



## ACOUSTICS AND SEND TRIBUNALS

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### **The SEND Tribunal process**

The main problem with SEND Tribunals is that they should not exist. In an ideal world, every education authority would be able – and willing – to send every deaf<sup>1</sup> pupil to the school of her<sup>2</sup> choice. In the real world this does not happen, sometimes because of a genuine disagreement over the needs of a deaf pupil, but often because the local education authority does not have the facilities to teach deaf children in the state system or the resources to pay the fees of a specialist or independent school. When such a conflict arises, the parents may appeal to a Special Educational Needs and Disability (SEND) Tribunal.

Although recently absorbed into the new two-tier tribunal system, the SEND Tribunal still operates in much the same way as before. The process is described reasonably clearly on the Ministry of Justice website – a web search on “SEND Tribunals” is more reliable than hoping that a government department will retain the same name or web address for any length of time, and will also yield helpful information from specialist educational solicitors, charities and other organisations.

Many appeals arise when a deaf child is due to move from primary to secondary education. Typically, the local authority nominates a mainstream school, which generally (but not always) includes a special hearing-impaired unit, while the parents believe that their child should go to a specialist school or to an independent school where class sizes are much smaller and staff / pupil ratios are higher.

The Tribunal consists of a three members whose task is to hear the evidence of both sides, and from that evidence to assess how and where the child’s needs can best be met, and the comparative costs of each side’s proposals. The local authority’s case is often presented by a local authority solicitor or barrister, and often the parents’ case will be prepared by a solicitor specialising in education law, but some parents have successfully compiled and presented their own cases. Where the potential cost of the education provision is high (figures of £30,000 - p/a are not uncommon) either or both sides may have their cases presented by a barrister in what is effectively a formal legal process. Either way the process is a difficult and stressful one both for the parents and for the child, who may be very unsettled by the uncertainty of not knowing which school she will be attending in a few months’ time. This is not a comfortable process for deaf children or their parents, who already face enough difficulties without being forced into a complex and expensive adversarial process. This is the system within which the expert witness has to work.

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<sup>1</sup> For simplicity, in this paper I use the term “deaf” to denote significant hearing impairment...

<sup>2</sup> ... and the female case to include the male.

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## **The role and responsibility of the expert witness**

A tribunal generally limits the number of witnesses to three on either side. The local authority will often present evidence from the head teacher and SEN Co-ordinator teacher at the nominated school, and sometimes from the local authority's own educational audiologist. The parent's witnesses may include an audiologist, an educational psychologist, and a speech and language therapist, who will have assessed the child and provided a detailed report on her needs. By contrast, the acoustics consultant assesses the school rather than the child, and often our first task is to explain to the parents the difference between our role and that of the audiologist.

In any case the expert witnesses on both sides should present clear, unbiased and independent advice. Their overriding duty is to assist the tribunal in matters within their expertise, and this duty overrides any obligation to their Clients. To this end the expert witnesses should be required to complete a formal declaration to this effect known as a "Statement of Truth". The authority's witnesses do not always do this, perhaps because they do not consider themselves to be expert witnesses.

For the parents' expert witness this duty to present unbiased evidence is relatively straightforward. It is, of course, natural to want to help one's client and it is possible to be carried away by the adversarial nature of the process. The witness must think, not of winning or losing a case, but of advising the tribunal. If the evidence does not support your client's case you must explain this as early as possible. This can present problems for witnesses who are employees of the authority, and who are acting under instructions to "win" the tribunal. This can lead to a very poor standard of evidence and tribunals are occasionally critical of such witnesses although they should really reserve their criticism for their employers.

## **The evidence on acoustics**

By contrast with the ethical issues, the measurement process is relatively simple. The acoustician assesses, not the child, but the schools ; the question that we have to address is whether each school provides an acoustic environment in which the deaf child can hear and communicate with teachers and other pupils. We measure as far as possible in typical conditions and in a typical selection of classrooms. Not all acousticians use the same process and this section describes the method that my practice has found to be most successful.

We normally take three types of measurement: room acoustics, ambient noise levels in the unoccupied rooms, and sound levels in use. We also consider, but do not necessarily measure, sound insulation.

### *Room acoustics*

The basic parameter here is the reverberation time ; the assessment criteria are usually those set out in BB93 <sup>3</sup>, i.e. a mid-frequency averaged reverberation time  $T_{mf}$  not exceeding 0.4 seconds in rooms intended for teaching deaf children. Ideally we would look for compliance with the BATOD standard, which is more stringent at low frequencies, but in practice compliance with this in existing schools is very rare.

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<sup>3</sup> The acoustic criteria in BB93 and the proposed changes to these are presented in Stuart Whyte's paper "An update on acoustics in schools in England" elsewhere in this publication

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In fact, many schools do not even meet the 0.8 second T<sub>mf</sub> requirement for mainstream secondary classrooms.

### *Unoccupied ambient noise levels*

BB93 generally considers noise from external sources such as traffic noise, and internal plant such as heating and ventilation systems. It normally excludes equipment such as computers, projectors and whiteboards, but for the purposes of tribunals these should be considered as they can generate distracting levels of tonal noise. The assessment criteria are again those discussed in BB93 ; 30 dB LAeq<sup>4</sup> in rooms intended for teaching deaf children, 35 dB LAeq in mainstream classrooms, 40 dB LAeq in laboratories and technical areas. Measurements include noise from heating and ventilation systems and windows should be open where this is required for ventilation.

