

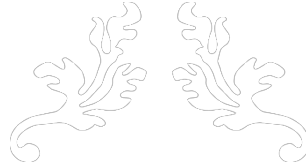


PRIFYSGOL CYMRU

Y Drindod Dewi Sant

UNIVERSITY OF WALES

Trinity Saint David



An Investigation into the Inclusion of Hearing-Impaired Pupils in Mainstream Schools in Wales

Module: ECAD6003 – The Reflective Practitioner



1600963

BA (Hons) Primary Education with QTS

University of Wales Trinity Saint David

April 2019

Frontispiece

This is to certify that, except where specific reference is made, the work presented in this research project is the result of the investigation carried out by the author. This research project nor any part of it has been presented or is currently being submitted in candidature of any award other than in part for the degree of BA (Hons) in Primary Education with QTS of the University of Wales Trinity Saint David. I understand that any work I use without reference constitutes as plagiarism, which will lead to the failure of this module.

Acknowledgements

A massive thank you to my specialist support lecturer Amy, without your support I would not be where I am today.

Table of Contents

Chapter 1: Introduction	4
Chapter 2: Literature Review	6
Chapter 3: Methodology and Research Design	12
Chapter 4: Results and Discussion	15
Chapter 5: Conclusion	21
Reference List	
Appendices	

Chapter 1: Introduction

The aim of this research project is to develop a current and deeper understanding of how mainstream schools in Wales support learners with hearing impairments. Additionally, it will establish how schools are supporting pupils with hearing impairments to achieve Donaldson's four purposes, with specific reference to 'healthy, confident individuals who are ready to lead fulfilling lives as valued members of society' (Donaldson, 2015: 29). The overall objective of this project is to gather a range of research from primary and secondary sources to provide further knowledge and understanding of how hearing impaired (HI) pupils are supported in mainstream schools in Wales, whilst also enhancing my own professional practice in supporting and teaching pupils who are hearing impaired.

In the United Kingdom there are over 34,000 children and young people who are HI and an estimated 840 babies born each year with hearing loss; in Wales this equates to 1 in every 1000 babies born (Early Support Wales, 2013). According to research, hearing loss can be present at birth or occur later on in the child's life, with 'the prevalence of childhood hearing loss' increasing 'with age and nearly' doubling 'by nine years of age' (Fortnum *et al.*, 2007 and Olusanya, 2005 as cited by Duncan, 2016: 251). There are a variety of reasons why these children lose their hearing, however, Moores (2001) argues that the main contributors to hearing loss are: maternal rubella (5 per cent), meningitis (9 per cent), heredity (13 per cent) and other causes which may have occurred at birth (22 per cent). It is important to remember that hearing loss is a spectrum with different degrees, which is expressed as mild, moderate, severe or profound the severity of hearing loss is measured by comparison with 'normal' hearing, (Watson *et al.*, 1999). In addition to this some forms of hearing loss may be temporary such as glue ear whereas other forms of hearing loss are permanent (National Deaf Children's Society, 2016).

The term 'hearing loss' is seen by many as an inclusive term for those who are hearing impaired, culturally deaf, use spoken language or British Sign Language (BSL) to communicate (Duncan, 2012). In contrast, Watson *et al* (1999) argues that the terminology used for discussing pupils with hearing loss is complicated as the name preference varies for each individual. For example, some pupils may prefer to be referred to as deaf whereas others may prefer to be referred to as hearing impaired. For the purpose of this research project and for reader clarity, the term 'hearing impaired' will be used to include all learners with hearing loss.

I have chosen to undertake this topic as my research project as, after discovering during my British Sign Language (BSL) lessons, England has Schools for the Deaf for HI pupils to attend whereas Wales does not. The education of HI pupils in Wales began in 1847, when the Cambrian Educational Society gained the support of the public to establish an educational institution for HI pupils, this institution later become known as the Royal Cambrian and Llandrindod Wells Residential School for the Deaf (The National Library of Wales, 2017). However, records at the National Library of Wales (2017) show that the Royal Cambrian and Llandrindod Wells Residential School for the Deaf closed in 1973, following changes in the provision of education for HI pupils. The educational provision in Wales offered to HI pupils consists of attending mainstream education, a unit or a special educational school. As a result, my BSL tutor suggested that some HI pupils and their families may travel across the border to England, to attend a School for the Deaf, believing they may experience a more inclusive education with other HI learners. This made me question whether mainstream schools in Wales are inclusive of learners with hearing impairments.

My hypothesis for this research project is that schools in Wales are perhaps failing to meet the needs of these pupils, due to a lack of training and awareness in how to support them. Research suggests that there are a variety of challenges and barriers which HI pupils experience in education (Gregory, 1998; Watson *et al.*, 1999; and Gallaway, 2003). Over the past few years there have been reports that indicate that there may be issues in mainstream schools when it comes to the inclusion of learners with hearing impairments in Wales and that there is an attainment gap between HI pupils and their hearing peers (BBC, 2013 and BBC, 2017).

The research methods that will be undertaken to explore my topic include;

- A review of literature
- Observations of hearing-impaired pupils during lessons.
- Staff and parent questionnaires.
- Semi-structured interviews with HI pupils.

Chapter 2: Literature Review

According to Gregory (2017), the United Kingdom has an extensive history in teaching pupils who are hearing impaired. However, the education of these pupils has been a continuous matter for debate with discussions revolving ‘around the type of school, the language of communication, and the support systems utilised’ (The European Union of the Deaf, 2019: 1). During the 1960s the number of pupils with hearing impairments educated in mainstream schools was relatively low (Gregory, 2017). However, this number steadily began to rise due to growing concerns over the quality of education being provided to HI pupils, the Lewis Report suggested that;

Disquiet about the results of the education of deaf children has been expressed many times by workers among the adult deaf who are conscious of the speech and language deficiencies of members of the deaf community who seek their help, and of the inadequate educational attainments of many school leavers coming into their care which impoverish the quality of the social, recreational and working lives of these young people.

Department of Education and Science (1978: 12)

This report was further supported by research from Conrad (1979), which found HI pupils had poor levels of attainment, Conrad’s findings also revealed that these pupils were leaving school functionally illiterate with a median reading age of a 9-year old child, and with lip reading skills no better than their hearing peers who had not spent years being trained in this skill. As a result, there was a growing movement towards the inclusion of pupils with additional learning needs (ALN) in mainstream education; the Warnock Report was significant in this change (Lauchlan and Greig, 2015). Published in 1978, the Warnock Report formed the basis for the 1981 Education Act which stated that all pupils with ALN should, whenever possible, be educated in mainstream schools (Education Act, 1981).

This was further supported by the Salamanca Statement made by the United Nations Education, Scientific and Cultural Organisation (UNESCO, 1994) conference, which suggested that inclusive education for all pupils including those with ALN in mainstream education should be implemented by governments world-wide. Since its publication there have been a number of documentations which display the Government’s commitment to the inclusion of children with ALN in mainstream education, such as the Special Educational Needs and Disability Act (2001), the Equality Act (2010) and the Children and Families Act (2014), which all state that teachers must ensure that children with ALN engage in school activities with their peers who do not have an additional learning need.

