

Professionals' perspectives of different professionals in developing signed language

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Abstract

Hearing parents of deaf children have important decisions to make regarding the language and education that is right for their child. Audism within society and the medicalisation of deafness is difficult to counter, influencing many families against embracing sign language, often leaving deaf children starting their education with a deficit of language.

In this small scale-study, professionals were observed and then interviewed to ascertain how they view and respect the views of other professionals supporting sign language development. It also examines the value placed on different languages and communication modes and begins to unpick the existence of a hierarchy of language.

Using reflexive thematic analysis results demonstrate that whilst the deaf professional's unique skill set was respected universally among other professionals, there was not a shared understanding of the roles that each play in the development of sign language. BSL is clearly respected by those interviewed, but due to the differences in professionals' interpretation of Total Communication the role of BSL and SSE in practice was not widely agreed upon. This could be seen as demonstrating the existence of a hierarchy of language, although more research is required.

The findings also generated other areas for future study, including investigating the impact of a deaf role model within a school setting and understanding the important balance between use and exposure to BSL versus SSE to support both the development of BSL and code-switching. The research also highlights opportunities for innovative training from within the team, including reflections of own experiences and how they impact practice which could be an interesting area of action research.

Table of Contents

Table of Contents	1
Abbreviations	4
List of Tables.....	5
1 Introduction	6
2 Literature Review	8
2.1 Family Experience	8
2.2 The Impact of Good BSL Skills	9
2.3 Early Sign Acquisition	9
2.4 Supporting Sign Language Development	10
2.5 BSL for Deaf Children in Schools	10
2.6 Routes in Deaf Education	11
2.7 Mandatory Qualification for Teachers of the Deaf.....	12
2.8 Collaborative Working in Deaf Education.....	13
2.9 BSL Qualifications within a Specialist Teaching Environment	13
2.10 Factors that Influence the Professional	13
2.11 Language Use within Settings	14
2.12 Deaf Adults in Pre-School Support and in Deaf Education	14
2.13 Deaf Adults in Language and Literacy Development	15
2.14 Summary of Literature Review	17
3 Methodology	18
3.1 Research Design	18
3.2 Research Methodology	18
3.3 Research Methods.....	19
3.4 Research Questions	20
3.5 Ethics	20
3.6 Sampling: Participant Recruitment	21
3.7 Observations	21
3.8 Semi-Structured Interviews.....	22
3.9 Data Collection and Analysis.....	23
3.10 Reflexivity	25
3.11 Summary of Methods Section	26

4	Results	27
4.1	Introduction	27
4.2	Pupils	27
4.3	Codes, Themes and Parent Themes	27
4.4	Parent Theme One: Experience and Qualifications – The Effect on Practice.....	28
4.4.1	Experience and Qualifications of Staff	28
4.4.2	Roles of the Professionals in the Setting.....	29
4.4.3	Role of the Speech and Language Therapist	29
4.4.4	Role of the Teacher of the Deaf	30
4.4.5	Role of the Teaching Assistant	31
4.5	Parent Theme Two: Language and Communication Choices within Practice	33
4.5.1	Family Influence and Effect on Language	33
4.5.2	Supporting Families.....	33
4.5.3	Families Impact on BSL Development: The Professionals’ Perspective	34
4.5.4	Eliciting Communication and Understanding.....	35
4.5.5	Language and Communication Choices.....	37
4.5.6	Knowledge of Different Educational Approaches	38
4.6	Parent Theme Three: Hierarchy of Language	39
4.6.1	Expectations of Language	40
4.7	Improvements in Practice	42
4.8	Summary of Results Section	43
5	Discussion	45
5.1	Experience and Qualifications – The Effect on Practice.....	46
5.1.1	Language used to Describe Sign Language Development	46
5.1.2	Strategies Used by Deaf Staff	46
5.1.3	BSL Competency.....	47
5.1.4	BSL Knowledge	48
5.1.5	The Role of the SaLT and ToD	48
5.1.6	Summary of Section	49
5.2	Language and Communication Choices within Practice	49
5.2.1	Families Role in BSL Development.....	49
5.2.2	Language Choice	50
5.2.3	Language Expectations.....	50

5.2.4	Decisions around Pedagogy	51
5.2.5	Total Communication	51
5.2.6	Summary of Section	52
5.3	Hierarchy of Language	52
5.3.1	Language Bias in Families	52
5.3.2	Professionals' Perceptions of a Language Bias in Practice	53
5.3.3	Summary of Section	54
5.4	Strengths and Limitations	54
5.5	Future Study and Implications	55
6	Conclusion	57
	References	59
	Appendices	66
	Appendix One: EC1A	66
	Appendix Two: EC3.....	78
	Appendix Three: EC4	79
	Appendix Four: EC5.....	81
	Appendix Five: EC6 - Professionals	84
	Appendix Six: EC6 - Children.....	87
	Appendix Seven: Interview Questions	90
	Appendix Eight: Six Phases of Reflexive Thematic Analysis – Braun and Clarke (2006) .	92
	Appendix Nine: Codebook	93
	Appendix Ten: Pupil Profiles	95

Abbreviations

AI	Artificial Intelligence
BSL	British Sign Language
CPD	Continuing Professional Development
CRIDE	The Consortium for Research in Deaf Education
CSW	Communication Support Worker
EHCP	Education and Health Care Plan
EYFS	Early Years and Foundation Stage
SaLT	Speech and Language Therapist
SENCO	Special Educational Needs Co-ordinator
SSE	Sign Supported English
TA	Teaching Assistant
ToD	Teacher of the Deaf
QToD	Qualified Teacher of the Deaf

List of Tables

Table 1: Deaf Gain: Visual Strategies to Support Language Development.....	16
Table 2: Role of the SaLT	30
Table 3: Role of the ToD.....	31
Table 4: Unique Skills of Deaf Staff: Views of Others	32
Table 5: Unique Skills of Deaf staff: Own Views.....	32
Table 6: Role of the TA.....	32
Table 7: Family Influence and the Effect on Language: Supporting Families	34
Table 8: Families' Impact on BSL Development: The Professional's Perspective	35
Table 9: Eliciting Communication and Understanding	36
Table 10: Strategies Used to Support Understanding and Language Development.....	36
Table 11: Language and Communication Choices	37
Table 12: Comments about Communication Approaches Outside of Commonly Understood Definitions	39
Table 13: Expectations of Language: Comments Relating to Families.....	40
Table 14: Expectations of Language: Comments Relating to Professionals	41
Table 15: Expectations of Language: Comments from Professionals	41
Table 16: Improvements in Practice: Use of BSL by Staff.....	42
Table 17: Improvements in Practice: Opportunities to Discuss Pupils' Language Development.....	42

1 Introduction

The majority of deaf children, estimated at 92–95%, are born to hearing parents (Mitchell and Karchmer, 2004; Marschark, 2007; Caselli, Pyers and Lieberman, 2021). The positive impact of an accessible language for these children in the early years and their subsequent outcomes through education is clearly identified (Moeller, 2000; Yoshinaga-Itano, 2003), although in practice interventions to support language competency are not consistently in place.

Data from The Consortium for Research in Deaf Education (CRIDE) shows that 21% of the overall population of UK Deaf children have a severe or profound hearing loss (2023) these children would have limited access to audiological input, especially prior to being aided, and thus would benefit from early sign language exposure. However, given the lack of a standardised national program to support parents of young deaf infants (Kelly et al., 2022), exposure to early sign language varies depending on the early experiences of the family and the knowledge, experience and own pedagogy of the professionals that families have contact with.

Researchers have identified the importance of deaf role models in the early years of sign language development and the support that this role can bring to families (Giaouri *et al.*, 2022; Hoskin, Herman and Woll, 2022; Fobi *et al.*, 2023). Differences in shared reading experiences have highlighted specific approaches that deaf parents use, which can be shared with hearing families by deaf role models, thus improving this shared reading experience and positively impacting both language and literacy outcomes (Swanwick and Watson, 2007).

However, there is a significant gap in research regarding deaf role models within formal education settings. Little is known about how their expertise is shared with hearing colleagues and how they contribute to the language development of deaf children. Furthermore, no studies have focused exclusively on the development of sign language within education settings and how professionals support this process. It is possible that deaf adults working in these environments do not fully recognise the depth of their expertise or how their contributions integrate into the broader framework of language development for young deaf children.

This research aims to identify the value that different professionals assign to different roles, training and experiences amongst their colleagues. It explores attitudes towards different language and communication modes, and it examines the effect that this has on decisions made about language and communication for young deaf children.

2 Literature Review

2.1 Family Experience

The vast majority of deaf children are born into hearing families (Mitchell and Karchmer, 2004; Marschark, 2007; Caselli, Pyers and Lieberman, 2021). On learning that their child is deaf, the most common family experience includes feelings of dismay and their contact, mainly with medical professionals, re-enforce the pathological approach (The Deaf People Association, 2022) in which deafness is seen as a condition which needs to be cured. These families have rarely socialised with deaf adults (Giaouri *et al.*, 2022) so have no experience of a signed language, positive deaf role models or an understanding of deaf culture or community. For some of these families the presence of an unknown signed language in the home could be seen as a threat (Wilks and O'Neill, 2022). The result of this, among other factors, is that families overwhelmingly choose a spoken language over sign (Humphries *et al.*, 2022). This is confirmed in the CRIDE data, where only 34% of school aged children with a severe or profound deafness use sign (either BSL or SSE) as their main language in school (CRIDE, 2023).

When considering language choices parents are rarely told that literature states spoken languages are easier to acquire if a signed language is learnt first (Humphries *et al.*, 2022; Wilks and O'Neill, 2022; Clark, D *et al.*, 2023). For hearing babies, the virtues of Makaton, Sign-a-long or Baby Signing are celebrated by hearing families experiencing the benefits of early signed communication before or alongside the development of speech (Wilks and O'Neill, 2022) which can significantly reduce frustration in these infants (Gale and Martin, 2024), and yet this information does not seem to be championed for deaf infants.

Those that opt for a signed language, or a sign-bilingual approach, may do so without signing expertise themselves. When coupled with an acceptance of the assumption of language delay for their deaf child, families may miss early attempts at signing. As such they may fail to provide the positive interaction and encouragement needed to elicit early sign approximations into signs (Spencer and Harris, 2005), in a way that hearing parents would add meaning to vocal babble and

reinforce its use. This example highlights a mismatch in language and communication skills between the deaf infant and their family (Zarchy, 2023).

Language choices need to be embedded in the families' normal practice and include wider family members and friends to provide the same accessible language opportunities as hearing infants and deaf children of deaf families (Zarchy, 2023). In order to commit to this experience for their deaf child this language use needs to be in harmony with families' core values to be successful (Holcomb, 2013).

2.2 The Impact of Good BSL Skills

Research shows that sign language acquisition in young deaf children can be delayed in those with limited exposure to fluent signing adults (Hoskin, Herman and Woll, 2022; Zarchy, 2023; Joy, Ledger and Duncan, 2024). Typically, communication for these hearing families is a mix of gesture, formal signs and 'home-signs'. The resulting gesturally based pseudo-signs are functionally successful with family and close friends but do not have carry over into a formal signed language (Spencer and Harris, 2005). Deaf children from deaf families consistently outperform those from hearing families where exposure to sign is not as consistent or from such an early age (Herman and Roy, 2006).

The lack of BSL role models in hearing families results in language deprivation for young deaf signing children which can prevent ultimate proficiency of any language, spoken or signed (Mayberry, 2010). Language deprivation also leads to deficits in cognition, behaviour, social-emotional development, executive functioning, and attention (Zarchy, 2023).

2.3 Early Sign Acquisition

All language users share early language experiences through a multi-modality approach, the simultaneous use of spoken and visual cues and making meaning from the communication around them. Early language learning involves pointing and gestures before spoken words in hearing infants, but crucially this needs the adults' attentiveness and engagement for this to lead to successful spoken language development (Gale and Martin, 2024). This multi-modality approach is replicated in sign language acquisition, with exposure to full BSL by care givers from birth, deaf

children will acquire a full signed language. This begins with manual babbling at around nine months followed by first signs (Mayberry and Squires, 2005; Hoskin, 2017). The earliest use of signs shows a reduced range of handshapes, simplified movements and the placement of signs in front of the signer (Morgan, Barrett-Jones and Stoneham, 2007). Signing deaf parents are also skilled in gaining and maintaining visual attention to provide language input (Spencer and Harris, 2005) and are able to adapt these skills to match language needs in line with development. Sign Language, when learnt in this natural family environment, replicates spoken language acquisition through meeting typical milestones, such as number of words/signs by certain ages and the beginning of grammatical features (Herman *et al.*, 2014).

2.4 Supporting Sign Language Development

Guidance by the Royal College of Speech and Language Therapists about the skills needed by speech and language therapists (SaLT) to become specialists in deafness, suggest a British Sign Language (BSL) Level 2 qualification (2024). If coupled with a Teacher of the Deaf (ToD) with similar, or lower, signing proficiency, these professionals do not have the BSL competency to understand even typical BSL development.

Where deaf staff and suitably qualified specialists are in role, research is providing tools, within the Deafness, Cognition and Language (DCAL) portal for example, to be able to identify deaf children with atypical sign language development (Herman *et al.*, 2014). Unlike the plethora of language interventions available for hearing children, research is in the preliminary stages of developing interventions for sign language users, but in the current climate this is rarely accessed (Hoskin, 2017) although work is beginning to address this (Hoskin, Herman and Woll, 2022).

2.5 BSL for Deaf Children in Schools

Parental perspectives regarding language choice comes from a lifetime of being in a society where audist and ableist ideologies exist (Goico and Montiegel, 2024). Families' initial experiences of deafness being framed within the medical model, are difficult to counter. Furthermore, professionals are lacking training and skills to be

able to discuss the full range of communication options for families (Goico and Montiegel, 2024).

Gregory and Hindley (1996) state that the reason a spoken language is often chosen or promoted over sign is a practical one, that deaf children need to integrate into the hearing world. However, they concede that it is easier to acquire spoken language if signed language is learnt first. Perhaps a choice for spoken language is symbolic of a deep-seated misconception where deaf people with clear spoken language are viewed as more intelligent or more educated than those who communicate through sign (Singleton, Jones and Hanumantha, 2014). Rational behind these decisions aside, the impact of language choice is significant.

Discussions about successes of different communication approaches in deaf education are plentiful (Michell, 2018 cited in Wilks and O'Neill, 2022). Literature seems to polarise this into oral and sign approaches (Marschark and Leigh, 2016), which cannot be easy for families to navigate.

Professionals also have to navigate these discussions. Ableism and audism are also pervasive through the education system (Goico and Montiegel, 2024) which will ultimately influence their decisions, as will monolingualism, the notion that education imposes the majority language on the learners (Hinton, 2016). However, as education providers, teachers can promote a minority language.

Regardless of the language choice, the goal of educators is to ensure that a language delay does not build (Clark, *et al.*, 2023), rather it is assessed, tracked and interventions put in place to support development.

2.6 Routes in Deaf Education

A clear education pathway of any one approach within a local authority is often lacking (Goico and Montiegel, 2024) which restricts options within the county. Out of county options are often expensive and SEND budgets are tight (Public Accounts Committee, 2025).

Three main educational pedagogies are Auditory-Oral, Sign Bilingual and Total Communication. Auditory-Oral can be fostered in a mainstream or deaf specialist environment where residual hearing, combined with speech reading and contextual

cues is used to understand and use spoken language, without the use of a signed language (Lynas, 2005). Sign Bilingualism uses sign language as the teaching language from which the national language, in either the written or spoken form, can be taught as a second language (Knoors, Tang and Marschark, 2014).

Total Communication uses multiple modalities to provide access to language, including sign language and audiology technology (Mayer, 2015). It is important to note that this is not simultaneous communication. The learner and the professional should be clear about what language/communication mode they are using, how they are using it and why, at different points across the day and within different contexts.

