Transcript of the evidence Session—P-04-481 Close the Gap for Deaf Pupils in Wales

- [142] **William Powell**: Bore da, bawb. You are most welcome. This agenda item is on petition P-04-481, Close the Gap for deaf pupils in Wales. This is our evidence session. I would like to welcome you all here this morning. I would like to ask you first of all to introduce yourselves for the Record and also to check the sound levels.
- [143] **Ms Dulson**: Thank you very much. My name is Jayne Dulson and I am a director of the National Deaf Children's Society here in Wales. Shall I introduce my colleagues for you? Would that be easier?
- [144] William Powell: Please.
- [145] **Ms Dulson**: Okay. On my left we have Elin Wyn, who is our policy and campaigns adviser here in Wales and Danyiaal Munir, who is very kindly giving his time to us today. Danyiaal is a friend of the National Deaf Children's Society and is a deaf young man himself. He is currently a student at Cardiff and Vale College and was previously a pupil at Llanishen High School in Cardiff. On my right we have Peter Rogers, who is an expert in acoustics and a fellow of the Institute of Acoustics. He has more letters after his name than in his name. [Laughter.]
- [146] Mr Rogers: Bore da.
- [147] **Ms Dulson**: So, that is us.
- [148] **William Powell:** Excellent. Are there any opening remarks you would like to make? I believe that you have a short presentation for us also.
- [149] **Ms Dulson**: Yes, indeed, we do. Okay, thank you. It was back in May 2013 that we submitted our video petition, 'Closing the Gap'. So, we are very grateful for this opportunity today to be able to discuss it more widely with you and take questions on it. 'Closing the Gap' is based around the educational attainment of deaf children in Wales, and, within that petition, you will have seen several issues identified as being key to levelling that gap. There are two issues that are of particular significance. The first is deaf awareness. Although we are not here to discuss that today, I do not want to leave it in the grass. It is a very important issue as far as we are concerned and one that we would like to see dealt with on an all-schools basis, dealing

with deaf awareness-raising for all staff in schools as well as all pupils. However, as you know, today—and I am rushing through—we are here to deal with acoustics and the importance of raising the level of acoustic environments within school buildings in Wales. We would like also to mention that our aim is to achieve better acoustic settings not just in our schools but also in our colleges and nursery schools throughout the principality.

- There are around 2,700 deaf children currently in Wales, but that number is inflated somewhat by 80% of all children between the ages of 0 and 10 years suffering at least one episode of temporary deafness during their young lives. That can be a period of some weeks or even some months and it can be repeated. So, you can see that the number of deaf children at any one time in our school population can be quite high. With more than 90% of deaf children educated in mainstream education settings, there is potential at any time for a deaf child to be in any classroom in any school throughout the country. You will know that pupils access an essential part of their learning by hearing and retaining information, and a good listening environment, a good acoustic setting, is therefore a good learning environment.
- [151] Building regulations were devolved to the Welsh Government on 31 December 2011. At that time, NDCS in Wales launched its 'Sounds Good?' campaign, which called on the Welsh Government to use its new powers that it had then been given to strengthen building regulations regarding acoustics in new school buildings and extensions to those buildings, regardless of funding streams. We also wished that to be extended to include nursery schools and colleges but, to this date, there has been no improvement made.
- [152] In England, 'Building Bulletin 93', which is the building regulation particularly pertaining to acoustics, has been archived; it is currently being reviewed, and we are expecting a replacement to that imminently, in the new year. The improvements to 'Building Bulletin 93' aim to update and streamline acoustics in all schools in England.
- [153] In addition, I would like the Petitions Committee to note that the School Premises (England) Regulations 2012, which are applicable to England only, require that acoustic conditions
- [154] 'must be suitable, having regard to the nature of the activities which normally take place therein.'

