

**Understanding how Physical Education can be taught
effectively to d/Deaf pupils in mainstream
settings: an ethnographic study.**

by

Olivia Emily Williams

A thesis submitted in partial fulfilment for the requirements for the degree of
Doctor of Philosophy at the University of Lancashire

September 2025.

RESEARCH STUDENT DECLARATION FORM

Type of Award Doctor of Philosophy

School School of Health, Social Work and Sport

1. Concurrent registration for two or more academic awards

I declare that while registered as a candidate for the research degree, I have not been a registered candidate or enrolled student for another award of the University or other academic or professional institution

2. Material submitted for another award

I declare that no material contained in the thesis has been used in any other submission for an academic award and is solely my own work

3. Collaboration

Where a candidate's research programme is part of a collaborative project, the thesis must indicate in addition clearly the candidate's individual contribution and the extent of the collaboration. Please state below:

4. Use of a Proof-reader

No proof-reading service was used in the compilation of this thesis.

Signature of Candidate *Liv Williams*

Print name: Olivia Emily Williams

ABSTRACT.

Research highlights d/Deaf pupils frequently experience isolation and exclusion in mainstream Physical Education (PE) (Reich & Lavay, 2009; Tanure Alves, de Souza, Grenier & Lieberman, 2021). However, research on d/Deaf pupils' experiences of mainstream PE is sparse (Reich & Lavay, 2009; Tanure Alves et al., 2021; Maher & Haegele, 2022) and lacks d/Deaf pupils' perspectives (with the exemption of Tanure Alves et al., 2021). Additionally, research more broadly investigating PE teacher effectiveness has neglected teaching pupils with SEND, particularly d/Deaf pupils. More specifically, whilst papers have proposed PE teaching strategies for educating d/Deaf pupils, their effectiveness is unknown (Barboza, Ramos, Abreu & Castro, 2019; Maher & Haegele, 2022). To address this gap in knowledge, this study investigates how d/Deaf pupils can be taught effectively in mainstream PE at 'Buttermere Primary School' in England.

Utilising an ethnographic approach, the study employed various research methods including participant observation, analysis of school documentation, semi-structured interviews, informal/ formal conversations, narrative inquiry and drawing elicitation. Drawing upon theories from cultural studies, Deaf Studies and the work of Bourdieu this thesis offers new insight to PE literature investigating d/Deaf pupils' education. Data was analysed utilising abductive reflexive thematic analysis. Findings revealed that an accessible and inclusive PE environment where all pupils could fulfil their potential was strongly connected to outcomes of effective teaching. To uncover how to achieve outcomes of effective teaching, the study identified teaching strategies for educating d/Deaf pupils, appropriate considerations to accompany them and their perceived effectiveness from stakeholders' perspectives. Findings emphasised the necessity of challenging hegemonic phonocentrism to establish an inclusive PE environment. Also, collaborative working between mainstream teachers and DRB staff was identified as vital to ensure that d/Deaf pupils' needs were appropriately supported to facilitate their inclusion and development in PE. Finally, this study identified social interactions and relationships between d/Deaf pupils, mainstream teachers, DRB staff and hearing peers as a key determinant of a positive PE experience for d/Deaf pupils. Despite discovering some positive social interactions and friendships between d/Deaf and hearing pupils, most d/Deaf pupils reported feeling isolated in mainstream PE. Taken together, this study's findings share good practice across the PE field and highlight necessary improvements to enhance mainstream PE for d/Deaf pupils.

TABLE OF CONTENTS.

Abstract.	3
Table of Contents.	4
Acknowledgments.	9
List of Tables and Figures.	10
Glossary of terms.	11
List of researcher's publications and conference presentations.	12
Introduction.	13
Background and context.....	13
Research Question and Aims.	15
Deaf Studies vs Disability Studies.....	16
Terminology - Deaf, deaf or an umbrella term?	17
Defining inclusion.	19
Structure of thesis.....	19
Chapter One: The History of d/Deaf education.	21
Introduction.....	21
Education begins.	23
UK educational policy developments and d/Deaf education	25
Recent SEND legislation.	31
Educational policy and d/Deaf voices	33
Chapter summary.....	34

Chapter Two: Literature Review.	35
Introduction.	35
d/Deaf pupils' experiences in general mainstream education.	35
Academic attainment.	36
Friendships and social interactions.	37
d/Deaf pupils' identity in mainstream education.	40
d/Deaf pupils' experiences in mainstream Physical Education.	42
d/Deaf pupils' balance in PE.	42
Communication and isolation.	43
d/Deaf pupils' identity in PE.	47
PE teachers' experiences educating d/Deaf pupils.	49
Proposed teaching strategies for educating d/Deaf pupils in PE.	53
Teacher effectiveness research in PE (TER-PE).	57
Presage-product research.	58
Descriptions of PE.	59
Process-product research.	59
Time mediating process-product research.	60
Comparisons amongst teachers.	61
Policy and TER-PE.	62
Ecological paradigm.	65
SEND in TER-PE.	65
Summary of literature.	66
 Chapter Three: Methodology.	 68
Introduction.	68
Research paradigm.	68
Ontology.	70
Epistemology.	71

d/Deaf epistemologies.....	73
Axiology.	74
Qualitative research.....	76
Ethnography.	77
Sampling.	81
Identifying and Negotiating Access.	83
Experiencing, enquiring and examining.....	86
Leaving the field.	96
Data analysis.	100
Abductive RTA.	101
Procedural ethics.	108
Situational and relational ethics.	108
Reflexivity.	111
Chapter summary.....	120
Chapter Four: Theoretical Chapter.....	122
Introduction.....	122
Theoretical frameworks.	122
Cultural studies.....	123
Power.	124
Hegemony.....	126
Hegemonic phonocentrism.	127
Audism.....	130
Othering.....	135
Habitus, field and capital.	136
How habitus is constructed, embodied and played out.	137

Chapter summary.....	140
Chapter Five: A contextual understanding of Buttermere Primary school. ...	143
School information.....	143
Values.....	144
Curriculum.....	144
Physical Education Curriculum and School Sport.....	144
Sporting facilities.....	146
Equipment for d/Deaf pupils.....	146
Celebrating being d/Deaf.....	147
d/Deaf role models.....	147
Chapter Six: Accessible teaching.....	149
Introduction.....	149
Teaching strategies and appropriate considerations.....	150
Differentiation.....	167
Assessment.....	170
The place for technology.....	175
Indoor and outdoor teaching considerations.....	179
Widening access and participation: hopes for the future.....	180
Chapter summary.....	185
Chapter Seven: Collaborative working.....	188
Introduction.....	188
Planning, preparation and communication.....	188
Co-delivery.....	196

Post delivery.	200
An appreciation for each other.	203
Chapter summary.	205
 Chapter Eight: Interactions and relationships in mainstream PE.	207
Introduction.....	207
Staff's relationships with d/Deaf pupils.	207
Peer friendships.....	213
Creating opportunities for social interactions.	218
Lonely in a crowded room: the realities of being d/Deaf in a phonocentric environment.	223
Chapter summary.	228
 Chapter Nine: Conclusion, Implications and Future directions.	230
Introduction.....	230
Accessible teaching.	231
Collaborative working.	234
Social interactions and relationships.....	236
Limitations and directions for future research.	238
Closing comments.....	240
 References.	242
Appendices.	316

ACKNOWLEDGEMENTS

The completion of this thesis would not have been possible without the time, dedication and support of those surrounding me.

I would like to thank my supervisors; Dr Jessica Macbeth, Dr Alan Thomson and Dr Andrew Sprake for their unwavering support, guidance and belief in me both in my undergraduate degree and PhD. From encouraging me to take up a PhD to supporting me every step of the way, their supervision has been nothing short of outstanding. Without them my dream of completing this thesis never would have become a reality. Throughout my PhD they have provided me with a wealth of opportunities to personally and professionally develop; for which I am extremely grateful. First, I would like to express my deepest appreciation to Jess, for her dedication towards this research study and my development. Jess has guided me throughout the entire process of my PhD and has provided invaluable contributions which have continuously inspired me. Second, I must thank Alan for sharing his expertise on teacher effectiveness and for asking those difficult to answer questions which have encouraged me to think critically. Further, I would like to thank Andy who has significantly shaped my understanding of research paradigms and reflexivity which has been instrumental to my development as a researcher.

My gratitude extends to Buttermere school and every research participant. I hope you enjoyed having me at your school as much as I loved being there. Thank you for sharing your knowledge about d/Deaf pupils in Physical Education which has brought this study to life. It is my aspiration that the data you helped generate will inspire others to research this area and help improve mainstream Physical Education for d/Deaf pupils.

A special thanks must go to my Mum and Dad, for their endless support and encouragement. Your belief in me has always motivated me to strive towards my potential and to keep going even in the most challenging times. I am grateful for everything you have done and continue to do for me.

Finally, thank you to my sisters, boyfriend and nieces, for their support over the years and much needed distractions from work. I love you all so much.

LIST OF TABLES AND FIGURES.

Figure 1 Integrated paradigmatic awareness framework.	69
Figure 2 Timeline of fieldwork phases.	80
Figure 3 Table of staff participants	82
Figure 4 Table of pupil participants.	83
Figure 5 Image of leaving gifts.	98
Figure 6 Image of leaving cards.	98
Figure 7 Image of message inside leaving card.	99
Figure 8 Image of message inside leaving card 2.	99
Figure 9 Initial thematic map.	105
Figure 10 Finalised RTA map.	107
Figure 11 Types of Audism.	131-133
Figure 12 Theoretical lens.	141
Figure 13 The graduated approach cycle.	202
Figure 14 Hannah's writing about mainstream PE.	209
Figure 15 "Y5 PE fun and nice teacher and I have a hard time to understand"...	224

GLOSSARY OF TERMS.

AfL	Assessment for Learning
ALT-PE	Academic learning time in PE
BSL	British Sign Language
BTES	Beginning teacher evaluation study
CPD	Continuous professional development
DfE	Department for Education
DfH	Department of Health
DRB	Deaf Resource Base
ITT	Initial teacher training
KS1	Key Stage 1
KS2	Key Stage 2
LEAs	Local Educational Authority
LSA	Learning support assistant
MUGA	Multi use games area
NDCS	National Deaf Children's Society
Ofsted	Office for Standards in Education
PPA	Planning, preparation and assessment
PE	Physical Education
RTA	Reflexive thematic analysis
SEND	Special educational needs and disabilities
SENCO	Special educational needs coordinator
SIDP	School improvement development plan
SSE	School self-evaluation
TA	Thematic analysis
TER-PE	Teacher effectiveness research in PE
ToD	Teacher of the Deaf

LIST OF RESEARCHER'S PUBLICATIONS AND CONFERENCE PRESENTATIONS DURING THIS STUDY.

Publications:

Thomson, A., Macbeth, J. L., & Williams, O. E. (forthcoming). Keeping it real. Using realist tales to understand Special Educational Needs and Disability in Physical Education. In: A. J. Maher, J. Haeghele & J. Coates (Eds.), Routledge Handbook of Qualitative Methods for Researching Disability in Physical Education, Routledge.

Conference Presentations:

Williams, O. E. (2023). Understanding how physical education can be taught effectively to D/deaf pupils in mainstream settings: an ethnographic study. Presented at Qualitative Methods in Sport, Exercise and Health: Innovative Approaches. [University of Copenhagen, online, 16th November 2023]

Williams, O. E. (2024). Understanding how physical education can be taught effectively to D/deaf pupils in mainstream settings: an ethnographic study. Presented at UCLan's Annual Postgraduate Research Conference. [University of Central Lancashire, Preston, UK, 23rd May 2024].

Williams, O. E. (2024). How can PE be taught effectively to D/deaf pupils in mainstream settings? Presented at The International Conference for Qualitative Research in Sport and Exercise. [Bath University, UK, 31st July 2024].

Williams, O. E. (2025). Inclusive research with d/Deaf participants. Presented at the Embedding inclusivity into research workshop. [University of Central Lancashire, Preston, UK, 18th March 2025].

INTRODUCTION.

Background and context.

Currently, over 46,000 children are d/Deaf in England (CRIDE, 2024), with 83% of d/Deaf children being educated in a mainstream school or mainstream schools with resource provisions (CRIDE, 2023). The integration of d/Deaf pupils into mainstream settings occurred due to changing educational policies and declining schools for the d/Deaf (Kumsang & Moore, 1998). To date, only twenty-two schools for d/Deaf children remain open in the UK (BATOD, 2023). The 1978 Warnock report and 1981 Education Act advocated mainstream education for children with impairments as a method to achieve societal inclusion (Armstrong & Squires, 2012). Therefore, from 1983, children with *special educational needs and disabilities* (SEND), including d/Deaf pupils could access the mainstream curriculum (Gregory, Sheldon & Bishop, 1995), including Physical Education (PE).

Across England, d/Deaf pupils underachieve by at least one grade per subject compared to hearing pupils at GCSE (NDCS, 2022a). Yet, with appropriate support and access to the curriculum d/Deaf pupils should achieve the same as their hearing peers (NDCS, 2019; NDCS, 2020a; NDCS, 2022a). Thus, it is not surprising that only one in twenty teachers believe the education system supports d/Deaf children (NDCS, 2022b). However, government legislation including the Special Educational Needs and Disability Act 2001, Equality Act 2010, Teachers' Standards (DfE, 2011) and National Curriculum (DfE, 2014) highlights the importance of an inclusive educational environment whereby pupils, including those who are d/Deaf, are supported and can reach their potential. Previously, research has suggested that teachers play a key role in d/Deaf pupils' inclusion and development (Jarvis & Iantaffi, 2006; Eriks-Brophy et al., 2006). Therefore, PE teacher effectiveness when educating d/Deaf pupils must be examined to ensure d/Deaf pupils can fulfil their potential as government legislation desires.

Historically, most research funding on d/Deaf people has been in the medical field rather than education (Singleton & Jones, 2014). Research on d/Deaf pupils within mainstream education, particularly in PE, is a largely neglected field of study. Although there is a lack of research surrounding d/Deaf pupils' education in general mainstream education, the research that exists provides useful insight into their experiences (Nunes, Pretzlik & Olsson, 2001; Jarvis, 2002; Ridsdale & Thompson, 2002; Iantaffi, Jarvis & Sinka, 2003a; Warner-Czyz et al., 2018). Nevertheless, additional research is warranted as these studies are limited and outdated particularly

in the UK (Nunes et al., 2001; Ridsdale & Thompson, 2002; Jarvis, 2002; Iantaffi et al., 2003a). Such research may help comprehend the current educational landscape and identify areas of improvement alongside good practice to inform practitioners and policy making.

Similarly, only a few academics have explored d/Deaf pupils' experiences in mainstream PE (Schultz, Lieberman, Ellis & Hilgenbrinck, 2013; Lieberman, 2016; Tanure Alves et al., 2021; Maher & Haegele, 2022). Studies investigating d/Deaf pupils' experiences in mainstream PE have revealed d/Deaf pupils frequently experience isolation and exclusion (Reich & Lavay, 2009; Tanure Alves, et al., 2021). However, research has neglected d/Deaf pupils' perspectives (with the exemption of Tanure Alves et al., 2021). Alongside this, research on PE teacher effectiveness has neglected the teaching of pupils with SEND (Smith & Thomas, 2006; Nesbitt, Fisher & Stodden 2021), specifically d/Deaf pupils. Moreover, despite academics suggesting teaching strategies for educating d/Deaf pupils in mainstream PE, they lack empirical evidence to support them, meaning the effectiveness of proposed teaching strategies are unknown (Barboza et al., 2019; Maher & Haegele, 2022). This research study addresses the existing gap in knowledge through generating empirical evidence on how d/Deaf pupils can be taught effectively in mainstream PE. Through understanding what constitutes effective teaching, it becomes possible to develop strategies that support d/Deaf pupils (Stinson & Liu, 1999), specifically in PE.

Previous PE research has tended to focus upon one viewpoint at a time when considering d/Deaf pupils' education in mainstream settings (Vermeulen, Denessen & Knoors, 2012; dos Santos Pedrosa, Beltrame, Boato and Sampaio, 2013; Tanure Alves et al., 2021). However, without involving multiple stakeholders' perspectives, the barriers d/Deaf pupils encounter and necessary support cannot be understood, limiting the effectiveness of interventions (Batten, Oakes & Alexander, 2014). Therefore, this study investigates multiple stakeholders' perspectives to obtain a comprehensive understanding of effective teaching and inform teaching d/Deaf pupils (BERA, 2000; Fitzgerald, Jobling & Kirk, 2003; Batten et al., 2014), specifically in mainstream PE.

Reflexive note: *This thesis begins with a confession. I am a 24-year-old, hearing nondisabled female from Liverpool, England with no prior affiliation to the Deaf community before undertaking my PhD. Though some may comment that by researching d/Deaf people I may be treading on land that is not mine (Young & Temple, 2014), I recognise that this subject area has been neglected for too long. My*

interest in d/Deaf pupils' education was sparked during my undergraduate degree in Sport and Physical Education. During this time, I joined a Duke of Edinburgh award that required me to learn a new skill for which I decided to learn British Sign Language (BSL) for three months. Following this, my interest in learning about d/Deaf pupils' education grew and I decided to research this for my undergraduate dissertation. Having read extensively surrounding d/Deaf pupils' education for my dissertation, I became aware of the limited research. Recognising this research gap, I saw an opportunity to positively contribute to existing literature and have an impact (albeit a small one) on d/Deaf pupils' education.