2.7 Mandatory Qualification for Teachers of the Deaf

In the UK, teachers working specifically with deaf children need to hold the Mandatory Qualification (MQ) to become a Qualified Teacher of the Deaf (QToD), or are required to gain their qualification within three years (Department for Education, 2016). Within this qualification, BSL expectations are relatively low. To qualify prior to 2023, a QToD only needed to achieve BSL Level One. And yet, 26% of those holding the MQ are working mainly in a resource provision (CRIDE, 2023), many of these children will be BSL users, where settings choose the BSL level for recruitment.

Recent changes to the MQ criteria reflect a need for a higher level of BSL competency:

‘Have a minimum of a Level 1 accredited BSL qualification with plans to complete Level 2 within 3 years. If working with a child who predominantly uses BSL higher level BSL skills/qualifications will be required (of at least level 3 BSL).’

(Department for Education, 2023b)

However, no clarity is given for how this will be enforced or funded.

2.8 Collaborative Working in Deaf Education

The importance of deaf leadership in the management of young deaf learners is agreed (Rogers and Young, 2011; Gale *et al.*, 2021). Yet deaf staff make up only 5% of support staff working in deaf education (CRIDE, 2023) undoubtedly leaving some settings with a limited number of deaf staff, if any.

Deaf staff are also underrepresented within the SaLT profession as the spoken language and listening component of the SaLT course are inaccessible (Hoskin, Herman and Woll, 2022).

2.9 BSL Qualifications within a Specialist Teaching Environment

Most provisions for signing deaf children will expect a higher level of BSL competency of their ToD and support staff than that of the MQ. Typically, in the experience of the researcher, primary settings expect BSL Level Two and secondary settings, BSL Level Three. This is not necessarily supported by the CRIDE data which states that 30% of support staff employed to work with deaf children have no qualification or only BSL Level One. Data relating to the BSL qualifications of ToDs is not available in this report.

2.10 Factors that Influence the Professional

A professionals' understanding and competency of sign language will ultimately influence the language that they use in their practice. Those with lower BSL competency, tend to frame deaf children according to their audiological status, rather than looking at their language and social needs, despite the fact that audiology stands outside of education (Wilks and O'Neill, 2022).

Personal alignments will produce biases (Goico and Montiegel, 2024) which ultimately impact practice. Factors such as: place of training; date of training; exposure to CPD; experience in different settings; years in deaf education; sign language competency; approach of the service/setting; understanding and/or exposure to other approaches and personal experience of deafness. These factors have a huge impact on the dynamic learning environment and thus experience of the deaf child (Salter, Swanwick and Pearson, 2017).

Different pedagogical approaches exist across the UK which accounts for differences in the quality of BSL exposure for deaf pupils (Herman and Roy, 2006). The number of deaf provisions under academy management is not listed by CRIDE (2023), but government data states that 79% of secondary schools, 38% of primary schools and 41% of special schools are academies (Department for Education, 2023a). Whilst private or independent schools may be able to decide on their own approaches, some may not have the autonomy to make these decisions. The complicated relationship between provisions or deaf schools based within an academy, but which serves an education authority, has not yet been under the research spotlight. However, this dynamic is crucial to understand, as Service Level Agreements between these two establishments lay the foundations for the pedagogical approach, training, level of support for the children and financial responsibilities.

2.11 Language Use within Settings

Translanguaging is used to describe the authentic way in which bi- and multilingual people use all of their communication resources for meaning making (Wolbers, Holcomb and Hamman-Ortiz, 2023). Language integrates into one dynamic resource rather than being compartmentalised by the user (Otheguy et al 2015 cited in Wolbers, Holcomb and Hamman-Ortiz, 2023).

The creation of critical translanguaging spaces in deaf education – where pupils can use all of their communication skills to serve as a scaffold for conceptual and language learning is crucial (Wolbers, Holcomb and Hamman-Ortiz, 2023). This needs to be done alongside protected language spaces for the development of the minority language, in this case BSL.

The range of BSL or English features used by the experienced sign language user is also influenced by the audience, where this change of register facilitates effective communication between individuals (Sutton-Spence and Woll, 1999).

2.12 Deaf Adults in Pre-School Support and in Deaf Education

Deaf adults should be promoted as an integral part of sign language learning for hearing parents of deaf children (Watkins, Pittman and Walden, 1998; Batterbury et

al., 2010), which has served not only as a positive language and social-emotional role model for the deaf child and their families (Fobi *et al.*, 2023; Joy, Ledger and Duncan, 2024), it also reduces barriers between the hearing family and their misconceptions of the deaf community and negative stereotypes of those within it (Gale *et al.*, 2021). In addition, it strengthens bonds with the deaf community and increases the confidence of these families (Fobi *et al.*, 2023; Joy, Ledger and Duncan, 2024). Deaf children who have the support of deaf mentors in their early education make more language gains than their peers without deaf mentors (Fobi *et al.*, 2023) and when incorporating the parents and families in learning sign language the positive impact can be extended to the social skills and mental health of the students (Kaur *et al.*, 2020).

When working with hearing families, deaf professionals should: use an interdisciplinary approach including the use of deaf role models; support early access to signed language; provide contact between the deaf and hearing world; support access to an appropriate environment; and offer support services for families (The Deaf People Association, 2022). Yet, there is a lack of suitable training for deaf individuals expected to carry out this role and a lack of consistency about what this role should incorporate (Giaouri *et al.*, 2022). Furthermore, additional complications arise where a child's sign language development appears atypical (Kaur *et al.*, 2020; Hoskin, Herman and Woll, 2022).

2.13 Deaf Adults in Language and Literacy Development

Differences in the use of sign language to support literacy development are evident between deaf and hearing mothers (Swanwick and Watson, 2007). In this research, hearing mothers displayed marginally less eye contact; story telling was less reciprocal; and differences were noted in shared meaning of the text.

Deaf gain refers to the positive and unique contributions that deaf people have made to society with specific reference to deaf people as visual beings (Gale and Martin, 2024). Within the family context, studies have attempted to quantify these skills when supporting children to illicit language development, (Table 1).

Table 1: Deaf Gain: Visual Strategies to Support Language Development

Deaf Gain: Visual Strategies to Support Language Development	
Category	Visual Strategy Example
Visual strategies	<p>gaining attention using eye gaze</p> <p>pointing</p> <p>combining kinaesthetic, tactile and vocal stimulation</p>
Parentese strategies	<p>slower tempo of signing</p> <p>repetition of signing</p> <p>exaggerated movements</p> <p>shaping the infants' hand to make the signs</p>
Joint attention strategies	<p>allowing time for the infant to visually explore an object/scene/event before engaging in signed conversation about it and pausing the conversation when the eye gaze is distracted from the adult, ready to re-initiate the conversation when the eye gaze is returned</p> <p>Follow the child's lead: by following the child's lead with regards to their eye gaze deaf adults are able to shift their conversation to match the deaf infant, thus language opportunities are optimised</p> <p>Allowing time to explore: use of the concept 'serve and return' for example if the child is looking at a cat, the adult should wait for the eye gaze to be on them to comment and then refocus to the cat (thus, introducing the language and reinforcing it)</p> <p>Sequential interaction: use of the above leads to successful sequential turn taking within interactions</p>
Shared reading strategies	<p>joint reading with picture books keeping both languages visible</p> <p>following the joint attention strategies as described above</p> <p>chaining (using fingerspelling to link to the English print word together with signing)</p> <p>tactile strategies to gain attention</p> <p>adjusting sign placement to fit with the story (on the book or body)</p>

Table 1: Adapted from source (Gale and Martin, 2024)

Spencer and Harris (2005) report similar findings with the addition of the use of rhythmical signing to support interest and understanding, in a comparable way that a hearing mother might use a sing-song voice with their hearing infant.

For hearing families, strategic use of their limited language skills to provide the best possible language environment is important (Zarchy, 2023) and requires guidance and support (Gale and Martin, 2024).

2.14 Summary of Literature Review

For a number of reasons families are rarely presented with a balanced view regarding the role of sign language when raising a deaf child. Where families choose to sign at home they need timely support of deaf role models to ensure successful sign language development (Mayberry and Squires, 2005; Zarchy, 2023).

The prevalence of audism within the education system (Goico and Montiegel, 2024) may not be effectively countered by the presence of a QToD as expectations of BSL competency is not high (Department for Education, 2023b) and training budgets restricted (Public Accounts Committee, 2025).

Deaf professionals are underrepresented within deaf education (CRIDE, 2023) and yet their importance is recognised (Batterbury *et al.*, 2010; Fobi *et al.*, 2023), however much of the research centres around pre-school sign language development, leaving sign development for school age children under researched.

3 Methodology

3.1 Research Design

Research is often divided into two broad categories, qualitative and quantitative. Some research utilises a combination to answer their research questions (Denscombe, 2017). Quantitative research can be broadly defined as: being used for large scale studies; using numbers as the unit of analysis; analysing specific variables, analysing the data after data collection; and where the researcher is detached from the process (Denscombe, 2017). In contrast qualitative research: uses words as the unit of analysis; tends to be used for small-scale studies; employs a holistic perspective; can analyse data during the collection process; and allows the researcher to be involved with the research. For these reasons, the qualitative approach was chosen.

3.2 Research Methodology

There are many types of qualitative research methodologies, including grounded theory, action research, descriptive phenomenological and qualitative description research. Whilst it is recognised that there is no one ideal method for qualitative research (Braun and Clarke, 2021a) consideration needs to be taken to ensure that an appropriate method is selected to match the needs, budget and timescale of the research project.

Grounded theory was not suitable as the development of a theoretical framework was not the intended outcome (Braun and Clarke, 2006). Action research was also not appropriate as this research did not aim to challenge or improve practice (Tripp, 2005).

A qualitative description methodology was chosen as it allows for a reflective process whereby the perspectives of participants unfolded and with it our understanding is developed (Agee, 2009). It differs from the descriptive phenomenology methodology where the researcher presents the phenomenon as a lived experience, which does not allow for the researcher to make suggestions and actively explore themes as they appear through interviews, as is the case within qualitative description research (Willis *et al.*, 2016).

3.3 Research Methods

The inclusion of observations as an additional data source within the qualitative description approach enriches the completeness of the research (Willis *et al.*, 2016). Observations allow the researcher to witness the interactions and events first hand, without relying solely on the perspectives of the participant (Denscombe, 2017). The naturalness of the observations was protected as the participants were observed during their normal day.

Interviews are a suitable way of collecting the views and perspectives of the participants (Denscombe, 2017) and can be unstructured, structured or semi-structured. An unstructured interview allows for a positive relationship to develop between the researcher and interviewee (Mueller and Segal, 2015), within this research relationships were already established. However, unstructured interviews have no pre-set questions thus the potential for gaps in the information gathered.

In contrast, structured interviews have an interview schedule, with questions and follow-up questions pre-determined, including a set order for the questions (Mueller and Segal, 2015). There is no allowance for deviation from the wording of the questions, which does not allow for the inevitable code-switching between languages and modes within a multilingual interview (Rolland, 2023), where these interviews could be in English, Sign Supported English (SSE), BSL or a combination.

Semi-structured interviews were chosen to provide the balance between collecting sufficient information, allowing for code-switching and being participant led. Although semi-structured interviews can be time consuming (Adams, 2015), the small scale of the research meant that this was achievable within the time restraints. Initial questions were set with a view to collecting the data required (Denscombe, 2017) but were adapted throughout the process, as was the order of questions, a practice not uncommon in semi-structured interviews. This responsive approach shows an increased understanding of the issues as they develop through the process of the research (Agee, 2009).

Group interviews or focus groups can be effective in generating more ideas than individual interviews and participants can support others with the sharing of sensitive information or views (Kruger *et al.*, 2019). However, the presence of other participants can also inhibit comments that are outside of those considered to be the

norms of the group. Group interviews can also pose difficulties within the transcription process (Denscombe, 2017) which would have been exacerbated with a group communicating through sign.

3.4 Research Questions

The following questions were developed:

- How are the views, experiences and training of the different individuals who are involved in the language acquisition of young deaf pupils understood and respected by different professionals?
- How are the different forms of communication valued by different professionals working with these children?
- Is there an underlying, or subconscious, hierarchy of different communication forms, which differs depending on the personal biases of the professional or their expectations for the individual?

The importance of a good set of research questions cannot be underestimated, where poorly constructed questions can cause problems along every stage of the study (Agee, 2009). Questions were reviewed during the process of the study to ensure that methods chosen were appropriate for the research (Cohen, Manion and Morrison, 2017).

3.5 Ethics

Ethics approval is necessary to ensure that participants' interests are protected through the course of the study (Denscombe, 2017), even where small-scale research is seemingly innocuous.

Ethics approval was obtained (Ethics Approval Number: SLE/SF/CP/06206) from the University of Hertfordshire's Ethics Committee following the BERA (2024) guidelines using form EC1A (Appendix One). Prior to any data collection permissions were obtained using form EC3 for professionals (Appendix Two) and using form EC4 for parents giving permission on behalf of their child (Appendix Three). Participants were able to give informed consent having been presented with full information (EC5 and EC6- version for professionals and pupil's families, Appendix Four, Five and Six) about the research (Denscombe, 2017).

3.6 Sampling: Participant Recruitment

This research involves professionals working with young deaf pupils in the early stages of sign language development. The sample is not representative, rather a purposive, exploratory sample, where pupils and professionals from the researcher's workplace were quickly identified through convenience sampling and recruited to align with the study's time constraints. In addition, by using a purposive sample, participants are known to have the experience and opportunities to provide valuable insights about this specific topic (Denscombe, 2017). Due to this sampling method, care must be taken to ensure that findings are not overly generalised.

Deaf pupils from Nursery, Reception or Year 1 are suitable as they are in the early stages of developing sign language. Pupils are already familiar with the researcher, which could help to support the naturalistic nature of the observations (Denscombe, 2017). Five pupils were invited to take part in the study, with parental consent obtained for all participants. All participating professionals were already working with these identified pupils. Other professionals from the setting were excluded from the research as they only worked with pupils outside of the identified age range.

Among the professional participants invited, four BSL using teaching assistants (TA) were recruited, two of whom are deaf. Of the deaf participants one communicates using BSL and the other either BSL or SSE, depending on the context and communication partner. Additionally, one SaLT specialising in deafness and one QToD participated in the research, both of whom are hearing.

3.7 Observations

Observations of professionals working with the young deaf learners took place prior to the interviews. Summaries and notes of these naturalistic observations were made as soon as possible to preserve accuracy (Denscombe, 2017). This additional dimension to the research provided an opportunity for observed good practice to be jointly examined within interviews and to discuss actions and motivations rather than relying on self-reported actions alone (Denscombe, 2017), thus increasing the integrity of the research (Willis *et al.*, 2016).

The QToD and SaLT were both observed during structured sessions, whilst the TAs were observed during unstructured, free-flowing learning through play sessions.

3.8 Semi-Structured Interviews

Discussions prior to interviews allowed the deaf participants to state their preferred language for the interview. By allowing participants the choice of language, any linguistic power imbalance is reduced (Rolland, 2023). If no choice was given to the participants, this would have presented a bias of language use within the research process. Although a main language had been chosen, participants were given linguistic freedom to express their views and opinions, allowing them the opportunity to code-switch (Rolland, 2023). Code-switching was used by hearing participants as well as the deaf participants, where, for example, a single multi-channel sign can express a view or action more succinctly than spoken English can and an equivalent translation is difficult to find (Sutton-Spence and Woll, 1999). For the deaf participants, code-switching between BSL and SSE is commonplace, especially when communicating with a non-native signer.

The interview questions began with collecting data about qualifications and experience (Appendix Seven). This information was collected to examine if these factors were understood and respected by other professionals in the team. In addition, it was used to identify a possible link between the training and experience of the professionals and their views and perspectives with regards to a potential underlying language bias.