- [155] The equivalent clause in the 1999 regulations, which still apply in Wales, is significantly weaker. Therefore, it is our assertion that Wales could be taking a backward step if the Welsh Government does not strengthen minimum controls on acoustic standards within Wales.
- [156] As I said, this is a campaign based on closing the educational attainment gap, and the educational attainment gap for deaf pupils in Wales is significant. 'Significant' seems to be my word for the day. [Laughter.] At the moment, there are gaps at every key stage, and the relative gap at GCSE level in the last academic year, as cited by the Welsh Government, is 21%. That is from the core subject indicators. So, it is 21%, and, as deafness is not a disability in itself, I am sure that you will agree that that is, again, a significant gap and an unacceptable one. So we, today, are calling on the Welsh Government to do the right thing and make schools, nurseries and colleges in Wales sounds good and close that educational attainment gap. That is all that I have to say for the moment, but, obviously, I will take questions later; I would welcome questions from you, as would my panel. I am going to hand over to Elin Wyn now.
- [157] **Ms Wyn**: Bore da, and apologies, I have a bit of a sore throat.
- [158] **William Powell**: Dim **William Powell**: That is not a problem.
- [159] **Ms Wyn**: It can be very difficult for hearing people to experience and to understand what it is like to be deaf. A hearing person can go around all day with ear plugs in their ears just to have a simulation of what it is like to be deaf, but, actually, most deaf children will have hearing aids or a cochlear implant. The point is that hearing aids and cochlear implants amplify all noise. When you are a hearing person, you can block out certain background noises, but that does not happen when you have a hearing aid. So, what we have for you now are sound simulations of what it is like for a pupil with high hearing loss, wearing hearing aids, in different situations. The first one is in a classroom with quite a lot of background noise from outside the classroom and quite a lot of chatter.

Chwaraewyd recordiad sain. A sound recording was played.

[160] So, you see, it is quite difficult to understand any kind of words, phrases, or anything in that.

[161] The second clip is of a classroom without any sort of external background noise, but still with some chatter from the fellow pupils.

Chwaraewyd recordiad sain. A sound recording was played.

- [162] So, you see that there is a slight difference, but not an awful lot.
- [163] The third clip is of a classroom that has been acoustically treated, so it is a much better environment for a child who has hearing aids or cochlear implants.

Chwaraewyd recordiad sain. A sound recording was played.

- [164] So, you can just about make out some of the words there.
- [165] This is probably not the best acoustic environment in which to hear these clips, as our acoustics expert will probably explain to you.
- Mr Rogers: Absolutely. Obviously, this is a very reverberant room; I [166] am just going to demonstrate it for you by clapping. I am sure you have heard this before, but just listen how long it takes for the sound to disappear. It takes about a second. So, every piece of information that I generate from my mouth has all of that information added to it before it reaches your ears. So, the key difference between a space that has good acoustics, in terms of pupils, and bad acoustics is that you only want to listen to the direct sound from the teacher; you do not want to hear all of the additional reflections. That is quite straightforward to achieve scientifically; you just make sure that every surface that sound hits absorbs it and does not reflect it. Most people will be familiar with the restaurant problem. In restaurants these days, you walk in and, in a nice quiet restaurant, you have perfectly normal hearing and you generally do not have a problem. As soon as you get the noise levels increasing, you are leaning forward and trying to make out what that person is saying, who is a few meters away from you. The point that we are here to make really is that when you are disadvantaged from the very beginning, it is that much more important to make sure that the conditions are right so that that child has the best opportunity to get the information. The key thing is that it is not just about being able to hear the teacher, which is obviously quite fundamental; it is also that if you cannot hear well, it is harder to retain the information that you are taught. So, I will

pass back.

