

Effective teaching strategies for deaf students



**ASSIGN
BUSTER**

What protocol would you put in place to ensure that pupils' hearing aids and other amplification equipment are working optimally and used appropriately and that other aspects of your role in relation to audiology are met? Give the rationale for the procedures that you have specified.

How would you evaluate the effectiveness of procedures that you have established?

Rationale

From the outset it is essential to determine what a 'protocol' is? As stated in the online Ask Oxford Dictionary protocol has many definitions, the one I believe provides a clear definition in this instance is "The accepted code of behaviour in a particular situation". (Ask Oxford, Nov 2009)

An educational establishment where children are using hearing aids and other amplification equipment would benefit from a protocol being in place. This would ensure that children using amplification equipment are accessing the curriculum at an optimal level. Teachers of the Deaf have a duty to ensure that each child's equipment is working and allowing them to learn and thrive within their educational environment by carrying out the protocol that is in place. It is therefore the duty of the teachers of the Deaf to carry out checks on the equipment. A protocol is therefore required to ensure that all Teachers of the Deaf are carrying out the same procedures and there is consistency through out the school.

" Teachers should aim to give every pupil the opportunity to experience success in learning and to achieve as high a standard as possible." (NCDS, 2005, p. 5)

By carrying out the checks, Teachers of the Deaf establish good practice and in turn aim to allow pupils to succeed. The children benefit when the protocol, which the school employs, is shared with parents and carers.

Listening and learning take place in both the home and school environment. This would extend the “ accepted code of behaviour” to the home life optimising the child’s access to everyday learning experiences.

With the need for a protocol established it is also necessary for that protocol to become a routine as to how, when and why Teachers of the Deaf should apply the specialised knowledge they have within their specific educational establishment.

“ Teachers of the deaf are specialist teachers, whose firm base in audiological knowledge is a fundamental part of their specialism” (Malthy and Knight, 2000, p. vii)

Putting into practice a clear set of guidelines allows for each individual, working with children using these devices, to know who is responsible for each area and who to report faults to. This is the case, especially when multi-agency teams are involved in an individual’s learning.

To answer the question outlined I intend to:

- Describe the setting to which the protocol applies to
- Discuss the aims of the protocol and whom it applies to
- Review and evaluate the effectiveness of the protocol in relation to practice and research

Protocol Setting

The setting to which this protocol applies to is unique, in Scotland, in the sense that it is a mainstream school where hearing-impaired children are fully integrated into mainstream classes. Children have access to a full curriculum, which enhances their educational experience. (See Appendix 1 for a full policy statement) Teachers of the Deaf are also used in a unique way they are class committed in a mainstream environment with no more than four hearing impaired children in their class. It is important now to emphasise that the teachers have a responsibility and a duty of care to hearing and hearing impaired pupils in class. It is recognised in Watson. L and Parsons. J (1998) that the majority of Teachers of the Deaf are working in mainstream schools either as part of a unit or in peripatetic work but in this setting children are fully integrated into mainstream classes. This setting provides a real life setting for the children as hearing and hearing-impaired peers work together as they would in everyday life. This allows an inclusive ethos to develop educating respectful and open-minded individuals. It allows for the development of a safe and secure environment where all children feel valued and equal.

Aims

The aims of the protocol are clearly set out in the Aims of the Audiology Programme (Appendix 1). They are in bold and easily identified on the page. This is of great benefit to Teachers of the Deaf and other individuals that encounter the document. The mix of visual diagrams and the clear print allows this section to be user friendly and less intimidating to the user. The initial statement presents a positive and motivating aim for everyone

involved. I will look at each aim individually and discuss how effectively the protocol (Appendix 2) achieves those aims.

All pupils with a hearing impairment will be assessed regularly through a range of tests.

Included in the protocol are the schools own testing strategies, which are of great importance as they make the protocol more meaning full to the individual establishment as these tests will differ depending on establishment.