With the Additional Learning Needs and Educational Tribunal (Wales) Act 2018 and a new curriculum coming into force, the debate in Wales now centres around the inclusion and attainment of these pupils. According to Consortium for Research in Deaf Education (CRIDE, 2018), the number of pupils with hearing impairments is being under-reported by services. There are 2,625 HI pupils in Wales based on the responses provided to the CRIDE (2018) survey, this is a decrease in comparison to the Welsh Government's School Census which suggests there are currently 3,122 pupils with hearing impairments in maintained schools in Wales (StatsWales, 2018). The information provided to the CRIDE may be a cause for concern as it suggests that some of the services who responded to the survey 'may only be providing figures for children living in the area that they actively support', or the services do not have reliable information on the number of HI pupils living in their area (CRIDE, 2018: 3).

Watson *et al* (1999) suggests the majority of HI pupils are educated in mainstream classes. This is supported by research which suggests that 81% of HI children attend mainstream schools, with an additional 8% attending resourced provisions at mainstream schools, only 10% of pupils attend special schools which are not specifically for HI pupils (CRIDE, 2017). Research by Angelides and Aravi (2006/2007) argues that attending mainstream education does not result in automatic inclusion. In the History of Deaf Education: Part 2 (2012) a number of ex-pupils described negative experiences of mainstream education, feeling excluded and sometimes bullied. Conversely, some ex-pupils described their experience positively and felt that their mainstream school provided better educational and employment opportunities (History of Deaf Education: Part 2, 2012). It should be noted that the interviewees within the documentary may have experienced social exclusion due to a language barrier, all of the interviewees are profoundly HI and use British Sign Language as their main form of communication, this can prove problematic and challenging for teachers as BSL may not be as easily accessible to them as spoken English (Vermeulen *et al.*, 2012; and Luckner, 2013) in these cases a Communication Support Worker (CSW) is required (Salter *et al.*, 2017). Through the use of a Communication Support Worker, the school ensures that the pupils are not excluded as communication difficulties overcome which should in turn generate a more positive attitude towards the hearing-impaired pupils (Nunes *et al.*, 2001).

Defining the word inclusion within the United Kingdom's educational system can be complicated as it is not a simple concept ((Dyson and Millward, 2000). This is supported by Norwich (2000: 10) who argues that different concepts of inclusion can be divergent and incompatible, with some arguing that it is 'learning in the same place on the same curriculum as others' or 'that it relates to the system and not necessarily to the same place and curriculum', some would even argue 'that it is not a state at all, but an unending process of increasing participation.'

Watson *et al* (1999) argues that if mainstream education is to be viewed as truly inclusive of all pupils, including those with ALN, then the pupils must be seen as contributing and valued members of the school. Research by Eriks-Brophy and Whittingham (2013) suggests that the inclusion of pupils with hearing impairments in mainstream schools results in higher academic performance in literacy and mathematics. This is supported by Mayer *et al* (2016) research, which found HI pupils could achieve high levels of attainment in receptive and expressive vocabulary skills. However, Marshack (2006) and Duncan *et al* (2014) argue that historically pupils with hearing impairments do not perform as well academically when compared to their hearing peers. This is supported by research which suggests that more than half of severely to profoundly HI pupils who are oral, experience high levels of reading difficulties similar to those experienced by hearing dyslexic pupils (City, University of London, 2017).

According to research by Benjamin (2002) and Lloyd (2008) inclusion in mainstream education may have a negative effect on achievement. This is supported by research which suggests that HI pupils continue to fall behind their hearing peers in education (Hrastinski and Wilbur's, 2016; Hendar and O'Neill, 2016). The figures from Pupil Level Annual School Census by Welsh Government indicate that there is an attainment gap between HI pupils (with no ALN) and their hearing peers (with no registered additional learning need). Although research indicates this gap is beginning to narrow, HI pupils in Wales are still underachieving at every key stage when compared to their hearing peers and 'face being left behind' (BBC, 2017). In 2017, 47.8% of HI pupils achieved a grade A* to C in the core subjects (English / Welsh, mathematics and science) at Key Stage 4 compared to 64.8% of their hearing peers (National Deaf Children's Society, 2017). This attainment gap is not just confined to Key Stage 4 and is seen in all Stages, this is displayed in ***Figure 1.***

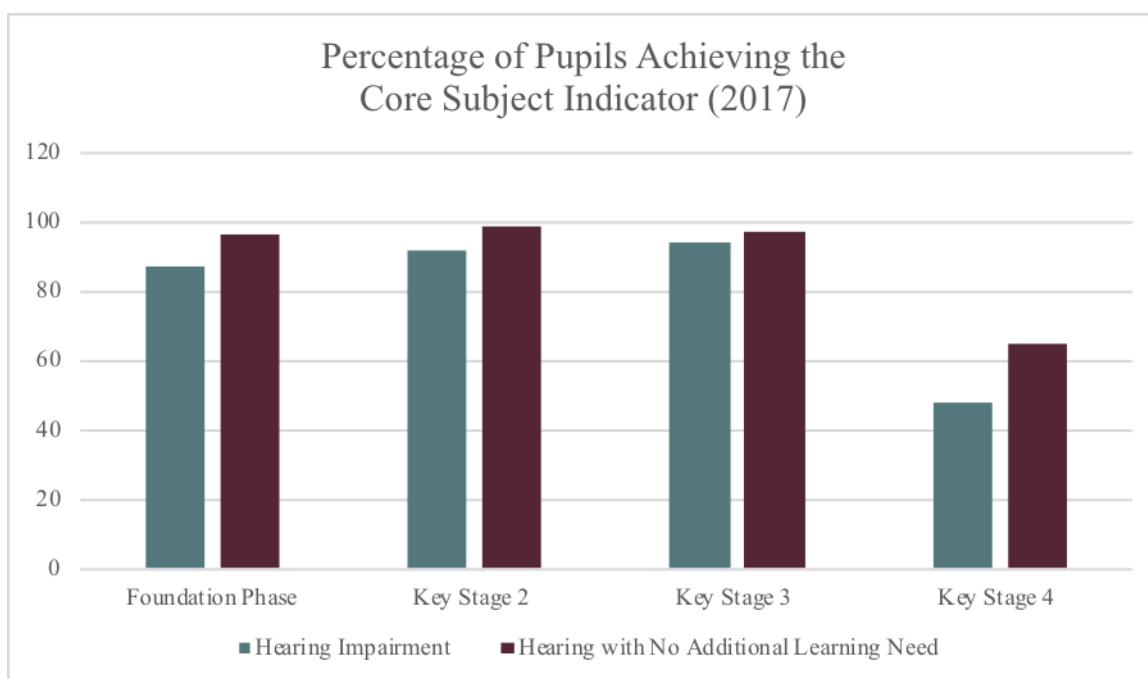


Figure 1: A graph to represent the number of HI pupils at every Key Stage achieving the Core Subject Indicator compared to their hearing peers in 2017 (Figures from NDCS, 2017).

This should not be the case, as the National Deaf Children’s Society (NDCS, 2010: 2) argues that ‘deafness is not a learning disability’ and that hearing-impaired pupils should be able to achieve alongside their hearing peers, when properly supported. Research by Marschark *et al* (2011) suggests that practices and instructional methods used by class teachers may count for 50 per cent of the academic underachievement of pupils with hearing impairments.