The next section of the interviews was broken down into different areas of investigation. Each section aimed at helping to answer the three main research questions. Within this semi-structured interview approach, the researcher allowed the conversation to flow, often sections appeared in a different order than anticipated to allow the participants the opportunity to share their thoughts (Agee, 2009).

The topic areas were:

- Motivation to Work with Deaf Children
- Knowledge of Different Deaf Teaching Pedagogies
- Personal and/or Professional Influences
- Understanding of Early BSL Development
- Prioritising Speech or BSL
- Perspectives on Own Role in Developing BSL

- Perspectives of the Role of Others in Developing BSL

Additional questions about the involvement of families were introduced responding to initial interviews raising this as an area requiring further questioning. As a result, 'Family Influence and the Effect on Language' became the eighth topic area.

Each topic area had an introductory question and subsequent follow-up questions to stimulate further discussion where needed (Appendix Seven). Follow-up questions are an important part of semi-structured interviews as they allow the researcher to get a deeper understanding about the topic and allow the extra time and discussion to ensure information is balanced and thorough (Rubin and Rubin, 2005).

The final part of the interview investigated language expectations for each child, what this currently looks like within the setting and professionals' predictions about future communication choices and preferences. This was followed by the opportunity to share thoughts for improvements within current practice with specific reference to the development of sign language.

The researcher expected participants throughout the interviews to discuss views and practice with particular reference to each individual child. Contrary to this expectation, the interviews did not follow that route, as such the involvement of the pupils was significantly reduced.

The interviews took place in the daily place of work to ensure a secure and familiar setting and to preserve confidentiality. Interviews can be tiring for both the researcher and the interviewee, with one hour considered as the maximum length for effective interviewing (Adams, 2015). All interviews were completed within a window of forty-five minutes to one hour and ten minutes.

3.9 Data Collection and Analysis

Reflexive thematic analysis was the most appropriate here as the main focus for this study was to explore views and perspectives. Critics might argue that it lacks sophistication and analytic power (Braun and Clarke, 2021b), however it allows for flexibility throughout the research process.

NVivo 14 software, provided by the University, was used for data analysis. The researcher followed Braun and Clarke's six-phase process (2021b):

- Familiarising yourself with the data
- Generating initial codes
- Searching for themes
- Reviewing themes
- Defining and naming themes
- Producing the final report

(See also Appendix Eight)

Within Phase One, interviews were recorded and transcribed. For hearing staff, automatic transcription was used during the interview and the resulting transcript was checked for accuracy by the researcher and edits made as needed. For deaf staff, automatic transcripts were used solely for the researchers' comments, and the video of the signing was used by the researcher to transcribe the participants signed responses. It is important to note here that BSL is a language in its own right. The meaning held within facial expressions and multi-channel signs are not easily written into English form (Sutton-Spence and Woll, 1999) where there might not be an equivalent translation, a consideration also for spoken bi- or multilingual research (Rabiah-Mohammed *et al.*, 2024). For this reason, videos of the interviews with deaf participants were kept to clarify points held within the transcripts during the analysis process (these will be deleted in accordance with University ethics guidelines and permissions). Guidance for the use of spoken bi- or multilingual research exists for the preparation of interviews (Rolland, 2023), approaches to transcriptions of interviews (Rabiah-Mohammed *et al.*, 2024), and the use of translation and back-translation within signed interviews (Barnett *et al.*, 2011). None of these referred to involving the participant to check accuracy. However, it is normal practice within the researchers place of work to offer deaf staff the opportunity to review written summaries of meetings. As such, deaf participants were offered the opportunity to review the transcripts.

The researcher made summaries of the interviews to support the familiarisation of the data.

A codebook (Appendix Nine) was generated during Phase Two and was used and reviewed throughout analysis to ensure that codes were applied consistently. This included re-coded all interviews following the development of the final codebook,

thus demonstrating consideration of new codes generated during later interviews (Braun and Clarke, 2006). In total, twenty-four codes were identified.

The twenty-four codes were categorised into seven themes during Phase Three. These themes, codes and interviews were then reviewed during Phase Four to ensure consistency. The codebook was adjusted to reflect how codes sat within these themes.

During phase five, where the purpose is to refine the themes, it became apparent to the researcher that whilst there were seven themes, these could be further categorised within three parent themes. Although the creation of parent themes is not explicitly stated within the reflexive thematic analysis approach, it was a natural development of the codes and initial themes to draw this conclusion. In addition to these parent themes sat one stand-alone theme relating to improvements in practice.

The final phase within this approach is the completion of the results section and the subsequent discussion. Data within the results section were direct quotes from the interviews and presented within tables for ease of reference.

3.10 Reflexivity

The researcher is a QToD with 12 years of experience working with deaf children in a primary setting, including seven years as a ToD. In addition, the researcher has gained three years of experience working as a ToD within a secondary setting and as a Head of Provision. The researcher is well-acquainted with the deaf adults included in the research and holds a Signature BSL Level 6 certificate.

The level of BSL qualification held by the researcher may have skewed questions towards the expectation of finding a deficit where professionals do not have similar BSL skills.

In addition, the researcher strongly adheres to Mayer's definition of Total Communication (2015). This may have led to a less flexible view of other definitions of Total Communication as an educational approach.

The recognition of these potential biases will improve the credibility of findings within analysis and will enhance the learning of the researcher (Dodgson, 2019).

Although this project did not set out to be a piece of Action Research, similarities exist especially when considering the participant sample, which could effect the impartiality of the researcher (Denscombe, 2017). However, the findings have the potential to directly impact future training and practises within the setting thus removing the barrier between scientific research and change in the workplace, which is a significant benefit to working in this manner (Somekh, 1995 cited in Denscombe, 2017).

3.11 Summary of Methods Section

The researcher chose qualitative methods to match the scale and style of the research project (Braun and Clarke, 2021a). Observations of professionals working with pupils were carried out to support accuracy and integrity within the interview process. Interviews were conducted one-to-one to allow participants to freely express their views (Kruger *et al.*, 2019). A semi-structured format allowed the researcher to be responsive to the participants contributions (Agee, 2009) and were flexible in the use and choice of language to allow participants to express themselves fully and to reduce any linguistic in-balance of power (Rolland, 2023).

A qualitative description research methodology was the most appropriate to investigate views and perspectives of the participants (Willis *et al.*, 2016) coupled with a reflexive thematic analysis using a six-phase approach (Braun and Clark, 2021b). NVivo 14 software was used to collate and process the data. Following this approach, twenty-four codes, seven themes and three parent themes were identified alongside participants views for improvements in practice.

4 Results

4.1 Introduction

The researcher set out to answer three questions encompassing: how views, experiences and training are understood and respected by all professionals; how different forms of communication are valued; and to consider the presence of an underlying bias leading to a hierarchy of language. This section presents findings from interviews of six professionals in a deaf provision based in a mainstream primary school which self-reports as using a Total Communication approach.

The results will be presented under the headings of the three parent themes identified during the analysis phase of the research, followed by views on improving practice.

4.2 Pupils

The professionals interviewed all work directly with the pupils recruited from Reception and Year One. Four of these pupils are regular users of personal amplification devices, three cochlear implant users and one brain stem implant user. One is a non-regular user of hearing aids. Pupils have different levels of audiological access to spoken language. Their access to sign language at home also differs with three of the main carers of these pupils having a BSL qualification of Level 2 or above. One main carer is a native BSL user, and the other main carer uses minimal signing at home (Appendix Ten).

4.3 Codes, Themes and Parent Themes

A total of twenty-four codes were identified which sat within seven themes:

- Experience and Qualifications of Staff
- Family Influence and the Effect on Language
- Expectations of Language
- Language and Communication Choices
- Knowledge of Deaf Education Approaches
- Eliciting Communication and Understanding
- Improvements in Practice.

These themes sat neatly within three over-arching parent themes:

- Experience, Qualifications and Roles of the Professionals
- Language and Communication choices within practice
- Hierarchy of Language.

Improvements in practice is presented as an additional stand-alone section.

Professional participants are numbered, and where comments or quotes are used their numbers are used as a reference to preserve anonymity. Similarly, pupils were allocated letters.

4.4 Parent Theme One: Experience and Qualifications – The Effect on Practice

Results pertaining to how the views, experiences and qualifications were understood and respected by other professionals are presented within this section. They address the comments made which relate to the codes and themes that sit within this parental theme.

4.4.1 Experience and Qualifications of Staff

The professionals interviewed varied in terms of qualifications and years of experience working with deaf children. BSL levels ranged from Level 2, with pre-Level 3 to Level 6 and deaf native BSL user (Table 2). It is important to note that both deaf professionals interviewed were educated in oral settings for the duration of their secondary education.

Table 2: Professional Overview

Reference	Professional Role	D = Deaf H = hearing	Level of BSL	Years of working with deaf children	Comments
1	TA	H	3	4	
2	TA	H	6	6	
3	TA	D	Near native	20+	Learnt BSL as a baby. Hearing parents who actively engaged in

					BSL. BSL taught through primary school. Oral secondary school
4	TA	D	Deaf BSL user	20+	Oral setting throughout primary school. Oral secondary school – but introduced to BSL by deaf friends from school.
5	QToD	H	2 and pre-3	30+	
6	SaLT	H	6	6	

4.4.2 Roles of the Professionals in the Setting

Each professional was asked about what they saw their role as being, followed by what they saw as the roles of others with specific reference to developing a signed language. Where professionals reflected on the roles of others, this did not always correlate with the self-reflection of the professional under scrutiny. Language used to discuss roles and practice was not shared between the professionals. In some areas of the interviews there seemed to be an ‘us and them’ edge to the discourse.

4.4.3 Role of the Speech and Language Therapist

When discussing their role, the therapist identified the following as central:

- Using evidence-based practice
- Using an ‘assess, plan, do, review’ framework to work towards targets
- Identifying appropriate tools to address identified gaps

Using a flexible approach both in terms of being child-led, to respond to the presentation of the child at the time of the session, and the use of different approaches as needed to address concerns in different situations across the day/school environment.

The SaLT stated that the use of BSL, SSE or spoken language would be used flexibly to support language development and encourage communication within sessions depending on the focus of the session.

Comments from other professionals about the role of the SaLT centred around the use of English, or English word order, over BSL, or prioritising speech targets over holistic development (Table 3). This does not match with the SaLT self-reported use

of language within a session. Some comments from other professionals might relate to sessions with other pupils, or from a specific speech target session, or perhaps this might reflect personal experiences leading to a bias.

Table 2: Role of the SaLT

Role of the SaLT	
Professional	Comment
2	[the] Speech and language therapist [will be] using Signed Supported English and me, perhaps trying to complement that. If that hasn't connected with the child, to put it in a more BSL way.
5	...each professional comes with their perspective as their key thing. So obviously, for the speech and language therapist, they have perhaps three main outcomes that they're looking at for a child across an annual review year ... that's very much what they are focusing on, where they want to see the progress.
4	Yeah, well, speak, speak, speak, speak...Well, it's both...but sometimes they'll use oral. And then if the therapist thinks, 'oh, they don't understand this, they don't understand the language', then they might use sign language to help them develop their vocabulary. Sometimes... no sign at all, just oral.
2	...do speech and language therapists actually develop sign? ...I had to pause and think because I thought they were developing, I mean obviously they're developing communication, but it's often related to English, Spoken English rather than sign communication. And I think that's where perhaps there's that clash between BSL order and Sign Supported English in English word order because I think the speech and language therapy, in my experience, tends to focus on...getting the English language order correct.

4.4.4 Role of the Teacher of the Deaf

The QToD identified the following main areas regarding sign language development:

- Encouraging turn taking
- Supporting attention
- Use of SSE to support understanding of English word order
- Responding to individual needs and targets
- Carrying out additional interventions set by other professionals

Other professionals viewed the role of a ToD as an overseeing one, not necessarily specifically concerned with sign development, but seeing this as part of progress set within the wider curriculum (Table 3).

Table 3: Role of the ToD

Role of the ToD	
Professional	Comment
2	...the ToD's role is a very broad role. Obviously, it's...not necessarily just about development of BSL, it's about all the curriculum and all the child.
1	[when]...you're not seeing progress or a level of progress you'd like to achieve or you think that child is capable of achieving, then I'll turn around to...[the] ToDs and go 'look, this only works so far. Can you come up with...a bigger plan?'
6	...it's also developing their listening but through the scope of...the curriculum often I think that's where I'm not...at that angle

4.4.5 Role of the Teaching Assistant

TAs were asked about their role, one linked sign language and emotional development as being mutually beneficial and broke the supporting social and emotional development into the following four areas:

- Managing behaviour
- Expressing emotions
- Turn taking
- Understanding routines

Hearing professionals commented on the specific skills of the deaf professionals, citing their ability to meaningfully identify sign babble and attempts at new signs. One attempted to explain the presence of these skills as well as the importance of deaf staff and BSL role models in a setting (Table 4).

Table 4: Unique Skills of Deaf Staff: Views of Others

Unique Skills of Deaf Staff: Views of Others	
Professional	Comment
5	Isn't it because that that's their [Deaf professionals] world and that's their language, and a lot of them have raised children themselves. So...some of those have raised deaf children themselves...they've got that real insight into what...they [are] producing [in sign].

Deaf staff confidently identified their unique language skills (Table 5).

Table 5: Unique Skills of Deaf staff: Own Views

Unique Skills of Deaf Staff: Own Views	
Professional	Comment
4	I can sign with them, then it's just natural...it's inside me. I'm using it. I know what I'm looking for.
3	I know with all of the children they're all so varied and I change my register to mesh with what they need. I go with the flow.
3	...if they're visually impaired you have to think about making sure that you're in their eyeline and you have to get down to be on their level, you have to match their needs...Sometimes your facial expression is...really encouraging for them of course.
3	[when I sign a story] there's a lot of gesture and if you do it right then the children are just fixated on you, they're all just like watching you and that really matches their needs

The SaLT recognised the importance of the day-to-day work of TAs and the impact that these staff have on all areas of development (Table 6). These adults give most of the language input within school, thus highlighting the importance of sharing targets and modelling strategies with them.

Table 6: Role of the TA

Role of the TA	
Professional	Comment
6	I think they're super important. I sometimes think to myself after a year here that I've forgotten about parents. Maybe I should be

	involving them [the TAs] more at this stage. I think they take over the role that the parents took initially and this is the person that knows them best in this setting and this is the person that's going to be with them the most and is going to be able to carry out those strategies.
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However, despite identifying the importance of the role of the TA, questions were raised related to inconsistencies within the team, perhaps due to differences in language expectations. Reporting back about specific interventions or observations needed within the setting across the week was also a concern, these may not have taken place or the staff not available to provide feedback.

4.5 Parent Theme Two: Language and Communication Choices within Practice

The second research question seeks to understand the value that is placed on the different language and communication modes used within the setting.

Whilst questions relating to the families of deaf children were not within the original framework of the interview, through the course of the research it became evident that it required some more investigation. It was recognised by the participants that families can significantly impact the acquisition and development of BSL through its use in the home and as such cannot be ignored.

4.5.1 Family Influence and Effect on Language

Some professionals have more contact with families due to the nature of their job role (Table 7 and Table 8). Discussed areas fell broadly under the headings of 'Supporting Families' and 'Family's Impact on BSL Development: The Professional's Perspective'.

It is important to note that there are some references to families that are not directly the focus of this research, where professionals drew on their wider experiences of working with families of deaf children.

4.5.2 Supporting Families

Professionals highlighted the importance of working with families, informing them of opportunities to engage with other parents or with the deaf community. One of these

professionals highlighted the need to be flexible in their approach with families to support their engagement with BSL: some need to understand the theory; others need simple step-by-step instructions and reminders; and some need a reference to support confidence in their own abilities (Table 7).