In Appendix 2, the protocol outlines the different checks that would take place to ensure that pupil's hearing is assessed regularly. The G. A. P assessments are included in each child' record and include a variety of linguistic and speech tests that are outlined in Appendix 2 and are carried out by the in house Speech Therapists. The Ling Speech Sound Test could be included in this however; it is outlined in the actual protocol. It will be used to gather information on how well a pupil is able to identify frequency elements in sounds. Ideally, this should be carried out before teaching and listening takes place to ensure that the amplification equipment is working optimally. If the test highlights any frequency issues, the stetoclip can be used to investigate further. In the event of everything, appearing to be working properly the issue can be raised with the educational audiologist on their visit to the school. They can then investigate and adjust amplification equipment to ensure optimal teaching and learning conditions are maintained.

Tympanometry tests are carried out and a record kept in each pupil's file. This provides information on the middle ear. It looks like an audiogram, which can be difficult to interpret. If the information from this was translated into a report that was more understandable Teacher's of the Deaf could use this information and translate it positively into their teaching environment so that it makes learning more accessible to the child and in turn meets the needs of the pupil.

Other tests included in the protocol are Pure Tone Audiograms aided and unaided. These tests are usually used to determine the degree of deafness. The tests are carried out using different frequencies and intensities. The tests can be conducted through air conduction, using headphones or bone conduction using a bone conduction headband.

Air conduction: this is where the individual wears headphones, the tester then selects pure tones from different frequencies and intensities. This test relies on the person being tested to be honest. Once the test is completed the range of deafness is apparent however the cause is not.

Bone conduction: this is conducted in a similar way to air conduction. Maltby and Knight (2000) explain that it determines the nature of deafness. The signals are passed through the skull bone and travels to the cochlea.

“ The difference between the air conduction result and the bone conduction result is known as the air-bone gap and this indicates the extent of any conductive hearing loss.” (Maltby and Knight, 2000, p. 34)

The results produced are displayed on an audiogram. It is important to emphasise that these tests are not carried out by Teachers of the Deaf but by audiologists. However, it is important that Teachers of the Deaf are aware of them and how results can be used to improve a pupil's residual hearing. This brings me to the point I made earlier on how the audiogram can be difficult to interpret. It would be of great advantage to teachers, parents, and other professionals if the information were transposed into a report, which can be used to benefit the child.

The use of pupil's residual hearing will be maximised

Many factors can contribute to ensuring that a child's residual hearing is maximised. In Appendix 2 it outlines the documentation and assessments, each individual will undertake during their time in school. This part of the protocol needs to be looked at as Record of Needs is being replaced with Additional Support Plans and Co-ordinated Support Plans. This highlights the need for the protocol being a working document and not something that is just produced to meet audiology requirements. In completing these assessment such as Pure Tone Audiograms aided and unaided and Tympanometry Records all agencies involved will be able to contribute to the action that should be taken within the educational environment to maximise the pupil's residual hearing.

In addition to this it is of great importance to consider the acoustic setting as this contributes to how well residual hearing is maximised. This leads on to the next aim.

The acoustical settings for learning will be monitored and acted upon where necessary.

In every classroom, there is background noise and this contributes to how effective a hearing aid can be.

“Hearing aids work well when there is little or no background noise”

(Maltby and Knight, 2000, p. 61)

However, this is unrealistic to attain within an educational environment. Children are often working in groups and teaching can take place in whole class settings where they can be further away than what would be desired for optimal hearing. The hearing aid volume can be increased however this will amplify the background noise that is present also. A quiet learning environment is one, which would provide optimal learning conditions however in a mainstream school this is unlikely. The increased class effects noise. Areas, which contribute to background noise within a mainstream class are, movement, chairs being pushed and pulled, bags being accessed and the rustling this produces, increased amounts of talking, group activities going on independently when other direct teaching is taking place. All of these can lead to a poor acoustic setting. It would therefore be beneficial for the protocol to include measures for the Teachers of the Deaf to assess this before teaching in this environment. They could use a sound level meter, which encourages the teacher to put his or herself in the position of the deaf child and try to remove any pieces of furniture, which are not essential which sounds can reflect off. The teachers are also able to position themselves around the class identifying where the best place for a deaf child to sit within