- [167] **Ms Wyn:** Maybe Danyiaal could speak a little bit about his experiences in school.
- Mr Munir: I would go into a lesson, for example, design [168] technology—that is my interest: electronics—and every time I go in there, the room is all hard floors and thin walls and it is more echoey. So, as soon as I go in, everyone starts chattering and before the teacher starts the lesson it is very frustrating for me to hear other people talking. So, say if I wanted to talk to my friend, I cannot hear because I can hear more people around me rather than just the one person I am talking to directly. Also, when the class is started by the teacher, there are people scraping chairs over the floors, which make really loud screeches. That affects me a lot when trying to concentrate on the teacher, one to one. Everyone has to look at the teacher and listen, but little noises can have a big influence on me, especially when I try to retain information from them. I have to concentrate more and I get more easily tired, so I tend to have headaches or those sorts of things because I have to concentrate directly on the teacher speaking. The sounds and the noises that are made affect me.
- [169] Mr Rogers: If I could just add the science to that bit, it is quite important that we just appreciate what the brain is doing. What is happening is that the information that is coming in is requiring a lot of cognitive function to just sort the wheat from the chaff—the information from the noise. So, as a result, a number of things happen physiologically: one is that you get tired quickly; and the second is that your cortisol levels go up—your stress levels go up. All of those things are counterproductive in terms of a positive learning environment. We do not learn well under those conditions. So, the point is that the acoustic conditions enable those things to be reduced so that those with a hearing impairment can have a more comfortable environment in which to understand. Maybe I can ask you a question: in the rooms that were specifically designed for hearing impaired, what was the comparison? Did you find those—
- [170] **Mr Munir**: There was a huge difference between the hearing impaired rooms and the mainstream classrooms. In the hearing impaired rooms, they have carpets with noise-cancelling walls, which are acoustic walls, so this has been a huge improvement on the mainstream classrooms. The hearing impaired classrooms are totally different, so I can focus more on the teacher without being stressed. I can relax and listen and learn more

easily compared to mainstream classrooms.

[171] **William Powell:** Thank you very much indeed for the clarity that you have brought to the issue for me. I should declare an interest; I have a significant hearing impairment in my left ear, so I empathise with that very much indeed.

10:15

- [172] I just have a couple of brief questions, and I know that colleagues have issues that they wish to cover with you as well. First of all, how would you like to see the 1999 school regulations specifically enhanced, and do you believe that the current English provisions would be a good benchmark, or would you like us to go beyond that in your aspirations?
- [173] Mr Rogers: Just to declare my interest as well, I am involved as a trustee in the Institute of Acoustics, and I am also involved in the rewriting of 'Building Bulletin 93'. So, my knowledge of this is all the way up there, but I suppose that I am recognising a weakness in the way that the English regulations are formed and an opportunity for you to do things in a slightly more robust fashion. My concern is purely the technical and the evidence base for this, and I do not think that there is any doubt that good acoustic conditions help those with hearing impairment. The good advantage is that it also helps those without hearing impairment. So, there is a win-win scenario here.
- [174] What I would suggest is that the wording in the School Premises (England) Regulations 2012 focuses on this word 'suitable', which is defined, and it points to the new BB93. I am happy to say that it is actually a good improvement in the new document on the old, and I am comfortable that, in offering that forward, it would be a good benchmark. The problem is that there is no requirement to test, so there is no proof, actually, that a school has achieved those conditions. The key for the school premises regulations is that they apply in use. So, it extends to all schools and, indeed, to nurseries too.
- [175] Under the current situation in Wales, you would only be looking at building regulations focusing on new schools and, again, there is no mandatory requirement to test. If you bought a new home, you would be required to have a sound test to prove that the acoustic conditions had been met. That is not currently the situation in the building regulations. So, the

school premises regulations give an opportunity to tie in with the wording that you have under the twenty-first century schools clause, which is linked to the funding, that requires acoustic testing to be completed to demonstrate that the conditions in BB93 have been achieved. That then would tie back in to 'the suitable condition had been achieved'.