Table 7: Family Influence and the Effect on Language: Supporting Families

Supporting Families	
Professional	Comment
6	[for the families] I need to be aware of...their learning styles. So, for some I need to send them journals with why it is so important; others I need to write it down...on a sticky note and put it on their fridge so they can see it every day; and for some of them I've...recorded the sessions and got them to watch them again.
6	I think it's more about producing a communication environment. Establishing that a child needs to hear or see a word many, many times before they're opening it up. And the only way that can happen is through natural...play engagement. And so, I support the family to make language part of the routine.

4.5.3 Families Impact on BSL Development: The Professionals' Perspective

Four of the six interviews noted the impact that families have on BSL development. The need for encouraging BSL use in the home, therefore reducing the difference between the home and family language environment, and the positive impact this can have.

One professional raised that families can often view understanding of contextual cues as signs of language understanding, thus over stating their child's listening abilities. The same professional also flagged the importance of functionality in sign language learning for the family, knowing the signs is not enough – it is the **use** of sign language which will have the impact.

The disparity of language environment between home and school for some was noted and the potential effects on the individual. However, there was also recognition that for these children, sign is used at home and the positive impact this has was noted (Table 8).

Table 8: Families' Impact on BSL Development: The Professional's Perspective

Families' Impact on BSL Development: The Professional's Perspective	
Professional	Comment
6	...observations can often be inaccurate. A parent might say 'ohh, she understands when I sign shoes, she goes and puts her shoes on or she understands when I say the car, she gets up and puts her coat on.' ...[and I ask] Are you holding the car key? That's all it is ... the child is really good at picking up on all the other cues.
6	I can sit there and teach them 50 signs. But if it's not going to be something they can use every bath time, every lunchtime, every milk time, it's just not going to be learned. I think parents find that quite tricky...I was thinking that's the most functional thing to do, but some of them can get really stuck.
3	Our children sometimes get confused because at home with family sometimes there's no sign there and then they come here and it's all sign and they're quite comfortable with both and that's OK, but it does have an effect for some of them, some of those children it has effect on their mental health. What they get at home and what they get at school [are different].
5	My current cohort is one of the first cohorts where the families have all done signing courses ... I think there's a lot more understanding that it's not a disadvantage to children I think previously parents wanted their children to speak and therefore spoke to them. And you know, there wasn't the understanding that actually, you know, use of sign alongside is not going to be a disadvantage.
4	...I mean, he's quite good because Mum is Level 3.
4	[Where] sign language is being reinforced at home, where people sign at home...you can really see...they develop much quicker. So that really helps the child for them to learn the language...it changes the confidence, [they] become a much more confidence signer... it helps to become ready for Year one and moving on their development, their [attainment] levels.

4.5.4 Eliciting Communication and Understanding

When discussing supporting early BSL skills, the concept of sign babbling emerged in most interviews, with some participants highlighting the importance of being attentive and receptive to small hand movements that may fall outside the

conventional sign framework. Additionally, the blending of gesture with sign was frequently mentioned.

Communication frustration was a factor, spoken about more by those working directly with the children across the day. Also, the use of gesture, lashing out and general vocalisations used where the child does not have the language, sign or voice, to be able to communicate wants and needs (Table 9).

Table 9: Eliciting Communication and Understanding

Eliciting Communication and Understanding	
Professional	Comments
2	We're still sort of trying to draw the sign language out of him. Because often ... you'll get an emotional reaction rather than communication. If he doesn't like it, he'll roar.
2	Yeah, it will include gesture. It can include hitting out.
1	Some of our children who have no access to speech and will just use their voice as a way of catching your attention.

Professionals referred to many of the methods described by Gale and Martin (2024) to support understanding and language development (Table 10). These strategies were described as visual; parentese, joint attention and shared reading, (descriptors of these strategies are held within Table 1).

Table 10: Strategies Used to Support Understanding and Language Development

Strategies Used to Support Understanding and Language Development	
Strategy Headings	Number of times raised in interviews
Visual strategies	8
Parentese strategies	13
Joint attention strategies	9
Follow child's lead	
Allowing time to explore	
Sequential interaction	
Shared reading strategies	2

It was the opinion of the researcher that a lot of good practice, including these strategies, were evident during the pre-interview observations and were discussed within the interviews. Examples of these included: the importance of being at the eye level of the deaf child – crouching down or putting the exciting object next to adults' face to be within the eye gaze; use of over exaggerated signs, including some gesture, to gain more interest from the deaf child; and humour to maintain interest for a prolonged period of time.

4.5.5 Language and Communication Choices

Language and communication choices underpin this project, questions about who makes these choices, how are they communicated between professionals and with families, and how is this enacted, developed across the course of the interviews. Possibly due to the nature of the different roles, some professionals commented more about family involvement than others. Concerns were raised where families do not engage in BSL learning and what the resulting communication looks like over time, potentially leaving families unable to fully engage in meaningful communication with their child.

It was noted that families need to be a part of the discussion around language and communication choices for the child, however a bias towards spoken language can leave children without a shared family language. In addition, one professional defined audiological access as a driver for spoken language over sign (Table 11).

Table 11: Language and Communication Choices

Language and Communication Choices	
Professional	Comment
6	I think parent choice is really important, and I think when you go against it, you're not going to get the engagement that you need...But saying that, I don't think parent choice is enough for me
6	...their child is, say, secondary age and they haven't developed speech. That parent hasn't taken the time to learn any sign. Think about that point. You're looking and you think, well, if we had gone with what they [parents] had wanted, none of us would be able to speak to that child now.
6	I think these children can be very loved, but their communication is neglected, and I can't really understand that...you're talking about an

	ability for somebody to be able to communicate hopes and dreams and thoughts and wishes that [person] isn't their parents.
1	[often the pupils] arrive at the [setting] with little to no signing. For some, that continues if their access to speech is good, whether that's because the level of hearing allows them that or things like cochlear implants that work quite well for them... I've found those children naturally tend to prefer speech.

When asked about language use in the future, there was some commonality about who would use what (BSL, spoken English or a combination), but some discrepancies were present. Each professional justified their response in terms of audiological access, type of personal listening device, current use of speech and/or referring to previous experience of children with a similar profile. The researcher noted that each professional gave their own opinion, they did not refer to a discussion point between the professionals or with families.

4.5.6 Knowledge of Different Educational Approaches

The researcher asked each professional to explain their understanding of the three main educational approaches used within deaf education: Auditory-Oral; Sign Bilingualism; and Total Communication.

Approaches within deaf education were understood differently by the professionals. A clear correlation between professionals, their qualifications and experience, and their understanding of the different approaches did not present itself. Occasionally comments from the professionals did not match the conventional understanding of these approaches as set within the literature review (Table 12). Some confusion was shared in the understanding of a sign bilingual approach. Auditory-Oral was categorised by one professional in terms of a pupils' audiological access alone and some professionals viewed Total Communication as the use of SSE.

Table 12: Comments about Communication Approaches Outside of Commonly Understood Definitions

Auditory-Oral	
Professional	Comment
5	Oral could be like any mainstream child communicating orally or a deaf child. Mostly, in my experience, sort of moderate or mild loss using speech as their main communication method.
Sign Bilingual	
Professional	Comment
5	So, I take that to be BSL as their main language but also with, perhaps, some speech or some other communication method.
6	[In practice] I'm still trying to work out bilingual versus Total Communication
Total Communication	
Professional	Comment
1	Total Communication is an approach where you use the appropriate mixture of sign and speech for the particular children you're working with.
5	Total Communication is the one...that I've had most experience with where you're giving sign support, you're giving speech input, you're using all of the extra natural gesture. In most of the settings I've been in, it's through a Sign Supported English method.
5	So, using Signed Supported English as our Total Communication approach in my setting is really the best approach I think at the moment.

4.6 Parent Theme Three: Hierarchy of Language

The third and final research question asked if there was a hierarchy of language that sat as an unconscious bias, affecting practice of some professionals. At times during the interviews some comments directly linked to this question in terms of language expectations.

4.6.1 Expectations of Language

Comments coded into this section ranged from: working with families to support a realistic language approach for their child; professionals' views on parental choices; and professionals' expectations for a communication response. Some of these views highlight a potential bias.

Two of the six professionals expressed strong views about working with families, their concerns were that parents were often choosing not to expose their child to BSL (Table 13). These views incorporated insights from contact with families outside of this study.

Table 13: Expectations of Language: Comments Relating to Families

Comments Relating to Families	
Professional	Comment
6	[I explain it through asking]...how are we going to get to the brain right now? This is how much speech can get to the brain [gestured small amount], but this is how much sign [gestured large amount]. And sometimes there's some reassurances that the sign might support their speech later on. That kind of didn't reassure some parents and I say...if you do only speech now and they're really struggling to pick that up... they can have [only] 10% of the language that they could be having.
6	...but I think there's always still that hope that they're going to pick up the speech in the end. And I think that's where we often lose at secondary age, because...you've spent all this time on sign and [families are] ... waiting for this speech to kick in.
3	[we] are getting brainwashed parents they are panicking; I just want my child to have perfect speech ... I don't really want them to be deaf I just need them to be hearing. I expect them to speak and that's what they want. I don't know, maybe the doctors have told them that it's OK.
3	They put the parents' choice before their own children
3	[In a role outside of school] ...I teach some parents [BSL], and we teach friends sign language. But some of them are not coming to it, they just want speech, they don't want the sign.

Views from or about professionals within the setting appeared to show a bias relating to BSL competency. Interviews also highlighted the use and expectation for the use of SSE over BSL, with concerns raised about this leading to a dominant language at the expense of access (Table 14).

Table 14: Expectations of Language: Comments Relating to Professionals

Comments Relating to Professionals	
Professional	Comment
3	some hearing staff, they want the voice as well
2	I think it's that oralist thing, not always assuming that I should be the person in the chair, because I've got spoken language.
2	I would like to see more ToDs with a greater proficiency of BSL because I'm sometimes aware that if you speak and sign, sometimes some of the things that you say aren't communicated with your hands. And therefore, children might miss out on information. If...you're doing two things at the same time...sometimes one of them suffers. One of them is the dominant form of communication.

Interestingly, the insistence for the use of voice was justified by a different professional in terms of a holistic view of communication for the future, justifying the use of voice and lip patterns at an early age (Table 15).

Additionally, one professional perceived language progress with a child using some speech as superior to a child using BSL.

Table 15: Expectations of Language: Comments from Professionals

Comments from Professionals	
Professional	Comment
5	There are different expectations in different contexts definitely, but with all of mine right from the beginning...use your voice.
5	But if you project them ahead and think, OK, this is a six-year-old, but when he's 16, you want him to be able to interact with others...you want him to be able to be producing something using lip pattern in some way to give a hearing adult or a hearing peer [extra cues]...some of those children will fine tune that sound to be more meaningful and more clear...Others they might not, but they're giving cues to listeners

	in their future. So, I think right from the beginning, you've got to think where you're going in the long, long term.
1	...a child who has better access to speech, you sometimes feel that you can make progress with language better than you can with a profoundly deaf child who's...entirely reliant on sign.

4.7 Improvements in Practice

Professionals were asked their views on improving practice. Their responses included the preservation of BSL through the explicit use of full BSL in certain situations or at certain times of the day (Table 16).

Table 16: Improvements in Practice: Use of BSL by Staff

Use of BSL by Staff	
Professional	Comment
2	I would like to see more ToDs with a greater proficiency of BSL
2	[opportunities for full BSL exposure] ... something more like the RAD [Royal Association for Deaf People] signed stories. It would be something that is fully about visual communication and not about speech.

The need for greater opportunities to discuss progress and language development was highlighted (Table 17), confirming that professionals recognised the significance of this omission in current practice, this was also reflected in the language and communication section of the results.

Table 17: Improvements in Practice: Opportunities to Discuss Pupils' Language Development

Opportunities to discuss pupils' language development	
Professional	Comment
1	... if we were able to sit down regularly and go OK, where's [pupil] got to? Where's [pupil] got to? I've experienced this, I've experienced that. We get to do that in fits and starts, passing in the corridor. If, you know, two people who support a particular child happen to be in the office at the same time. But it's in passing, it's informal and a more structured version of that would mean we had that clearer picture.
1	Being fully staffed would help as well, wouldn't it...

1	...achieving that consistency through having a team...who will get the opportunity to have regular reviews would be the ideal. So, everyone's got the same clear picture of that child's development in their head.
4	I'd like to be able to have discussions with speech and language therapists, with the class teacher, talk about the development levels, talk about their vocabulary, their confidence, their sign and all of that together.

4.8 Summary of Results Section

This section has presented the results from semi-structured interviews with different professionals under three parent themes, highlighting their links with the initial three research questions.

In the first section, where the experiences, qualifications and roles of the different professionals are explored, the researcher found that deaf staff were seen as a valuable part of the team. The role and practice of the SaLT and QToD was not universally understood by others with specific regards to sign language development.

The next section, language and communication choices in practice, found that the professionals recognised the importance of families in developing sign language. As such, work to engage with families and to support them to become confident with signing is highly rated and facilitates better language development in their child. Where families do not engage with signing, concerns were raised about the lack of consistency of language environments and the potential negative impact this can have in future relationships between the child and their family.

The third section examined the possibility of the existence of a hierarchy of language. Professionals expressed concerns about the language expectations of families showing as well as the use of SSE over BSL at school within different learning contexts.

Finally, whilst examining improvements in practice the level of BSL competency and the preservation of opportunities for high quality BSL exposure were raised. Additionally, the importance of better communication between professionals to discuss the sign language development of each individual pupil.

5 Discussion

Extensive research has linked BSL development in school-aged children to literacy proficiency (Swanwick and Watson, 2007) and highlighted the importance of deaf role models in sign language development (Giaouri *et al.*, 2022; Hoskin, Herman and Woll, 2022; Fobi *et al.*, 2023). However, there is a lack of research looking solely at sign language development within the school setting. Given that many deaf children enter school with limited sign language skills (Hoskin, Herman and Woll, 2022; Joy, Ledger and Duncan, 2024) this requires further exploration. This research focuses on examining the understanding of, and respect for, the roles of others who work together supporting sign language development, the value placed on different languages and communication modes, and the potential for a hierarchy of language.

Participants recognised the challenge of developing BSL within the constraints of a mainstream environment, where the demands of a busy curriculum are present even within the EYFS. Additionally, the need for clear and concise training is a key priority within SEND settings given the financial constraints in the sector (Public Accounts Committee, 2025).

This research posed three research questions which were investigated using a qualitative description research approach, using semi-structured interviews and reflexive thematic analysis. Codes and themes were found during the analysis stage, and not during the project design stage. This meant that whilst some themes were anticipated, others were participant led. A clear example of this is the Family Influence code. Families was not a pre-defined area within the interview structure, however families were raised during initial interviews and were quickly established as an area needing exploring.

Through the analysis three parent themes emerged: Experience and Qualifications – The Effect on Practice; Language and Communication Choices within Practice; and Hierarchy of Language. These link directly to the original research questions.

Through the course of the discussion the researcher will, where possible, aim to answer these research questions, propose implications for practice and suggest further areas of study.

5.1 Experience and Qualifications – The Effect on Practice

The first research question asked how the views, experiences and training are understood and respected across the different professionals. This section will explore that area as well as examining the impact on an individual's perceptions and practice.

5.1.1 Language used to Describe Sign Language Development

Throughout the interviews it was evident that there is not shared terminology to discuss language development between the professionals. DOTDeaf training, where deaf practitioners are trained alongside specialist SaLT to be able to identify, discuss and provide mediated learning experiences in order to support areas of need, has gone some way to address this (Hoskin, Herman and Woll, 2022). However, this is not available for all professionals. This approach prioritises the training of deaf practitioners, but it should be noted here that none of those interviewed have had DOTDeaf training. There is a significant gap where a setting is without a DOTDeaf practitioner, or as in this case, a disadvantage for those without the training as it leaves them without the terms to discuss sign language development.