An influential factor which is important in inclusive education is the teachers’ beliefs (Ajzen, 1991; Ammah and Hodge, 2005 and Jordan *et al.*, 2010), attitudes and expectations which research argues can affect pupil attainment (Eriks-Brophy and Whittingham, 2013 and Salter *et al.*, 2017). Research by Santoli (2008) suggests that teachers are more likely to have low expectations of pupils with ALN if they believe that pupils with ALN only benefit insignificantly from education. This in turn can have further detrimental effects as low expectations and negative teacher beliefs can encourage low pupil achievement (Jussim and Harber, 2005). Additionally, studies by Richardson and Placier (2001) and later Lambe and Bones (2006) argue that a lack of confidence may also affect pupil’s development, as teachers may have a lower motivation to adapt to pupils with ALN. Further, studies imply that teachers are less likely to interact with pupils with ALN if they do not feel responsible for them (Forlin, 1998; Avramidis and Norwich, 2002; Lambe and Bones, 2006 and Jordan *et al.*, 2010). This may be the opposite for teaching assistants as the may feel more responsible for the pupils they are supporting, this is supported by research which indicates that teaching assistants are ‘more positive and confident than teachers’ when working

with pupils with ALN (Paju *et al.*, 2016 as cited in Edwards, 2018). However, a study conducted by Salter *et al* (2017) argues that teaching assistants may also have a negative impact on pupils' attainment, this is further supported by Lauchlan and Greig (2015) research which implies that some teaching assistants may be over supporting their pupils which may led to the pupil becoming reliant on their teaching assistants through learned helplessness. This may be a consequence of a lack of training for teaching assistants in how to properly support pupils, as research by Cajkler *et al* (2006: 30) indicates that training for teaching assistants is 'a patchwork quilt of provision...about which there is continued and serious concern'.

There is also an argument that Initial Teacher Training courses do not prepare or educate teachers properly on how to implement inclusion-based practices involving pupils with ALN (Eriks-Brophy and Whittingham, 2013; Mulholland and O'Connor, 2016; and Paju *et al.*, 2016). This may be having a detrimental impact as research by Avramidis and Norwich (2002) suggest that teachers are more likely to hold positive attitudes towards inclusion if they have received specific training as part of their professional education in the teaching pupils with ALN compared to teachers who had little or no training. This is supported by research which argues that access to training, smaller class size, additional support and planning time have had a consistently positive effect on teacher attitudes (Center and Ward, 1987; Scruggs and Mastropieri, 1996; Avramidis and Norwich, 2002; and Gal *et al.*, 2010). This can lead to an increase in teachers' confidence and knowledge in supporting pupils with hearing impairments (Eriks-Brophy and Whittingham, 2013). Teachers of the Deaf can assist this process by providing professional direction to colleagues and teaching assistants through training and advice so that they may improve their practice in teaching and supporting HI pupils (Department for Education, 2016). Research argues that professional collaboration is an important factor in obtaining positive educational outcomes for HI pupils. (Mulholland and O'Connor, 2016; Paju *et al.*, 2016; and Salter *et al.*, 2017).

Another issue in educating HI pupils is the perception of audiological equipment, some teachers have a misconception that the equipment enables HI pupils to function like their hearing peers (Swanwick and Marschark, 2010), whereas others may not understand that this equipment has limitations (Archbold, 2010; and Vincenti *et al.*, 2014). Teachers may also refuse to wear a radio aid due to a lack of understanding (McCracken *et al.*, 2012). However, pupils may also decide against using radio aids which may frustrate some teachers, this was the case for Peter in Vermeulen *et al* (2012) study. McCracken *et al* (2012) suggests HI pupils face challenges within the class environment such as reverberation and background noise. This may cause disruptive behaviour from the hearing-impaired pupil as their hearing aids may produce a loud and frequently painful sound as a result of excessive classroom noise (Iantaffi *et al.*, 2003).

Edwards (2018) argues that the educational system needs to consider the social and emotional needs of hearing-impaired pupils, not just their academic attainment. This is supported by studies which suggest that these pupils may experience social isolation and have more short-term friendships rather than one long term friend (Antia *et al.*, 2011; and Nunes *at al.*, 2001). Lloyd's (2008) research also indicates that HI pupils in mainstream education may experience increased loneliness and suffer from a low self-esteem. Lauchlan and Greig (2015) argue educational and social inclusion may be in conflict with one another as pupils with ALN in mainstream education may have less specialist support but are more likely to have better access and a wider friendship group with peers who do not have ALN, compared to pupils who attend special educational schools.

Chapter 3: Methodology and Research Design

Prior to undertaking any research activities an Application for Ethical Approval was completed and approved (*Appendix 1*). Which ensured that the research conducted adhered to the British Educational Research Association (BERA) Ethical Guidelines for Educational Research (2018) and the University research guidelines. Rubin and Rubin (1995) argue researchers should be aware and understand the ethical obligations required of them when conducting research in order to protect the participants involved. These ethical obligations do not begin and end with the letter of consent (Homan, 1992). During the research process, participants were reassured that all data collected would be confidential and in line with the Data Protection Act (2018) and the General Data Protection Regulation (2018).

The research was conducted and gathered during the Electives School Experience. Two additional schools were contacted for comparison research but declined to take part in the project due to concerns over Data Protection (2018) and the General Data Protection Regulation (GDPR, 2018). During the research process participants were provided with a cover letter (*Appendix 2*), which provided information on the research and what would be required of them. Participants were also asked to sign a consent form (*Appendix 3*). Before, during and after the research process, participants were informed that they could withdraw at any time.

To investigate the inclusion of hearing-impaired pupils within the School, a variety of methods were used. According to Denscombe (2014) using a variety of research methods to collect data may offer a more complete picture and improve the researcher's confidence in the accuracy of their findings, compared to using one method alone. Greene *et al* (1989: 259) argues that the use of mixed methods 'seeks convergence, corroboration' and 'correspondence of results from the different methods', to secure an in-depth understanding of the topic in question (Denzin, 2012). However, Morgan (2014) argues that having more or different kinds of results does not automatically improve the researchers work. The more methods used may also present the research with additional challenges, with regards to over extending time and data analysis of the research (Denscombe, 2014). I chose to use a mixed method approach because each of the methods used have strengths and weaknesses, but it is these strengths that allow the research method (for example, a questionnaire) to do things that other research methods (such as an interview) cannot do (Dillman *et al.*, 2009).

Arthur *et al* (2012) suggests that observations can be successful when the researcher is allowed time to observe and record the behaviours of the participants. However, this may bring on the *observer effect* in which the participants may alter their behaviour (for example, become self-

conscious or respond enthusiastically) because they know they are being observed (Denscombe, 2014). This was taken into consideration when observing two of the profoundly HI pupils within their classroom environment. The pupils were made aware that the observations taking place were to see how they were generally supported during lessons, this took the pressure off the pupils as there was nothing special required of them. However, their teaching assistants and teachers may have been more aware and acted accordingly, if so their behaviour adaption may have been unconscious or conscious.