<https://assignbuster.com/effective-teaching-strategies-for-deaf-students/>

the class is. This allows for greater access to teaching and learning and ultimately reducing some of the background noise. As the background noise does not only come from the people inside the class, it is important for the teacher to do this so that outside noises are reduced. Traffic, toilets, general outside activity, weather can all be heard in the classroom. (Maltby and Knight 2000)

It would therefore be of great value for the protocol to offer ways of minimising background noises within the classroom setting however it doesn't provide ways of making the classroom acoustically sympathetic. Reducing background and reverberation could be set out in guidelines and could provide suggestions.

“ An acoustically good environment is crucial for effective classroom listening ... schools provide an acoustically hostile environment that particularly disadvantages hearing aid wearers.” (Maltby and Knight, 2000, p. 54)

Therefore, guidelines within the protocol should encourage the use of carpets, curtains blinds, acoustic ceiling tiles and soft materials, which can in turn absorb and reduce the amount of background noise. (BATOD, 2001) This will help promote the fruitful learning environment outlined in Appendix 1.

As classrooms are, in general, noisy places to be it would also be of great value that the protocol takes into account classroom management strategies, laying out rules for talking and listening. Establishing a whole school approach would provide consistency for not only the children but also

the Teachers of the Deaf who undoubtedly have varied teaching styles and approaches.

“...It is the teachers responsibility to maintain discipline and cooperation and thus reduce noise levels. Ensuring only one person talks at a time. (Maltby and Knight, 2000, p. 58)

Fm and Sound Field systems help reduce the amount of background noise as this amplifies one source of sound benefiting the hearing aid or cochlear implant user. This will allow for enhanced teaching and learning taking place and allow the learner to become more focused and interactive with the lesson in hand. It is therefore of great importance that they are utilised effectively. Sound Field systems not only benefit hearing-impaired children in the class but those of hearing children as well. This is due to the teacher’s voice being amplified and making it clear for all present in the room. Brett and McCracken (1998) have referred that some authorities are not using the system successfully and in turn not providing children with the heightened sensory provision. The system not only increases the volume of the person using it but also helps eliminate noises in the classroom, which can be controlled such as movement, chairs moving, quiet discussions.

This has outlined the importance of monitoring the acoustic setting for the children it has also highlighted areas in which the protocol could be improved to optimise the service provided to the children. Including these areas would make Teachers of the Deaf and Teachers of the Deaf in training more aware of areas which can be detrimental to the learning environment and moreover have a negative impact on the child’s learning.

The amplification needs of each pupil will be assessed and addressed.

Each child is an individual and in turn, each child has individual needs. So it is of the utmost importance that Teachers of the Deaf regularly assess the equipment each child uses. This will ensure that faults are highlighted quickly and fixed without any real issues arising for the child and their learning. Brett and McCracken (1998) outline the particular needs of a Hearing Aid wearer and provide outline for assessing the equipment. These include making sure that hearing aids are well fitted and that the individual is able to hear in a range of environments. These are of great importance in a school as children are moving from area to area rather than being stationary in the one environment. This is where the acoustic setting assessments are monitored and acted on if necessary.

Tests are carried out, which were discussed in the first aim, to gather information. This information can then be used to make decisions regarding amplification equipment of each individual making sure that Teachers of the Deaf are meeting the needs of each child.

The amplification equipment and technology will be working to optimum effect and will be used effectively.