Research Question and Aims.

The question at the heart of this thesis is: how can PE be taught effectively to d/Deaf pupils in mainstream settings? To address this research question, the study adopted an ethnographic approach to fulfil four key aims:

1. Investigate d/Deaf pupils' experiences within mainstream PE.
2. Explore social interactions in the PE landscape between d/Deaf pupils, their hearing peers, d/Deaf support staff and mainstream teachers.
3. Discover teaching strategies adopted when educating d/Deaf pupils in PE.
4. Explore the effectiveness of existing teaching strategies from the perspectives of d/Deaf pupils, hearing peers, mainstream teachers and d/Deaf support staff.

Considering that definitions of teacher effectiveness and inclusion are context dependent (Lynas, 1999; Powers, 2002), this study adopts an ethnographic approach to gain a contextual understanding of Buttermere school and those within it. Ethnography was eleven months and involved participant observation, semi-structured interviews, analysis of policy documentation, formal/informal conversations, narrative inquiry and drawing elicitation. Through ethnography, this study offers methodological originality compared to previous research on d/Deaf pupils' education in PE which has included experimental studies (Maher, 2020), practitioner based papers (Reich & Lavay, 2009; Schultz et al., 2013; Lieberman, 2016) and empirical studies using semi-structured interviews (Tanure Alves et al., 2021). In doing so, this study builds upon previous research by examining what people really do alongside what they say (Forsey, 2010).

Deaf Studies vs Disability Studies.

Prior to tackling terminology, it is essential to understand the Disability Studies and Deaf Studies debate which is closely related to discussions surrounding terminology of d/Deaf people (Scully, 2019). Deaf Studies and Disability Studies have long debated what field research relating to d/Deaf people should be situated within. Academics have taken up various positions on the Deaf/Disability Studies debate (Burch, & Kafer, 2010). Disability Studies has existed for many decades and has focused on various issues that influence the identity and lives of people with disabilities and is closely related to disability culture (Fernandes & Myers, 2010; Brueggemann, 2013). The disability movement has been responsible for defining d/Deaf people as disabled whereby d/Deaf people's audiological state is measured against the hearing majority (Obasi, 2008). Comparatively, Deaf Studies emerged in the 1970s and has challenged the medical view of d/Deaf people as disabled (Kusters, Meulder, O'Brien, 2017). Deaf Studies is closely connected to Deaf culture and sign language (Fernandes & Myers, 2010). The Deaf cultural construction appreciates Deaf people as a linguistic minority rather than having an impairment, meaning that disability theory does not account for the Deaf experience (Davis, 2008; Scully, 2019). Whilst Deaf Studies may not account for deaf individuals who identify as disabled, it has been suggested that Disability Studies neglects key language issues (Burch & Kafer, 2010). When examining language, Deaf Studies scholars employ various theories such as phonocentrism and audism to analyse the oppressive practices d/Deaf people face in a society dominated by hearing and speaking humans. As will be discussed in Chapter Four, phonocentrism is "the privilege of sound and the spoken word in relation to being human" (Derrida, 1976 cited in Maher, 2020, p.318), whilst audism is connected to perceived superiority based on "one's ability to hear or behave in the manner of one who hears" (Humphries, 1977, p.12). As language plays a key role in pedagogy and d/Deaf people may encounter oppressive practices from language barriers, this study draws mainly on Deaf Studies to enable detailed analysis of how language could impact the effective teaching of d/Deaf pupils and their experiences of mainstream PE. Whilst this thesis does not reject Disability Studies, and its findings may have relevance and parallels to Disability Studies, Deaf Studies is predominantly drawn upon due to its alignment with theoretical and conceptual ideas, as will be discussed in Chapter Four.

Terminology - Deaf, deaf or an umbrella term?

There has been considerable debate on terminology surrounding d/Deaf people, resulting in multiple terms being utilised across literature (Powers, Gregory & Thoutenhoofd, 1999), and reflecting that self-identity is important and varies amongst d/Deaf people (Iantaffi et al., 2003a). Young and Temple (2014, p.12) assert that these “differences in terminology are not inconsistencies but often indicate deliberate choices and perspectives”. The Deaf / deaf division can separate audiological state, socialisation and acculturation (Senghas & Monaghan, 2002). In separating audiological definitions of deafness from those of socialisation and acculturation, issues can be more easily understood (Senghas & Monaghan, 2002). Therefore, the following section explores the Deaf / deaf distinction in relation to an audiological state before moving on to socialisation and acculturation.

When referring to an audiological state, the term deafness is often employed (Gregory & Hartley, 1990; Ladd, 2003). As defined by the NDCS (n.d. a), deafness is when one or more parts of the ear does not work effectively. The World Health Organisation (n.d.) considers anyone who can hear 20dB or better in both ears to have ‘normal’ hearing. As deafness is used as an audiological term, deaf people are viewed as having an impairment or disability based on medical notions of ‘normal’ hearing levels (Skelton & Valentine, 2003; Hodge, Lieberman, & Murata, 2017; Foster, Fitzgerald & Stride, 2019; Scully, 2019). Thus, levels of deafness are assessed using the decibel hearing range: mild (21-40 dB), moderate (41-70dB), severe (71-90 dB) and profound (95dB) (NDCS, n.d. b). Within CRIDE’s (2023) survey, the level of deafness in proportion to d/Deaf children was broken down into 22% unilateral, 25% mild, 32% moderate, 9% severe and 12% profound. Notably, individuals who identify as deaf often do not wish to be part of the Deaf community and wish to remain with the majority, hearing and speaking society (Ladd, 2003). Additionally, other terms such as hard of hearing and hearing impaired have been utilised in an audiological sense to describe those who relate to the medical model of deafness.

Comparatively, those who identify as Deaf consider themselves to be a linguistic, cultural minority (Hoffmeister, 2007; Obasi, 2008; Hodge, et al., 2017). These individuals are immersed in Deaf culture and use sign language to communicate (Ladd, 2003; Woll & Ladd, 2003). Culturally Deaf individuals consider themselves to be a linguistic minority who have been oppressed through the hegemony of speech, enforced by social and political institutions (Skelton & Valentine, 2003; Obasi, 2008). As Deaf people are not disabled in their own community, they do not perceive

themselves as disabled (Lane, 2002; Brueggemann, 2013). Hearing people also require sign language interpreters in certain situations e.g. when a Deaf person is the provider of information, however in these situations hearing people are not considered disabled (Obasi, 2008). Thus, Deaf people as disabled is a social construction (Obasi, 2008). Culturally Deaf people strongly dislike the term 'hearing impaired' due to its connection with disability and impairment (Skelton & Valentine, 2003). However, some d/Deaf individuals may find themselves 'in-between' culturally Deaf and disability discourses (Lane, 1995; Skelton & Valentine, 2003). Due to the complexities surrounding d/Deaf identities, researchers have adopted differing terms when researching d/Deaf people, as previously mentioned. Whilst many academics have provided strong rationales for their chosen term, separating lowercase deaf and uppercase Deaf may exclude some individuals (Saikia, 2021). Arguably, adopting a singular term of deaf or Deaf within educational research, a setting with multiple people with diverse identities may alienate potential research participants who believe they do not meet the criteria to participate in the study. Therefore, terminology used to refer to participants in educational research must be flexible and account for all d/Deaf identities that exist (Cawthon & Garberoglio, 2017).

Most recently, some academics have adopted the term deaf when researching both culturally Deaf and medically deaf people, arguing that this term provides simplicity and flexibility, appreciating that a person's identity may fluctuate from deaf, Deaf, hard of hearing and so on (Cawthon & Garberoglio, 2017). Whilst this terminology appreciates the fluidity of d/Deaf identities, arguably this recent shift of using 'deaf' may create confusion and alienate culturally Deaf individuals who do not believe their identities are appropriately represented. For this reason, this study adopted the term d/Deaf as an umbrella term when referring to individuals who identify as culturally Deaf, medically deaf and those experiencing various degrees of deafness (Paul, 2018). The term d/Deaf appreciated identity may change over time and space, this was important when researching young people who may be uncertain on their identity (Skelton & Valentine, 2003). Although a singular term does not reflect the multiple, complex identities that exist surrounding d/Deaf people, for the purposes of researching an all-encompassing term was useful (Kusters et al., 2017). Adopting the umbrella term of d/Deaf offered flexibility, allowing participants' identities to change over the duration of the study whilst being inclusive of various identities (Skelton & Valentine, 2003).

Throughout this thesis, the term *pupils with special educational needs and disabilities* (SEND) will refer to pupils who have a learning difficulty and/or disability which means

they require special educational support (DfE & DoH, 2015). Under the Equality Act 2010, pupils with SEND includes those with sensory impairments such as hearing (DfE & DoH, 2015). In 2024, 61% of d/Deaf pupils were identified as having a SEND and 19% of d/Deaf children had an EHC plan (CRIDE, 2024). As some d/Deaf pupils can be identified as having a SEND and requiring additional support, SEND legislation and school SEND policy documentation commonly include d/Deaf pupils. For this reason, d/Deaf pupils are frequently placed under the broader term of pupils with SEND, yet their support needs in education may vary, influencing the extent to which they have 'inclusive' educational experiences.

Defining inclusion.

Over recent years, inclusion has become a 'buzzword' in education, yet it remains a largely misunderstood topic (Haegele & Maher, 2022). Inclusion and integration have previously been used interchangeably (Vickerman, 2002) though integration does not guarantee inclusion (Haegele, 2019). Inclusion is a philosophy whilst integration is the placement of all pupils in the same educational environment regardless of their learning needs (Haegele, 2019). Confusion over these terms have led to an 'illusion of inclusion' whereby educators believe that d/Deaf pupils have full access to language (Hauser, O'Hearn, McKee, Steider & Thew, 2010). In this thesis, inclusion refers to "intersubjective experiences associated with feelings of belonging, acceptance, and value that are dynamic, ephemeral, spatial, and in flux" (Haegele & Maher, 2023, p.385). As Haegele and Maher (2023, p.387) explain an individual's intersubjectivity influences how they "interpret the world through mental, sensory and linguistic processes". Appreciating how mental, sensory and linguistic processes influence one's feelings of inclusion is important as these concepts are ever present in d/Deaf pupils' educational experiences. School environments are constantly in flux, meaning that pupils may feel included in some PE lessons and not in others (Haegele and Maher, 2023). Employing Haegele and Maher's (2023) definition of inclusion facilitates a detailed analysis of d/Deaf pupils' PE experiences and helps explain how their feelings of inclusion may fluctuate throughout fieldwork. Moreover, perceiving inclusion as fluid is advantageous to appreciate the heterogeneity of d/Deaf pupils and their differing experiences and perceptions of effective PE teaching.

Structure of thesis.

This thesis is divided into nine chapters and has been organised in the following way. Chapter One provides historical context of d/Deaf education from ancient Greece to the present day to comprehend d/Deaf pupils' education today. In Chapter Two,

literature surrounding d/Deaf pupils' experiences of mainstream education, and more specifically PE is explored alongside teaching strategies for educating d/Deaf pupils and PE teacher effectiveness to identify gaps in research and provide a rationale for the study. The third chapter provides justification for my chosen research paradigm and the methodological approach I employed in this research. The chapter advocates a new approach utilising d/Deaf ontologies and epistemologies to better understand d/Deaf pupils' experiences in mainstream PE. Chapter Four presents the theoretical concepts employed to analyse research findings. The chapter introduces power, hegemony, phonocentrism and Bourdieu's notions of capital (1990) to explain their usefulness for comprehending d/Deaf pupils' mainstream PE experiences. Chapter Five provides a contextual understanding of Buttermere Primary School, the research setting for this ethnographic study, with a particular focus on PE provision and adapted provision for d/Deaf pupils. Chapter Six acts as the first findings chapter which focuses on accessible teaching as a key component of effective teaching. This chapter identifies teaching strategies employed and other useful considerations when educating d/Deaf pupils and examines teaching strategies (in)effectiveness from the perspectives of d/Deaf pupils, hearing pupils, mainstream teachers and DRB staff. Moving on, Chapter Seven explores collaborative working between mainstream and DRB staff as a key component of effective PE teaching, examining the extent to which staff worked collaboratively to facilitate d/Deaf pupils' inclusion and development. Chapter Eight analyses social interactions and relationships at Buttermere school, with a particular focus on d/Deaf pupils' interactions with mainstream teachers, DRB staff and their hearing peers in the context of PE. Understanding the contributing factors to positive or negative interactions enables good practice and relevant improvements to be identified and shared which may be transferable to other contexts. The conclusion summarises the main research findings and explores potential implications for the PE field and mainstream education. Finally, the conclusion closes with research limitations and directions for future research that is warranted to work towards more effective teaching and the inclusion of d/Deaf pupils in mainstream educational contexts.

CHAPTER ONE.

THE HISTORY OF d/DEAF EDUCATION.

Introduction.

To comprehend d/Deaf children's education today, it is essential to understand its historical roots. This chapter provides historical context surrounding d/Deaf education. Firstly, the chapter will highlight how philosophy in ancient Greece not only shaped cultural attitudes of Greek society but also led to the oppression of d/Deaf people and shaped d/Deaf education for centuries (Branson & Miller, 2002; Gertz & Boudreault, 2016). Next, the chapter explores the beginning of d/Deaf education throughout the world, drawing attention to the 'war of methods' concerning the best strategy to educate d/Deaf children. Following this, the UK's policy developments concerning d/Deaf education are explored to highlight the everchanging educational environment for pupils with SEND over the past one hundred years (Maher & Haegele, 2022). Lastly, the chapter examines SEND legislation in mainstream PE, before highlighting the importance of d/Deaf voices in educational policy. As the history of d/Deaf education is extensive and can be traced across multiple eras (Lang, 2011), it is not possible to discuss all historical events, thus the most pertinent events will be drawn upon.

Literature discussing d/Deaf people and their education can be traced back to ancient Greece (Lampropoulou, 1994; Gertz & Boudreault, 2016). In Plato's *Cratylus*, the beginning of philosophical dialogues concerning sign language can be seen between *Cratylus*, *Socrates* and *Hermogenes* (Marschark, Schick & Spencer, 2006; Gert & Boudreault, 2016; Bauman & Murray, 2017). *Socrates* speculates:

"Suppose that we had no voice or tongue, and wanted to communicate with one another, should we not, like the deaf and dumb, make signs with the hands and head and the rest of the body?" (Plato, 1998 cited in Bauman & Murray, 2017, p.246).

Here, *Socrates* uses a rhetorical question to analyse sign language (Armstrong, 2008; Lang, 2011). These questions acted as the fundamental basis for future questions about the inception of language (Bauman & Murray, 2017). Plato's dialogues provide useful information regarding Athenian society and d/Deaf people's value within it (Lampropoulou, 1994; Ladd, 2003). As Lampropoulou (1994) infers, Plato's *Dialogues* suggests d/Deaf people and sign language were accepted in Athenian society. However, Bauman (2008a) highlights this moment when philosophy swayed

between speech and sign was short-lived as Socrates, Hermogenes and Cratylus failed to gain Deaf signers' viewpoints or consider the properties of sign language, with their conversation returning to connecting sound to things. Also, Bauman (2008a) emphasises while Socrates highlighted the possibility of alternative communication to speech e.g. sign language, this was only to discuss emulating speech rather than as a valid language. Thus, Plato reinforces speech's superiority for communication whilst making sign language strange, inferior and the other (Bauman, 2008a). The impact of Plato's dialogues remains evident today, whereby society remains largely ignorant to how language and literature have evolved in a false dualism of speech and writing (Bauman, 1997). Therefore, sign languages have been hidden in the 'phonocentric blind spot' by Plato's work (Bauman, 2008a).

Similar philosophical thinking can be seen throughout Aristotle's work, who was influenced by Socrates and Plato (Gertz & Boudreault, 2016). Aristotle perceived hearing as the most important sense for instruction, understanding and learning (Lampropoulou, 1994; Edwards, 1997). From this perspective, Aristotle claimed d/Deaf people were "senseless and incapable of reason" (McAlister, 1994, p.163). The Greeks perceived d/Deaf people to have an intellectual impairment due to the verbal communication difficulties that accompany them (Edwards, 1997; Rose, 2006). Although Aristotle did not explicitly discuss d/Deaf children's education, when some educators interpreted his work, they assumed d/Deaf people could not be educated (Lampropoulou, 1994). During this period, perceptions of disability overshadowed attempts of educating d/Deaf people (Lang, 2011). Perceptions of d/Deaf people as disabled and intellectually inferior persisted during the Middle Ages and the Renaissance, resulting in their marginalisation and limited education for d/Deaf people (Branson & Miller, 2002). Although some scholars during the Renaissance including Girolamo Cardano, a physician from Italy challenged Aristotle's beliefs, arguing that d/Deaf people were capable of reasoning (Lang, 2011; Gertz & Boudreault, 2016), it was not until the Age of Reason that d/Deaf people were educated in schools. Nevertheless, attitudes of d/Deaf people as 'uneducable' and disabled persisted during the Age of Reason, as will later be discussed (Branson & Miller, 2002). For a more detailed account of how d/Deaf people were perceived in the Middle Ages, Renaissance and Age of Reason times please see the work of Branson and Miller (2002), Lang (2011) and Gertz and Boudreault (2016).