- [176] Another helpful steer for you is that, yesterday—. Would you like to mention the quality marks, or would you like me to do?
- [177] Ms Dulson: No, carry on.
- [178] Mr Rogers: I have been working with the NDCS to try to come up with, not necessarily the minimum requirement or the minimum standard, but actually one that is desirable for children with hearing impairment. We are calling that the 'quality mark', and that is a freely available, selfadministered mark, which any school can download from the NDCS website as of today. What that does is that it sets out gold, silver and bronze standards for classrooms. They are linked to the standards that are in BB93, but also to what the NDCS would like to see as an aspirational target for a classroom. I would encourage you to embrace that as one way in which you could demonstrate that this standard has been achieved. Now, the reason that it is self-administered is to give freely available access, really, and to enable schools to be able to close the gap, simply by demonstrating that they have had an acoustic test done, and they can demonstrate that these standards have been achieved. Once that is the case, they can display this quality mark, and a pupil, a teacher or a parent is then able to freely see and signpost which classrooms are acceptable and which are not. So, I would really suggest that that is a very good way forward, sir.
- [179] **William Powell**: That is really helpful. There is just one final question from me, and it is: to what extent is it possible to retrofit? You referred to twenty-first century schools, which clearly is the flagship programme, but many of our pupils for many years to come are going to be in schools that have not been through that particular programme. What are the particular challenges around retrofitting?
- [180] **Mr Rogers**: Interestingly, the costs have been looked at and it might surprise you to know that it is not a costly exercise to retrofit classrooms, because the main issue is around absorption. The panels that you see at the side of this room are acoustic panels. They are here because, without them, the room would be very reverberant. The cost of an acoustic panel for fitting

out a classroom is around £500, which, if you think about the benefit, is really insignificant. The reality is that, if you are talking about inclusive environments and the opportunity to close the gap properly, that is the one thing that could be done that would close that gap. It is not true to say that reverberation is the only issue, as you have noise from outside, and so forth, but it is a critical one. By dealing with that issue alone, you would deal with the majority of the problem.

- [181] **William Powell:** That is helpful. Russell George, you have indicated, then Joyce.
- [182] **Ms Wyn**: Sorry, I was just going to add that, yesterday, NDCS published some guidance for schools, for headteachers and local authorities on creating good listening conditions for learning in education. It is an acoustics toolkit and it is available now on the website. I can give you copies if you would like, after the meeting.
- [183] **William Powell:** That would be really helpful; thank you.
- [184] **Ms Wyn**: This guidance contains lots of ideas about how to retrofit and improve the acoustic environment of a classroom at a reasonable cost, and also how to do it in a way that makes it attractive for pupils. For instance, you can hang what they call 'acoustic clouds'; you can hang things from the ceiling that look like little clouds and are made from absorbent material. That makes the classroom look a bit nicer. I can give you these copies afterwards.
- [185] William Powell: Great; thank you.
- [186] **Russell George**: We just have a few minutes left for questions. Thank you for coming today. We have many old buildings, old schools, and I understand that there are plenty of issues there. However, with the new schools that are being built, I wanted to understand the difference. You are saying that schools are being built but they are not accommodating and are poorly designed. However, regardless of the fact of regulation or not, are designers not taking into account your suggestions? Regardless of regulation, they could still take it into account when building a new school.
- [187] **Ms Dulson**: All schools that are funded through the twenty-first century schools programme have to have pre-completion testing before the end of that build. However, as we know, there are fewer schools being built

through that programme and other funding streams are being used. So, the building regulations at the moment are not fit for purpose and derogations are sought regularly, and are granted far too easily, in our experience. So, we have concern about all new school builds and a retrofit, we are able to demonstrate, is plausible, feasible and sustainable, and it is low cost. However, for the new buildings, we need firmer and stronger regulations in place.

[188] Russell George: What I saying is that those regulations are not there, you want them to be there, but is there nowhere in Wales where a schools has been built where they have gone further, beyond the regulations?