During the research process informal interviews were arranged with four of the profoundly HI pupils in the school. The pupils who were interviewed included; a Year 7, Year 8, Year 9 and Year 10 pupil. The pupil's opinions offered an insight into how they felt they had be included in mainstream education as Docherty and Sandelowski (1999: 177) suggest 'they are the best sources of information about themselves'. The majority of the questions asked within the interview were open questions, this provided the pupils with the opportunity to expand on their answers (Johnson and Christensen, 2014). The informality of the interview offered flexibility, with follow up questions included, to incite additional information (Bell, 2010). However, interviews aren't without their challenges, as Thomas (2013) suggests interviewees may adapt their responses because a special interest has been taken in them, this is known as *Hawthorne effect* or the *experimenter expectancy effect* in which the interviewees give responses they believe the interviewer expects. This may result in bias data as the participants may give untruthful answers. All of these aspects were considered during the interviews, with the interviewer reassuring the pupils that there was no right or wrong answer, it was just their opinion that mattered. After the interview, permission was also sought from the pupils so that the researcher could have access and use of the pupils predicted grades (known as Global Grades) in their research, this was granted.

The final aspect of the research involved questionnaires, the staff questionnaire was presented online using 'Google Forms'. Wright (2006) suggests that there are a number of benefits to using online questionnaires as they offer greater ease to data analysis, a wider reach to respondents and are more time effective. The questionnaire used both open and closed questions to gather qualitative and quantitative answers (Cohen *et al.*, 2011). In the design process the time commitments and the number of questions were considered, in an effort to maximise the response potential of completed questionnaires (Denscombe, 2014). The pupils who were interviewed were also sent home with paper questionnaires for their parents or carers to complete. However, there were limitations to this method as there was no way to determine if the respondents were being truthful (Ackroyd and Hughes, 1981) and in some questions respondents are unable to expand on their answers (Popper, 1992). Cohen *et al* (2011) also suggests that questionnaires can have a low response rate, which was the case in this project. One parent questionnaire and ten staff

questionnaires were completed – two teaching assistants, seven teachers and one assistant headteacher, which offered diversity to the responses provided.

This was a small-scale project as the research was limited to one school. The data gathered from the variety of methods used offered comparative results for this project. If the research were to be conducted again, it would require a larger sample size with more schools across Wales and all pupils with a form of hearing loss invited to participate. Also, a comparison study, with responses from those who attend and work in Schools for the Deaf, would also provide a more in depth and counter discussion in the results analysis. This would provide a more balanced argument and ensure result validity. It would also mean that the results could be generalised to a wider population as it is more likely to be a true representation of the inclusion of HI pupils in mainstream education in Wales unlike the results gathered in this project.

Chapter 4: Results and Discussion

This chapter will present the findings of the research gathered from the Electives Experience School (To view the Electives Experience School Report please refer to *Appendix 4*). The findings of this research will be used in comparison to identify evidence which supports or contradicts the research reviewed in Chapter 2.

Staff Questionnaire

For the staff questionnaire a total of ten responses were received. Seven of these responses were from Teachers, two were from Teaching Assistants and one was from an Assistant Headteacher all of which had taught or supported pupil's with hearing impairments during their school career. This would appear to contradict the National Sensory Impairment Partnership (2012 as cited in Salter *et al.*, 2017) suggestion that educational professionals may have limited or no experience of working with HI pupils. This may have a negative impact on the staff members awareness of the number of challenges and barriers in education experienced by HI pupils (Gregory, 1998; Watson *et al.*, 1999; and Gallaway, 2003).

All of the respondents believed that HI pupils faced challenges within the school environment, each respondent provided similar answers to explain the challenges they believed HI pupils have in school. The most common themes were noise level, friendships and access to lesson resources, for example a video without subtitles being shown in class. These responses were similar to those of the pupils during their interviews, this indicates that the staff members are aware of the challenges that HI pupils face in school.

In response to Question 4, four out of the 10 members of staff indicated that they had attended basic deaf awareness training and one member of staff within this four also indicated they had attended an observation / cluster meeting with primary schools to ease the transition of HI pupils. Despite the fact that less than half of the respondents attending basic deaf awareness training, each seemed aware and implemented specific strategies when teaching HI pupils. This is displayed in their responses to Question 5 of the Staff Questionnaire, in which the respondents discuss strategies such as;

- The use of radio aids
- Small group work
- One to one support
- Positioning to ensure the HI pupils are able to lip read
- And ensuring HI pupils have access to the lesson resources

The use of these strategies is supported by Martin (1988) as they enable the pupils to access the learning.

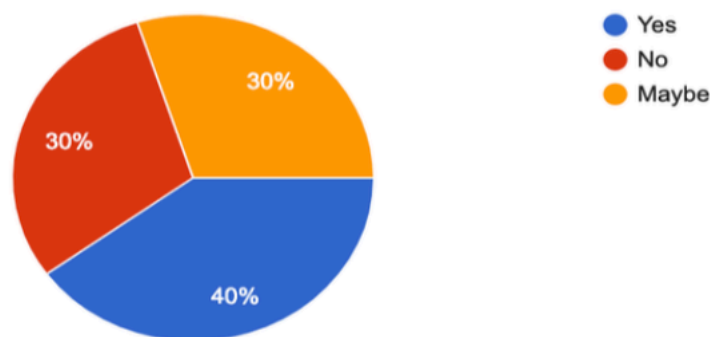
80% of respondents believed that their approach to teaching and supporting pupils had changed over time. This was the result of a variety of reasons as such as becoming more aware of the pupils needs, better technology and a gain in confidence.

In response to Question 7 of the Staff Questionnaire (*See Appendix 4 page 19*) 70% of respondents believed that HI pupils performed better in whole group sessions with the remaining 30% believing that HI pupils performed better in one to one support. Duncan *et al* (2014) argues that a social learning approach is fundamental in the education of HI pupils, this perhaps favours the whole group approach over the one to one support.

When questioned whether they believed other pupils in the class were supportive of HI pupils, 90% responded Yes and 10% responded No. When questioned about the educational benefits of having a HI pupil in the classroom, the staff responses varied. This is displayed in *Pie Chart 1*.

Does having a hearing impaired pupil in the class have educational benefits for the other learners?

10 responses



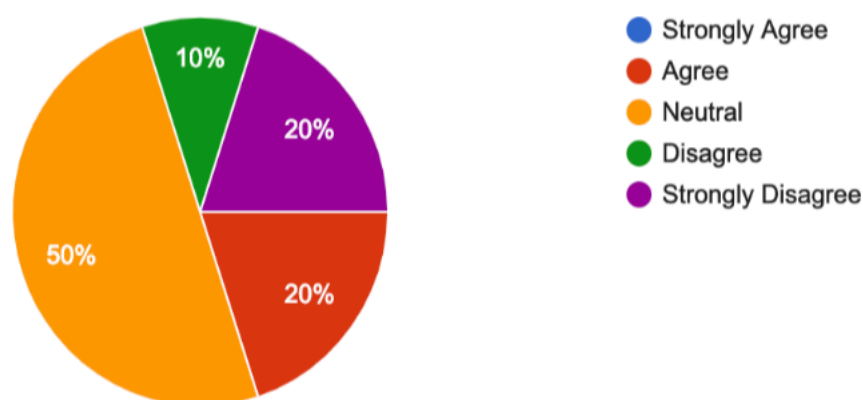
Pie Chart 1: A representation of the staff responses to Question 9 of the staff questionnaire.