Education begins.

Research on the emergence of d/Deaf education is sparse and has been dominated by several key authors (Markides, 1983; Moores, 2010a; Lang, 2003; Lang, 2011; Gertz & Boudreault, 2016), thus particular attention will be given to their works throughout this section.

Within 1755, the first school for the d/Deaf in the world was established in France by a French priest, Abbé Charles Michel de l'Épée (Moores, 2010a). L'Épée believed the most effective way to educate d/Deaf pupils involved using signs, gestures, fingerspelling and writing (Lang, 2003; Gertz & Boudreault, 2016). Thus, l'Épée combined signs with his own grammatical elements (Lang, 2011). Ladd (2003) suggests these academic practices were rooted in growing awareness and acceptance for d/Deaf people and sign language. However, l'Épée's methods were criticised by Samuel Heinicke, the founder of a d/Deaf school within Leipzig (Lang, 2003). Heinicke created the German oral method and believed that thought was only possible through speech, thus he argued learning the manual alphabet before speech went against the order of learning (Moores, 2010a). Following this, Heinicke and l'Épée exchanged letters expressing their differing beliefs on the most effective way to educate d/Deaf pupils which begun the war of methods (Marschark, Lang, Albertini, 2002; Lang, 2003). The war of methods had profound implications upon d/Deaf people's education and lives which will later be discussed.

Meanwhile, Thomas Braidwood founded the first British school for the d/Deaf in 1760 (Kumsang & Moore, 1998; Lang, 2003). Braidwood used sign language and speech simultaneously in d/Deaf education (Stone & Woll, 2008; Gertz & Boudreault, 2016), meaning his method was a mixture of French and German methods (Kyle et al., 1998). However, little was known about Braidwood's methods due to the secrecy surrounding them (Markides, 1983; Deuchar, 2013). Although Americans attempted to discover Braidwood's methods they were denied, meaning educators continued to teach speech with little success (Markides, 1983). Within five years pupils at Braidwood's school could read, write, lipread and communicate through speaking whilst impressing visitors to the school (Markides, 1983). The establishment of Braidwood's school for the d/Deaf facilitated development of British Deaf community and British Sign Language (Stone & Woll, 2008). During this period, education was limited to privileged classes, meaning the poor could not access Braidwood's academy (Branson & Miller, 2002). Consequently, in 1792, Royal School for the Deaf /the Asylum for the Deaf and Dumb children of the poor was established and run by

Braidwood's nephew, Watson, who adopted his methods (Branson & Miller, 2002; Deuchar, 2013).

Following Braidwood's death, Watson published *Instruction of the Deaf and Dumb*, whereby he advocated d/Deaf people should be taught using Braidwood's method (Markides, 1983; Deuchar, 2013). However, Braidwood's successor as the head of an asylum school for the Deaf in Birmingham, Louis du Puget, adopted l'Épée's methods (Deuchar, 2013). Thomas Braidwood's death resulted in a decline of teaching speech to d/Deaf pupils in Britain for six to seven decades (Markides, 1983). Nevertheless, teaching d/Deaf children speech began to remerge in the 1860s when Gerrit van Asch established a private school for d/Deaf children in London based on the 'German approach' with William van Praagh's assistance (Markides, 1983). Following this, in 1871, the Association for the Oral instruction for the Deaf and Dumb was established (Markides, 1983). During the 1870s, a movement towards teaching speech to d/Deaf children occurred whilst 'manual' schools for the d/Deaf in Europe came under scrutiny regarding their educational achievements, living conditions and teacher training (Markides, 1983).

The International Congress of Milan in 1880 was a pivotal moment in the 'war of methods' (Fernández-Viader, & Fuente, 2004; Gertz & Boudreault, 2016). The Milan congress consisted solely of hearing individuals who voted against sign language and for an oralist education, resulting in sign language being banned in education within Europe and the United States (Moore, 2010a; Corazza, 1994; Branchini, 2014; Gertz & Boudreault, 2016). The Milan congress began the period of 'pure oralism' (Corazza, 1994; Batterbury, 2012), which dominated until 1960 (Moore, 2010a). As Gannon (1981) argues, this impacted d/Deaf people's education and lives across the world for decades. As Valentine and Skelton (2009) emphasise, the period of oralism resulted in lost educational opportunities for d/Deaf people. Not only did the Milan Congress deny d/Deaf people effective communication but also hindered their career development, reduced the number of d/Deaf professionals in education and suppressed the Deaf community for over 80 years (Hutchinson, 2007; Moore, 2010b). As Bauman (2008b) highlights, the oralist period symbolises the most potent historical example of the enforcement of phonocentrism and audism in social and educational policy. The period of oralism is an example of institutional / overt audism (Bauman, 1997; Eckert & Rowley, 2013).

From the 1880s to the 1920s, heightened focus upon oralism and 'normalising' d/Deaf children in education led to increased medicalisation of d/Deaf people (Borsay, 2007;

Gertz & Boudreault, 2016). During the 1930s, increasing presence of audiology reinforced beliefs that d/Deafness could be treated as a pathology (Branson & Miller, 1993; Branson & Miller, 2002). Thus, d/Deaf education was underpinned by medical model thinking which attempted to provide 'therapy' for d/Deaf children to bring them closer to the dominant speaking / hearing norm (Branson & Miller, 2002; Borsay, 2007). As Branson and Miller (2002) highlight, despite many oralists believing they were helping d/Deaf people, oralism had oppressive cultural impacts. During the 1920s, physical violence was used as a punishment for sign language usage in schools for the d/Deaf (Borsay, 2007; Ladd, 2003). The physical punishment against d/Deaf pupils during this period represents the violence of phonocentrism (Bauman, 2008b).

However, some d/Deaf children, particularly children with relations to Deaf adults (Deaf teachers and school visitors) and those with a strong Deaf identity resisted oralism and it was not until the 1930s that oralism became present in schools within the North East of England and Scotland (Ladd, 2003). Similarly, in France, oralism and medicalisation methods were resisted in d/Deaf education (Séguillon, 2002). Yet, once the number of d/Deaf teachers declined, d/Deaf illiteracy rose, and d/Deaf leadership diminished, maintaining Deafhood principles became difficult (Ladd, 2008). Despite this, some d/Deaf individuals continued to resist an oralist education as Ladd's (2003) accounts from 1945-1960 demonstrate, whereby individuals secretly used BSL and deliberately damaged their hearing aids. However, oralism persisted (Borsay, 2007) and as Batterbury (2012) suggests, it created a 'dependency culture' fostered by a disability paradigm which has continued into the late 21st century e.g. by offering disability benefits to d/Deaf adults. Therefore, d/Deaf education was and continues to be a political battleground where the future of the Deaf community and d/Deaf people's quality of lives are challenged (Woll & Adam, 2012).

UK educational policy developments and d/Deaf education.

UK d/Deaf history is under researched (Branson & Miller, 2002), particularly concerning education. Most educational policies for d/Deaf pupils have come under the umbrella term of SEND (Kumsang & Moore, 1998), thus the following paragraphs review UK educational policy developments for pupils with SEND more broadly and highlight its influence on d/Deaf children. Whilst d/Deaf education continued after Braidwood's academy and was influenced by policies including the 1870 Education Act and the Elementary Education Act of 1893, it is beyond the scope of this chapter to discuss these. For a more detailed account of d/Deaf education prior to 1944 see

the works of Branson and Miller (2002), Armstrong (2012), Deuchar (2013) and Wearmouth (2023).

The 1944 Education Act embraced the optimistic ethos the end of Second World War brought (Borsay, 2012). Until 1944, d/Deaf education in the UK was a matter of charity rather than public responsibility (Lane, 1984; Borsay, 2007). The 1944 Education Act introduced free, compulsory education for all children aged between 5 and 15 (apart from those deemed 'ineducable') (Armstrong, 2002; Stidder & Hayes, 2013) and introduced a special needs educational system, whereby children with SEND were categorised and in medical terms (House of Commons Education and Skills Committee, 2005). The 1944 Education Act was administrated by Local Educational Authorities (LEAs) who exerted considerable power over educational provision in their area (Skidmore & Copeland, 1998). As highlighted by Borsay (2007), the 1944 Education Act was instrumental in increasing the number of children attending special education schools from 38,499 in 1945 to 106,367 in 1972 (Tomlinson, 1982 cited in Borsay, 2007). However, as Branson and Miller (2002) suggest d/Deaf pupils saw little educational improvements other than the establishment of secondary education for the privileged, and by 1950 many d/Deaf children remained unable to find places in schools for the d/Deaf. As secondary education was limited to the privileged, it failed to apply to the masses meaning that most d/Deaf people continued to be denied access to education. Furthermore, inadequate funding for schools for the d/Deaf meant they were forced to close or change from residential to day schools, with minimal places available (Branson & Miller, 2002). Therefore, the 1944 Education Act failed to have a significant positive impact upon d/Deaf people's education.

However, in 1947, 'partially hearing units' attached to mainstream schools were established in London (Kumsang & Moore, 1998; Powers, 1999; Branson & Miller, 2002). These units attempted to develop speech, language, auditory and lipreading and provide training in hearing aid use (Taylor, 1953). Kumsang and Moore (1998) suggest the development of hearing impaired units led to a movement towards mainstreaming. These units reduced the number of d/Deaf children attending schools for the d/Deaf (Markides, 1983) whilst, those deemed profoundly d/Deaf remained institutionalised and were perceived 'uneducable' (Branson & Miller, 2002). Indeed, it is only since the 1980s that a substantial movement towards mainstreaming d/Deaf children has occurred (Powers, 1999; Branson & Miller, 2002).

Following World War Two, tensions regarding oral/manual methods continued and a new debate regarding cultural or clinical perspectives of educating d/Deaf people

emerged (Lang, 2011). Nevertheless, in the 1960s, William Stokoe and his colleagues discovered underlying structured patterns of sign languages and highlighted it could do the same as any other language (Bauman, 2008b). William Stokoe's work laid the foundations for new linguistic studies of sign languages and Deaf communities whilst sign language received more respect and attention in education (Erting, Johnson, Smith & Snider, 1994; Lang, 2003). During this period, BSL awareness increased and attitudes towards d/Deaf people improved (Swanwick, 2010; Lang, 2011) and the 'combined method' of speech and signs remerged in British education (Branson & Miller, 2002; Marschark et al., 2006). Meanwhile, Total Communication, a multifaceted approach for communicating during instruction was created in America, which involved speech, fingerspelling, auditory training, print, gesture and sign language (Moore, 2010a; Sterling, 2016). Total Communication was developed by Roy Holcomb and was underpinned by the idea that all aspects of communication should be utilised at different stages of a pupils' development depending on their needs at each stage (Moore, 2009; Moore, 2010a). Following America's lead, the UK introduced Total Communication in education during the 1960s and 1970s driven by recognition of the linguistic status of sign languages and the unsuccessfulness of the oral method (Ladd, 1999; Erting et al., 1994; Branson & Miller, 2002; Marschark et al., 2006).

However, in the 1970s, concerns were raised regarding the effectiveness of Total Communication at improving d/Deaf people's education in the UK (Swanwick, 2010; Knoors, Tang & Marschark, 2014). The underachievement of d/Deaf pupils was emphasised within Conrad's 1979 report which demonstrated that d/Deaf children left school lower mathematic and reading skills compared to their peers alongside poor lipreading skills and low speech intelligibility (Pickersgill, 1998; Swanwick, 2010). Meanwhile, growing acknowledgment of Deaf people as a cultural and linguistic minority was taking place globally via the Deaflympics, petitions to make sign language legally recognised and studies suggesting greater literacy levels via bilingual methods (Knoors et al., 2014). Thus, a shift from Total Communication to bilingual-bicultural approach in d/Deaf education occurred (Swanwick, 2010; Knoors et al., 2014). Nevertheless, the methods war continues in some countries today (Marschark et al., 2006).

Alongside growing acceptance of sign language during the 1970s, a move towards mainstreaming d/Deaf pupils occurred (Woll & Adam, 2012), partly due to the growing influence of disability activist groups and changing educational policies (Gregory, Knight, McCracken, Powers & Watson, 1998; Thomas & Smith, 2009). As Knight

(1998) suggests this facilitated d/Deaf and disabled people to become more autonomous and politically aware. Though for some, d/Deaf people participating in disability agenda meant accepting the label of disabled which was perceived as “selling one’s soul to the devil” (Brennan, 2003, p.673). The reduction of d/Deaf schools was perceived a threat to Deaf heritage (Obasi, 2008); thus many Deaf people expressed a preference for segregated schools whilst opposing mainstreaming (Knight, 1998). Deaf Studies scholars believe mainstreaming d/Deaf children misrepresented d/Deaf people as disabled which had negative impacts on their education and identity which will later be discussed (Brennan, 2003; Obasi, 2008).

1978 symbolised a pivotal turning point in education, whereby the Warnock Report encouraged pupils with SEND, including d/Deaf pupils, to be integrated in mainstream education (Armstrong & Squires, 2012; Vickerman & Maher, 2019). The Warnock report replaced labelling of children with ‘handicaps’ to SEND to refer to pupils with a range of needs including cognitive, physical, sensory, communicative or behavioural (Thomas & Smith, 2009; Armstrong & Squires, 2012). Following this, the 1981 Education Act which was enacted in 1983 began the transfer of children with SEND, including d/Deaf children, into mainstream education where possible (Kumsang & Moore, 1998; Maher, 2010; Thomas & Smith, 2009). Also, the 1981 Education Act introduced visiting teacher services for pupils with SEND (Kumsang & Moore, 1998). During this time, LEAs were responsible for arranging and maintaining appropriate schooling and statements for pupils with SEND (Tomlinson, 1988; Alban-Metcalf, 1996). Within the 1980s and 1990s, the number of children in special schools decreased whilst children recognised as having SEND increased (House of Commons Education and Skills Committee, 2005). However, many LEAs failed to produce coherent policies, demanding teachers, parents and voluntary bodies’ support (Tomlinson, 1988). Due to the rapid introduction of pupils with SEND in mainstream education, few teachers had adequate training or time to consider their needs, thus a lack of coherence and multiagency working between UK policies existed (Vickerman & Maher, 2018). Although d/Deaf schools remained open following the 1981 Education Act, over the coming decades the number of schools for the d/Deaf declined (Anglin-Jaffe, 2020). In 1982, 75 schools for d/Deaf existed in the UK (Moore, 2008 cited in Anglin-Jaffe, 2020), though by 2023 only twenty-two remained open (BATOD, 2023).

The 1988 Education Reform Act introduced the National Curriculum (House of Commons Education and Skills Committee, 2005), yet it failed to offer alternation or

the disapplication for pupils with SEND over certain periods (Alban-M etcalfe, 1996). Although the national curriculum led to a wider and more structured curriculum, schools had to follow programmes regardless of d/Deaf pupils' needs (Kumsang & Moore, 1998). The amount of content covered by the national curriculum meant d/Deaf pupils missed other vital education e.g. language work whilst schools would debate establishing a unit if they thought this may negatively impact school results (Wakefield, 1998).

Whilst the 1981 Education Act strengthened the centrality of LEAs over SEND, following this, local management of schools (LMS) reduced the power of LEAs over educational arrangements in their local areas (Alban-Metcalfe, 1996; Skidmore & Copeland, 1998). Additionally, after the 1988 Education Reform Act schools were encouraged to opt out of being controlled by LEAs (Sharp, 2002). Thus, several academics have suggested the Conservative Government's agenda in the 1980s and 1990s was to remove LEAs from power (Sharp, 2002; Tomlinson, 2005).

More broadly, in the 1990s, a commitment to inclusion internationally occurred and questions surrounding its feasibility were intensified by policy developments including the Salamanca Statement (Maher, 2013). The Salamanca Statement in 1994 declared all children should be educated in mainstream education where possible to provide equal opportunities and promote an inclusive society (UNESCO, 1994). As Kumsang and Moore (1998) highlight, the Salamanca statement carefully selected its reference to inclusion and asserts that d/Deaf pupils' communication needs may be more appropriately met in special schools or in d/Deaf units within mainstream schools. As Powers (2002) emphasises, no evidence within the Salamanca statement supports that mainstream schools are more effective than special schools at facilitating d/Deaf pupils' attainment and social inclusion. Despite this, mainstreaming d/Deaf pupils became widespread (Mathews, 2017).

Since 1994, the UK government placed inclusion of pupils with SEND at the heart of several policies (Powers, 2002). Firstly, the 1994 Code of Practice on the Identification and Assessment of SEND resulted in schools having clear roles and responsibilities to support children with SEND (Alban-Metcalfe, 1996; Vickerman & Maher, 2019). This Code of Practice increased educators' awareness that different communication methods may be necessary for children with varying needs, particularly d/Deaf pupils (Kumsang & Moore, 1998). The Code of Practice facilitated a more effective partnership between parents and professionals as well as amongst professionals themselves (Kumsang & Moore, 1998). However, it raised concerns

amongst teachers responsible for its implementation regarding its practicalities due to a lack of resources and time (Daniels & Smith, 1999).