This lack of shared terminology was particularly evident in TA interviews. Most struggled to articulate their actions and the underlying theory, but by reviewing earlier observations, the researcher helped them to positively reflect on their practice. Behaviour management and turn taking to support better interactions with adults and peers were reported to be aspects of BSL development. Whilst these skills have not been directly referred to in the literature in relation to BSL development, they are an essential part of being school-ready (Mashburn and Pianta, 2006). Of those interviewed, TAs have the most contact with the young deaf learners as they support the children across the day in different aspects of their social and educational experience at school. Perhaps it is this holistic view of the child that led one of these professionals to link the development of sign to social and emotional maturity.

5.1.2 Strategies Used by Deaf Staff

Some good practice observed and discussed directly correlated with Gale and Martins' strategies (2024), deaf staff interviewed also described other strategies they

use, such as over exaggerated signing and the inclusion of lots of gesture to maintain interest, similar to the strategies observed in deaf parents (Spencer and Harris, 2005). The deaf professionals knew that they bring something to the role which is not easily replicated by hearing staff. Furthermore, hearing professionals presented a positive view of the unique skills that deaf staff bring to the role. Yet the deaf staff have yet to explicitly share this knowledge as an in-house formal training opportunity in line with the views of Gale et al (Hinton, 2016) (2021) and Rogers and Young (2011) cited in (Fobi *et al.*, 2023).

5.1.3 BSL Competency

In other settings, where BSL levels of supporting staff can be much lower (CRIDE, 2023) we have to question the guidance, or lack of, that is given to these professionals. Some rural settings might only support one deaf child, given the low incidence of deaf staff working in this role, these professionals are unlikely to have the benefit of working alongside a deaf role model. Even in provisions where BSL is a majority language, the new QToD standards only suggest BSL Level Three (Department for Education, 2023b) within three years of qualifying as sufficient. This would not provide exposure to the fluent and rich language required for age-appropriate language development (Hoskin, Herman and Woll, 2022; Zarchy, 2023; Joy, Ledger and Duncan, 2024).

For new teachers entering the profession of ToD, concerns must be raised about the robustness of ensuring BSL qualifications are completed. Once the trainee ToD has completed the MQ and BSL Level One, no further proof of BSL qualification is required to continue practice, despite further training being specified (Department for Education, 2023b). Clarity is needed to agree whose responsibility it is to ensure this additional training happens. Perhaps more importantly, given the national SEND funding crisis (Public Accounts Committee, 2025), clarity is needed regarding funding these qualifications. The status of QToD does not rely on further BSL training, so there is no clear motivator for the employer or employee. This situation leaves the progress of the young deaf learner at the mercy of the experience and qualification of the individual employed to support them and the pedagogy and quality of support and CPD provided by those governing the provision.

5.1.4 BSL Knowledge

A difference in the approach of the professionals was expected relating to experience and qualification (Goico and Montiegel, 2024), but in the interviews the correlation was not clear. Some professionals, with a lower level of professional training in deaf education, displayed high levels of understanding within areas such as different educational approaches and the development of early BSL.

The disparity between BSL competency of the ToD, SaLT and support staff could lead to a mismatch in approach, expectations and potentially target setting. The interviews confirmed Wilks and O'Neill's (2022) views that those with lower BSL skills tend to frame deaf children according to audiological status. As such, those children face adults' higher expectation of spoken language ability, so in some contexts, as seen within this research, BSL can be considered as 'not enough' as some staff ask for voice alongside sign. We should question if this demonstrates the existence of a bias towards spoken language.

5.1.5 The Role of the SaLT and ToD

The role of the SaLT was portrayed by other professionals as being biased towards the production of spoken English over BSL, which did not reflect what the SaLT viewed as their practice. It is interesting to note that of those interviewed, both deaf staff spent part/all of their education in an oral setting with SaLT input and although the comments about the use of spoken English over sign within therapy sessions were not only from these professionals, it is possible that the deaf professionals' personal experience has biased their view of speech and language therapy.

The role of the ToD was better understood by other professionals. Interestingly, neither the ToD or the other professionals suggested the development of BSL as an important part of the role, although SSE was linked to supporting English word order knowledge. The SaLT in this setting is a high level BSL user, but a BSL Level Two user would be considered as sufficient to enter the role as a specialist in deafness (Royal College of Speech and Language Therapists, 2024). This does leave us to question who is responsible for ensuring that sign language development is typical where BSL proficiency could be lacking, certainly lower than the deaf sign language users who are considered pivotal in providing full BSL exposure (Hoskin, Herman and Woll, 2022; Zarchy, 2023; Joy, Ledger and Duncan, 2024).

5.1.6 Summary of Section

Whilst good practice has been recognised, the lack of shared terminology used to discuss sign language development between professionals highlights lost opportunities for discussions around this good practice. Similarly, a lack of understanding between professionals about their roles with regards to sign language development has also been uncovered. Beyond the setting, vulnerabilities have been exposed in the training and ongoing support for QToD, and specialist SaLT.

5.2 Language and Communication Choices within Practice

The second research question centred around the value placed on different languages and communication modes by the professionals. Through the research it became clear that the role of families cannot be discounted. Families role and influence on practice will be explored within this section, as will the understanding of the different pedagogical approaches and finally the way in which these aspects are communicated across the team.

5.2.1 Families Role in BSL Development

The literature review reflects the importance of families within BSL development. It explores the research on the impact of early experiences from diagnosis (The Deaf People Association, 2022), the importance of early BSL exposure (Hoskin, Herman and Woll, 2022; Zarchy, 2023; Joy, Ledger and Duncan, 2024), the differences between BSL competency of deaf children with hearing and deaf families (Herman and Roy, 2006), and the importance of deaf role models (Fobi *et al.*, 2023; Joy, Ledger and Duncan, 2024). All of which influence the attitudes and decisions of the families when they come to choose a setting and thus the educational approach for their child.

It was noted in the interviews that some families need support and encouragement to engage with BSL. By working with the families and understanding their needs and learning styles, the professionals interviewed showed an understanding of the need to support the simulation of BSL into the families core values (Holcomb, 2013) resulting in greater success.

Whilst there is a high occurrence of BSL use by families in this research, the disparity between the home and school signing environments was noted by the professionals leading to a mismatch of language and skills (Zarchy, 2023). Even with the BSL qualifications held by the main care giver for the families involved, they will be unable to provide the same level of exposure to high quality BSL as a deaf child within a deaf signing family, and unless BSL is used by all members of the family, the accessibility is limited (Zarchy, 2023). This brings us to question if there should be a greater focus on prioritising exposure to high quality BSL within settings in order to bridge the language competency gap between deaf children of deaf families and deaf children of hearing families (Herman and Roy, 2006), reduce unwanted deficits in other areas (Zarchy, 2023) and support greater literacy proficiency (Swanwick and Watson, 2007).

5.2.2 Language Choice

Total Communication was understood by some professionals as being the use of SSE, rather than the use of defined language and communication tools within different contexts to support development. This is going to influence the expectations of language and communication modes held by the professionals. Framing the setting as using Total Communication, without providing a clear definition, does not protect the language space for minority languages (Wolbers, Holcomb and Hamman-Ortiz, 2023), nor does it allow for a flexible learning style for the individual to make conceptual and language learning gains.

In practice, these learners do have access to some high quality BSL across different points of the day, both by having direct interactions as well as observing the interactions between deaf professionals and deaf or hearing peers. Yet clarity is needed to support the pupils to recognise the different languages and modes used at different points and within different contexts across the school experience and to understand why these language choices have been made.

5.2.3 Language Expectations

Agreed expectations for language use for each young deaf learner had not been set through a formal procedure. However, it was recognised that this would be a beneficial change in practice to do so. Unfortunately, as one professional noted,

staffing shortages amidst the SEND crisis (Public Accounts Committee, 2025) makes this difficult to turn into a reality.

5.2.4 Decisions around Pedagogy

For those overseeing provisions, the absence of a national strategy means that local authorities, academies, and individual settings must determine their own pedagogical approaches and then be responsible for ensuring its high-quality implementation.

This raises concerns about whether decision-makers have the necessary qualifications to navigate what is an extremely complex issue, or if the squeezed budgets of local SEND services (Public Accounts Committee, 2025) become a driving force for decision making.

That isn't to say that a nationally enforced pedagogical approach is necessarily a suitable solution. It could be argued that deaf children need different approaches to meet their unique needs and to reflect the demographics of the setting. In the current SEND system where specialist education places are named for those with an Education and Health Care Plan (EHCP), parental choice is a huge factor.

Professionals have a duty to ensure that, where possible, a deaf cohort is present, so compatibility with parental preferences and the density of the local deaf population could be deciding factors for the pedagogical approach chosen.

5.2.5 Total Communication

Differences in defining a Total Communication approach within the setting were exposed. The impact on practice and potential confusion for staff, families and ultimately the learners is yet to be explored. Some considered Total Communication as consecutive communication with spoken English alongside sign (SSE), leaving questions about the presence of a dominant language and the lack of equality of access for all. Other professionals understood Total Communication as a 'toolbox' approach in line with Mayer (2015), using a variety of different languages, modes and strategies explicitly presented at distinct points across the day to support understanding and achievement. Settings need to agree an approach, a definition and support its practical application and share this with staff and families for a joined-up approach.

5.2.6 Summary of Section

Families play a pivotal role in language choices for their child. Supporting these families to embrace sign and understand their role in their child's development was recognised by the professionals and should remain an important part of the role of a deaf pupil provision.

Language choices and expectations within practice are intrinsically linked to the pedagogical approach of the setting, which once decided needs to be defined and shared.

5.3 Hierarchy of Language

The final research question proposed the possible existence of a hierarchy of language. This section summarises the literature surrounding the topic, the impact that a hierarchy could have with reference to family engagement and how differences in pedagogical approaches interplay with this hierarchy.

5.3.1 Language Bias in Families

The literature review points to an existence of a hierarchy of language, where spoken language is favoured over sign (Humphries *et al.*, 2022). From preconceptions resulting from a lack of interactions with people from the deaf community (Giaouri *et al.*, 2022), to the diagnosis and initial views shared by members of the medical profession (Goico and Montiegel, 2024), to misconceptions about intelligence in those using sign language (Singleton, Jones and Hanumantha, 2014), the language hierarchy is present.

A family preference for spoken language was also referred to within the interviews, perhaps due to a lack of acceptance of their child's deafness or embracing the medical view where providing audiological access through hearing aids or implantation would be able to support full access to spoken English. Persuading families to sign where there is a reluctance can be difficult for the professional to support as signing needs to be in line with core values (Fobi *et al.*, 2023). As the SaLT in this research noted, understanding the driver to help families to embrace the process is pivotal. Even when successful, families often hope for speech to follow sign. Whilst this is not an unrealistic expectation as sign can support the

development of speech (Humphries *et al.*, 2022; Wilks and O'Neill, 2022; Clark *et al.*, 2023), it is not always a reality.

Some families fail to engage in learning formal sign language. Where children do not go on to develop spoken language, families may only have simple transactional signs leaving them unable to communicate complex communication beyond basic needs. This can lead to feelings of isolation which ultimately will effect mental health (The Deaf People Association, 2022). Although this research focused on the professionals, there is clear evidence of the need to involve and encourage families at every step of the way to engage with BSL development. Professionals noted their part to play in this, through the understanding of families learning styles to involve them in the process and by sharing information about events and opportunities to engage with the deaf community.

5.3.2 Professionals' Perceptions of a Language Bias in Practice

Some professionals alluded to the existence of a hierarchy of language where SSE is prioritised over BSL in formal literacy teaching contexts. In SSE, sign is supporting spoken language, but spoken language remains the dominant form of communication, an example of education imposing the minority language (Hinton, 2016). Deaf children and adults will be missing some of the information conveyed as not everything will be signed, thus excluding deaf adults and children from full exposure in an accessible language for all.

Although critics could argue that the active choice for the use of spoken language is to ensure the deaf child has the broadest possible experience in a society where spoken language is more highly valued and is used and understood by the majority (Wilks and O'Neill, 2022), to the researcher this practice presents more as reinforcing the view that education is essentially ableist and audist (Goico and Montiegel, 2024).

This language hierarchy was also evident where professionals talked about their own, or others, insistence on children responding with voice alongside sign. This insistence does not allow for the equality and flexibility of translanguageing which supports conceptual and language learning (Wolbers, Holcomb and Hamman-Ortiz, 2023). Having explored the research identifying language deprivation where BSL

exposure is lacking and the subsequent deficits that can occur in cognition, social-emotional development, executive functioning and attention (Zarchy, 2023) as well as the effects this has on the proficiency of any future language learning (Mayberry, 2010), it seems counter-productive to set an expectation of a multi-modal response (using voice and sign). Surely, within the setting professionals should be accepting and celebrating a BSL response and capitalising on opportunities to develop BSL production, after all it is the responsibility of educators to ensure that a language delay does not build (Clark *et al.*, 2023) and provide opportunities to celebrate and promote the minority language (Wilks and O'Neill, 2022).

5.3.3 Summary of Section

A hierarchy of language is evident in both families' decisions and in the education setting. This can lead to a reluctance to engage with sign in the home as well as influencing the choice of education setting. A disparity between language use in the home and school is often found, and even where families engage with sign, there is often the hope for spoken language later on.

In practice, the understanding of Total Communication as the use of SSE can lead to reduced opportunities for use of and exposure to high quality BSL. In addition, opportunities will be missed to equally celebrate contributions in a shared language, leading to the presence of a dominant language which isn't accessible for all.

5.4 Strengths and Limitations

This research used purposive sampling to find participants for this exploratory research. As an MA Dissertation there were limits due to the timeframe and final word count so this research could only focus on one setting, however the results were still able to complement current literature and open questions for further research.

The researcher is known to the adults due to the convenience sampling, and is a Level 6 BSL user, so potential concerns about the accuracy of interview transcriptions for deaf staff was mitigated. Other studies working with deaf participants have used qualified BSL interpreters/translators to ensure validity of the resulting transcript (Hoskin, Herman and Woll, 2022) but this was beyond the

resources available for this study, instead deaf staff were offered the transcripts to review after interviews.

Observations of professionals working with the pupils were incorporated into the design to help stimulate discussion around working practises during the interviews. The time available, and the timing of the study, resulted in some of these observations taking place and notes subsequently made, as opposed to being videoed. However, this resulted in a less obtrusive method and still provided the discussion needed.

NVivo 14 was available for the research, whilst this can be a challenge for an inexperienced user, the supporting functions for data handling made it a worthwhile investment of time.

5.5 Future Study and Implications

The research highlighted training needs, the content of which has the potential to be beneficial for more than this setting alone. It also uncovered the need for future research and perhaps poses more questions than it answered.

The lack of a shared terminology to discuss sign language development was evident, which highlighted the need for training beyond that available for deaf staff and SaLT through the DOTDeaf training (Hoskin, 2017). Ideally the numbers of deaf staff working in deaf education would increase, but in the absence of a national drive to recruit, train and retain deaf staff into these roles, settings need to learn from these minority deaf adults within formal training contexts to promote better outcomes for young deaf learners. Research is needed about the nature of a deaf role model in a school setting, if this needs to be distinct from the presence of a deaf TA in the setting and if so, what this role needs to include in order for the learners to gain maximum benefit.

Opportunities to discuss expectations and progress in language and communication should be included within the information routinely shared between team members, including the ToD, SaLT and deaf and hearing TAs. In settings where professionals do not have the benefit of a large team with a high skill set, opportunities for externally provided professional supervision should be explored to ensure that the

best interests and development of the young deaf child is at the heart of language and communication decisions.

The pedagogical approach of a setting not only needs to be defined, it needs to be shared and understood by all professionals. Where a Total Communication approach is in place, the language and communication expectations for different contexts, differences in cognitive load of the task, and between different people needs to be clarified with staff and explicitly shared with the deaf learners (Mayer, 2015). Clarity is also needed about the different professionals and their role(s) for different areas of development and this should also be shared.