It is essential that this aim is addressed in the protocol as teachers and parents should be checking the child's amplification equipment on a daily basis. This will allow problems to be detected quickly and rectified. In turn, this will maximise the potential learning that, the child has access to and allow the child to engage fully in their learning and the social interactions, which can take place within the classroom. This is concurred by Maltby and <https://assignbuster.com/effective-teaching-strategies-for-deaf-students/>

Knight; they believe that auditory equipment if working properly will enhance the learners' experiences and the overall progress which a child can make. This setting is one, which uses oral communication, and not signing so any problems with amplification equipment is extremely detrimental to the child's development.

“ ... without effective exposure to the sounds of the environment and particularly of speech the opportunity to develop spoken language will be diminished.” (Maltby and Knight, 2000, p. 38)

The mainstream protocol for this setting outlines how to check all different kinds of amplification equipment. However it may need updated as, no child now wears the Sprint (the body worn processor) as this just adds to the bulk of the protocol and the amount of paper which you have to go through especially if you are new to the school. In addition to this upon evaluating the protocol, I also feel that there should be a checklist record for each child, keeping track of any issues with equipment. This could be a simple tick list to ensure that time constraints do not impose an issue for the teachers. This would provide useful information for the educational audiologists when they visit asking if there have been any problems. This is of greater use in the lower end of the school where the children are less able to vocalise any issues, which they may be having. As it is just now, there is no such method of recording and Teachers of the Deaf are making notes on an informal basis with no consistency being formed throughout the establishment. Parents should be considered also; they could be consulted on what would be easily managed for them at home, so that the protocol can be continued there, as it is of great importance that the equipment is at an optimal level there also.

Appendix 2 outlines the checks, which should be carried out on a daily basis. Daily checks begin with a visual check. By looking closely at the casing of a hearing aid or cochlear implant cracks can be identified. Moulds and tubing can be looked at and the build up of wax or condensation can be apparent. It has been argued that it is not the role of the Teacher of the Deaf to clear wax obstructions from tubing and ear moulds (NCDS, 2005) in the case of children there might not be anyone else. In meeting the overall aim of the protocol “ ... to provide a fruitful learning environment...” it is essential that we do what we can to meet each child’s individual needs.

In the setting which this protocol applies, as stated before it is an oral one, it is important that the older children become responsible for checking their equipment and that the Teachers of the deaf promote each individuals independence and provide support for these checks only when needed.

In this setting, other equipment is used also Radio aids and Sound Field systems are in place to provide further amplification. These have been included in the protocol along with whose responsibility it is to check these and how often the checks should be carried out.

“ Deaf pupils who are being educated orally without any sign support will be highly dependent on amplification, both in the form of personal hearing aids and other equipment, for example radio aids.” (Gregory, Knight, McCracken, Powers and Watson, 1998, p. 138)

This quote highlights the greater importance placed on amplification equipment in a mainstream school and the necessity for it to work optimally. This equipment is what the children solely rely on to communicate effectively

<https://assignbuster.com/effective-teaching-strategies-for-deaf-students/>

with. Radio aids should be checked monthly using a test box. This can highlight any problems with equipment and it will ensure that the hearing aid is producing sound at a high intensity this should also be carried out across a number of frequencies. It is also important that hearing aids and processors also be checked monthly to ensure that they are in line with the manufacturers specifications. Teachers of the Deaf are not responsible for these tests and are not fully trained in the technologies used to carry out these tests however they should be aware that they take place and of their importance in ensuring that amplification equipment works at its optimal level. In this setting and as stated in the protocol (Appendix 2) the Depute Head is responsible for ensuring these tests are completed.

I am of the opinion it would be beneficial for the protocol to outline what a Teacher of the Deaf should do when the equipment is not working properly. For example if shoes or links are faulty are there temporary replacements, or are there contacts in place with manufacturers to highlight faults. It would not be the responsibility for the Teacher of the Deaf to contact manufacturers directly but that of the Depute Head however there needs to be a record or pro-forma included in the protocol for passing this information on the Depute Head to guarantee that any problems are rectified quickly.