Arguably, the election of the Labour Government in 1997 boosted inclusion as a political agenda in the UK (Vickerman, 2012; Vickerman & Maher, 2018). The UK's commitment to inclusion was exemplified through various policies including Special Educational Needs and Disability Act of 2001, the SEND Code of Practice in 2001, Every Child Matters Agenda in 2005 and National Curriculum Inclusion Statement in 2007 (Vickerman, 2012). However, little changes were made to the National Curriculum (Thomson, 2017), which is problematic considering its implications on the inclusion of pupils with SEND as previously discussed. Nevertheless, other policies during this period emphasised the UK's commitment to the Salamanca statement and mainstreaming pupils with SEND (Morley et al., 2005).

As Powers (2002) highlights the Special Educational Needs and Disability Act 2001 safeguarded the rights of pupils with SEND, allowing parents to state a preference of a mainstream school and ensured schools set measurable academic targets for all pupils. Similarly, Iantaffi et al. (2003b) state the SEND Code of Practice 2001 stressed children's right to be consulted about provision. Arguably, increasing rights of children and parents concerning education represented a growing movement towards inclusion, whereby children's needs were placed at the forefront of educational decisions. However, Powers (2002) highlights inconsistency exists between notions of inclusion in this policy and others published by Ofsted which aimed to increase educational outcomes.

Although UK academics (Kumsang & Moore, 1998; Branson & Miller, 2002; Powers, 2002; Iantaffi et al., 2003b) have provided information on the notable landmarks in d/Deaf education from the 1760s to the 1990s, research is outdated and policy changes since have not been accounted for. This contrasts to US research which has continuously highlighted how government legislation has impacted d/Deaf pupils' education (Eriks-Brophy et al., 2006; Gertz & Boudreault, 2016; Alasim, 2021). This is problematic considering the UK's educational environment surrounding SEND has been 'everchanging' (Maher et al., 2021). Over the past 15 years, the UK government has introduced several policy changes concerning the education of pupils with SEND, including revisions to SEND Code of Practice (DfE & DoH, 2015).

As highlighted by Kumsang and Moore (1998), UK government legislation has significantly influenced d/Deaf education, yet changes have been made under the heading of SEND despite d/Deaf education being unique. Deaf Studies scholars have

expressed their concerns with mainstreaming, suggesting it seeks to create homogeneity through assimilating minority groups into the linguistic and cultural environment of mainstream education (Branson & Miller, 1993; Branson & Miller, 2002). Whilst inclusion policies may embrace the social model of disability for other pupils with SEND, for d/Deaf pupils mainstreaming supports the medical agenda, ensuring the dominance of speech (Mathews, 2017). Although SEND policies are overflowing with terminology of equality, much of their underpinning principles are rooted in a medical model of deafness (Brennan, 2003). For example, despite the SEND Code of Practice 2014 highlighting a commitment to inclusive practice, it states that children with a 'hearing impairment' may have a SEND or disability, which reinforces medical model thinking towards d/Deaf people. Alongside this, the 2014 National Curriculum expresses that "The national curriculum for English reflects the importance of spoken language in pupils' development across the whole curriculum – cognitively, socially and linguistically. Spoken language underpins the development of reading and writing" (DfE, 2013a, p.13). By upholding the dominance of speech in education whilst promoting the integration of d/Deaf pupils, government legislation is contradictory and exclusionary to culturally Deaf people whilst reinforcing notions of d/Deaf people as disabled. Thus, Branson and Miller (2002) state, the ideals of mainstreaming are contradictory, and therefore mainstreaming is a discriminatory practice whereby policies expect d/Deaf people to adapt to the hearing world. In this manner, mainstreaming d/Deaf pupils could be perceived a project of 'normalisation' rather than inclusion (Mathews, 2017). Mainstreaming fails to ensure the linguistic rights of d/Deaf children and full access to the curriculum, assessment or social experience (Brennan, 2003). Consequently, Branson and Miller (1993) argue mainstreaming is a form of symbolic violence which does not consider d/Deaf pupils' educational needs and reinforces notions of d/Deaf people as 'disabled' and reveals structural inequalities.

Recent SEND legislation.

Considering the pivotal role policies play in the delivery of PE for pupils with SEND (Vickerman & Maher, 2019), it is essential to review recent policy developments. Currently, no research has reviewed recent SEND legislation developments on d/Deaf pupils' inclusion in PE specifically, therefore this section draws upon wider literature to enable critical analysis of SEND legislation. Over the past 15 years, policy changes regarding teacher education pedagogy and supporting pupils with SEND in mainstream PE have occurred (Morley et al., 2020). The most noteworthy of policy changes relating to teaching pupils with SEND in PE includes revisions to the national

curriculum, inclusion statement, teachers' standards and the education inspection framework (Vickerman & Maher, 2018; Morley et al., 2020). As several educational policies have been introduced, and it is not possible to examine all of these in detail, attention will be paid to the most pertinent examples relating to high quality teaching of SEND as previously outlined. Notably, all of these policies have emphasised the importance of teaching quality, yet it is unclear if d/Deaf pupils are being taught effectively in mainstream PE and if so, what constitutes effective teaching.

The Equality Act 2010 highlighted schools cannot discriminate against pupils with impairments and ought to ensure reasonable adjustments to avoid them experiencing disadvantage whilst promoting equality and good relations (DfE & DoH, 2015). Under the Equality Act, a person who is disabled has a "physical or mental impairment which has a substantial and long-term adverse effect on that person's ability to carry out normal day to day activities." (Government Equalities Office & Women Equalities Unit, 2022, n.p.). As previously mentioned, a d/Deaf pupil may be considered disabled under the Equality Act if they experience permanent deafness or temporary deafness for over 12 months (NDCS, N.D.b). From September 2012, schools had to provide auxiliary aids and services when these were not provided through SEN statements or other sources (DfE, 2014b). Regarding d/Deaf pupils, auxiliary aids and services may include but is not limited to; a BSL interpreter, radio aids, soundfield equipment and a note taker (NDCS, n.d. c). This policy attempted to enhance d/Deaf pupils' learning and inclusion in mainstream settings. However, by placing d/Deaf pupils under a branch of disability, the policy reinforces medical model thinking towards d/Deaf people, weakening their rights of self-identity.

Additionally, the latest Teachers' Standards and National Curriculum published by the UK government demonstrate a commitment to inclusive PE provision (Vickerman & Maher, 2019). Under Teachers' Standards, teachers must understand all pupils' needs, including those with SEND and use appropriate teaching strategies to support their learning (DfE, 2011). The National Curriculum Inclusion Statement outlines that teachers must have high expectations of all pupils, set ambitious targets and plan lessons to ensure no barriers to learning exist for pupils with SEND (DfE, 2013a). Increasing teacher responsibility to provide an inclusive learning environment and enhance the learning of pupils with SEND is evident. However, Maher (2010) highlights, the National Curriculum for Physical Education's (NCPE) focus on elite performance marginalises pupils with SEND and undermines the inclusion aims of PE. Yet research has failed to explore the implications of policies on d/Deaf pupils' education within specific curriculum subjects such as mainstream PE.

Furthermore, the 2014 SEND Code of Practice placed emphasis on mainstreaming pupils with SEND (Vickerman & Maher, 2019). This Code of Practice provides guidance to enable educators to comprehend their legal responsibilities to pupils with SEND (Vickerman & Maher, 2019). Emphasis is placed on a teacher's responsibility for providing high quality teaching of pupils with SEND (Cowne, Frankl & Gerschel, 2018). The new code attempted to create a more effective SEND system (Vickerman & Maher, 2019). In 2019, Ofsted introduced an Education Inspection Framework (EIF) which outlined how schools, academies, non-independent schools, further education, skills provision and early years settings would be inspected (Ofsted, 2024a). During inspections, the education for pupils with SEND is a key determinant of a school's/academy's grading (Ofsted (2024). For instance, an 'outstanding' rating would mean pupils with SEND are achieving exceptionally well whilst an 'inadequate' rating means a school/academy has low expectations of pupils with SEND whilst their needs are not appropriately identified or met (Ofsted, 2024a). The framework's criteria highlighted the expectation that all learners should receive high-quality education (DfE, 2022). Whilst more recently, the area SEND inspection framework has sought to evaluate local areas measures for children and young people with SEND to improve their experiences and outcomes (Ofsted & Care Quality Commission, 2023). Evidently, cohesion between policies such as Teachers' Standards, National Curriculum Inclusion Statement, SEND Code of Practice, EIF and the SEND inspection framework exists through their focus on high quality teaching to achieve inclusion. This may have somewhat positively influenced d/Deaf pupils' education, though the degree to which it has requires further investigation.

Educational policy and d/Deaf voices.

Unfortunately, as d/Deaf pupils have been conflated under the umbrella term of SEND most educational policy developments have failed to consider d/Deaf pupils' specific educational needs and have instead reproduced marginality (Gregory, et al., 1998; Branson & Miller, 1983). There is a paucity of political power and little penetration by d/Deaf people into such professions (Batterbury, 2012). For instance, the UK parliament has lacked d/Deaf MPs and has not been proportionate to the amount of d/Deaf people in the UK (RNID, 2010). Thus, d/Deaf people's voices have been underrepresented in parliament and educational policies. Yet, d/Deaf identity is diminished when hegemony of the hearing population decides what is best for d/Deaf people (Gertz, 2003). Educational institutions have taken control over d/Deaf people arguing to act in their interests whilst not gaining their opinions in what involves them the most (Lane, 1992 cited in Bauman, 2004). It is only more recently that Deaf

campaigners such as the National Deaf Children's Society are being listened to by the UK's government, regarding the need for more Teachers of the Deaf (TOD) (HM Government, 2023), despite the number of TOD declining since 2011 (NDCS, 2022C). Alongside this, the long-fought campaign of the 'Right to Sign' by Young People's Advisory Board and NDCS since 2017 (NDCS, 2023a) has only recently been successful in parliament with the introduction of BSL as a GCSE from September 2025 (DfE, 2023). There is a necessity for d/Deaf voices in parliament concerning d/Deaf education as this may have profound implications on their education moving forward.

Chapter summary.

This chapter provided context on the most influential developments in d/Deaf education to comprehend the current educational landscape and location of PE within it. The history of d/Deaf education can be traced back longer than initially expected. However, this does not mean that d/Deaf education has been easily granted, instead this chapter revealed decades of oppression. Questions remain regarding the oppression d/Deaf people face today through mainstreaming. For many years, d/Deaf voices have gone unheard, yet d/Deaf voices regarding education are vital to understand d/Deaf people's educational needs. As Ladd (2003) suggests only once education becomes 'Deaf-centred' can significant developments occur. Therefore, this study obtains d/Deaf pupils' perspectives regarding effective PE teaching to share across the PE field to facilitate d/Deaf pupils' learning and inclusion. The next chapter critically analyses literature surrounding d/Deaf pupils' education within mainstream settings, specifically in PE to identify the current gaps in knowledge and provide a rationale for the chosen research topic.

CHAPTER TWO.

LITERATURE REVIEW.

Introduction.

This chapter reviews literature surrounding d/Deaf children's education, particularly in mainstream Physical Education (PE). Firstly, this chapter explores d/Deaf pupils' experiences in general mainstream education. As Angelides and Aravi (2006) highlight, d/Deaf pupils have incurred benefits and disadvantages from mainstreaming and this chapter highlights the impact of these over the past 40 years. Moving on, the chapter focuses upon literature surrounding d/Deaf pupils' experiences in mainstream PE as it has previously been suggested pupils with SEND may have differing needs within curriculum subjects (Maher, 2010; Maher & Palmer, 2012). Upon critical analysis of literature, it will become apparent that research which obtains d/Deaf pupils' perspectives on their experiences of mainstream PE within the UK is needed. To comprehend why d/Deaf pupils predominately report negative PE experiences, the chapter delves into PE teachers' experiences educating d/Deaf pupils. Here, it will become clear mainstream teachers often lack knowledge, training or experience prior to educating d/Deaf pupils in PE. Analysis of literature will highlight a dearth of research explores PE teachers' experiences educating d/Deaf pupils. Furthermore, the chapter examines literature surrounding teaching strategies for educating d/Deaf pupils in PE to demonstrate it currently lacks an empirical evidence base (Maher & Haegele, 2022). This will justify the selected research topic to discover how d/Deaf pupils can be taught effectively in PE. Finally, the chapter will explore the large body of literature surrounding PE teacher effectiveness to highlight how research in this area has neglected the teaching of pupils with SEND, particularly d/Deaf pupils. Through analysing the selected literature review themes, the rationale behind this research study will become apparent; to explore how d/Deaf pupils can be taught effectively in mainstream PE.

d/Deaf pupils' experiences in general mainstream education.

Whilst there is a growing body of literature surrounding the experiences of pupils with SEND, there is less of a research base about d/Deaf pupils' experiences in mainstream education compared to other pupils with SEND such as autism spectrum disorders or learning impairments (Vermeulen, Denessen & Knoors, 2012; Schwab, Wimberger & Mamas, 2019). Currently, little empirical research exists surrounding d/Deaf pupils' education in mainstream settings (Alasim, 2021). However, by

understanding d/Deaf pupils' experiences of mainstream education it may become possible to highlight potential improvements within a particular setting or similar settings, if generalised (Iantaffi, Sinka & Jarvis, 2003b). Within literature, there is conflicting information regarding whether d/Deaf pupils have positive or negative experiences in mainstream education. Thus, this section will examine evidence of both, focusing upon the most prevalent themes in literature including d/Deaf pupils' academic attainment, friendships and social interactions. The limitations of studies and potential considerations when reviewing findings will be explored to facilitate critical analysis of literature. Finally, the section emphasises the necessity for research to focus on d/Deaf pupils' experiences in individual subjects.

Academic Attainment.

Literature has suggested mainstreaming offers the potential for d/Deaf pupils to achieve higher academic grades (Hendar, 2008 cited in Olsson, Dag & Kullberg, 2018). In Angelides and Aravi's (2006) study, it is argued mainstream education offers a richer curriculum and more learning opportunities for d/Deaf pupils compared to SEN settings. However, Powers (2002) argues comparison of d/Deaf pupils' attainment in SEN and mainstream settings should not occur as they teach different populations, thus this is not evidence of teaching effectiveness. Meanwhile, as Powers, Gregory and Thoutenhoofd (1999) highlight, despite studies linking mainstream placement with higher attainment, researchers have not considered potential factors. For example, background factors including having a d/Deaf parent, using English at home and personal attributes e.g. hard work which may determine a d/Deaf pupil's attainment (Powers, 1999; Luckner & Muir, 2001; Powers, 2003; Powers; 2011). Within Powers' (2011) study exploring the views of high achieving d/Deaf pupils, it is acknowledged many factors remain missing from this discussion, including teaching strategies which may have been overlooked by d/Deaf pupils. Thus, care must be taken during interpretation and analysis of studies revealing higher academic attainment for d/Deaf pupils in mainstream settings, considering sampling bias, missing information, potential causes and how data is measured (Powers, 2003).

Moreover, studies suggesting mainstreaming can facilitate higher academic grades are outdated, based outside of the UK and do not consider d/Deaf pupils' attainment compared to their hearing peers. As previously mentioned, for the past seven years in England, d/Deaf children have achieved one grade less at GCSE than their hearing peers on average (NDCS, 2022a). Similarly, Hendar and O'Neill (2016) suggest

d/Deaf pupils are underrepresented in higher attainment groups at the end of secondary education in Scotland and Sweden. Thus, research suggests in mainstream classrooms, d/Deaf pupils generally attain less than their hearing peers (Marschark & Hauser, 2012). The attainment gap between d/Deaf and hearing children demonstrates mainstream education is failing to deliver its promises of quality education for d/Deaf children (NDCS, 2019A). Hence, it is misleading to suggest mainstreaming is a success in terms of d/Deaf pupils' academic attainment when an attainment gap between d/Deaf pupils and hearing pupils exists. Only once d/Deaf children have equal learning opportunities to their hearing peers can inclusive education be achieved (Jarvis, 2002). As Nunes et al. (2001) suggests, mainstreaming d/Deaf pupils should not only be assessed in terms of cognitive gains but also by its social implications, indeed if d/Deaf pupils feel isolated their education will suffer. Therefore, the literature review now examines d/Deaf pupils' friendships and social interactions in mainstream education.

Friendships and social interactions.