Respondent reasons varied for their answers to Question 9 ranging from non-hearing impaired pupils developing an understanding of the challenges faced by the HI pupils to HI pupils being treated the same as their peers are unaware of their hearing impairment. The respondents answers to Question 10 and Question 11 (*See Appendix 4 page 21*). Demonstrated that all of the members of staff had a positive attitude towards the HI pupils, with members commenting on the pupils

determination and commitment to work, the HI pupils growing in confidence through peer interaction and how having the correct support in place can have a beneficial impact on the pupils attitude to learning as the support enables them to access the lesson and the work. When questioned about the educational attainment of HI pupils and their hearing peers, the teachers responses varied. This is displayed in *Pie Chart 2*.

Recent research indicates that there is an attainment gap between hearing impaired learners and their hearing peers. Have you experienced any evidence which supports this?

10 responses



Pie Chart 2: A representation of the staff responses to Question 12 of the staff questionnaire.

Research indicates that HI pupils tend to achieve less academically than their hearing peers, especially in key subjects such as literacy and mathematics (Duncan *et al.*, 2014; Marshack, 2003). To investigate whether there was an attainment gap between the HI pupils and their hearing peers within the school. The researcher analysed the pupils current Global Grades and academic performance (*see Appendix 4 page 25-28*). From an analysis of the results and the information provided by learner interviews and staff questionnaire it is suggested that the school is successfully supporting these pupils to achieve their full potential academically, with each of the pupils predicted and on track to achieve A*-C in the core subjects at Key Stage 4. These findings contradict research which suggests there is an attainment gap between HI pupil and their hearing peers.

Learner Interviews

In response to Question 1 (*see Appendix 4, page 11*), the pupils interviewed offered a variety of answers to the challenges they faced in school. The main theme was the level of noise, with other responses also suggesting difficulty communicating with others and trouble accessing lesson resources. For example, not being able to understand a video played in class as there are no subtitles available.

In response to Question 2 on how the school helps them to overcome these challenges, Pupil C responded that the school provided as much help as possible. Pupil A, B and D responded with similar answers explaining that there was always support provided to them, in the form of one to one assistance and other members of staff. In the case of Pupil A, they did use to have a radio aid however they did not like using it especially when they needed to give it to the teacher in assembly.

All pupils feel a part of the school. However, Pupil C explained that when they first started school they found it had to make friends as they spoke very little English, having English as an Additional Language (EAL) and a HI made things difficult for them. Pupil D also responded that sometimes they feel excluded as they are unable to take part in activities, such as swimming as they are unable to hear when they take their hearing bar off. This supports Angelides and Aravi research (2006/2007) which indicates that attendance does not automatically result in inclusion.

None of the Pupils would have preferred to go to a School for the Deaf for a variety of reasons such as not wanting to be different, did not need the extra support and that they feel more normal attending a mainstream school.

Two of the pupils attended ‘Talking Hands’ a group for HI children outside of school and Pupil D thought this group was “amazing” as they taught BSL and have provided a lot of support. Pupil C did not attend any groups outside of school for HI children as they did not feel they needed the support provided or the BSL club within the school as they were not interested in attending. Pupils B response took on a different tone, they explained that they did not attend any groups for HI children because they do not want to be surrounded by people who are “different” as it reminds Pupil B that they are also “different”. The interviewer observed that Pupil B became defensive about this subject and was adamant that they did not want to be different, the pupil stated that if BSL Club in school was known as deaf club then they would not attend.

In the case of Pupil B, they appeared to have a negative perception of being HI. Watson *et al* (1999) describes how some people with HI identify themselves as a minority group that has their own culture and language (BSL). People who describe themselves this way have a positive perception of their HI (Watson *et al.*, 1999). Pupil’s B negative perception of their HI may be

having a detrimental effect on their well-being. This is supported by research which suggests that identification with one's minority group (in this case people with HI) is valuable and may have a positive effect on psychological well-being (Walters and Simoni, 1993; Michaelieu, 1997).

Additional research by Bat-Chava (2000) argues that those with a stronger HI identity (such as culturally deaf or bicultural) are more likely to have a higher self-esteem than those who have a weaker HI identity (such as those with a negative identity or culturally hearing). This may have implications if the pupils have a negative perception especially in regards to becoming 'healthy, confident individuals who are ready to lead fulfilling lives as valued members of society' (Donaldson, 2015: 29). The school tried to encourage a more positive perception by introducing a BSL club to the schools activities list, however there was no display boards of this around the school and only a handful of staff were aware that the club was running.

When asked if they had HI friends Pupil A responded that they did and that it was good to have a mixed friendship group. Whereas Pupil A, C and D did not have HI friends but both agreed it would be nice to have a HI friend. This may be because they sometimes feel lonely or excluded from activities with their hearing friends (Cappelli *et al.*, 1995; Mertens, 1989; Stinson and Antia, 1999; Stinson *et al.*, 1996).

Parent / Carer Questionnaire

The one response to the Parent / Carer Questionnaire was received from Pupil's A parent. They believed that the school is inclusive of their child, and that their child has not faced any challenges in terms of receiving support in school. In Question 2a they responded that their child received excellent support from their Teaching Assistant and other support staff throughout the school.

In response to Question 4, Pupil's A Parent responded that their child did take part in other clubs or activities that involved other hearing impaired children. They expanded on this in Question 4a by explaining that they attended youth club, BSL Level 1, sign choir and other social events organised by the 'Talking Hands' group at the Swansea Deaf Centre. Pupil's A Parent believed that it was important for their child to have a mixed friendship group of hearing and HI friends as it 'reflects the wider society which he is a part of'. This is reflected in Pupil's A Parent response to Question 6 in which they would not have considered sending their child to a School for the Deaf if there was one in Wales. Pupil's A Parent explained the reasoning for their answer in Question 6a, responding that pupil A wants to be in a school environment which reflects day to day life for him – Pupil A is from a hearing family, and has many hearing friends and also d/deaf friends.

The responses from Pupil's A parent suggests that the family has a positive attitude towards Pupil's A HI and is encouraging a bicultural link. This may provide Pupil A with a higher self -

1600963

esteem (Bat-Chava, 2000) when compared to HI individuals who do not attend clubs with other HI people or perhaps have positive support from their family.

Chapter 5: Conclusion

Approximately 500 words / 513

The aim of this research project was to develop a current and deeper understanding of how mainstream schools in Wales support HI pupils. In addition, to this how schools are supporting pupils with hearing impairments to achieve Donaldson's four purposes, with specific reference to 'healthy, confident individuals who are ready to lead fulfilling lives as valued members of society' (Donaldson, 2015: 29). I hypothesised that schools in Wales were perhaps failing to meet the needs of these pupils, due to a lack of training and awareness in how to support them.

However research conducted at the Electives Experience School suggest that it is an inclusive and supportive school. The school did this by implementing a 'push-in' model in which the HI pupils are not disengaged from the classroom, 'implying continuous membership' (Peer and Reid, 2016:259). This in turn avoids stigmatisation of the HI pupils and provides the class teacher with a 'readily available model of hearing peers that assists in benchmarking age and stage development' of the HI pupil (Peer and Reid, 2016: 259). Duncan *et al* (2014) argues that social learning is a fundamental view within the education of HI pupils, this social learning approach is applied through the use of the 'push-in' model.