[189] **Ms Dulson**: There are good examples, and there are several schools that are currently under construction for which advice is being sought from NDCS on particular points around acoustic environments. There was one school that we would recommend, and perhaps the committee would wish to visit, and that is Rogiet Primary School. We have visited it ourselves and we were extremely impressed. It is not a school that has a hearing-impaired resource base. This is a school that has gone down the road of providing excellent acoustic environments for the whole school population, because they can see the distinct improvement in attainment for all pupils, not just those with a hearing impairment, and also an improved environment for their teaching staff, who then have much better health and much better throats, and are able to provide a much better learning environment for deaf children.

[190] I think that Peter has a few words that he would like to say.

[191] Mr Rogers: I deal with the reality on the building sites and the design teams, and sit around with architects, et cetera. The issue, really, is that if it is a nice wood, it will not make its way through to the end of the design, unless there is a robust defence by an acoustician, often. We are not the police of this process, but we find ourselves more and more in that position. So, unless there is testing—. What we need to do is to provide for new school buildings a design that would comply. Once that goes through building control and is signed off, that then needs to be built. Now, what ends up on site does not always match what is on the design and the reality is that there is no check in place to make sure that that is the case. When you consider the school populations and the next generation going through these new buildings, we really want them to be the right sort of environment. After all, that is what we are expecting, but nobody is checking.

- [192] William Powell: Joyce Watson is next.
- [193] **Joyce Watson:** Thank you for coming in today. There are two things from what you have just said. The fact that nobody is checking is a fairly obvious one, but also best practice. You are pointing us to a school that you want us to visit—I do not know where it is, but, if we can, we will.
- [194] **Ms Dulson**: It is not far. It is in Monmouthshire.
- [195] **Joyce Watson**: Surely, we do not want to be reinventing the wheel each time. So, is there a process for sharing best practice so that it saves money in that respect? Also, moving on from that, you talk about learning environments, particularly nurseries, which clearly fall outside, and in Wales perhaps more so than other places. How do you think that we are going to manage to bring those on board? They are private enterprises, and they are looking, obviously, to run them as best as they can. What could we do to encourage those private enterprises, in the main, to facilitate the learning environment for those who are challenged with their hearing deficit?
- [196] **Ms Dulson**: I think that identifying best practice is quite easily done. There are—
- [197] **Joyce Watson**: What about sharing it?
- [198] **Ms Dulson**: Indeed. However, there are professional bodies, and there are inspection and regulation authorities and bodies. Estyn, for example inspects. We have the Care and Social Services Inspectorate Wales as well. So, there are several regulatory bodies that could instil best practice or distil best practice. I think that by shoring up the regulations, which, as we have demonstrated, exist in England, for example, with the new 'Building Bulletin 93' and also with the schools regulations, there are ways that we can beef up requirements. In terms of disseminating best practice, I think we can do that very well through current regulatory bodies. Peter, would you like to add anything?
- [199] **Mr Rogers**: Yes, please. Nurseries in England are included, even if they are not part of the 'school' definition, under the School Premises (England) Regulations 2012. So, there is a good premise for requiring it. After all, that is where we are developing speech. It is important. The reality is that nurseries value their Ofsted ratings quite highly. I would suggest that that would be a good opportunity. Ofsted is not an expert in acoustics, but

neither is building control. They need to go through a process and demonstrate. It is quite conceivable to achieve that, and it would really help everyone, I think, to understand the process. The Institute of Acoustics and the Association of Noise Consultants are working closely together to provide guidance. That guidance will be available early in 2015. I commend that to you as another route for getting that advice; we are here to assist.

[200] **Ms Dulson**: I know that we were referring to Ofsted there; of course, in Wales, we mean Estyn. However, I would refer you back to the Welsh Government's 'The Learning Country' and its seven core aims, one of which is to give children a flying start. So, I think that it is within your gift. It is your responsibility.