Research is needed to understand if signing deaf children are getting enough explicit exposure to BSL in order to develop sign language without disadvantage. More needs to be learnt about the correct balance between BSL, spoken English and SSE use within a Total Communication setting. In addition, understanding how and when code-switching skills are acquired in deaf children with deaf parents, will help to inform practice to support the development of this seemingly innate skill in deaf children with hearing parents, without leading to language confusion.

Although deaf and hearing staff referred to the use of spoken English over sign within speech and language therapy sessions, we need to determine the impact of the deaf professionals' personal experience with speech therapy and education, and examine the potential resulting bias. It is unclear from this research if this could also influence the deaf professionals' practice with deaf learners, another potential area for future study.

Finally, understanding the decision-making process leading to pedagogical and staffing decisions of settings within an academy, and the impact this has on the learners, is an area in need of urgent investigation.

6 Conclusion

The views and abilities of deaf staff were universally respected by the professionals interviewed. However, professional roles in relation to developing sign language were unclear. Clarity is needed for all staff to understand their roles and the roles of others, so that each part of the jigsaw can be understood in relation to its place within the bigger picture. Each professional needs the opportunity to share their role, from their perspective, and see it set within the roles of other professionals within a training opportunity, to fully value the different roles within one setting. As part of this process professionals should be encouraged to reflect on their own experiences and training which impacts their practice (Young, 2006) and what, if anything, they need to do to counter this.

The question of value assigned to different language and communication forms was dominated by the discussion surrounding the use of SSE and BSL. Some professionals were concerned about the use of SSE, while others justified it. Some of the concerns could be negated through the use of distinct times and situations where only high quality BSL is used (Mayer, 2015), but questions remain about the balance of SSE and BSL and how these dovetail within a packed curriculum. Which leaves us to question if a Total Communication approach can ever equally value all languages and communication approaches, or if the inevitability, as noted within these interviews, is that one form of communication becomes dominant at the expense of another.

A hierarchy of language was evident in the literature, impacting on the choices and actions of families. This hierarchy was also evident within this research impacting on language use and expectations of response. However, what was not clear, is whether the driver for spoken language over sign was a response to audism being prevalent in society (Goico and Montiegel, 2024), or there to reduce potential future negative biases that society tends to attribute to BSL users (Singleton, Jones and Hanumantha, 2014), or if another factor is at play. Either way, although hearing professionals interviewed respected the views and experiences of deaf professionals, in practice, BSL was not always given equal status.

This research has highlighted where clarity around professional roles and teaching pedagogy can impact practice. Where equal value is thought to be placed on languages within the setting, the variation in understanding of the pedagogical approach and the resulting current practice appears to undermine this. By investigating the relationship between exposure to BSL and SSE, and supporting BSL development alongside code-switching, we will be able to equip our deaf learners with greater sign language competency. Finally, through well-considered training, incorporating opportunities for self-reflection, we may be able to consider and counter the biases that professionals bring to their practice, either through societies influence or from personal experiences.

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Appendices

Appendix One: EC1A

UNIVERSITY OF HERTFORDSHIRE

FORM EC1A: APPLICATION FOR ETHICS APPROVAL OF A STUDY INVOLVING HUMAN PARTICIPANTS (Individual or Group Applications)

Please complete this form if you wish to undertake a study involving human participants.

Applicants are advised to refer to the Ethics Approval StudyNet Site and read the Guidance Notes (GN) before completing this form:

<http://www.studynet2.herts.ac.uk/ptl/common/ethics.nsf/Homepage?ReadForm>

Applicants are also advised to read the FAQ General Data Protection Regulation (GDPR) before completing this form.

<http://www.studynet2.herts.ac.uk/ptl/common/ethics.nsf/Frequently+Asked+Questions/4AD88CD88D0F3F2D8025829800300621>

Use of this form is mandatory [see UPR RE01, 'Studies Involving Human Participants', Sections 7.1-7.3]

Approval must be sought **and granted** before any investigation involving human participants begins [UPR RE01, S 4.4 (iii)]

Note: Supervisors should submit this form on behalf of their students.

Please submit this form and any accompanying documentation to the appropriate Ethics Committee with Delegated Authority (ECDA):

Health, Science, Engineering and Technology ECDA: hsetecda@herts.ac.uk or

Social Sciences, Arts and Humanities ECDA: ssahecda@herts.ac.uk

(If you require any further guidance, please contact either hsetecda@herts.ac.uk or ssahecda@herts.ac.uk)

Abbreviations: GN = Guidance Notes UPR = University Policies and Regulations

THE STUDY

Q1 Please give the title of the proposed study

The role of the professional and their perspectives of the roles of others in developing signed language in young deaf learners.

THE APPLICANT

Q2 Name of applicant/(principal) investigator (person undertaking this study)

Melanie Harrington

Student registration number/Staff number

24057700

Email address

Harringtonm@philip-southcote.surrey.sch.uk

Status:

☐ Undergraduate (Foundation)

☐ Undergraduate (BSc, BA)

☒ Postgraduate (taught)

☐ Postgraduate (research)

☐ Staff

☐ Other

If other, please provide details here:

[Click here to enter text.](#)

School/Department:

Social Sciences, Arts and Humanities

If application is from a student NOT based at University of Hertfordshire, please give the name of the partner institution: Mary Hare Course

Name of Programme (eg BSc (Hons) Computer Science): MA Deaf Education Studies

Module name and module code: Research Methods and Dissertation Module 7FHE1108

Name of Supervisor: Sarah Davis Supervisor's email: s.davis@maryhare.org.uk

Name of Module Leader if applicant is undertaking a taught programme/module:

Imran Mulla

Names and student/staff numbers for any additional investigators involved in this study (students should read GN Sections 1.5 and 2.2.1 concerning responsibilities of all members of the group)

Is this study being conducted in collaboration with another university or institution and/or does it involve working with colleagues from another institution?

☐ Yes ☒ No

If yes, provide details here:

DETAILS OF THE PROPOSED STUDY

Q3 Please give a short synopsis of your proposed study, stating its aims and highlighting where these aims relate to the use of human participants (See GN 2.2.3)

To investigate the perspectives of professionals who work with young deaf children aged between 4-6 within a primary education setting within a deaf provision based in a mainstream school with regards to their role in the development of signed language. To investigate what each professional views as the role of other professionals in this development.

Q4 Please give a brief explanation of the design of the study and the methods and procedures used. You should clearly state the nature of the involvement the human participants will have in your proposed study and the extent of their commitment. Ensure you provide sufficient detail for the Committee to, particularly in relation to the human participants. Refer to any Standard Operating Procedures SOPs under which you are operating here. (See GN 2.2.4).

The study will take place in The Lighthouse Specialist Centre for Deaf Children at Guildford Grove School, which is my normal place of work for two days a week. As such I hold an Enhanced DBS and the children involved in the study are familiar to me. I will be operating within the standard operating procedures including, but not limited to Health and Safety and Safeguarding procedures.

The study will consist of short, videoed observations of individual professionals working directly with the young deaf child. These professionals may include, but is not limited to, deaf Teaching Assistants, Specialist Teaching Assistants working with deaf children, Teachers of the Deaf (qualified and unqualified) and Speech and Language Therapists whilst they are working with individual signing deaf children in Yr R and Yr 1.

This will be followed by a series of interviews conducted with the professionals.

Videos will be viewed prior to interviews and different aspects of the communication and interactions will be noted and grouped according to the themes arising from the literature review and the observed practice. The videoed observations will be available as a discussion point during the interviews.

Videos will be recorded on a work ipad access to which is restricted with a code as per the school policies and has been agreed by the Head Teacher of Guildford Grove School.

The interview will be semi-structured, and an interview schedule has been attached. Interviews will be transcribed using Teams transcript function and then checked for accuracy by myself.

Where an interview is with a deaf member of staff, I will transcribe the interview and the professional will be given a chance to review the transcript for accuracy before it is used. I hold a BSL Signature Level 6 Qualification and work with these deaf staff on a regular basis.

Interviews will take place at the normal place of work for the professionals within the school's usual opening hours.

Interviews will be recorded on a work ipad access to which is restricted with a code as per the school policies and has been agreed by the Head Teacher of Guildford Grove School.

Interviews will be saved on the University OneDrive for the duration of the study and then will be deleted after completion of the study and no later than 31st May 2025.

The total of deaf children included in this study is expected to be between 4-6. Data about the deaf children will be collected from professionals involved, with the parents' permission. This information will cover diagnosis, audiology records, language used at home and contact with different professionals and agencies before starting school. All data will be anonymised and then stored on the University OneDrive account which is password protected.

The total number of professionals involved in this study is expected to be between 6-8.

All professionals involved in this study are working within their normal work setting and so hold an Enhanced DBS certificate and are known to the young people whom they are working with.

Q5 Does the study involve the administration of substances?

☐ Yes ☒ No

PLEASE NOTE: If you have answered yes to this question you must ensure that the study would not be considered a clinical trial of an investigational medical product. To help you, please refer to the link below from the Medicines and Healthcare Products Regulatory Agency:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/317952/Algothrim.pdf

To help you determine whether NHS REC approval is required, you may wish to consult the Health Research Authority (HRA) decision tool: <http://www.hra-decisiontools.org.uk/ethics/>

If your study is considered a clinical trial and it is decided that ethical approval will be sought from the HRA, please stop completing this form and use Form EC1D, 'NHS Protocol Registration Request'; you should also seek guidance from Research Sponsorship.

I confirm that I have referred to the Medicines and Healthcare Products Regulatory Agency information and confirm that that my study is not considered a clinical trial of a medicinal product.

.... Please type your name here: Click here to enter text.

Date: Click here to enter a date.

Q6.1 Please give the starting date for your recruitment and data collection: As soon as ethics is approved

Q6.2 Please give the finishing date for your data collection: 31st May 2025
(For meaning of 'starting date' and 'finishing date', see GN 2.2.6)

Q7.1 Where will the study take place?

Observations – Lighthouse Specialist Centre,
Guildford Grove School
Interviews – In person Guildford Grove School

Please refer to the Guidance Notes (GN 2.2.7) which set out clearly what permissions are required;

Please tick all the statements below which apply to this study

Q7.2 Permissions

This question is about two types of permission you may need to obtain. Depending on the study you may need more than one of each of these:

- i Permission to access a particular group or groups of participants to respond to your study
- ii Permission to use a particular premises or location in which you wish to conduct your study

If your study involves minors/vulnerable participants, please refer to Q18 to ensure you comply with the University's requirement regarding Disclosure and Barring Service clearance.

TICK THE APPROPRIATE BOXES IN EACH COLUMN

(i) Permission to access participants		(ii) Permission to use premises/location	
(tick)		(tick)	
	I confirm that I have obtained permission to access my intended group of participants and that the permission is attached to this application		Permission has been obtained to carry out the study on University premises in areas outside the Schools and the agreement is attached to this application.
✓	I have yet to obtain permission but I understand that this will be necessary before I commence my study. <u>For student applicants only:</u> I understand that the original copies of the permission letters must be verified by my supervisor before data collection commences		Permission has been obtained from an off-campus location to carry out the study on their premises and the agreement is attached to this application
✓	This study involves working with minors/vulnerable participants. I/we have obtained permission from the organisation (including UH/UH Partner Institutions when appropriate) in which the study is to take place and which is responsible for the minors/vulnerable participants. The permission states the DBS requirements of the organisation for this study and confirms I/we have satisfied their DBS requirements where necessary	✓	Permission has been sought. <u>For student applicants only:</u> I understand that the original copies of the permission must be verified by my supervisor before data collection commences
	Permission is not required for my study. Please explain why:		Permission is not required for my study. Please explain why:

HARMS, HAZARDS AND RISKS

Q8.1 It might be appropriate to conduct a risk assessment (in respect of the hazards/risks affecting both the participants and/or investigators). **Please use form EC5, Harms, Hazards and Risks, if the answer to any of the questions below is 'yes'.**

If you are required to complete and submit a School-specific risk assessment (in accordance with the requirements of the originating School) it is acceptable to make a cross-reference from this document to Form EC5 in order not to have to repeat the information twice.

Will this study involve any of the following?

Invasive Procedures/administration of any substance/s? ☐ YES ☒ NO

IF 'YES' TO THE ABOVE PLEASE COMPLETE EC1 APPENDIX 1 AS WELL AND INCLUDE IT WITH YOUR APPLICATION

Are there potential hazards to participant/investigator(s) ☐ YES ☒ NO
from the proposed study? (Physical/Emotional or other non-physical harm)

Will or could aftercare and/or support be needed by participants? ☐ YES ☒ NO

Q8.2 Is the study being conducted off-campus (i.e. not at UH/UH Partner?) ☒YES ☐NO

It might be appropriate to conduct a risk assessment of the proposed location for your study (in respect of the hazards/risks affecting both the participants and/or investigators) (this might be relevant for on-campus locations as well). Please use Form EC5 and, if required, a School-specific risk assessment (See GN 2.2.8 of the Guidance Notes).

If you do not consider it necessary to submit a risk assessment, please give your reasons:

An EC5 will be completed due to the nature of the face-to-face research.

ABOUT YOUR PARTICIPANTS

Q9 Please give a brief description of the kind of people you hope/intend to have as participants, for instance, a sample of the general population, University students, people affected by a particular medical condition, children within a given age group, employees of a particular firm, people who support a particular political party, and state whether there are any upper or lower age restrictions.

- Teachers of the Deaf (these may be qualified or unqualified) and Specialist Teaching Assistants who are working at The Lighthouse Specialist Centre for Deaf Children.
- Speech and Language Therapists with a Specialism in Deafness and who are employed by Surrey County Council in this position.
- Deaf children who are in Yr R – 1 (aged between 4-6) and meet the criteria to be placed at The Lighthouse. The children included in this study all use signed language as part of their daily communication mode and use signing at school. The children may or may not have diagnosed additional needs.

Q10 Please state here the maximum number of participants you hope will participate in your study. Please indicate the maximum numbers of participants for **each** method of data collection.

Observations – 6
Pupil data collection – 6
Interviews - 15

Q11 By completing this form, you are indicating that you are reasonably sure that you will be successful in obtaining the number of participants which you hope/intend to recruit. Please outline here your recruitment (sampling) method and how you will advertise your study. (See GN 2.2.9).

Convenience sample based at my place of work.

The deaf children are from the earliest year groups with emerging BSL skills. There are 6 children in Yr R and Yr 1.

Teachers of the Deaf (with and without the Mandatory Qualification for Teachers of the Deaf) who work regularly with these children or who worked with them last academic year. There are two ToD who meet this criteria.

Specialist Speech and Language Therapist who has signing skills and works with signing children within the setting. There is one SaLT who meets these criteria.

Deaf Teaching Assistants who regularly working with these children in their setting. There are two Deaf TA who meet these criteria.

Specialist Teaching Assistants with a BSL Level 2 or above who regularly work with these children in their setting. There are 6 TA who meet these criteria.

CONFIDENTIALITY AND CONSENT

(For guidance on issues relating to consent, see GN 2.2.10, GN 3.1 and UPR RE01, SS 2.3 and 2.4 and the Ethics Approval StudyNet Site FAQs)

Q12 How will you obtain consent from the participants? Please explain the consent process for each method of data collection identified in Q4

☒ Express/explicit consent using an EC3 Consent Form and an EC6 Participant Information Sheet (or equivalent documentation)

☒ Consent by proxy (for example, given by parent/guardian)

Use this space to describe how consent is to be obtained and recorded for each method of data collection. The information you give must be sufficient to enable the Committee to understand exactly what it is that prospective participants are being asked to agree to.

Express/explicit consent –

Professionals will be given an EC6 for details about the study and their involvement. They will sign an EC3 to show their consent.

These forms will be scanned and stored on the OneDrive linked to my University Email address which is password protected. This will be deleted at the end of the study and no later than May 2025.

The original copy will be shredded after a scanned copy is saved.

Consent by proxy -

Parents will be given an EC6 for details about the study and their child's involvement. They will sign an EC4 to show consent for their child to take part.