The research gathered from the Elective Experience School indicates;

- That there is no attainment gap between the HI pupils and hearing peers.
- Staff members display a positive attitude towards the HI pupils
- Staff members are aware of the challenges faced by HI pupils and adapt to meet the needs of the learner.

Even though the Electives Experience School was an excellent representation of how schools across Wales should be including and supporting pupils with hearing impairments, it did not disprove nor prove my hypothesis. Nor does it make my research reliable because the research sample was too small and was only representative of one school, as a result it cannot be generalised to the rest of Wales.

This research has helped me to develop my understanding of HI pupils and how to support them. If this research were to be conducted again, a larger sample size would be required as well as a comparison study with Schools for the Deaf in England to gather a wider variety of opinions. This is supported by Bell (2010) who argues that the opinions of those who choose not to take part in the research, may differ to the responses made by those who have chosen to take part.

The research would also benefit from focusing on a certain aspect rather than a variety of aspects so that a greater discussion can be made. Moving forward an area which may benefit from further research is the support in place for pupils with mild to moderate hearing loss. As Archbold *et al* (2015) argues that these pupils did not tend to have the support in place in school as they are perceived as being able to cope, despite the fact that research in recent years indicate that having a mild to moderate form of hearing loss can have a significant impact on learning.

Word Count: 6, 499

Reference List:

- Ackroyd, S. and Hughes, J.A. (1981) *Data Collection in Context*. London: Longman.
- Additional Learning Needs and Education Tribunal (Wales) Act (2018). Cardiff: National Assembly of Wales.
- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50, pp.179 – 211.
- Ammah, J. O. A., and Hodge, S. R. (2005). Secondary P.E. teachers' beliefs and practices in teaching students with severe disabilities: a descriptive analysis. *The High School Journal*, 89(2), pp. 40–54.
- Angelides, P. and Aravi, C. (2006/2007) A comparative perspective on the experiences of deaf and hard of hearing individuals at mainstream and special schools. *American Annals of the Deaf*, 151(5), pp. 476-87.
- Antia, S.D., Jones, P., Luckner, J., Kreimeyer, K.H. and Reed, S. (2011) Social Outcomes of Students Who are Deaf and Hard of Hearing in General Education Classrooms. *Exceptional Children*, 77(4), pp. 489-504.
- Archbold, S. (2010) Deaf Education: Changed by cochlear implantation? PhD, Radboud University.
- Archbold, S. Ng, Z. Y., Harrigan, S., Gregory, S., Wakefield, T., Holland, L. and Mulla, I. (2015) *Experiences of young people with mild to moderate hearing loss: Views of parents and teachers*. Available at: <https://www.earfoundation.org.uk/research/research-categories/recent/young-people-with-mild-to-moderate-hearing-loss> (Accessed: 27th April 2019).
- Arthur, J., Waring, M., Coe, R. and Hedges, V.L. (2012) *Research Methods and Methodologies in Education*. London: Sage.
- Avramidis, E., and Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: a review of the literature. *European Journal of Special Needs Education*, 17(2), pp. 129-147.
- Bat-Chava, Y. (2000) Diversity of deaf identities. *American Annals of the Deaf*, 145(5), pp. 420.
- BBC (2013) *Legal threat over lack of Welsh-medium signer for deaf girl*. Available at: <https://www.bbc.co.uk/news/uk-wales-mid-wales-21257304> (Accessed: 17th April 2019).
- BBC (2017) *Welsh deaf school pupils 'underachieve' at key stages*. Available at: <https://www.bbc.co.uk/news/uk-wales-39895438> (Accessed: 17th April 2019).
- Bell, J. (2010) *Doing your Research Project: A guide for first-time researchers in education, health and social sciences (5th edition)*. Berkshire: Open University Press.

- Benjamin, S. (2002) *The micropolitics of inclusive education*. Buckingham: Open University Press.
- British Educational Research Association (2018) *Ethical Guidelines for Educational Research*. Available at: https://www.bera.ac.uk/wp-content/uploads/2018/06/BERA-Ethical-Guidelines-for-Educational-Research_4thEdn_2018.pdf?noredirect=1 (Accessed: 20th April 2019).
- Cajkler, W., Tennant, G., Tiknaz, Y., Sage, R., Tucker, S. and Taylor, C. (2006) *A systematic literature review on the perceptions of ways in which support staff work to support pupils' social and academic engagement in primary classrooms(1988–2003)*. Available at: <http://eppi.ioe.ac.uk/cms/Portals/0/PDF%20reviews%20and%20summaries/WWA%20TReport%20WEB.pdf?ver=2008-02-21-114946-720> (Accessed: 27th April 2019).
- Cappelli, M., T. Daniels, A. Durieux-Smith, P.J. McGrath, and D. Neuss. (1995) Social development of children with hearing impairments who are integrated into general education classrooms. *The Volta Review*, 97, pp.197–208.
- Center, Y, and Ward, J. (1987) Teachers' attitudes toward the integration of disabled children into regular schools. *Exceptional Child*, 34, pp. 41-56.
- Children and Families Act* (2014) Available at: https://www.legislation.gov.uk/ukpga/2014/6/pdfs/ukpga_20140006_en.pdf (Accessed: 20th April 2019).
- City, University London (2017) *Too many deaf children are still failing to learn to read, says new study*. Available at: <https://www.city.ac.uk/news/2017/november/too-many-deaf-children-are-still-failing-to-learn-to-read,-says-new-study> (Accessed: 20th April 2019).
- Cohen, L., Manion, L. and Morrison, K. (2011) *Research methods in education*. 7th Edn. Oxon: Routledge.
- Conrad, R. (1979) *The Deaf School Child: Language and Cognitive Function*. London: Harper and Row.
- Consortium for Research in Deaf Education (2018) *2018 report for Wales: CRIDE report on 2017/18 survey on educational provision for deaf children in Wales*. Available at: <https://www.batod.org.uk/wp-content/uploads/2018/02/CRIDEW2018.pdf> (Accessed: 20th April 2019).
- Data Protection Act (1998) Available at: https://www.legislation.gov.uk/ukpga/1998/29/pdfs/ukpga_19980029_en.pdf (Accessed: 20th April 2019).

Data Protection Act (2018) Available at:

http://www.legislation.gov.uk/ukpga/2018/12/pdfs/ukpga_20180012_en.pdf (Accessed: 25th April 2019).

Denscombe, M. (2014) *The good research guide*. Berkshire: Open University Press.

Denzin, N.K. (2012) Triangulation 2.0. *Journal of Mixed Methods Research*, 6(2), pp. 80 – 8.

Department for Education (2016) *Specification for mandatory qualifications: For specialist teachers of children and young people who are deaf*. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/699087/Specification_for_mandatory_teacher_qualifications_-_hearing_impairment.pdf (Accessed: 20th April 2019).

Department of Education and Science (1978) *Special Educational Needs: Report of the Committee of Enquiry into the Education of Handicapped Children and Young People (The Warnock Report)* London: HMSO.

