroom determined by the placement of 4 or 6 speakers.

How does the SAS improve the listening environment?
The SAS can help overcome difficulties created by noise because it amplifies the teacher’s voice and so the teacher’s voice is heard more easily over the background noise.

The SAS also overcomes some of the effects of reverberation, because each child receives the sound of the teacher’s voice directly through the speakers. This means there is little interference from hard surfaces as the sound is travelling relatively short distances from the speakers to the child’s ear.

Lastly, the SAS overcomes the effect of distance between the teacher and the child by providing a constant signal within the soundfield area. Regardless of the teacher’s location in the classroom, the student will receive a clear message from the teacher.

How do children benefit?
Children with conductive hearing loss benefit because they:
- are able to hear the teacher more clearly
- are able to follow oral instructions more easily
- are less distracted by noises outside the classroom
- are more alert
- are more willing to participate in classroom activities
- are more attentive and stay on task much longer
- show better listening skills
- show better behaviour in the classroom as they are more aware of what is happening

How do teachers benefit?
Teachers benefit because they:
- can speak at a normal conversational level and don’t have to raise their voice to be heard
- experience less fatigue and stress at the end of the day as they have not had the added effort of maintaining elevated voice levels
- experience greater ease in getting and maintaining the children’s attention and therefore better management and control of the class.
- can use a more natural teaching style knowing that wherever they are in the classroom all children will have access to the teacher’s voice.
When do I use the SAS?

The purpose of the SAS is to provide an improved auditory signal to the listener. Therefore it is important that the SAS is used consistently throughout the school day, especially during listening times. The SAS is versatile. Here are some ideas about the kind of teaching activities the SAS can be used for:

- direct teaching
- group work
- storytelling
- reading stories (small group or whole class)
- morning news sessions
- show and tell sessions
- project presentations
- question and answer activities, quizzes, game shows
- listening to taped music, stories or rhymes
- discussions
- debating
- interpreting/bilingual sessions
- watching TV/ videos
- demonstrations

! Note: Daily use of the SAS in all teaching activities provides an enhanced listening environment that gives children with conductive hearing loss the best opportunity to learn.

How do I find out more about the soundfield amplification system (SAS)?

Contact your Advisory Visiting Teacher: Hearing Impairment (AVT:HI) if you have questions about SAS. If you want to use an existing SAS, and would like support with this, your AVT:HI can help with the set up and the use of SAS. If your school does not have a SAS available for use in your classroom, short term SAS loans (of one school term) can be organised through your AVT:HI from the Disability Services Support Unit.

Read Using soundfield amplification systems (SAS) in the classroom. This is an EQpublication that was distributed to all schools with soundfield amplification systems by AVTs:HI in 2002. Look for it in your school library or professional development resource area or ask a teacher who currently has a SAS in their classroom if you can borrow their copy. This publication can also be borrowed from the Aboriginal and Torres Strait Islander Learning Enhancement Centres in Brisbane (Inala) and Townsville.

Some schools nominate an experienced SAS user to troubleshoot and support others in their use of the SAS in the classroom. Use this person to learn more about the SAS and it’s use in classrooms.

Other teachers in the school may have used/be using a soundfield amplification system. Talk to them about their positive experiences. As with all technology, some people may have had frustrating experiences with SAS! Try to use these stories as a learning experience rather than as a reason not to use SAS.

References

Further Reading