### *Sound levels in use*

Much of the literature refers to signal-to-noise ratio but this is practically impossible to measure in a survey of this type. We have, however, found that sound levels measured during lessons are a direct function of the class size as well as the classroom acoustics. Across many surveys we have found that average noise levels during lessons (including the teacher's and pupils' voice levels) are around 10 dB LAeq higher in classes of 25-30 children than in the smaller classes typical of specialist and independent schools. A pupil with hearing aids or cochlear implants has a much lower dynamic range for hearing, and will cope better in quieter conditions. This may seem a very simplistic measurement, but it provides a very useful indication of listening conditions in a classroom.

### *Sound insulation*

BB93 considers noise from adjacent rooms through sound insulation measurement, but in an existing school this is time-consuming, disruptive and often unnecessary. Significant problems with noise transmission will be audible during the measurements of sound levels in use. The expert witness should have enough experience and expertise to hear when this occurs, identify the causes and refer to them in the report. Typical causes are very lightweight construction in temporary buildings; partitions which terminate above lightweight ceilings; almost all types of folding partition; and inadequate doors and glazing between classrooms and circulation areas, especially if those circulation areas are very reverberant.

### *Soundfield systems*

The main benefit of soundfield systems is that, properly used and adjusted, they save teachers from straining their voices. In that respect they can be very valuable additions to the classroom. Their existence and use should be noted in the report, but they do not normally help the deaf child, who will generally be using a radio aid. They certainly do not compensate for poor room acoustics or high noise levels.

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<sup>4</sup> The technical definition of this quantity is beyond the scope of this article and is unnecessary unless you mean to measure noise levels. If you need to look it up you should probably not be considering acting as an expert witness in acoustics.

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### *Measurements outside the classroom*

Children still need to communicate outside classrooms. High noise levels and excessive reverberation in corridors, dining halls and sports hall can all be all be problematic. Some children are more sensitive to this than others and whether to include these areas in the acoustic assessment should be discussed with the parents before the survey.

### **The report and the tribunal hearing**

The tribunal members have to read through a lot of information and will appreciate clear and concise evidence in a well-written report. Most consultants rely on report-writing for their living, and over the course of hundreds of reports have developed an effective report-writing technique. The same is not always true of other professions and it is worth remembering that your report will be reviewed by other experts who will be eager to find fault. It is therefore well worth having a colleague review your report before submission. The legal adviser may suggest some changes but will not re-write your report for you and may not be familiar with the technical terms anyway.

As well as listing the measurement methodology and results, the report should include conclusions and recommendations relevant to the specific child. For this reason it is often necessary to understand the reports of the other witnesses and in particular the audiologist. The requirements of a profoundly deaf child with two cochlear implants and who is heavily reliant on sign language will be very different from those of a child with moderate hearing loss and good lip-reading skills.

It is important in the report to differentiate between facts that you know, information gathered or assumed from other sources, and your own professional opinion. If there is uncertainty about an issue, or if there is something that you simply do not know, make this clear your report because you will probably be asked about it.

There is, incidentally, no reason why the report should not include recommendations or suggestions for improvements. As a result of recent reports to tribunals, several schools have installed acoustic treatment which has benefited both deaf and hearing pupils.

### **The tribunal hearing**

The tribunal hearing is often surprisingly informal. That does not detract from the importance of presenting your evidence correctly, and from being absolutely familiar with a report which you probably wrote a month previously. Many an expert has been caught out by a shrewd question from one of the tribunal panel, and has been embarrassed to have to search through her own report for an answer. Read and re-read your report beforehand.

You should also by this stage have seen the reports of the witnesses on the “other side” and you will presumably have discussed that evidence with your counsel. You may have pointed out some weaknesses or inconsistencies on their reports - remember that they will have done the same with yours. Sadly, there does not seem to be much encouragement for witnesses to meet beforehand and discuss areas of agreement, so it helps if at least you have marked up your opposite number’s report to identify issues where you seem to be in agreement and those which require discussion at the tribunal.

Sadly, the standard of evidence presented at tribunals is sometimes very poor. Recent examples include acoustic surveys by staff who clearly have no expertise in the subject, using inadequate or uncalibrated equipment and referring to the wrong

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standards. In one case recently the acoustics report assessed classrooms against the standards for mainstream schools only, and under questioning it transpired that the witness had no knowledge of the acoustic standards for deaf children and had never read BB93. In another case the assessment referred only to the acoustics of a school's hearing impaired unit, with no consideration of the other rooms where the pupil would spend most of her time. In yet another, the report failed to mention that noise levels in the classrooms increased by 20 dB(A) when the heating system was turned on. In such cases there is no possibility of the local authority's case being successful and we have to wonder why the parents are being put through this very stressful and costly process.

If that all seems rather negative, it is because ultimately the tribunal system is there to deal with those cases where the system has failed and the local authority and parents cannot agree. There is perhaps a suggestion of progress, as a few enlightened local authorities have realised that the money currently spent in losing tribunals and educating deaf children outside the state system would be better spend in building new local provision with acoustically excellent classrooms and smaller class sizes. Perhaps in twenty years' time there will be enough such places and SEND tribunals for deaf children will be unnecessary. In the meantime, however, we have a duty to make an imperfect system operate as well as possible.

#### Biographical note

*Adrian James is a Fellow of the Institute of Acoustics and a past chairman of the Association of Noise Consultants. His consultancy, Adrian James Acoustics Limited, has designed Hearing Impaired units for schools throughout England and is currently designing the new Royal Academy for Deaf Education. He was a principal author of DfES Building Bulletin 93 "Acoustic Design of Schools" and is on the working group revising that document. Working with the leading Educational Audiologist David Canning, Adrian was the consulting author of the "Essex Study", an assessment of the impact of improved acoustic standards in classrooms, commissioned by Essex County Council and the National Deaf Children's Society.*

*For more information visit [the AJA web page on SEND Tribunals](#)*

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