Dillman, D.A., Smyth, J.D. and Christian, L.M. (2009) *Internet, Mail, and Mixed-mode Surveys: The Tailored Design Method*. New Jersey: Wiley.

Docherty, S. and Sandelowski, M. (1999) Focus on qualitative methods: Interviewing children. *Research in Nursing & Health*, 22(2), pp. 177-185.

Donaldson, G. (2015) *Successful Futures: Independent Review of Curriculum and Assessment Arrangements in Wales*. Available at: http://dera.ioe.ac.uk/22165/2/150225-successful-futures-en_Redacted.pdf (Accessed: 8th April 2019).

Duncan, J. (2012) ‘Students with hearing loss’, in L. Peer and G. Reid (eds) *Special Educational Needs: A Guide for Inclusive Practice*. London: Sage.

Duncan, J. (2016) ‘Inclusive Education for Students who are Deaf or Hard of Hearing’, in Peer, L. and Reid, G. (ed.) *Special Educational Needs: A Guide for Inclusive Practice*. 2nd Edn. London: SAGE.

Duncan, J., Rhoades, E.A. and Fitzpatrick, E. (2014) *Auditory (Re)habilitation for Adolescents with hearing Loss: Theory and Practice*. New York: Oxford University Press.

Dyson, A., and Millward, A. (2000). *Schools and special needs: Issues of innovation and inclusion*. London: Paul Chapman.

Early Support Wales (2013) *Information for parents: Deafness*. Available at:

<https://www.childreninwales.org.uk/wp-content/uploads/2015/09/Deafness.pdf> (Accessed: 18th April 2019).

Education Act (1981) London: HMSO

Edwards, E. (2018) *Mainstream teacher perceptions of working with deaf children in primary schools*. Available at:

<https://www.maryhare.org.uk/sites/maryhare.org.uk/files/research/EEwards2018.pdf> (Accessed: 20th April 2019).

Equality Act (2010) Available at:

https://www.legislation.gov.uk/ukpga/2010/15/pdfs/ukpga_20100015_en.pdf (Accessed: 20th April 2019).

Eriks-Brophy, A. and Whittingham, J. (2013) Teachers' perceptions of the inclusion of children with hearing loss in general education settings. *American Annals of the Deaf*, 158(1), pp. 63–97.

Forlin, C. (1998). Teachers' personal concerns about including children with a disability in regular classrooms. *Journal of Developmental and Physical Disabilities*, 10(1), pp. 87-106.

Fortnum, H., Stacey, P., Barton, G. and Summerfield, A. (2007) National evaluation of support options for deaf and hearing-impaired children: relevance to education services. *Deafness & Education International*, 9(3), pp. 120-30.

'History of Deaf Education: Part 1' (2012) BSL Zone, 1st July. Available at:

<https://www.bslzone.co.uk/watch/history-deaf-education-1/> (Accessed: 8th April 2019).

'History of Deaf Education: Part 2' (2012) BSL Zone, 1st July. Available at:

<https://www.bslzone.co.uk/watch/history-deaf-education-2/> (Accessed: 8th April 2019).

18, pp. 47-56.

Gal, E., Schreur, N., & Engel-Yeger, B. (2010). Inclusion of children with disabilities: Teachers' attitudes and requirements for environmental accommodations. *International Journal of Special Education*, 25(2), pp. 89-99.

General Data Protection Regulation (2018) Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679> (Accessed: 25th April 2019).

Great Britain (1889) *Report of the Royal Commission on the Blind, the Deaf and Dumb &c., of the United Kingdom*. London: Eyre and Spottiswoode.

Greene, J.C., Caracelli, V.J. and Graham, W.F. (1989) Toward a conceptual framework for mixed-method evaluation designs, *Educational Evaluation and Policy Analysis*, 11(3): 255-74.

Gregory, S. (2017) *The education of deaf pupils in mainstream schools*. Available at:

<https://www.batod.org.uk/information/the-education-of-deaf-pupils-in-mainstream-schools/> (Accessed: 9th April 2019).

- Hendar, O. and O'Neill, R. (2016) Monitoring the Achievement of Deaf Pupils in Sweden
- Homan, R. (1992) *The Ethics of Social Research*. London: Longman.
- Hrastinski, I. and Wilbur, R.B. (2016) Academic Achievement of Deaf and Hard-of-Hearing Students in an ASL/English Bilingual Program. *The Journal of Deaf Studies and Deaf Education*, 21(2), pp. 156-170.
- Iantaffi, A., Jarvis, J., and Sinka, I. (2003) Deaf pupils' views of inclusion in mainstream schools. *Deafness and Education International*, 5(3), pp. 144–156.
- Johnson, R.B. and Christensen, L. (2014) *Educational Research: Quantitative, Qualitative and Mixed Approaches*. 5th Edn. London: Sage.
- Jordan, A., Glenn, C., and McGhie-Richmond, D. (2010). The supporting effective teaching (SET) project: the relationship of inclusive teaching practices to teachers' beliefs about disability and ability, and about their roles as teachers. *Teaching and Teacher Education*, 26, pp. 259–266.
- Jussim, L., and Harber, K. D. (2005). Teacher expectations and self-fulfilling prophecies: knowns and unknowns, resolved and unresolved controversies. *Personality and Social Psychology Review*, 9, pp. 131-155.
- Lambe, J., and Bones, R. (2006). Student teachers' perceptions about inclusive class- room teaching in Northern Ireland prior to teaching practice experience. *European Journal of Special Needs Education*, 21(2), pp. 167-186.
- Lauchlan, F. and Greig, S. (2015) Educational inclusion in England: origins, perspectives and current directions. NASEN. *Support for Learning*, 30(1), pp. 70-82.
- Leigh, G. (2008) Changing Parameters in Deafness in Deaf Education. In: Marschark, M. and Hauser, P. C. (eds.) *Deaf Cognition Foundations and Outcomes*. New York: Oxford University Press.
- Lloyd, C. (2008) Removing barriers to achievement: A strategy for inclusion or exclusion? *International Journal of Inclusive Education*, 12(2), pp. 221-236.
- Luckner, J.L. (2013) Itinerant Teachers of Students Who are Deaf or Hard of Hearing: Practices and Preparation. *Journal of Deaf Studies and Deaf Education*, 18(3), pp. 409-423.
- Marschark, M., Spencer, P., Adams, J. and Sapere, P. (2011) Evidence-based practice in educating deaf and hard-of-hearing children: Teaching to their cognitive strengths and needs. *European Journal of Special Needs Education*, 26(1), pp. 3-16.
- Marshark, M., Lang, H.G. and Albertini, J.A. (2006) *Educating Deaf students: From Research to Practice*. Oxford: Oxford University Press.