If you do not intend to obtain consent from participants please explain why it is considered unnecessary or impossible or otherwise inappropriate to seek consent.

N/A

Q13 If the participant is a minor (under 18 years of age) or is unable for any reason to give full consent on their own, state here whose consent will be obtained and how? (See especially GN 3.6 and 3.7)

Consent will be obtained via an EC4

Q14.1 Will anyone other than yourself and the participants be present with you when conducting this study? (See GN 2.2.10)

☐ Yes ☒ NO

If YES, please state the relationship between anyone else who is present other than the applicant and/or participants (eg health professional, parent/guardian of the participant).

Q14.2 Will the proposed study be conducted in private?

☒ YES ☐ NO

If 'No', what steps will be taken to ensure confidentiality of the participants' information. (See GN 2.2.10):

Q15.1 Are personal data of any sort (such as name, age, gender, occupation, contact details or images) to be obtained from or in respect of any participant? (See GN 2.2.11) (You will be required to adhere to the arrangements declared in this application concerning confidentiality of data and its storage. The Participant Information Sheet (Form EC6 or equivalent) must explain the arrangements clearly.)

☒ YES ☐ NO

If YES, give details of personal data to be gathered and indicate how it will be stored.

Interview participants information will be collected to distinguish between job roles, experience and qualifications.

Pupils data will be collected to distinguish between level of deafness, age of diagnosis, language choice at home and school and type of audiological aid and usage.

Participants will be allocated a random letter which they will be referred to throughout the study to preserve anonymity.

The data will be anonymised and stored on the University One Drive and destroyed once the dissertation is completed which will be no later than May 2025.

PLEASE NOTE: If you are processing personal information you MUST consider whether you need to complete a Data Protection Impact Assessment (DPIA). Please read the DPIA guidance available from the FAQ section of the UH Ethics Approval StudyNet site:

<http://www.studynet2.herts.ac.uk/ptl/common/ethics.nsf/Frequently+Asked+Questions/935D97CDBC546E69802583A9005213A6>

If you need to complete one, please find the DPIA template in the University's website [here](#)

The DPIA must be completed in consultation with the University's Data Protection Officer and submitted with your application for ethics approval.

Will you be making recordings?

☒ YES ☐ NO

If YES, give details of the types of recordings to be made and describe how and where they will be securely stored.

Observations – these will be recorded using the school Ipad which has been allocated to me as a teacher, it is protected with a password as per the school's policies. They will be stored within teams during analysis and will be deleted after the study has been completed, this will be no later than the 31st May 2025.

Interviews – these will be recorded using the school ipad which has been allocated to me as a teacher, it is protected with a password as per the school's policies. They will be stored within teams during analysis and will be deleted after the study has been completed, this will be no later than the 31st May 2025. The Head Teacher has given permission for this.

The interviews will be transcribed using the teams transcription software for spoken interviews. I will complete a manual transcription of the BSL interviews.

Transcripts of the interviews will be saved on the University One Drive account.

Q15.2 If you have made a YES response to any part of Q15.1, please state what steps will be taken to prevent or regulate access to personal data and/or recordings beyond the immediate investigative team, as indicated in the Participant Information Sheet.

All information will be stored on the University One Drive. No hard copies of data will be kept.

Any data stored will be discarded securely on completion and submission of the dissertation and following the exam board confirmation of results no later than May 2025, and in accordance with the Data Protection policies of the University of Hertfordshire.

Indicate what assurances will be given to participants about the security of, and access to, personal data and/or recordings, as indicated in the Participant Information Sheet.

Participants will be informed that their data will be anonymised prior to storage and that all information will be stored on the University One Drive account. All data and recordings will be deleted in accordance with Data Protection policies of the University of Hertfordshire.

State as far as you are able to do so how long personal data and/or recordings collected/made during the study will be retained and what arrangements have been made for its/their secure storage and destruction, as indicated in the Participant Information Sheet.

Data will be anonymised and stored on the University OneDrive which is password protected. All data and recordings will be deleted at the end of the study and no later than May 2025.

Q15.3 Will data be anonymised prior to storage? ☒ YES ☐ NO

Q16 Is it intended (or possible) that data might be used beyond the present study? (See GN 2.2.10) ☐ YES ☒ NO

If YES, please indicate the kind of further use that is intended (or which may be possible).

If NO, will the data be kept for a set period and then destroyed under secure conditions? ☒ Yes ☐ NO

If NO, please explain why not:

Q17 Consent Forms: what arrangements have been made for the storage of Consent Forms and for how long?

Any completed forms will be stored securely on the University One Drive Account and deleted no later than May 2025.

Q18 If the activity/activities involve work with children and/or vulnerable adults satisfactory Disclosure and Barring Service (DBS) clearance may be required by investigators. You are required to check with the organisation (including UH/UH Partners where appropriate) responsible for the minors/vulnerable participants whether or not they require DBS clearance.

Any permission from the organisation confirming their approval for you to undertake the activities with the children/vulnerable group for which they are responsible should make specific reference to any DBS requirements they impose and their permission letter/email must be included with your application.

More information is available via the DBS website -
<https://www.gov.uk/government/organisations/disclosure-and-barring-service>

REWARDS

Q19.1 Are you receiving any financial or other reward connected with this study? (See GN 2.2.14 and UPR RE01, S 2.3)

☐ YES ☒ NO

If YES, give details here:

[Click here to enter text.](#)

Q19.2 Are participants going to receive any financial or other reward connected with the study? (Please note that the University does not allow participants to be given a financial inducement.) (See UPR RE01, S 2.3)

☐ YES ☒ NO

If YES, provide details here:

[Click here to enter text.](#)

Q19.3 Will anybody else (including any other members of the investigative team) receive any financial or other reward connected with this study?

☐ YES ☒ NO

If YES, provide details here:

[Click here to enter text.](#)

OTHER RELEVANT MATTERS

Q20 Enter here anything else you want to say in support of your application, or which you believe may assist the Committee in reaching its decision.

No additional comments

DOCUMENTS TO BE ATTACHED

Please indicate below which documents are attached to this application:

- ☒ Permission to access groups of participants
- ☐ Permission to use University premises beyond areas of School
- ☒ Permission from off-campus location(s) to be used to conduct this study
- ☐ Form EC5 (Harms, Hazards and Risks: assessment and mitigation)
- ☒ Consent Form (See Form EC3/EC4)
- ☒ Form EC6 (Participant Info Sheet)
- ☐ Data Protection Impact Assessment (DPIA)
- ☒ A copy of the proposed questionnaire and/or interview schedule (if appropriate for this study). For unstructured methods, please provide details of the subject areas that will be covered and any boundaries that have been agreed with your Supervisor

☐ Any other relevant documents, such as a debrief, meeting report. Please provide details here:

[Click here to enter text.](#)

DECLARATIONS

1 DECLARATION BY APPLICANT

1. I undertake, to the best of my ability, to abide by UPR RE01, 'Studies Involving the Use of Human Participants', in carrying out the study.
2. I undertake to explain the nature of the study and all possible risks to potential participants,
3. Data relating to participants will be handled with great care. No data relating to named or identifiable participants will be passed on to others without the written consent of the participants concerned, unless they have already consented to such sharing of data when they agreed to take part in the study.
4. All participants will be informed **(a)** that they are not obliged to take part in the study, and **(b)** that they may withdraw at any time without disadvantage or having to give a reason.

(NOTE: Where the participant is a minor or is otherwise unable, for any reason, to give full consent on their own, references here to participants being given an explanation or information, or being asked to give their consent, are to be understood as referring to the person giving consent on their behalf. (See Q 12; also GN Pt. 3, and especially 3.6 & 3.7))

Enter your name here: Melanie Harrington Date 01/10/2024

2. **GROUP APPLICATION**

(If you are making this application on behalf of a group of students/staff, please complete this section as well)

I confirm that I have agreement of the other members of the group to sign this declaration on their behalf

Enter your name here: Click here to enter text. Date Click here to enter a date.

DECLARATION BY SUPERVISOR (see GN 2.1.6)

I confirm that the proposed study has been appropriately vetted within the School in respect of its aims and methods; that I have discussed this application for Ethics Committee approval with the applicant and approve its submission; that I accept responsibility for guiding the applicant so as to ensure compliance with the terms of the protocol and with any applicable ethical code(s); and that if there are conditions of the approval, they have been met.

Enter your name here: S.J. Davis Date 02/10/2024

Appendix Two: EC3

UNIVERSITY OF HERTFORDSHIRE ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS (‘ETHICS COMMITTEE’)

FORM EC3 CONSENT FORM FOR STUDIES INVOLVING HUMAN PARTICIPANTS

I, the undersigned [*please give your name here, in BLOCK CAPITALS*]

.....
of [*please give contact details here, sufficient to enable the investigator to get in touch with you, such as a postal or email address*]

.....
hereby freely agree to take part in the study entitled :
The role of the professional and their perspectives of the roles of others in developing signed language in young deaf learners.

.....
(UH Protocol number : SLE/SF/CP/06206)

1 I confirm that I have been given a Participant Information Sheet (a copy of which is attached to this form) giving particulars of the study, including its aim(s), methods and design, the names and contact details of key people and, as appropriate, the risks and potential benefits, how the information collected will be stored and for how long, and any plans for follow-up studies that might involve further approaches to participants. I have also been informed of how my personal information on this form will be stored and for how long. I have been given details of my involvement in the study. I have been told that in the event of any significant change to the aim(s) or design of the study I will be informed, and asked to renew my consent to participate in it.

2 I have been assured that I may withdraw from the study at any time without disadvantage or having to give a reason.

3 In giving my consent to participate in this study, I understand that voice, video or photo-recording will take place and I have been informed of how/whether this recording will be transmitted/displayed.

4 I have been told how information relating to me (data obtained in the course of the study, and data provided by me about myself) will be handled: how it will be kept secure, who will have access to it, and how it will or may be used, including the possibility of anonymised data being deposited in a repository with open access (freely available).

5 I understand that if there is any revelation of unlawful activity or any indication of non-medical circumstances that would or has put others at risk, the University may refer the matter to the appropriate authorities.

Signature of participant.....Date.....

Signature of (principal)
investigator.....Date.....

Name of (principal) investigator MELANIE HARRINGTON
.....

Appendix Three: EC4

UNIVERSITY OF HERTFORDSHIRE ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS (‘ETHICS COMMITTEE’)

FORM EC4 CONSENT FORM FOR STUDIES INVOLVING HUMAN PARTICIPANTS FOR USE WHERE THE PROPOSED PARTICIPANTS ARE MINORS, OR ARE OTHERWISE UNABLE TO GIVE INFORMED CONSENT ON THEIR OWN BEHALF

I, the undersigned *[please give your name here, in BLOCK CAPITALS]*

.....
of *[please give contact details here, sufficient to enable the investigator to get in touch with you, such as a postal or email address]*

.....
hereby freely give approval for *[please give name of participant here, in BLOCK CAPITALS]*

.....
to take part in the study entitled

The role of the professional and their perspectives of the roles of others in developing signed language in young deaf learners.

(UH Protocol number SLE/SF/CP/06206)

1 I confirm that I have been given a Participant Information Sheet (a copy of which is attached to this form) giving particulars of the study, including its aim(s), methods and design, the names and contact details of key people and, as appropriate, the risks and potential benefits, how the information collected will be stored and for how long, and any plans for follow-up studies that might involve further approaches to participants. I have also been informed of how my personal information on this form will be stored and for how long. I have been given details of his/her involvement in the study. I have been told that in the event of any significant change to the aim(s) or design of the study I will be informed and asked to renew my consent for him/her to participate in it.

2 I have been assured that he/she may withdraw from the study, and that I may withdraw my permission for him/her to continue to be involved in the study, at any time without disadvantage to him/her or to myself or having to give a reason.

3 In giving my consent to participate in this study, I understand that video recording will take place, and I have been informed that this will not be shared with anyone else.

4 I have been told how information relating to him/her (data obtained in the course of the study, and data provided by me, or by him/her, about him/herself) will be handled: how it will be kept secure, who will have access to it, and how it will or may be used.

5 I have been told that I may at some time in the future be contacted again in connection with this or another study.

6 I declare that I am an appropriate person to give consent on his/her behalf, and that I am aware of my responsibility for protecting his/her interests.

Signature of person giving consent

.....Date.....

Relationship to participant

.....

Signature of (principal) investigator

.....Date.....

Name of (principal) investigator **MELANIE HARRINGTON**

.....

Appendix Four: EC5

UNIVERSITY OF HERTFORDSHIRE ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS (‘ETHICS COMMITTEE’)

FORM EC5 – HARMS, HAZARDS AND RISKS: ASSESSMENT AND MITIGATION

Name of applicant: : Melanie Harrington Date of assessment: 9/10/24

Title of Study/Activity: The role of the professional and their perspectives of the roles of others in developing signed language in young deaf learners.

Please see attached : GGR Health and Safety Policy Local Arrangements Autumn 2023

Activity Description					
1. IDENTIFY RISKS/HAZARDS	2. WHO COULD BE HARMED & HOW?		3. EVALUATE THE RISKS		4. ACTION NEEDED
<p><u>Activities/tasks and associated hazards</u> Describe the activities involved in the study and any associated risks/ hazards, both physical and emotional, resulting from the study. Consider the risks to participants/the research team/members of the public.</p> <p>In respect of any equipment to be used read manufacturer's instructions and note any hazards that arise, particularly from incorrect use.)</p>	<p><u>Who is at risk?</u> e.g. participants, investigators, other people at the location, the owner / manager / workers at the location etc.</p>	<p><u>How could they be harmed?</u> What sort of accident could occur, eg trips, slips, falls, lifting equipment etc, handling chemical substances, use of invasive procedures and correct disposal of equipment etc. What type of injury is likely? Could the study cause discomfort or distress of a mental or emotional character to participants and/or investigators? What is the nature of any discomfort or distress of a mental or emotional character that you might anticipate?</p>	<p><u>Are there any precautions currently in place to prevent the hazard or minimise adverse effects?</u> Are there standard operating procedures or rules for the premises? Have there been agreed levels of supervision of the study? Will trained medical staff be present? Etc/</p>	<p><u>Are there any risks that are not controlled or not adequately controlled?</u></p>	<p><u>List the action that needs to be taken to reduce/manage the risks arising from your study</u> for example, provision of medical support/aftercare, precautions to be put in place to avoid or minimise risk or adverse effects NOTE: medical or other aftercare and/or support must be made available for participants and/or investigator(s) who require it.</p>
<p>Investigator is an agent for the spread of infection including COVID 19.</p>	<p>Children and staff Families Education Sector</p>	<p>Children and staff are exposed to contracting the virus. Families, if an outbreak is triggered that impacts on wider school community, parents / local area etc. Education Sector, in the case of infection outbreaks;</p>	<p>Investigator is aware of their potential to spread infection and their responsibility to rigorously follow sensible and proportionate control measures. Investigator has read and agrees to abide by the</p>	<p>Risks can be minimised, but not completely eradicated.</p>	<p>Schools are rigorous about their response to suspected cases, and where a child or member of school staff is symptomatic the investigator will not work with them nor provide support. If the investigator has a family member who is self-isolating, investigator should contact the school they had planned to visit to</p>

		risk of interruption to education	<p>government guidance contained within <u>People with symptoms of a respiratory infection including COVID-19 - GOV.UK (www.gov.uk)</u></p> <p>This includes working home if symptoms are present, or if that is not possible agreeing options with the employer (school).</p> <p>See also, school policy section 3.30 entitled Infectious Diseases.</p>		<p>make them aware of the situation and allow the school to decide if the visit should go ahead or not.</p> <p>The investigator will always sign in on arrival to the school where the study is taking place.</p> <p>In addition to the policy, ensure that there is adequate ventilation in the area(s) of the videoed observations and interviews take place in order to stay within the current government guideline for infectious diseases including COVID 19.</p>
<p>Videoed observations of pupils and their interactions with staff</p> <p>Interviews</p>	<p>Children and staff</p> <p>Investigator</p>	<p>Fire</p> <p>Other emergency arrangements</p>	<p>The investigator and adult participants are school staff and have had the appropriate training given by the school with regards to fire and lockdown procedures.</p> <p>The children are educated at the school where the videoed observations are taking place and as such school staff with guide them, as per the school policies and procedures, to the points of safety as needed.</p> <p>See also school policy section 3.6 entitled Fire Evacuation and other Emergency Arrangements</p>	No	<p>In the event of a fire, lock down or any other emergency procedure the videoed observation/interview will be immediately halted by the investigator in order to focus on the school agreed policies and procedures to ensure safety for all pupils and staff.</p> <p>In the event of a fire, lock down or any other emergency procedure the investigator will ensure that deaf staff or children are aware that the videoing has been halted and will be alerted to the emergency incident as per the information in the individual PEEPS.</p>

			<p>The investigator is aware of the staff and students for which Individual PEEPS (Personal Emergency Evacuation Plans) are in place for. The investigator will ensure that they are aware of the specific arrangements for the individuals and will follow the procedures in place in the event of any emergency situation.</p>		
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<p>Signed by applicant: M. Harrington</p>	<p>Dated: 15/10/24</p>
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Appendix Five: EC6 - Professionals

UNIVERSITY OF HERTFORDSHIRE

ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS (‘ETHICS COMMITTEE’)

FORM EC6: PARTICIPANT INFORMATION SHEET : Professionals

1 Title of study

The role of the professional and their perspectives of the roles of others in developing signed language in young deaf learners

2 Introduction

You are being invited to take part in a study. Before you decide whether to do so, it is important that you understand the study that is being undertaken and what your involvement will include. Please take the time to read the following information carefully and discuss it with others if you wish. Do not hesitate to ask us anything that is not clear or for any further information you would like to help you make your decision. Please do take your time to decide whether or not you wish to take part. The University’s regulation, UPR RE01, 'Studies Involving the Use of Human Participants' can be accessed via this link:

<https://www.herts.ac.uk/about-us/governance/university-policies-and-regulations-uprs/uprs>
(after accessing this website, scroll down to Letter S where you will find the regulation)

Thank you for reading this.