At the heart of positive mainstream experiences for d/Deaf pupils is peer friendships (Ridsdale & Thompson, 2002; Jarvis, 2003; Iantaffi et al., 2003a; Batten, et al., 2014; Edmondson & Howe, 2019; Andersson, Adams & Lyngbäck, 2022). Within Powers' (1999) study, it is highlighted d/Deaf pupils are accepted by their hearing peers. However, Powers' (1999) findings were from a teacher's perspective who may not know the true extent of d/Deaf pupils' friendships, thus the reliability of these findings may be questioned. Evidently, disparities between teacher's perceptions and d/Deaf pupils' perceptions of d/Deaf pupils' social interactions can be seen throughout Schwab et al.'s (2019) study whereby mainstream teachers rated d/Deaf pupils' social inclusion higher than pupils did. Consequently, studies from teachers' perspectives alone that report positive social interactions should be cautiously analysed, as teachers may wish to report positive social interactions due to social desirability bias (Schwab et al., 2019). Nevertheless, Powers' (1999) findings are supported by Iantaffi et al., (2003a), whereby d/Deaf pupils reported that mainstream education provided many opportunities to make friends. Hearing friends may help clarify misunderstandings that may occur for d/Deaf pupils (Luckner & Muir, 2001; Jarvis, 2003; Iantaffi et al., 2003a). Whilst this can be a mutual exchange whereby d/Deaf pupils can help their hearing peers understand topics (Iantaffi et al., 2003a). Jarvis (2003) states mutual support between d/Deaf and hearing peers may help hearing peers develop their communication skills with d/Deaf peers through a trial-and-error process. Consequently, academics have suggested peer friendships facilitate d/Deaf

children's social, emotional and cognitive development whilst improving their wellbeing and confidence (Powers, 2002; Batten, et al., 2014).

However, as highlighted by Batten et al. (2014) whilst a d/Deaf pupil can have hearing friends in mainstream education, this does not guarantee that these friendships are of good quality. Within Edmondson and Howe's (2019) study, despite d/Deaf pupils being part of a friendship group, they still experienced social issues due to a lack of understanding from peers. Also, within Edmondson and Howe (2019) and Andersson et al.'s (2022) studies despite reporting that some d/Deaf pupils experienced friendships, these were overshadowed by many participants reporting a socially unpleasant experience. Furthermore, Nunes et al. (2001) highlights d/Deaf pupils are more likely to have sporadic friendships than their hearing peers and are less likely to have friendships beyond the classroom e.g. being invited to play at home. Thus, literature suggests whilst d/Deaf pupils may have friends in mainstream education they feel less included and accepted by their peers (Schwab et al., 2019). Consequently, d/Deaf pupils' friendships in mainstream schools must not be taken at face value.

A significant amount of literature reveals poor social interactions for d/Deaf pupils, whereby a lack of friendships and exclusion are deeply intertwined in their experiences of mainstream education (Nunes et al., 2001; Israelite, Ower & Goldstein, 2002; Ridsdale & Thompson, 2002). Firstly, communication barriers can impede d/Deaf pupils' friendships with hearing peers in mainstream education (Jarvis, 2002; Punch & Hyde, 2011; Xie, Potmėšil & Peters, 2014; Warner-Czyz et al., 2018). During playtime, d/Deaf pupils struggle to hear other children due to high noise levels (Preisler, Tvingstedt, & Ahlström, 2005). Thus, Ridsdale and Thompson (2002) argue when speech is the dominant form of communication in mainstream education, d/Deaf pupils may encounter difficulties making friends. Therefore, even when d/Deaf pupils are accepted by their peers, they are less likely to have a friend than their hearing peers (Nunes et al., 2001; Waulters & Knoors, 2007; Xie et al., 2014).

Although Nunes et al.'s study (2001) yields rich data concerning d/Deaf pupils' experiences in the UK, it is problematic to generalise their findings as the sample consisted only of d/Deaf pupils who communicated via speech. Also, as Nunes et al.'s (2001) study is retrospective, their findings might not be representative of d/Deaf pupils' experiences today, particularly considering the changing educational policies during this time. Moreover, recalling experiences retrospectively poses risk to the trustworthiness of findings (Bredahl, 2013 cited in Zhu & Haegele, 2017). As

Sutherland and Young (2014) highlight, asking d/Deaf adults about their educational experiences may be of limited value to inform present educators as educational practices have changed and perceptions of school experiences may be influenced by maturity and life experiences. Considering this, the current study empirically investigates d/Deaf pupils' mainstream experience to support or contrast previous UK findings.

Additionally, it is argued d/Deaf pupils are more likely to be rejected than their peers in mainstream settings (Cappelli et al., 1995; Angelides & Aravi, 2006; McIlroy & Storbeck, 2011). Alongside this, literature suggests in mainstream settings d/Deaf pupils frequently experience bullying and oppression (Kiff & Bond, 1996; Kouwenberg, Rieffe, Theunissen & de Rooij, 2012; Edmondson & Howe, 2019). These studies support Warner-Czyz et al. (2018) more broadly who states d/Deaf children commonly experience teasing and exclusion. In mainstream education, peer perceptions underpin d/Deaf pupils' inclusion (Stinson & Anita, 1999), thus when d/Deaf pupils are perceived as 'different', communication and establishing meaningful relationships is problematic (Rustin & Kuhr, 1989; Stinson & Lui, 1999; Ridsdale & Thompson, 2002). As highlighted within Ridsdale and Thompson's (2002) study in the UK, d/Deaf pupils can be treated differently and excluded by their hearing peers. Feelings of difference amongst d/Deaf pupils are echoed in Israelite et al.'s (2002) study more broadly in Canada, whereby a d/Deaf pupil recalled other pupils pointing and avoiding them. Stinson and Lui (1999) suggest d/Deaf pupils may struggle to engage in social interactions due to their hearing peers' fear of 'difference' and impatience. Isolation in mainstream education can create feelings of insignificance amongst d/Deaf pupils (Israelite et al., 2002). Literature revealing poor social interactions for d/Deaf pupils is worrying considering this may lead to under-achievement, increased psychosocial difficulties, poor mental health and restrict future interactions with hearing people (Nunes et al., 2001; Ridsdale & Thompson, 2002; Wauters & Knoors, 2008; Batten et al., 2014). Consequently, academics have argued mainstreaming has had adverse impacts than those intended, resulting in d/Deaf pupils' isolation which is counterproductive to their education, identity and social development (Stinson & Lang, 1994; Obasi, 2008).

Although Israelite et al. (2002) reveals d/Deaf pupils may initially be excluded, sometimes upon disclosing being d/Deaf, their peer interactions can improve. Additionally, Stinson and Lui (1999) suggest hearing pupils who have more knowledge about d/Deaf people are more accepting of their peers and can overcome communication breakdowns. However, as Nunes et al. (2001) highlights, the mere

presence of d/Deaf pupils alone is insufficient to raise d/Deaf awareness, thus schools should be proactive in facilitating effective communication between hearing and d/Deaf pupils. Therefore, raising d/Deaf awareness may help hearing peers understand how to manage communication breakdowns, improve d/Deaf pupil's social interactions and create a positive school ethos (Jarvis, 2003; Wearmouth, 2023). However, academics highlight caution should be taken during d/Deaf awareness activities to prevent embarrassing d/Deaf pupils, thus activities must be carefully planned to improve d/Deaf pupils' inclusion in mainstream education (Jarvis, 2003).

Despite literature revealing some positive mainstream experiences for d/Deaf pupils (Iantaffi et al., 2003a), these are largely overshadowed by the abundance of research documenting exclusion, isolation and bullying of d/Deaf pupils (Israelite et al., 2002; Kent, 2003; Wolters, Knoors, Cillessen & Verhoeven, 2011). As Batten et al. (2014) suggests, the lack of consensus over d/Deaf pupils' peer interactions may be due to variables such as participant characteristics, thus literature is limited in ability to generalise. Also, variations in literature may be a result of contextual variables, for example studies being conducted in different countries, which have varying educational policies, school cultures and teaching approaches. Notably, most studies investigating d/Deaf pupils' mainstream experiences are self-reports (Iantaffi et al., 2003a; Edmondson & Howe, 2019; Schwab et al., 2019; Andersson et al., 2022). Although self-reports are useful, d/Deaf pupils' perceptions of social interactions may vary from how they are perceived by their peers, thus d/Deaf pupils' self-perception may not represent the complete picture of their social interactions (Nunes et al., 2001; Wauters & Knoors, 2008). As previously mentioned, without a thorough picture of d/Deaf pupils' social interactions, the problems d/Deaf pupils face or the support needed cannot be understood, limiting the success of future interventions (Batten et al., 2014). Hence, this study addresses Batten et al.'s (2014) calls for future research to gain several stakeholder's perspectives and include various research methods including observations. In doing so, the study gains rich insight into d/Deaf pupils' social interactions in mainstream settings.

d/Deaf pupils' identity in mainstream education.

When discussing d/Deaf pupil's integration in mainstream settings, d/Deaf pupils' identity must be considered alongside communication barriers (Iantaffi et al., 2003b). Therefore, the following section examines d/Deaf pupils' identity in mainstream education. Although research suggests d/Deaf pupils who experience positive

relationships have a strong sense of identity (Kent & Smith, 2006) this is a small amount compared to literature that reveals negative social interactions as previously discussed. The abundance of research highlighting negative social interactions for d/Deaf pupils in mainstream education is concerning considering this may negatively impact identity and self-esteem (Powers, 1999).

As Dixon, Smith and Jenks (2004) suggest, teasing d/Deaf pupils is to sustain their subordination within the mainstream school's social hierarchy. Hearing pupils may attempt to 'other' d/Deaf pupils, creating an imbalance of power which d/Deaf pupils become aware of (Israelite et al., 2003). Low social status is strongly correlated to d/Deaf pupils' low self-esteem (Ridsdale & Thompson, 2002). Such experience can be related to Goffman's (1963) work more broadly, whereby through hegemonic discourses a stigma surrounding d/Deaf people emerges. As suggested by Kent (2003), this subjective sense of shame impinges d/Deaf pupil's identity development. Indeed, Kumari and Bhatt (2014) found that d/Deaf pupils had lower self-concept compared to their hearing peers. Consequently, isolation and exclusion in mainstream education can have profound negative impacts upon d/Deaf pupils' self-esteem and identity (Jarvis, 2002; Angelides & Aravi, 2006).

Hearing and radio aids can cause embarrassment for d/Deaf pupils in mainstream settings as these make being d/Deaf visible (Iantaffi et al., 2003a; Edmondson & Howe, 2019). Self-stigmatization through internalised perceptions of 'abnormality' is linked to the visibility of hearing aids (Kent & Smith, 2006). To overcome 'difference', d/Deaf pupils may attempt to 'blend in' (Dixon, Smith and Jenks, 2004). Within Israelite et al.'s (2002) study, most d/Deaf pupils in mainstream education concealed being d/Deaf to 'fit in'. This can be linked to impression management, here d/Deaf pupils may control information about themselves to 'pass' as 'normal' (Goffman, 1963; Jones et al., 2011). Arguably, selective disclosure of a hearing aid allows d/Deaf individuals to co-construct their reality in social, cultural and historical contexts (Kent & Smith, 2006). During social interactions, those with invisible impairments, including deafness can conceal impairments through passing to distance themselves from their stigmatised identity (Lingsom, 2008; Roman, 2009; Newheiser & Barreto, 2014).

Concealing being d/Deaf represents dysconscious audism, whereby d/Deaf people internalise audist beliefs (Gertz, 2008). Although more widely in O'Connell's (2022) study of d/Deaf people's employment, dysconscious audism in education is briefly discussed, academics are yet to explore how dysconscious audism may be linked to d/Deaf pupils' 'passing' in mainstream education. As highlighted in Alasim's (2021)

systematic review of d/Deaf pupils' experiences of mainstream education, literature has failed to apply various theories. Future research which applies dysconscious audism, stigma and passing may facilitate a deeper analysis of d/Deaf pupils' mainstream experiences and identity.

Whilst literature provides insight into d/Deaf pupils' experiences in general mainstream education, these studies are outdated, particularly those from the UK (Nunes et al., 2001; Ridsdale & Thompson, 2002; Jarvis, 2002; Iantaffi et al., 2003a). As previously mentioned, the UK's educational and SEND landscape is "complex, nuanced and everchanging" (Maher et al., 2020, p.960). Considering the UK has encountered numerous educational policies since the publication of studies discussed earlier, the educational context may have changed. Moreover, as Maher and Hagele (2022) highlight teaching d/Deaf pupils in a PE environment significantly varies from a classroom environment. Consequently, this study examines d/Deaf pupils' social interactions in PE to enhance knowledge.

d/Deaf pupils' experiences in mainstream Physical Education.

This section examines literature concerning d/Deaf pupils' experiences in mainstream Physical Education. PE was among one of the first subjects where pupils with SEND were integrated in mainstream classes (Maher & Haegele, 2022). Despite this, a dearth of literature concerning d/Deaf pupils' experiences in PE exists (Tanure Alves et al., 2021), particularly in the UK. To enhance understanding of d/Deaf pupils' mainstream PE experiences, it is essential to draw upon literature from the US and Brazil. Due to the limited nature of research, wider literature such as teaching strategies for educating d/Deaf pupils and the socialisation of Deaflympians will be drawn on to help uncover d/Deaf pupils' mainstream PE experiences. By analysing literature, this section will highlight the necessity for research to explore d/Deaf pupils' mainstream PE experiences in the UK, consider d/Deaf pupils' perspectives and use different methodological approaches.

d/Deaf pupils' balance in PE.

A key theme throughout literature is that d/Deaf pupils have poorer balance abilities than their hearing peers (Gayle & Pohlman, 1990; Vidranski & Farkaš, 2015; Jernice & Nonis, 2017). Although it may be argued Jernice and Nonice's (2017) findings are unrepresentative of all d/Deaf pupils as their sample only includes females, literature has identified that sex is not a significant factor in balance abilities (Gayle & Pohlman, 1990; Vidranski & Farkaš, 2015). Lieberman (2016) highlights when semi-circular

canals are damaged, d/Deaf pupils are likely to experience balance problems which may cause motor ability and developmental delays. However, Lieberman (2016) suggests not all d/Deaf pupils have balance problems and often have no restrictions on their participation in PE. Though it is noteworthy that Lieberman's (2016) paper is quite speculative and lacks its own empirical evidence to support these claims. As Goodman and Hopper (1992) highlight psychomotor deficits amongst d/Deaf children should not be assumed. Although d/Deaf children may be delayed in their physical development compared to their hearing peers, they eventually catch up to their peers' balance skills as they get older (Gayle & Pohlman, 1990; Stewart & Ellis, 1999; Vidranski & Farkaš, 2015). Thus, concerns over d/Deaf pupils' balance in PE are not a major issue when compared with communication barriers which require the most attention (Stewart & Ellis, 1999; Palmer, 2018; Vickerman & Maher, 2019). Consequently, the literature review now examines communication barriers for d/Deaf pupils in mainstream PE.

Communication and isolation.

Throughout literature, communication has been highlighted as a fundamental barrier to d/Deaf pupils' engagement in PE. As suggested by Reich and Lavay (2009) communication difficulties are often exacerbated for d/Deaf pupils in PE. During PE, d/Deaf pupils may not be directly facing the teacher leading to misunderstandings or instructions not being heard (Eichstaedt & Seiler, 1978). Additionally, communication issues can be compounded in PE as d/Deaf pupils may remove their hearing aids due to fear of damaging them (Reich & Lavay, 2009; Kurková, 2015). Meanwhile, background noise can create misunderstandings for d/Deaf pupils in PE (Reich and Lavay, 2009). Alongside this, inaccessible communication methods can lead to d/Deaf pupils' exclusion in PE (Palmer, 2018; Tanure Alves et al., 2021). As highlighted by Tanure Alves et al. (2021) some PE teachers do not offer alternative methods of communication to improve pupils' understanding of activities, placing responsibility on interpreters for d/Deaf pupils' participation. Communication barriers may hinder d/Deaf pupils' social interactions within PE, particularly during team activities (Tanure Alves et al., 2021). Meanwhile, Reich and Lavay (2009) highlight when misunderstandings in PE occur, d/Deaf pupils are excluded for 'not listening'. Academics suggest misunderstandings may lead to frustration and anxiety for d/Deaf pupils in PE (Columna & Lieberman, 2011; Schultz et al., 2013; Kurková, 2015). Inaccessible communication methods may negatively impact d/Deaf pupils' participation, social interactions and progress in PE (Reich & Lavay, 2009; Tanure

Alves et al., 2021). In this manner, it is hardly surprising Kurková (2015) found d/Deaf pupils in mainstream settings have a higher prevalence of negative attitudes towards PE than their hearing peers or d/Deaf pupils in schools for the d/Deaf. Hence, PE teachers must develop effective communication with d/Deaf pupils to foster inclusion and reduce barriers to learning (Kurková, 2015; Barboza et al., 2019).

Although Tanure Alves et al. (2021) emphasise the limitations of utilising interpreters in mainstream education, restricting social interactions between peers, they fail to acknowledge the consequences of using interpreters when researching d/Deaf people. During interviews, Tanure Alves et al. (2021) uses interpreters which may disrupt the researcher-child relationship and raise concerns over power relations, confidentiality, misinterpretation (Harr, 2001). The use of interpreters within Tanure Alves et al. (2021) raises a risk of institutional covert audism, here interpreters may only translate information that they believe is relevant (Eckert and Rowley, 2013). This may pose risk to the validity and reliability of Tanure Alves et al.'s (2021) findings. As highlighted by Bauman (2004) more broadly, increased awareness of audism may prevent its daily manifestations. A researcher must be aware of an interpreter's translation of the child's responses (Harr, 2001). Future research which explores d/Deaf pupils' experiences in mainstream PE should be aware of how audism may manifest to prevent its presence in research.