- Martin (1988) *Helping Hearing Impaired Children in Mainstream Classes*. Stafford: NARE.
- Mayer, C., Watson, L., Archbold, S., Ng, Z.Y. and Mulla, I. (2016) Reading and writing skills of deaf pupils with cochlear implants. *Deafness and Education International*, 18(2), pp. 71-86.
- McCracken, W., Roberts, A. and Wilding, T. (2012) *Oticon Foundation: Study of FM in Real World Settings*. Available at: <https://personalpages.manchester.ac.uk/staff/wendy.mccracken/OticonFoundationreport.pdf> (Accessed: 20th April 2019).
- Mertens, D. (1989) Social experiences of hearing-impaired high school youth. *American Annals of the Deaf*, 134, pp. 15–9.
- Michaelieu, Q. (1997) Female identity, gendered parenting and adolescent women's self-esteem. *Feminism and Psychology*, 7, pp. 328 – 333.
- Moore, E. (2008) 'A lesson from history', *BATOD magazine*, March, p. 4-6.
- Moore, D. F. (2001) *Educating the Deaf: Psychology, Principles and Practices*. 5th Edn. Boston: Houghton Mifflin.
- Moore, D. F. (2010) Partners in Progress: The 21st International Congress on Education of the Deaf and Repudiation of the 1880 Congress of Milan. *American Annals of the Deaf*, 155(3), pp. 309-310.
- Morgan, D.L. (2014) *Integrating Qualitative and Quantitative Methods: A Pragmatic Approach*. California: Sage.
- Mulholland, M. and O'Connor, U. (2016) Collaborative classroom practice for inclusion: perspectives of classroom teachers and learning support/ resource teachers. *International Journal of Inclusive Education*, 20(10), pp. 1070-1083.
- National Deaf Children's Society (2016) *Special schools for Deaf Children in the UK*. Available at: <https://www.ndcs.org.uk/documents-and-resources/special-schools-for-deaf-children-in-the-uk/> (Accessed: 19th April 2019).
- Norwich, B. (2000). Inclusion in education: From concepts, values and critique to practice. In H. Daniels (Ed.), *Special education re-formed: Beyond rhetoric?* London: Falmer Press.
- Nunes, T., Pretzlik, U. and Olsson, J. (2001) Deaf children's social relationships in mainstream schools. *Deafness and Education International*, 3(3), pp. 123- 136.
- of research on teaching* (4th ed.). Washington, D.C: American Educational Research Association.
- Olusanya, B.O. (2005) Can the world's infants with hearing loss wait? *International Journal of Pediatric Otorhinolaryngology*, 69: 735-8.

- P.I. (1984) Joseph Watson 1765-1829. *Journal of Special Education*, 18(4), pp. 448-449.
- Paju, B., Rätty, L., Pirttumaa, R. and Kontu, E. (2016) The schools staff's perception of their ability to teach special educational needs pupils in inclusive settings in Finland. *International Journal of Inclusive Education*, 20(8), pp. 801- 815.
- Peer and Reid (2016) eds. *Special Educational Needs: A Guide for Inclusive Practice*. 2nd Edn. London: Sage.
- Popper, K. (1992) *The Logic of Scientific Discovery*. London: Routledge.
- Richardson, V., and Placier, P. (2001). Teacher change. In V. Richardson (Ed.), *Handbook*
- Rubin, H.J. and Rubin , I. S. (1995) *Qualitative Interviewing: The Art of Hearing Data*. London: Sage Publications.
- Salter, J.M., Swanwick, R. and Pearson, S.E. (2017) Collaborative working practices in inclusive mainstream deaf education settings: teaching assistant perspectives. *Deafness & Education International*, 19(1), pp. 40-49.
- Santoli, S. P., Sachs, J., Romey, E. A., and McClurg, S. (2008). A successful formula for middle school inclusion: collaboration, time and administrative support. *Research in Middle Level Education Online*, 32(2), pp. 1-13.
- Scruggs, T, and Mastropieri, M. (1996) Teacher perceptions of mainstreaming/inclusion 19581995: A research synthesis. *Exceptional Children*, 63, pp. 59-74.
- Special Educational Needs and Disability Act* (2001) Available at: https://www.legislation.gov.uk/ukpga/2001/10/pdfs/ukpga_20010010_en.pdf (Accessed: 20th April 2019).
- Spooner, W. (2011) *The SEN Handbook for Trainee Teachers, NQTs and Teaching Assistants*. 2nd Edn. London: Routledge.
- StatsWales (2018) *Reports of Special Educational Needs (SEN) by type of need and type of provision*. Available at: <https://statswales.gov.wales/Catalogue/Education-and-Skills/Schools-and-Teachers/Schools-Census/Pupil-Level-Annual-School-Census/Special-Educational-Needs/reportsofspecialeducationalneeds-by-typeofneed-typeofprovision> (Accessed: 9th April 2019).
- Stinson, M., and S. Antia. (1999) Considerations in educating deaf and hard-of-hearing students in inclusive settings. *Journal of Deaf Studies and Deaf Education*, 4, pp. 163–75.
- Stinson, M., K. Whitmire, and T. Kluwin (1996) Self-perceptions of social relationships in hearing-impaired adolescents. *Journal of Educational Psychology*, 88, pp. 132–43.

Swanwick, R. and Marschark, M. (2010) Enhancing Education for Deaf Children: Research into Practice and Back Again. *Deafness and Educational International*, 12(4), pp. 217-235.

The European Union of the Deaf (2019) *Education*. Available at: <https://www.eud.eu/about-us/eud-position-paper/education-position-paper/> (Accessed 9th April 2019).

The National Library of Wales (2017) *Finding Aid – Royal Cambrian and Llandrindod Wells Residential School for the Deaf*. Available at: <https://archives.library.wales/downloads/royal-cambrian-and-llandrindod-wells-residential-school-for-the-deaf.pdf> (Accessed: 9th April 2019).

Thomas, G. (2013) *How to do your research project*. London: Sage.

United Nations Educational, Scientific and Cultural Organization (UNESCO), (1994) *The Salamanca statement and frame- work for action on special needs education: World conference on special needs education: Access and quality*. Salamanca, Spain: UNESCO.

Uus, K. and Bamford, J. (2006) Effectiveness of Population-Based Newborn Hearing Screening in England: Ages of Interventions and Profile of Cases. *Pediatrics*, 117, pp. 887-893.

Vermeulen, J.A., Denessen, E. and Knoors, H. (2012) Mainstream teachers about including deaf or hard of hearing students. *Teaching and Teacher Education*, 28(2), pp. 174-181.

Vincenti, V., Bacciu, A., Guida, M., Marra, F., Bertoldi, B., Bacciu, S. and Pasanisi, E. (2014) Pediatric cochlear implantation: an update. *Italian Journal of Pediatrics*, 40, pp. 72.

Walters, K. L. and Simoni, J.M. (1993) Lesbian and gay male group identity attitudes and self-esteem: Implications for counselling. *Journal of Counselling Psychology*, 40, pp. 94–99.

Watson, L., Powers, S. and Gregory, S. (1999) *Deaf and Hearing Impaired Pupils in Mainstream Schools*. London: Routledge.

Gregory, S. (1998) *Issues in Deaf Education*. London: Routledge.

Gallaway, C. (2003) *Deafness and Education in the UK: Research and Perspectives*. New Jersey: John Wiley and Sons.

Wright, K.B. (2006) Researching internet-based populations: Advantages and disadvantages of online survey research, online questionnaire authoring software packages and web survey services. *Journal of Computer-Mediated Communication*, 10(3).

Yoshinaga-Itano, C. 2003. Early Intervention after Universal Neonatal Hearing Screening: Impact on Outcomes. *Mental Retardation and Developmental Disabilities Research Reviews*, 9, pp. 252-266.