Joyce Watson: The reason, if I may, Chair, I picked up on nurseries was for the reason that you have just said: what you learn there will stay with you for the rest of your life, or possibly be missing for the rest of your life. I would also, if I may, like to ask this. You say you have seen good practice, and you say there are bodies that regulate either the building or the learning environment: is there anywhere else that we could go to to pursue this agenda and perhaps understand it better?

10:30

[202] **Ms Dulson**: As Peter is here as a representative of the Institute of Acoustics, I suggest that that is an institute that you need to take evidence from. There is no doubt about that. Actually visiting a school yourselves will give you such a good idea of the difference between a good acoustic setting and a less good acoustic setting. I think we are able to demonstrate quite clearly with the level of the attainment gap in Wales for deaf children that there is a significant issue. It is that word 'significant' again. It really is a problem that we need to be addressing.

- [203] So, we are giving you evidence and we have given you a lot of data and evidence within our briefing, which cites again the benefits or the direct correlation between attainment and acoustics. So, please read all of those documents, because they really will flavour the day.
- [204] William Powell: Thank you. Russell George is next.
- [205] **Russell George**: I was just going to ask about the value of us visiting a school. You can tell the difference between a poor acoustic building

and a good one, but, for example, if I am not hard of hearing myself, how am I going to understand the difference?

- [206] **Ms Dulson**: We will supply you with some ear defenders.
- [207] **Russell George**: Right. Okay.
- [208] **Ms Dulson**: You will notice immediately as you go in, because you will notice that lack of reverberation. You will notice the absorption within the environment. Rogiet school, for example, is right next door to a major road and they have taken into account design features, and they have also used things like the acoustic cloud, which Elin cited. They have used cushioning and they have used appropriate floor coverings, which also are attractive to children; they enjoy being in those environments. They have been very inventive with regard to the windows and the doors as well. All of these things can make a huge difference to a deaf child within any environment. However, we would also stress that you would be doing this for all children within learning environments.
- [209] **Russell George**: But you have got some kind of appliance that we could use that would—
- [210] **Ms Dulson**: Yes, absolutely. We can do that. Indeed.
- [211] **Mr Rogers**: Just to emphasise the point that people usually recognise only poor acoustics, you almost do not, really—. You are not aware of it when it is adequate or even good. When you go to a concert hall you will appreciate the music and the fact that it is not coloured. So, when you go into a room, what you are thinking about is, 'Can I get what I need? Do I feel comfortable? Do I feel in the right state of mind to be able to learn?' That is quite subtle and that is obviously when you are starting from a point of not being able to hear well initially. You are immediately struggling to just achieve that baseline of, 'Can I hear?' So, when you are going into a space, for example the next time you walk into a restaurant—this is the best example I can think of—think about how you feel, think about your anxiety levels when the noise levels start increasing, and think about what we are asking our children to do. We are asking them to go through this process, so let us make it as positive as possible.
- [212] William Powell: Thanks. There is just one final question from me on the issue of nursery provision, because we have got so many small and

medium-sized stand-alone nursery facilities in Wales, and not so many of them are necessarily delivered within the wider foundation phase setting. How can we overcome that particular problem? What could be put in place to raise the bar across Wales, given the nature of the provision?

- [213] **Ms Dulson**: I think what we found is that nursery schools generally are very keen to support deaf children's education and, when we have offered advice, have been very keen to put that advice into practice. I think there is a great will to improve the stock out there and a great will to move forward. So, I do not think that you will find that this will fall on deaf ears.
- [214] **William Powell:** Good. I think that is a positive note on which to finish.
- [215] Diolch yn fawr iawn am Thank you very much for coming this ddod y bore yma. morning.
- [216] It has been a very stimulating session, and I look forward, at the beginning of the next committee meeting, to our opportunity to discuss this and the transcript, which we will also make available to you so that you can be satisfied that everything is correct and that it reflects the session that we have had this morning. Thank you very much indeed.
- [217] **Ms Dulson**: Thank you.
- [218] William Powell: Excellent. Cheers.