Evaluation

The technology surrounding audiology and amplification equipment is evolving so the first point is that the protocol should be regularly evaluated and adapted to ensure that it fits the requirements of the equipment being used. As I stated previously there are steps and procedures included in the document that no longer apply to children in the school, I am not saying this

should be discarded completely however it can be removed from the working document until required, if ever required again.

The steps are clear and it is identify who is responsible for each job; however some equipment is checked annually. I feel that as there is a heavy daily reliance on these pieces of equipment and there is a strong argument that these checks should be more frequent. This would allow for problems and issues to be identified and rectified more quickly. Especially when these equipments help achieve the aims outlined in the protocol (Appendix 1)

In addition to more frequent checks it would beneficial to have a check list and record sheet this would benefit, not only Teachers of the Deaf but parents, audiologists and other professionals that work with the children. It would allow for quick reference for any issues children are having with their hearing aids or cochlear implants and would highlight any recurring problems. This information would be recorded in a consistent format providing continuity throughout the school. It would also be provided to parents to allow them to keep checks on their child's equipment. With everyone using the same format, the child can be encouraged to become more responsible for maintaining and checking their own equipment.

Not only does audiology evolve but also education and the way we approach teaching and education is continually evolving so the protocol should be updated with these changes. That is in Appendix 1 the policy statement outlines that the establishment follows the 5-14 guidelines. This is still the case however the Curriculum for Excellence is becoming the more dominant

tool in the planning and implementing of lessons and therefore should now be included also.

The greatest indication of how successful the protocol has been is whether it is still meeting the needs of the children it poses to serve. It would therefore be good sense to establish a working party within the establishment to evaluate how well it is doing this, and adapt it to be more successful or it could be added for discussion to the agenda of the Hearing Impairment meetings, which are held regularly. This would incorporate views of everyone working with the document and not just a selected few on the working party.

Conclusion

The protocol, which appears in Appendix 2, is one, which is already in place, and I have broken it down and looked at the aims that it says it achieves. As a Teacher of the Deaf, this protocol is established and has to be adhered to. It is an important agreement, which has to be followed by all Teachers' of the Deaf, to ensure that the needs of each child within a class are being met.

“ One way to ensure the teacher of the deaf and other professionals working with deaf children are meeting their obligations is to devise an audiology protocol.” (Course Team University of Birmingham, 2009, Unit 4 p. 80)

I feel that this protocol has plus points and negative ones. It achieves all of the aims outlined however it has not been updated in some time. With new equipment, needing to be included i. e. our new FM system and older amplification equipment, which is not currently in use needing to be removed. It would also benefit from additions, some parts being condensed into a daily check sheet, which would be more time efficient as it operates

<https://assignbuster.com/effective-teaching-strategies-for-deaf-students/>

within a mainstream school. This would allow for even younger children becoming more familiar with the checks they should carry out. Moreover, I feel there should also be a place for a parental part of the protocol as they are a vital part of their child's life.

Even though it is heavy on wordage, it does include pictures of the equipment in question allowing for quick finding of the part of the protocol, which relates to children in your class.

The protocol does establish the roles of individuals and the duties and responsibilities that they have. It also states timelines for different checks whether they are daily, weekly or annually. It outlines what should be present in each class for carrying out checks, e. g. First Aid Kit.

To conclude I do feel that this protocol does suffice but would benefit from regular updates as needs change and children within educational establishments continually move on. As a teacher and particularly for Teachers of the Deaf it is important to meet the needs of every child. As a profession we endeavour to do this and having a protocol allows for consistency and continuity throughout the stages.

“ We have ambition for all our young people and we want them to have ambition for themselves and to be confident individuals, effective contributors, successful learners and responsible citizens. All Scotland's children and young people need to be nurtured, safe, active, healthy, engaged in learning, achieving, included, respected and responsible if we are to achieve our ambition for them.” (December 2009, Scottish Government)

In managing the protocol more successfully, we will achieve the above aim as set by our Government and all the aims outlined within the document of the establishment. In doing this the needs of all children that are taught, within the setting, are met.