Whilst literature provides insight into d/Deaf pupils' PE experiences, studies are based outside the UK; thus it is unclear if similar issues persist. More broadly in Foster, Fitzgerald and Stride's (2019) UK exploration of Deaflympians' socialisation in sport, both positive and negative experiences was reported. However, Foster et al.'s (2019) study is retrospective and only briefly mentions PE settings rather than being an explicit focus. Thus, this study might not reflect current UK PE settings or d/Deaf pupils' experiences in mainstream PE today. Also, Foster et al.'s (2019) sample may be unrepresentative of all d/Deaf pupils' PE experience as participants are Deaflympians, whom it may be suggested have had a positive PE experience due to their decision to pursue sport further. Nevertheless, Foster et al. (2019) identified communication barriers were exacerbated in PE due to Sports Hall acoustics which resulted in d/Deaf pupils' exclusion. As a dearth of research concerning d/Deaf pupils' PE experiences exists within the UK, the current study seeks to build upon Foster et al.'s (2019) findings to inform future practice and enhance knowledge. To comprehend why communication difficulties for d/Deaf pupils persist, it is necessary to look beneath the surface and appreciate the influence of inadequate modifications and the reproduction of dominant discourses. Within educational settings, DeLuca

(2013) highlights hegemonic practice may occur through a 'normative' concept, whereby minority groups may be integrated in a social setting but must follow dominant discourses such as speech. Also known as, "hegemonic phonocentric teaching and learning strategies" (Maher, 2020, p.318). Phonocentric teaching strategies may result in a hearing-centred society, whereby d/Deaf people experience audism (Bauman, 2004; Myers & Fernandes, 2010a). Consequently, hegemonic phonocentrism must be disrupted to ensure PE is inclusive for d/Deaf pupils (Maher, 2020).

Although PE academics have not applied phonocentrism (with the exception of Maher, 2020), its presence is evident throughout literature concerning d/Deaf pupils' PE experiences. As previously discussed, in Tanure Alves et al.'s (2021) study, PE teachers often failed to provide alternative communication methods, resulting in d/Deaf pupils' isolation. Here, literature prevails d/Deaf pupils who cannot conform to the dominant standard of hearing are excluded in mainstream PE (Tanure Alves et al., 2021). Whilst Tanure Alves et al. (2021) challenges the dominance of speech, the explicit application of phonocentrism may have provided deeper analysis of d/Deaf pupils' PE experiences. Similarly, within Reich and Lavay's (2009) study, failure to apply phonocentrism and 'othering' when a d/Deaf pupil is removed from an activity for 'not listening' limits their analysis as this may have provided a deeper understanding of necessary improvements within the PE field. As literature fails to apply d/Deaf epistemologies and hearing centred approaches such as phonocentrism, a foundation for influencing educational policies cannot be provided (Holcomb, 2010; Hauser et al., 2010). To deconstruct hegemony which privileges speech and hearing, individuals must be aware of phonocentrism (Bauman, 2008b). Until theories such as phonocentrism are employed to understand and analyse mainstream PE settings, the causes behind negative experiences cannot be addressed. Although Maher (2020) takes the first steps in connecting phonocentrism to PE settings, his sample consisted of prospective PE teachers, in a university setting. As Maher (2020) acknowledges, the transferability of his findings is unclear as phonocentrism is yet to be applied to a school, PE context. Future research should explore the presence and impact of phonocentrism on d/Deaf pupils' experiences within mainstream PE.

Whilst literature provides useful insight into d/Deaf pupils' PE experiences, a dearth of research explores this within UK educational settings, apart from Maher and Haegele's (2022) non-fiction accounts of d/Deaf pupils' experiences of different

teaching strategies. However, as Maher and Haegele's (2022) study fails to gather the perspectives of d/Deaf pupils, their experiences and feelings connected to them remain unknown. Due to cultural differences, political variations and differing educational policies, it is unclear if d/Deaf pupils have similar experiences in the UK to those in literature from the US and Brazil. Meanwhile, as Powers (2002) highlights more broadly, academics must appreciate how conceptions of inclusion vary in each country. From this viewpoint, it is likely d/Deaf pupils from different countries would report different mainstream PE experiences due to varying conceptions of inclusion. Consequently, UK research concerning d/Deaf pupils' experiences in mainstream PE is necessary. Additionally, research from d/Deaf pupils' perspectives in mainstream PE is limited to Kurková's (2015) and Tanure Alves et al.'s (2021) studies. As highlighted by Sutherland and Young (2014) more broadly, educational research rarely is informed by d/Deaf pupils' perspectives, however by appreciating their insights d/Deaf pupils' needs can be understood. For inclusion of d/Deaf pupils in mainstream education to be successful, educators must listen to d/Deaf pupil's voices about their experiences (Iantaffi et al., 2003a). To comprehend d/Deaf pupils' needs in mainstream PE, this study will be informed by d/Deaf pupils' experiences and perspectives.

As research has tended to focus upon high school settings when researching d/Deaf pupils in PE (Reich & Lavay, 2009; Kurková, 2015; Tanure Alves et al., 2021), it is unclear if d/Deaf pupils in primary setting have similar experiences to those reported. Indeed, d/Deaf pupils' experiences of mainstream PE in primary and high school settings may vary as primary teachers tend to be generalists compared to high school teachers who specialise in a subject area. Considering that research concerning d/Deaf pupils' PE experiences in primary education is sparse, this study investigates d/Deaf pupils' experiences of mainstream PE in a primary school to enhance knowledge surrounding d/Deaf pupils' education.

Previous studies have investigated d/Deaf pupils' experiences in mainstream PE in several ways including semi-structured interviews (Tanure Alves et al., 2021) and questionnaires (Kurková, 2015). However, as previously mentioned, differences may exist between what people say they do and what they do. Through ethnography this study builds upon previous research by exploring the authentic setting of a school to uncover what people do compared with what they think they do (Walford, 2018). Also, ethnography will enhance research by extracting the multiple layers attached to an individual's experience (Herbert, 2000).

d/Deaf pupils' identity in PE.

A plethora of literature reveals negative social interactions amongst d/Deaf pupils in PE which is worrying considering research more broadly has shown this can have damaging impacts upon identity for pupils with SEND (Fitzgerald, 2005). However, no research study has explored how d/Deaf pupils' PE experiences impact their identity. As literature concerning d/Deaf pupils' identity in PE is sparse, wider literature including d/Deaf pupils' PE experiences will be drawn upon to comprehend d/Deaf pupils' identity in mainstream PE. Firstly, it is necessary to comprehend the PE field before positioning d/Deaf pupils within it.

It is well established that PE is a key site for forming physical culture (Fitzgerald & Hay, 2014). PE is distinctive from many other subjects, whereby pupils can perform and see each other's performances (Lavay & Depape, 1987). Within PE, the body is a key focus which must be "managed, maintained, conditioned, repaired and controlled in order to improve performance." (Stolz, 2013, p.953). As PE is body-focused, it can significantly influence pupils' embodied identity (Armour, 1999). Within PE, physical capital can be generated through performance, assessment, classification and gaze (Hunter, 2004). Thus, pupils with the closest 'ideal' body will acquire capital whilst those who deviate from the dominant standard may struggle to gain capital (Hunter, 2004). Notably, physical capital can be converted for economic, social and cultural capital (Shilling, 2004). Due to PE's focus on bodies, a pupil with SEND may struggle to convert physical for social capital, resulting in their marginalisation (Hunter, 2004; Fitzgerald, 2005). Therefore, successful social interaction in PE depends upon body management (Kirk 1997 cited in Armour, 1999).

Although it is suggested more broadly that d/Deaf people do not have as much access to cultural capital compared to the hearing community (Hauser et al., 2010), Bourdieu's notions of capital (1990) have not been applied within research concerning d/Deaf pupils' PE experiences. Nevertheless, research subtly implies that d/Deaf pupils have low physical and linguistic capital in mainstream PE which could impede their ability to gain social and cultural capital. Evidently, this can be seen throughout Tanure Alves et al.'s (2021) study whereby d/Deaf pupils who cannot conform to the dominant standard of hearing are excluded and viewed inferior. Although Tanure Alves et al.'s (2021) applied DeLuca's (2013) framework of inclusion, the application of Bourdieu's capital (1990) may have helped uncover why d/Deaf pupils are experiencing the normative conception of inclusion. Such analysis may have identified underlying causes of d/Deaf pupils' PE experiences and offer suggestions

on how to work towards dialogical and transgressive conceptions within PE. Similarly, within Reich and Lavay's (2009) study, Bourdieu's notions of capital may have helped comprehend why a d/Deaf pupil, hides their hearing aids in PE by wearing their hair down to avoid being viewed as 'disabled' or 'hearing impaired'. Importantly, d/Deaf pupils in mainstream education may have similar physical capital to their hearing peers, however once their d/Deafness is disclosed their physical capital may decline (O'Brien, 2021). Arguably, the d/Deaf pupil within Reich and Lavay's (2009) conceals being d/Deaf to avoid the negative impacts of low physical capital such as low social capital and isolation. However, as Reich and Lavay's (2009) study is mostly atheoretical, analysis of why the d/Deaf pupil hid their hearing aids in PE is limited. The application of Bourdieu's notions of capital to both studies could have facilitated a greater understanding of how d/Deaf people are positioned within social environments (O'Brien, 2021), specifically in PE. Such analysis may have enhanced understanding of d/Deaf pupil's identity in mainstream PE and its underlying processes. Only once underlying processes are identified can 'doxa' (taken for granted truths and beliefs connected with PE) (Bourdieu, n.d. cited in Hunter 2004) be challenged surrounding the value of certain types of capital in PE.

Furthermore, within Tanure Alves et al.'s (2021) study, as d/Deaf pupils are viewed as inferior and excluded, this experience could have been linked to 'othering' (Silva & Howe, 2012). When d/Deaf people are 'othered', they are recognised as inferior and positioned on the margins of social power and cultural life (Israelite et al., 2002). Here, audism is present whereby d/Deaf bodies are perceived as "unwanted, inferior and subject to repair." (Hauser et al., 2010, p.490). These audist practices may reinforce hegemonic privilege based on one's ability to hear (Bauman, 2004; Eckert & Rowley, 2013). Through hegemony a stigma (Goffman, 1963) surrounding d/Deaf pupils appears. Meanwhile, audism may lead to d/Deaf pupils internalising negative stereotypes which may lead to isolation, anxiety or depression (Ladd, 2003; O'Connell, 2022; Wearmouth, 2023). Arguably, this can be seen within Reich and Lavay's (2009) example of a d/Deaf pupil hiding their hearing aids to 'pass' as hearing (Silva & Howe, 2012; Silva & Howe, 2019). Here, it may be argued the d/Deaf pupil within Reich and Lavay's (2009) study has internalised dysconscious audism whereby they believe "the only way to succeed is to become 'like hearing'" (Gertz & Boudreault, 2016, p.65). Dysconscious audism may prevent d/Deaf people achieving quality education and weaken their Deaf identity (Gertz, 2008). Audism may lead d/Deaf people to question their own linguistic, cultural and social identity (Hauser et al., 2010). By theorising dysconscious audism, the barriers and oppression within

d/Deaf pupils' education can be understood (Gertz 2008). The application of stigma, passing and audism in literature may have facilitated richer analysis of d/Deaf pupils' identity processes in mainstream PE. As Andersson et al. (2022) highlight more broadly, if educators are more aware of identity processes, they can anticipate socio-emotional aspects of learning and make decisions about d/Deaf pupils' education in alignment with their needs. As highlighted above, research that touches upon d/Deaf pupils' identities in mainstream PE has missed the opportunity to apply a range of useful concepts, including capital, stigma, othering and audism which will form part of this study's theoretical lens (see Chapter Four). Moreover, research which has explored d/Deaf pupils' identity within mainstream PE is sparse whilst studies have tended to explore this topic in passing rather than this being an explicit focus. Moving forward, future research which specifically focuses on d/Deaf pupils' identity within mainstream PE would be useful to inform educators.

PE teachers' experiences educating d/Deaf pupils.

The following section explores literature surrounding PE teachers' experiences educating d/Deaf pupils. Although there is a growing body of literature about teacher's attitudes and their perspectives on the inclusion of pupils with SEND, there is less of a research base focused on PE settings (Smith & Thomas, 2006; Morley et al., 2021). More specifically, future research needs to explore d/Deaf pupils' inclusion in PE from PE teachers' perspectives (Tanure Alves et al., 2021). For instance, there is less research about PE teachers' self-efficacy when educating d/Deaf pupils compared to physical, visual or intellectual impairments (Hutzler, Meier, Reuker & Zitomer, 2019). Teaching d/Deaf pupils PE is a neglected topic, particularly when compared with other mainstream subjects such as Maths (for example Gregory, 1998; Nunes & Moreno, 2002; Nunes, 2004; Nunes, 2020) or Science (for example Lang, 1994; McIntosh, Sulzen, Reeder, & Kidd, 1994; Mukhopadhyay & Moswela, 2010; Kurz, Schick & Hauser, 2015; Cameron, O'Neill, & Quinn, 2017). Due to the limited nature of research surrounding PE teachers' experiences educating d/Deaf pupils, the literature review draws upon wider studies including those based outside of the PE context which have featured PE teachers (e.g. Vermeulen, Denssen and Knoors, 2012).

Mainstreaming has resulted in subject teachers being responsible for the education of pupils with SEND, despite many teachers lacking experience or expertise (Jarvis & Iantaffi, 2006). More broadly in education, it is suggested two in three teachers do not know how to teach a d/Deaf child, whilst 68% lack the confidence they can

effectively do so (NDCS, 2021a). This is evident within PE literature which highlights PE teachers have insufficient training or experience educating d/Deaf pupils. Within dos Santos Pedrosa et al.'s (2013) study of Brazilian PE teachers, participants reported feeling unprepared when educating d/Deaf pupils. Similarly, in Vermeulen et al. (2012) study of mainstream teachers, a PE teacher emphasised she had no training or experience teaching d/Deaf pupils, prior to a d/Deaf pupil's integration into her class. However, in Vermeulen et al.'s (2012) study, the PE teacher believed prior education about d/Deaf pupils would not be beneficial as teaching strategies can change depending upon a pupil's needs. Reich and Lavay (2009) question this, arguing that despite the importance of catering for pupils' needs, teachers require d/Deaf awareness, otherwise d/Deaf pupils may be overlooked or misunderstood which may compound difficulties in PE, negatively impacting their learning.

Although Vermeulen et al. (2012) provide useful insight into PE teacher preparation, the PE teacher in the study has 25 years of teaching experience and findings may be deemed unrepresentative, considering initial teacher training (ITT) in the Netherlands now often includes education on teaching pupils with SEND (Civitillo, De Moor & Vervloed, 2016). Vermeulen et al.'s (2012) findings may not reflect the reality of all PE teachers, particularly those who are newly qualified. Consequently, new research is needed in the Netherlands and internationally amongst newly qualified PE teachers concerning their prior education about teaching d/Deaf pupils.

Notably, the conflicting evidence in literature concerning the usefulness of prior PE teacher education about d/Deaf pupils may be a result of varying cultures and educational policies. As previously discussed, Vermeulen et al.'s (2012) study was conducted in the Netherlands, which during this period had a small number of d/Deaf children in mainstream education who mostly possessed good oral communication skills (Waulters & Knoors, 2008; Wolters et al., 2011). Comparatively, within the US, where Reich and Lavay's (2009) study was conducted, d/Deaf pupils were predominantly educated in mainstream education with varying levels of deafness and methods of communication (Schultz et al., 2013). Thus, it is likely d/Deaf pupils in mainstream settings within the Netherlands and the US will have varying educational needs which may account for the differing beliefs towards the usefulness of prior education about teaching d/Deaf pupils. Consequently, it is problematic to generalise findings, considering cultural differences.

Most recently, Maher (2020) extends feelings of inexperience to prospective PE teachers in England, whereby they wore ear defenders whilst their peers taught them

to experiment with embodied pedagogies and facilitate pedagogical learning. Within Maher's (2020) study participants encountered difficulties when attempting to provide meaningful non-verbal feedback to participants wearing ear defenders. Thus, it is plausible participants from Maher's (2020) study may encounter similar difficulties when educating d/Deaf pupils and therefore are unprepared to educate them. However, as previously stated Maher's (2020) participants attended the same university, thus these findings may not reflect the experiences of all prospective PE teachers in England, whilst the experiences of PE teachers may vary from prospective ones. Moreover, as previously mentioned, Maher (2020) highlights the transferability of his study to d/Deaf pupils in a school-based context is unknown. Future research should investigate prospective PE teachers' competence and confidence educating d/Deaf pupils support or challenge Maher's (2020) findings.