3 What is the purpose of this study?

To investigate the perspectives of professionals who work with young deaf children within an education setting with regards to their role in the development of signed language.

To investigate what each professional views as the role of other professionals and how others support the development of signed language.

4 Do I have to take part?

It is completely up to you whether or not you decide to take part in this study. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. Agreeing to join the study does not mean that you have to complete it. You are free to withdraw at any stage without giving a reason. A decision to withdraw at any time, or a decision not to take part at all, will not effect any treatment/care that you may receive (should this be relevant).

5 Are there any age or other restrictions that may prevent me from participating?

There are no restrictions that will prevent you from participating.

6 How long will my part in the study take?

If you decide to take part in this study, you will be involved in it for a maximum of 2 terms. The initial filming will take place during your normal working hours, the interview, which will be no longer than one hour. There may be follow up interview questions to clarify information from the interview, this would be done via email. Deaf participants will be given the opportunity to check my transcript of the interview to ensure that it is a true representation of our conversation. Your involvement will finish no later than May 2025.

7 What will happen to me if I take part?

The first thing to happen will be for a short video to be filmed of you working with one of the deaf children that you support as part of your normal way of working.

After that, we will arrange an interview, outside of your usual work hours, to discuss your role and how you support deaf children with their sign language development. We may review part or all of the video to support our discussions. The interview will be recorded on Mel Harington's work IPad and will be stored there protected by a password as per the school regulations. The interview will be transcribed and the transcription will be stored on the University OneDrive account. All information relating to the interview will be anonymised.

If the interview is being conducted in BSL there will be an opportunity to review the transcript of the interview to ensure that it has been translated in a way which reflects your views, opinions and perspectives.

8 What are the possible disadvantages, risks or side effects of taking part?

There are no known risks from taking part in this study. All information will remain anonymous.

9 What are the possible benefits of taking part?

This can provide an opportunity to have your views heard, to help shape future training and to share your views with the wider teaching team.

10 How will my taking part in this study be kept confidential?

All personal data will be stored electronically in a secure, password protected file and destroyed at the end of the completed dissertation and the subsequent moderation process, this will be no later than August 2025.

The data stored will be anonymised, this means that your name will not be kept on any files relating to this dissertation.

11 Audio-visual material

Videos of adults working with children will be kept for the duration of the interview cycle and any subsequent discussions. Any notes or coding from these will be stored electronically until the completion of the research and the subsequent moderation process, it will then be destroyed. This will be no later than August 2025.

The interviews will be recorded, once they have been transcribed, the recordings will be destroyed. The transcriptions will be stored electronically until the completion of the research and the subsequent moderation process which will be no later than August 2025. It will then destroyed.

12 What will happen to the data collected within this study?

- The data collected will be stored electronically, in a password-protected environment until the end of the dissertation and the subsequent moderation process. It will then be destroyed under secure conditions no later than August 2025.
- The data will be anonymised prior to storage.

13 Will the data be required for use in further studies?

The data will not be used in any further studies.

14 Who has reviewed this study?

The University of Hertfordshire Social Sciences, Arts and Humanities Ethics Committee with Delegated Authority

The UH protocol number is SLE/SF/CP/06206

15 Factors that might put others at risk

Please note that if, during the study, any medical conditions or non-medical circumstances such as unlawful activity become apparent that might or had put others at risk, the University may refer the matter to the appropriate authorities and, under such circumstances, you will be withdrawn from the study.

16 Who can I contact if I have any questions?

If you would like further information or would like to discuss any details personally, please get in touch with me, Melanie Harrington, in writing, by phone via the school or by email: mh24agu@herts.ac.uk
Alternatively, you can contact my dissertation supervisor, Sarah Davis on: s.davis@maryhare.org.uk

Although we hope it is not the case, if you have any complaints or concerns about any aspect of the way you have been approached or treated during the course of this study, please write to the University's Secretary and Registrar at the following address:

Secretary and Registrar
University of Hertfordshire
College Lane
Hatfield
Herts
AL10 9AB

Thank you very much for reading this information and giving consideration to taking part in this study.

Appendix Six: EC6 - Children

UNIVERSITY OF HERTFORDSHIRE

ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS (‘ETHICS COMMITTEE’)

FORM EC6: PARTICIPANT INFORMATION SHEET : Children

1 Title of study

The role of the professional and their perspectives of the roles of others in developing signed language in young deaf learners

2 Introduction

You are being invited to take part in a study. Before you decide whether to do so, it is important that you understand the study that is being undertaken and what your involvement will include. Please take the time to read the following information carefully and discuss it with others if you wish. Do not hesitate to ask us anything that is not clear or for any further information you would like to help you make your decision. Please do take your time to decide whether or not you wish to take part. The University’s regulation, UPR RE01, 'Studies Involving the Use of Human Participants' can be accessed via this link:

<https://www.herts.ac.uk/about-us/governance/university-policies-and-regulations-uprs/uprs>
(after accessing this website, scroll down to Letter S where you will find the regulation)

Thank you for reading this.

3 What is the purpose of this study?

To investigate the perspectives of professionals who work with young deaf children within an education setting with regards to their role in the development of signed language.

To investigate what each professional views as the role of other professionals and how others support the development of signed language.

4 Do I have to take part?

It is completely up to you to decide if you want your child to take part in this study. If you agree for your child to take part, you will be given this information sheet to keep and be asked to sign a consent form. Agreeing to join the study does not mean that you have to complete it. You are free to withdraw at any stage without giving a reason. A decision to withdraw at any time, or a decision not to take part at all, will not effect any treatment/care that you may receive (should this be relevant).

5 Are there any age or other restrictions that may prevent me from participating?

There are no restrictions that will prevent your child from participating.

6 How long will my part in the study take?

If you decide for your child to take part in this study, your child will not be required to do anything outside of their normal school day. They will be filmed during their school day as part of their normal way of working with the adults supporting them. This part of the study will finish no later than February 2025.

7 What will happen to me if I take part?

A brief anonymised profile of your child will be created to detail hearing loss, amplification and languages used in the home and at school. This information will be taken from the school records which are saved in accordance with the School's Data Protection Policy.

We will arrange for a short video to be filmed of your child working with one of their support staff as part of their normal school day. This could be a Lighthouse Teaching Assistant, a Teacher of the Deaf or a Speech and Language Therapist.

The video will be filmed and stored using a school Ipad which is password protected as per the school's policies.

The video will be used during interviews with the staff that work with your child to look at how they have supported your child's language development at different points during the session.

8 What are the possible disadvantages, risks or side effects of taking part?

There are no known risks from taking part in this study. All information will remain anonymous.

9 What are the possible benefits of taking part?

This can provide an opportunity for staff to consider how they are supporting the development of signed language with the deaf children they work with and to build a better understanding of how their work can complement and support the work of others.

10 How will my taking part in this study be kept confidential?

All personal data will be stored electronically in a secure, password protected file and destroyed at the end of the completed dissertation and the subsequent moderation process, this will be no later than August 2025.

The data stored will be anonymised, this means that your child's name will not be kept on any files relating to this dissertation.

11 Audio-visual material

Videos of adults working with children will be kept for the duration of the interview cycle and any subsequent discussions. Any notes or coding from these will be stored electronically until the completion of the research and the subsequent moderation process, it will then be destroyed. This will be no later than August 2025.

12 What will happen to the data collected within this study?

- The data collected will be stored electronically, in a password-protected environment until the end of the dissertation and the subsequent moderation process. It will then be destroyed under secure conditions no later than August 2025.
- The data will be anonymised prior to storage.

13 Will the data be required for use in further studies?

The data will not be used in any further studies.

14 Who has reviewed this study?

The University of Hertfordshire Social Sciences, Arts and Humanities Ethics Committee with Delegated Authority

The UH protocol number is SLE/SF/CP/06206

15 Factors that might put others at risk

Please note that if, during the study, any medical conditions or non-medical circumstances such as unlawful activity become apparent that might or had put others at risk, the University may refer the matter to the appropriate authorities and, under such circumstances, you will be withdrawn from the study.

16 Who can I contact if I have any questions?

If you would like further information or would like to discuss any details personally, please get in touch with me, Mel Harrington, in writing, by phone via the school number or by email: mh24agu@herts.ac.uk.

Alternatively you can contact my dissertation supervisor, Sarah Davis on: s.davis@maryhare.org.uk

Although we hope it is not the case, if you have any complaints or concerns about any aspect of the way you have been approached or treated during the course of this study, please write to the University's Secretary and Registrar at the following address:

Secretary and Registrar
University of Hertfordshire
College Lane
Hatfield
Herts
AL10 9AB

Thank you very much for reading this information and giving consideration to taking part in this study.

Appendix Seven: Interview Questions

Topic	Possible questions	Possible follow-up
Motivation to working with deaf children	What made you want to work with deaf children?	Prior personal experience of deafness Prior professional experience of deafness
Knowledge of different deaf teaching pedagogies	Have you come across the following terms/pedagogies? Auditory-Oral Bilingual Total Communication What do these mean to you?	Are there other pedagogies you are aware of? Which one do you relate to in this setting? What does that look like in this setting?
Personal/professional influences	Are there any factors/experiences that have shaped how you support language development in deaf children?	Previous jobs Family/personal experiences
Understanding of early BSL development	What does early BSL look like?	
	How do you foster these skills?	
Prioritising speech or BSL	How do you choose in an interaction which language you are going to expect in your response?	What does this look like? Do this differ for different children?
My role	What do you see as your role in supporting the language development of the individual deaf child	
The role of others	How does the ToD / SaLT / TA	What are their skills? How do your skills complement each other?

	Support this language development?	<p>Who is the expert in this field?</p> <p>How do you make sure that your approach is consistent?</p>
Families	What do you see as the role/influence of the family	<p>How do you work with families?</p> <p>How could you support families?</p> <p>What impact does family engagement in sign have on the child?</p>

Appendix Eight: Six Phases of Reflexive Thematic Analysis – Braun and Clarke (2006)

PHASE	DESCRIPTION OF THE PHASE	STEPS TAKEN IN THIS RESEARCH
1. Familiarising yourself with your data:	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.	Interviews transcribed Summaries of the interviews
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.	Interviews coded Twenty-four codes identified Codebook created Interviews re-coded and check for consistency
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.	Seven potential initial themes identified
4. Reviewing themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.	Data reviewed Re-coding as needed Refined codebook created
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.	Three parent themes identified
6. Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.	Results section Analysis linking to the literature

Appendix Nine: Codebook

Parent Theme	Code and Theme	Description
Experience and Qualifications - effect on practice	Experience and qualifications of staff	Experiences and qualifications which could/do shape the views and actions of the professionals
	BSL experience	Years of BSL experience of professionals
	Experience in Lighthouse	Number of years professionals have worked in the Lighthouse
	Motivation to work with Deaf children	Motivation to work with Deaf children
	Personal experience of deafness	Experiences of being deaf: education, BSL, family etc
	Previous experience in education	Experience in education with hearing pupils (prior to LH)
	Roles of the professionals in the Lighthouse	Professionals' view of own roles and the views of others
	Role of SaLT	SaLT perspective of SaLT role; others perspective of SaLT role
	Role of TA (Deaf)	Perspective of own role as a deaf TA; perspectives of others of role of deaf TA
	Role of TA (Hearing)	Perspective of own role as a TA; others perspective on the role of TA
	Role of ToD	Perspective of own role as ToD; perspectives of others on role of ToD
Language and Communication choices within practice	Family influence and effect on language	Working with families and the impact of families' use of BSL on the development of their child's language
	Eliciting communication and understanding	Methods used in the teaching of deaf children and early BSL production
	Early BSL production	What does early BSL production look like; what is your experience in supporting this; how do we develop from early BSL production to more formal BSL use
	Methods used with deaf children	What methods do the professionals try to employ to support BSL development; wider development of the deaf child also coded here
	Families	Supporting families; working with families
	Language and communication choices	Attitudes that shape language and communication choices; exposure to BSL; use of SSE in the classroom
	BSL	Specific references to BSL as a language
	BSL across the day	When BSL is used across the day/week; exposure to BSL
	SSE	Voice and sign in tangent; Pros and Cons
	Cons of SSE	Explicit cons of SSE listed from interviews
	Pros of SSE	Explicit pros of SSE from interviews
	Knowledge of different educational approaches	professionals' knowledge and understanding of TC, Oral and Bilingual approaches

	Bilingualism	Professionals' understanding of Bilingualism as an educational practice
	Oral	Professionals' understanding of Oral education methods
	Total Communication	Professionals' understanding of TC in the education system
Hierarchy of Language	Attitudes and Expectations of language	Specific references to use of and expectations of use of language (is BSL, SSE, English)
	Expectations of Language Use	Is this shown in attitudes? In practice? Endemic within the TC approach?
	Attitudes	Explicit or implied attitudes about BSL/SSE within interviews/profiles
	Improvements in practice	Professionals wish list to improve practice
	Improvements in practice	Improvements that professionals want to see

Appendix Ten: Pupil Profiles

Child	How aided	Main language at home	BSL Level of parent(s)	Comments
A	CI Sonnet 2	Sign Supported English	Mother – on L2 course	Attending Auditory Verbal Therapy
B	ABI Sonnet 2	Spoken and sign	Mother – on L3 course	Uses vocalisations to show frustration/when needing attention
C	CI Sonnet 2	Spoken and sign	Mother L2	Many vocalisations nearing understandable single and two-word utterances (sometimes understood with context, sometimes understood with signs)
D	HA Non-regular user	British Sign Language and Signed Supported English (Mum deaf)	Mother - Deaf native BSL Dad – Deaf with some sign	Reluctant Hearing Aid user
E	CI Nucleus 7	Portuguese and English	None	Progressive deafness

CI = Cochlear Implant; HA = Hearing Aid; ABI = Auditory Brainstem Implant