As literature highlights inadequate PE teacher preparation for educating d/Deaf pupils, it is not surprising concerns about the quality of PE teaching for d/Deaf pupils have emerged. For example, Reich and Lavay (2009) describe how a PE teacher excludes a d/Deaf pupil from an activity for 'not listening'. Whilst Reich and Lavay (2009) overlook this issue, it may be argued the PE teacher's lack of d/Deaf awareness excludes the d/Deaf pupil, negatively impacting their participation and learning opportunities. Similarly, inadequate preparation for educating d/Deaf pupils can be seen in Tanure Alves et al.'s (2021) study, whereby PE teachers failed to provide alternative methods of communication, relying on interpreters for communication with d/Deaf pupils. These findings support those of Alves et al. (2014) highlighting PE teachers often fail to provide feedback or interact with d/Deaf pupils. This is concerning considering interpreters often lack subject specific knowledge in PE and encounter difficulties relaying information resulting in embarrassment for d/Deaf pupils and performance issues (Tanure Alves et al. 2021). As Schultz et al. (2013) suggests ineffective communication can negatively impact d/Deaf pupils' educational outcomes. Meanwhile, as highlighted by National Deaf Children's Society (NDCS, 2015) clear communication between a subject teacher and d/Deaf pupils can support d/Deaf pupils' learning and social and emotional development. A lack of training or experience educating d/Deaf pupils amongst PE teachers in literature is problematic considering a teachers' knowledge, skills and motivation determines d/Deaf pupils' inclusion (Jarvis & Iantaffi, 2006; Barboza et al., 2019). An improved understanding of d/Deaf pupils' needs may improve their mainstream PE experiences (Reich & Lavay, 2009). As Barboza et al., (2019) highlight, PE teachers must be

provided more teacher training surrounding d/Deaf pupils to acquire the necessary skills and knowledge for educating them.

More broadly, in general mainstream education, Jarvis and Iantaffi (2006) suggest teachers should wear ear plugs to enhance their understanding of how d/Deaf pupils perceive the educational environment. Such approach can be related to Maher's (2020) work when prospective teachers wore ear defenders to encourage pedagogical learning. Although Maher (2020) claims his study does not intend for prospective PE teachers to cognitively imagine themselves as the 'other', arguably, participants may have imagined themselves in the position of a d/Deaf pupil, regardless of the study's intentions. Thus, similar ethical issues may arise to simulations. Simulations do not capture the lived experience of individuals, or their emotions connected to experiences (Maher, Williams & Sparkes, 2019; Maher, Haegele & Sparkes, 2022). As Maher's (2020) sample does not include d/Deaf people it is unclear whether the implemented strategies were effective and if additional considerations must be accounted for. Furthermore, simulations may medicalise d/Deaf people, resulting in prospective teachers looking at d/Deaf pupils through a disability lens which may have damaging effects on d/Deaf pupils' education and identity.

A dearth of literature explores mainstream PE teachers' experiences of educating d/Deaf pupils, therefore future research should gather PE teachers' perspectives and experiences of this (Barboza et al., 2019; Tanure Alves et al., 2021; Maher & Haegele, 2022). This is particularly the case in the UK, whereby mainstream PE teachers' perspectives and experiences of educating d/Deaf pupils has not received attention in literature. Although Maher and Haegele (2022) describe non-fiction accounts surrounding teaching d/Deaf pupils in mainstream PE within the UK, their analysis is focused on teaching strategies, thus PE teachers' experiences and perspectives when educating d/Deaf pupils in the UK remain unknown. Moreover, it can be problematic to generalise literature from other countries as educational contexts may vary. Consequently, this study obtains mainstream teachers' experiences of educating d/Deaf pupils in PE to address the gap in UK literature.

Whilst this literature review has drawn upon wider research to comprehend PE teachers' experiences educating d/Deaf pupils, it is noteworthy that research explicitly investigating this from PE teachers' perspectives is limited to dos Santos Pedrosa et al. (2013) and Vermeulen, Denessen and Knoors (2012). The present study will address the growing necessity for research on mainstream teachers' experiences,

including their values and pedagogy when educating d/Deaf pupils in PE to enhance knowledge (Tanure Alves et al., 2021).

Proposed teaching strategies for educating d/Deaf pupils in PE.

A successfully adapted Physical Education environment has the potential to positively impact d/Deaf pupils and hearing pupils (Kurkova, 2015). As suggested by NDCS (2015) more broadly, an effective school will understand d/Deaf pupils and reduce barriers to learning by introducing appropriate modifications to help d/Deaf pupils reach their potential. Thus, Physical Educators must provide appropriate adaptations to help d/Deaf pupils excel (Schultz, et al., 2013). Therefore, this section examines literature surrounding PE teaching strategies for educating d/Deaf pupils.

As literature provides an extensive list of potential teaching strategies for educating d/Deaf pupils in PE, it is not possible to discuss all of these within this literature review. Thus, attention will be given the most prominent examples in literature. For further detail on proposed teaching strategies for d/Deaf pupils, please see the works of Reich and Lavay (2009), Hodge, Lieberman and Murata (2012), Schultz et al. (2013) and Lieberman (2016). Although proposed teaching strategies may vary, there is one commonality amongst them; their effectiveness remain largely unknown (Barboza et al., 2019). Despite a growing body of literature surrounding PE teaching strategies for educating d/Deaf pupils in PE, they lack empirical evidence (Maher & Haegele, 2022). The appropriateness of proposed strategies in literature is determined by the academic's viewpoint (Maher & Haegele, 2022), as they fail to obtain any perspectives of stakeholders within the PE setting (Reich & Lavay, 2009; Schultz et al., 2013; Lieberman, 2016). As this section will highlight future research which investigates PE teaching strategies for educating d/Deaf pupils must be supported by empirical evidence. However, firstly it is necessary to examine literature surrounding proposed PE teaching strategies for educating d/Deaf pupils.

As previously discussed, d/Deaf pupils are primarily ocular-centric, thus literature suggests visual cues are vital when working with them (Reich & Lavay, 2009; Lieberman, 2016; Maher, 2020; Maher & Haegele, 2022). Consequently, literature suggests demonstrations will facilitate d/Deaf pupils' understanding of PE activities (Reich & Lavay, 2009; Schultz et al., 2013; Lieberman, 2016; Maher & Vickerman, 2019). Lieberman (2016) argues without demonstrations it is unlikely d/Deaf pupils will comprehend subtle sporting rules or strategies. As Schultz et al., (2013) suggest demonstrations may not only be useful for d/Deaf pupils but also for their hearing peers. Therefore, demonstrations alongside other teaching strategies (to later be

discussed) may facilitate an inclusive PE environment and promote d/Deaf pupils' development (Schultz et al., 2013; Maher & Vickerman, 2019). However, as Maher and Haegele (2022) highlight, PE teachers must remain cautious when completing demonstrations as d/Deaf pupils who lip-read may struggle to watch demonstrations and read lips simultaneously. Additionally, literature emphasises PE teachers must consider their positioning when teaching pupils who lip-read e.g. ensuring they face the pupil and do not stand in front of a bright light or the sun (Hodge et al., 2012; Lieberman, 2016; Maher & Haegele, 2022). Furthermore, PE teachers should consider the pace, accuracy and frequency of demonstrations when educating d/Deaf pupils (Maher, 2020).

Whilst academics have suggested demonstrations may enhance d/Deaf pupils' understanding of activities, this is quite speculative. As Maher and Haegele (2022) highlight, topics covered in literature such as teacher positioning during demonstrations are obvious considering some d/Deaf pupils lip-read, whilst less obvious topics e.g. how to compliment demonstrations with instructions have not been discussed as they have not been empirically researched. Thus, practitioner-based papers have disseminated 'effective' practices without evidence to support or deny them which may lead to PE teachers adopting unintentionally harmful practices (Maher & Haegele, 2022). Future research proposing PE teaching strategies for educating d/Deaf pupils must be rooted in empiricism.

Also, nonverbal cues may not always be appropriate when educating d/Deaf pupils (Maher and Haegele, 2022). As suggested by Florini and Manzini (2018), PE teachers must remain flexible when educating d/Deaf pupils as strategies may vary depending upon the lesson's objectives. Therefore, literature recommends PE teachers should consult d/Deaf pupils on communication methods used in PE and the effectiveness of teaching strategies to better understand d/Deaf pupils' needs (Reich & Lavay, 2009; Schultz et al., 2013). Consequently, PE teachers must critically review "what works best, with whom and in what situations and circumstances" when educating d/Deaf pupils (Maher & Haegele, 2022, p.44).

Within Maher and Haegele's (2022) non-fiction accounts, they describe Ms Patel, a PE teacher who uses demonstrations to assist the education of Sarah, a d/Deaf pupil. Whilst Maher & Haegele (2022) critically examine multiple factors surrounding demonstrations, e.g. the importance of positioning, background noise, delivering instructions separately and teacher reflections with pupils, by failing to explore Sarah's perspective it is unclear whether she understood and if the demonstration

was effective. As highlighted by Holland, Haegele, Zhu and Bobzien (2023) more broadly, PE research fails to explore how pupils with SEND experience 'inclusion' strategies. Additionally, Vickerman and Maher (2019) suggest including pupils with SEND as active research participants is crucial in discovering their lived experiences and helping teachers understand their needs. As Maher and Haegele (2022) indicate, research which uses observations, PE teacher reflections and considers d/Deaf pupils' perspectives will help researchers and educators to understand and develop best practice guidance for demonstrations with d/Deaf pupils. Therefore, this study uses observations, interviews and naturally occurring conversations to gather stakeholder's perspectives on the effectiveness of teaching strategies.

More broadly, Hodge, Lieberman & Murata (2012) argue to successfully execute social justice pedagogies, educators must move away from ethnocentric viewpoints that stem from hegemony. Demonstrations which challenge hegemonic phonocentrism may lead to more inclusive PE for d/Deaf pupils (Maher, 2020). However, demonstrations that challenge phonocentrism already occur unintentionally within a PE setting to enhance all pupils' understanding (Maher, 2020). Nevertheless, the premise of demonstrations to challenge phonocentrism and create an inclusive PE environment remains. Although aspects of challenging phonocentrism can be seen subtly throughout PE literature, academics (with the exemption of Maher, 2020) have failed to apply phonocentrism. For example, Lieberman (2016) proposes the use of different coloured flags as visual cues when stopping and starting activities. Others have proposed including sign language during PE teaching to facilitate d/Deaf pupils' inclusion and development (Columna & Lieberman, 2011; Hodge et al., 2012). The application of phonocentrism may facilitate innovative thinking surrounding teaching strategies for d/Deaf pupils and allow for deeper analysis on their effectiveness. Although phonocentrism is yet to be applied to an empirical study concerning d/Deaf pupils' education in mainstream PE, it offers great potential for disrupting hearing-centred ideologies and establishing an accessible and inclusive PE environment (see Chapter Four).

Another PE teaching strategy for educating d/Deaf pupils which has received much attention in literature is peer tutoring, whereby hearing and d/Deaf pupils teach and learn from each other (Schultz et al., 2013). It is suggested peer tutor programs may improve socialisation and friendships between pupils (Lieberman, Dunn, Van der Mars and McCubbin, 2000; Lieberman, 2016). Academics propose peer tutoring can facilitate an inclusive PE environment (Lieberman & Houston Wilson, 2009). Within Lieberman et al.'s (2000) study, peer tutoring improved moderate to vigorous physical

activity (MVPA) levels of both d/Deaf and peer tutors. Thus, it is suggested peer tutoring provides d/Deaf pupils additional time to practice skills, receive personalised instruction and feedback which can improve their performances (Schultz et al., 2013). Therefore, literature suggests peer tutoring should be included within mainstream PE lessons (Lieberman, 2016). However, Maher and Haegele (2022) points out peer tutoring lacks satisfactory evidence for its widespread use. Additional research regarding the effects of peer tutoring on d/Deaf pupils and their hearing classmates in PE is needed to support or dismiss literature.

Furthermore, literature encourages PE teachers to have discussions with d/Deaf pupils about their deafness and preferred methods of communication prior to lessons (Reich & Lavay, 2009; Schultz et al., 2013; Lieberman, 2016; Maher & Haegele, 2022). Also, Maher and Haegele (2022) highlight PE teachers should have conversations with d/Deaf pupils after lessons to encourage teacher reflection. As Reich and Lavay (2009) suggest, the process of gaining information about d/Deaf pupils may help build rapport and trust with them. Maher and Haegele (2022) argue these discussions may develop teaching strategies that appropriately meet d/Deaf pupils' needs. Therefore, communicating with d/Deaf pupils may improve PE teacher's understanding of pupil's needs and create positive PE experiences (Reich & Lavay, 2009).

Whilst literature provides useful guidance for PE teachers educating d/Deaf pupils, these strategies alone are not enough to facilitate d/Deaf pupils' participation in PE lessons, as they must be accompanied by a purpose and meet d/Deaf pupil's needs (Fiorini, & Manzini, 2018). Moreover, modifications of PE lessons to include d/Deaf pupils may be counterproductive if they feel embarrassed (Reich & Lavay, 2009). Consequently, teaching strategies must be implemented with care and flexibility.

Furthermore, PE teachers must understand how to adapt teaching for cochlear implant and hearing aid users (Hilgenbrinck, Pyfer & Castle, 2004; Schultz et al., 2013). It is suggested cochlear implant or hearing aid users may encounter difficulties in rooms with poor acoustics or high noise levels, thus a PE teacher must be aware of their needs to cater for these (Reich & Lavay, 2009). Focusing specifically on cochlear implant users, PE teachers must remain cautious when implementing contact sports to avoid damaging a d/Deaf pupil's cochlear implant (Barboza et al., 2019). Some academics suggest PE activities that involve a risk to the head e.g. hockey should be avoided when educating cochlear implant users (Lieberman, 2011; Lieberman, 2016). However, Hilgenbrinck et al., (2004) argue that activities should

not be avoided, but rather be undertaken with caution e.g. providing headgear during certain activities (Hilgenbrinck et al., 2004). Therefore, PE teachers must implement appropriate teaching strategies to ensure the safety and development of pupils with cochlear implants. Comparatively, hearing aid users may remove their hearing aids to avoid them being damaged in contact sports or swimming (Reich & Lavay, 2009). Thus, Liberman (2011) suggests PE teachers must implement strategies such as demonstrations and peer tutoring whilst considering their own and pupils' positioning to ensure the success of hearing aid users. Nevertheless, d/Deaf pupils are a heterogeneous group who have individual needs and preferences (Young & Temple, 2014); thus a PE teacher must have a pupil-centred approach whereby d/Deaf pupils are consulted about effective teaching strategies as previously discussed.

Although literature provides numerous teaching strategies for educating d/Deaf pupils in mainstream PE, the effectiveness of these strategies remains unknown (Barboza et al., 2019). As recognised by Stewart and Ellis (1999) and Maher (2020), PE standards are often overlooked in literature concerning d/Deaf pupils' education. Alongside this, literature has not gathered d/Deaf pupils' perspectives concerning the effectiveness of proposed teaching strategies. As Maher and Haegele (2022) highlight disconnections exist between proposed teaching strategies and empirical support for them, thus they argue reflective diaries, observations and discussions with d/Deaf pupils, hearing classmates, learning support assistants (LSAs) and interpreters may enable PE teaching of d/Deaf students to be evidence informed. Consequently, this study gathers perspectives of mainstream teachers, d/Deaf pupils, hearing peers and DRB staff to ensure PE teaching strategies for d/Deaf pupils are evidence informed.

Teacher effectiveness research in PE (TER-PE).

This section reviews teacher effectiveness research in PE (TER-PE) to comprehend definitions and mechanisms used to determine PE teacher effectiveness, here TER-PE can be positioned for teaching pupils with SEND, specifically d/Deaf pupils. As most TER-PE originates from the USA and UK studies are sparse (Thomson, 2017), this section draws upon international research, whilst accounting for differing educational contexts. Although there is a growing body of TER-PE, limited research focuses on teaching pupils with SEND. Scholars are concerned mainstreaming has neglected teacher effectiveness for pupils with SEND (Lindsay, 2007; Kauffman et al., 2020 cited in Maher & Haegele, 2022). Through enhancing understanding of effective teaching, practitioners can develop methods to support d/Deaf pupils

(Stinson & Liu, 1999; Maher & Haegele, 2022). Therefore, the literature review now focuses on the broad theme of PE teacher effectiveness.

Due to the limited nature of TER-PE focused on pupils with SEND, this section will explore dominant TER-PE subareas to establish its nature and appropriateness for examining PE teacher effectiveness when educating pupils with SEND, particularly d/Deaf pupils. Although PE experienced a delayed arrival to TER (Mawer, 1995), an abundance of research has since evolved. To provide useful context on TER-PE, the chapter firstly explores early TER in general education which completed presage-product studies. Next, the chapter discusses dominant methodological approaches in TER-PE which have been divided by Silverman (1991) into key subareas including descriptions of PE, process-product, time mediating process-product research and comparisons among teachers. Furthermore, as the ecological paradigm and educational policy have recently become paradigms of TER-PE (Ward, 2013; Solmon & Garn, 2014), these will also be scrutinised.

Presage-product research.

From 1940 to 1960, researchers in general education attempted to identify challenges teachers face and traits of an effective teacher (Lee & Solmon, 2005). Dunkin and Biddle (1974) highlighted research had failed to consider contextual variables e.g. a pupil's ability level (Brophy, 1979) and published a model to examine teacher effectiveness which considered presage (teacher characteristics), context, process (instructional behaviours) and product (pupil attainment) variables (Brophy, 1979; Ward, 2013). Dunkin and Biddle's work developed TER-PE and helped comprehend dominant TER paradigms (Dodds & Placek, 1991; Metzler, 2014; Nesbitt et al., 2021). Following Dunkin and Biddle's model, one of the key paradigms that emerged was presage-product research which examined the influence of teacher characteristics including personality traits e.g. directness, dispositions e.g. attitude, motivation and experience of teaching on pupil achievement (Lee & Solmon, 2005; Ward, 2013; Creemers & Kyriakides, 2015; Nesbitt Fisher & Stodden, 2021). Thus, presage-product studies searched for psychological traits of an effective teacher (Campbell, Campbell, Kyriakides, Muijs & Robinson, 2004; Creemers & Kyriakides, 2015).

Although presage-product studies provided information on teacher attitudes, they did not provide insight into teacher behaviours (Walberg, 1986 cited in Creemers & Kyriakides, 2015). Regarding teaching pupils with SEND more broadly in education, this is problematic as teachers may have positive attitudes towards inclusion but lack knowledge, training, experience or resources to include pupils with SEND (Morley,

Bailey, Tan & Cooke, 2005; Lindsay, 2007; Watson, 2013). Thus, a teacher's practice may vary from the one they desire, meaning presage-product studies may give an unrepresentative view of a teacher's effectiveness. As presage-product studies failed to provide insight into teacher behaviours or connect specific teacher behaviours to pupil achievement they were criticised in literature (Rosenshein & Furst, 1973 cited in Creemers & Kyriakides, 2015; Brophy & Good, 1984; Ward, 2013). Thus, a movement towards searching for process variables emerged, specifically in PE (Rink 2013).

Descriptions of PE.

The work of Anderson and Barrette (1978) which described teacher's and pupils' behaviours in PE laid the foundations for descriptive research (Silverman, 1991; Lee, 2003). Following this, a plethora of research described PE, many of which were doctoral dissertations (Silverman, 1991; Mawer, 2014). Descriptive PE studies used observation instruments to identify process variables including teacher and pupil behaviour to enhance understanding of PE (Curtner Smith, 2002; Lee, 2003; Rink, 2013; Mawer, 2014). For instance, Hastie and Saunders (1990) discovered pupils were more likely to be on-task when they were closely observed by teachers, thus teacher positioning was perceived vital. Although researchers provided reliable descriptions, they could not confirm certain methods contributed to learning (Metzler, 2014), or identify characteristics of an effective teacher (Mawer, 2014). Consequently, researchers began to focus on proxy measures of learning (Metzler, 2014). Nevertheless, descriptive research provided the foundations to improve understanding of relationships to achievement (Metzler, 1989; Lee, 1991).

Process-product research.

Due to the somewhat failure of presage-product paradigm, researchers turned their attention to teacher behaviours as a determinant of pupil achievement, influenced by behaviourism (Campbell et al., 2004). Process-product studies dominated TER for many years (Kyriacou, 2010), aiming to identify what an effective teacher did (Rink, 2013). Researchers searched for a proxy for pupil learning e.g. teaching strategies (Rink, 1996; Rink, 2014) and within the PE field, studies in the 1980s and 1990s connected teacher effectiveness to pupils' motor skill development (Rink, 2013; Nesbitt et al., 2021). As process-product research was rooted in positivism, teacher effectiveness was free from context (Rink, 1993), this knowledge base informed teacher training and observation (Rink, 2013). However, instructional techniques in TER-PE were insufficient characteristics of effective teaching (Rink, 2013). Also,

contradictory information about teacher behaviour and pupil outcomes existed (Silverman & Ennis, 2003). Thus, little was discovered about the process of teaching (Grant, 1990 cited in Thomson 2017). This is problematic considering effective PE should appreciate pedagogical processes alongside their results (Stirling & Belk, 2002). Consequently, in the 1980s academics gradually turned their attention to time mediating process-product research to explore how a teacher's behaviour impacted pupil learning (Lee, 2003).

Time mediating process-product research.

TER-PE advanced following Siedentop, Birdwell and Metzler's (1979) modification of The Beginning Teacher Evaluation Study (BTES) for PE settings (Placek, Silverman, Shute, Dodds & Rife, 1982). Metzler (1983; 1989) advocated the longer time was spent on an activity, the greater attainment would occur, thus those who provided longer practice time were most effective. Notably, the work of Brophy and Good (1986) more broadly in education during this period increased support for process variables, including 'time on task' (Ward, 2013; Metzler, 2014).

Within PE, Academic Learning Time–Physical Education (ALT–PE) was the most used time-based variable (Silverman, 1991; Siedentop, 2002; Lee, 2003). ALT-PE analysed relationships between a teacher's actions and time spent on motor skill activities (Placek et al., 1982) and was perceived a useful tool to understand pedagogical processes, whilst linking teacher behaviour to pupil learning (Placek et al., 1982; Placek & Randall, 1986). However, using ALT-PE, Silverman (1991) revealed pupils were engaged for a third of a lesson, thus he suggested previous studies had not considered the quality of pupil engagement which may have influenced achievement. Providing the maximum practice time does not guarantee learning (Rink, 2013). Also, providing pupils an opportunity to be engaged does not mean that they will be (Van Der Mars, 2006). Due to time constraints of PE lessons, researchers believed the amount of time pupils were engaged in activities was a contributing factor of effective teaching and began to examine pupils' engagement alongside its incidence (Lee 2003; Van der Mars, 2006; Nesbitt et al., 2021). Thus, the most effective teachers provided greater practice time, spent more time observing and little time on feedback or intervention (Behets, 1997). Research has shown pupils with SEND have lower ALT-PE than their peers without SEND in mainstream settings (Temple & Walkley, 1999; van Der Mars, 2006; Wiskochil, Lieberman, Houston-Wilson & Petersen, 2007; Schedlin, 2012). However, when educating pupils with SEND in PE, additional time during instruction and feedback may be necessary to

ensure their understanding and inclusion (Vickerman & Maher, 2019; Tarantino, Makopoulou & Neville, 2022). Therefore, ALT-PE may be inappropriate to assess a PE teacher's effectiveness when educating pupils with SEND.

Process-product research over-simplified interactions between pupils, teachers and contextual variables (Doyle, 1977; Ward, 2013; Rink, 2013). As Treder, Morse and Ferron (2000) highlight more broadly in education, process-product research does not consider contextual variables or pupil's social and emotional development. This is problematic considering Teachers' Standards (DfE, 2011) expects teachers to promote physical, social and intellectual development of children. As inclusion is an intersubjective experience, relating to methods and the extent individuals with impairments have access to social opportunities (Maher, McVeigh, Thomson, Knight, 2023), it is important to appreciate social opportunities and contextual factors when assessing teacher effectiveness.

Methodologically, early TER-PE including descriptive, process-product and experimental studies largely used quantitative methodologies which aligned with positivistic approaches to ensure scientific validity (Silverman, 1985; Rink, 1993; Curtner Smith, 2002). Arguably, these instruments were selected as PE academics were schooled in natural sciences, meaning little was known about qualitative methodologies (Locke, 1989). Researchers did not understand how or why certain behaviours resulted in pupil achievement (Lee, 1991; Lee, 2003; Connolly, 2009; Thomson, 2017) so to understand teaching-learning processes, a movement to qualitative methodologies occurred (Rink, 2013). A qualitative approach facilitates richer insight of PE settings (Curtner Smith, 2002). Thomson (2017) states qualitative approaches can help understand how a teacher's thoughts about effectiveness are influenced by their contextual lives. Whilst Thomson's (2017) study deepens our understanding on how a teacher's praxis is influenced by their thinking, academics are yet to explore this when teaching d/Deaf pupils. Moving forward, TER-PE should undertake a qualitative approach to gain a contextual understanding of effective PE teaching of d/Deaf pupils, and the spaces in which teachers operate, which is vital considering the heterogeneity of d/Deaf pupils.

Comparisons amongst teachers.

Another sub-area throughout TER-PE is comparisons in teaching behaviour between inexperienced and experienced teachers (Silverman, 1991). Research on expertise naturally developed from research on teaching-learning processes (van der mars,

2006). Underpinning novice-expert research is Berliner's (1988) development of expertise in pedagogy which involves five stages:

1. Novice.
2. Advanced beginner.
3. Competent teacher.
4. Proficient teacher.
5. Expert teacher.

Through classroom experience, practice and knowledge, teachers can advance through each stage, develop effective teaching and become an expert (Manross & Templeton, 1997; Ward & O'Sullivan, 1998; Thomson, 2017). Expertise was achieved through prolonged periods within a specific context (Siedentop & Eldar, 1989). However, experience may not automatically result in expertise (Siedentop & Eldar, 1989; Manross & Templeton, 1997; Kim & Bo, 2020). Those who may be perceived an expert may not be more effective than novices (Van der Mars, 1991). This is problematic when assessing the reliability of studies as 'expert' teachers were often selected as research participants based on their reputation, without observing their teaching (O'Sullivan & Douts, 1994).

Studies focused on behavioural, cognitive and a combination of both when examining teaching expertise (Dodds, 1994; Lee, 2003) and implied expert teachers do not think they are experts and believe they have lots to learn (Manross & Templeton, 1997). Also, studies found expert teachers differed in their ability to analyse motor skills (Dodds, 1994). Furthermore, research suggested expert teachers are more likely to meet pupils' needs and check these are being met throughout a lesson (Piéron & da Costa, 1996). Hence, expert PE teachers will experience job satisfaction and pupil attainment (Manross & Templeton, 1997). Expert PE teachers may be more effective when educating pupils with SEND due to their ability to meet pupil's needs which may promote attainment. However, as expertise is context specific (Siedentop & Eldar, 1989), a PE teacher may be an expert when teaching pupils without impairments but a novice teaching pupils with SEND. Therefore, novice-expert studies may provide unrepresentative findings when examining teacher effectiveness.

Policy and TER-PE.

Although limited TER-PE has been published within the last 20 years (Nesbitt et al., 2021), researchers have guided the PE field to its own destination (Metzler, 2014).

As paradigms shifted in TER-PE, perceptions of effective teaching changed which was reflected in educational policy (Solman & Garn, 2014). Policy has constantly influenced education and PE Teacher Education (Metzler, 2014). Since 1980, neoliberalism has become entrenched in educational policies which has placed teachers under performative pressures (Connell, 2013). Here, PE teachers have become accountable for pupil attainment (Ward, 2013; Michael et al., 2021). Neoliberalism has resulted in high-stakes testing (Macdonald, 2011), whereby standardised tests have measured pupil learning and subsequently effective teaching (Dyson, 2014). High-stakes examinations act as an accountability tool, enabling Ofsted to judge the effectiveness of schools and create school performance tables (West, 2010). Schools that perform well in school performance tables are more likely to obtain additional capital and positively influence parents when selecting prospective schools for their children (West, 2010; Moore & Clarke, 2017). Therefore, to improve school performance indicators, teachers will narrow the curriculum to focus on what will be measured in tests (Macdonald, 2011; Rink, 2013).

However, in TER-PE confusion interpreting educational policies has led to disagreements when assessing effectiveness on what should be measured and how (McKenzie & Lounsbery, 2013; Solman & Garn, 2014; Rink, 2014). As highlighted by Rink (2014), academics in TER-PE have focused upon their priorities including physical activity (McKenzie & Lounsbery, 2013), cognitive development (Ennis, 2014), motor skill development (Rink, 2013) and affective development (Dyson, 2014). Notably, every study investigating teacher effectiveness in PE has their own limitations. Solmon and Garn (2014) highlight McKenzie and Lousenbery's (2013) and Rink's (2013) studies which assess a PE teacher's effectiveness by pupils' physical activity outside of PE as problematic. This may impact the validity of findings as ineffective teachers may be considered effective if pupils have high physical activity levels outside of school (Solmon & Garn, 2014). Due to high-stakes examinations and shifting educational policy, "what is not measured does not count" (Rink, 2013, p.411). Narrowing the PE agenda to measurable outcomes may have damaging results (Rink, 2013; Dyson, 2014), such as overlooking learning skills or social and affective development (Muijs, 2006). Here, neoliberal educational policy has placed emphasis on product and performance rather than personal development (Moore & Clarke, 2016). However, failing to consider aspects of social, moral and emotional development in PE may produce "arenas of struggle: struggles over practices, struggles over subjectivity and a politics of identity and self-worth." (Ball, 2016, p.1056). In particular, high-stakes examinations aligned with neoliberal ideals

do not consider the needs of pupils with SEND, placing them at a disadvantage when they are assessed against their hearing, non-disabled peers (Maher, von Rossum & Morley, 2023). In this manner, neoliberal, high-stakes examinations are at odds with inclusion (Evans, 2014). To facilitate inclusive PE for pupils with SEND, high-stakes examinations underpinned by neoliberal ideals must be disrupted (Maher et al., 2023).

As behavioural aims may undermine wider aims of PE (Kirk, 2010a), Dyson (2014) called for a holistic approach to TER-PE. Calls for holistic assessment have also been echoed more broadly by Maher et al. (2023) who are concerned with the impacts of neoliberal pressures and standardised assessments on pupils with SEND. Although Rink (2014) states academics would support a holistic approach, she appreciates consensus may be challenging to maintain as what is measured must be prioritised. Similarly, in general education, judgements must be made regarding which approaches are most effective at promoting inclusion (Connolly, 2009). Due to the variety of SEND and provision, assessing inclusion can be difficult (Farrell, 2000), whilst a one-size-fits-all approach would be inappropriate (Solman & Garn, 2014; Nesbitt et al., 2021). Solman and Garn (2014) suggest paradigms which explore how and why certain approaches foster learning will yield more meaningful findings than those seeking dominance of a singular method.

As highlighted by Rink (2013, p.409), the difficulty of defining effectiveness “lies in the complexity of teaching”, which is a “multifaceted interaction between the student, the teacher, the content, and other contextual variables”. Teacher effectiveness may be impacted by social, contextual and individual variables (Day, Kingston, Stobart & Sammons, 2006; Kirk, 2010b). A PE department’s aims determine what effective PE teaching is (Metzler, 2014). Thus, how individuals conceptualise teacher effectiveness depends on a school’s context (Day et al., 2006; Kirk, 2010b; Thomson, 2017). Similarly, definitions of inclusion and how to achieve this are context dependant (Powers, 2002). As Powers et al. (1999) suggests future research examining effective teaching of d/Deaf pupils should focus upon individual schools. These shortcomings provide a rationale for the ethnographic approach adopted in this research on how d/Deaf pupils can be taught effectively in mainstream PE.

As most TER-PE originates from the USA (Rink, 2013; McKenzie & Lounsbery, 2013; Ennis, 2014; Rink, 2014), it is problematic to generalise findings to the UK due to differing education systems and policies. As Thomson (2017) emphasises goals for teacher effectiveness in the UK also shift in alignment with Ofsted and policy changes.

Thus, it is important to appreciate how policy influences perceptions of effective PE teaching. Future UK research should explore the implications of policy on PE teacher effectiveness when educating d/Deaf pupils.

Ecological paradigm.

Another paradigm that has been influential in conceptualising effective teaching is Doyle's (1977) classroom ecology paradigm, attempting to link teachers' behaviours with pupil learning (Hastie & Siedentop, 2006). Doyle (1977) highlighted the importance of contextual factors, and the meanings assigned to experiences and processes. Within an ecological paradigm, tasks can be managerial, instructional or social (Carlson & Hastie, 1997; Ward, 2013; Thompson, 2017). Tasks may facilitate or impede the achievement of lesson objectives (Ward, 2013). The ecological paradigm has been widely applied in TER-PE (Hastie & Siedentop, 2006; Ward, Ayvazo & Iserbyt, 2022) and is linked with ethnographic and interpretive methods (Silverman, 1991). The ecological paradigm offers insight into naturally occurring events via observation, facilitating analysis of lessons and wider school life (Hastie & Siedentop, 1999). Thus, enhancing understanding of PE pedagogy (Hastie & Siedentop, 2006; Ward et al., 2022).

Whilst Doyle's (1977) ecological paradigm helps understand the context of classrooms, it has limitations (Lee, 2007; Ward, 2013). As Thomson (2017) highlights the ecological paradigm fails to consider how an individual's perceptions of effectiveness are impacted by their contextual lives. Meanwhile, more broadly in education effective teaching of d/Deaf pupils is determined by educational, child and background variables (Lynas, 1999a). As d/Deaf pupils are a heterogeneous group (Young & Temple, 2014), their perceptions of teacher effectiveness may be impacted by their needs and contextual lives. Thus, an individualised, rather than a one-size-fits-all, approach may be more appropriate when teaching d/Deaf pupils (Lynas, 1999b; Wang, 2010; Knoors & Hermans, 2010). By comprehending the varying perceptions of teacher effectiveness and contextual factors behind them, the justification for the adoption of certain teaching strategies over others in differing contexts and with different individuals may be provided.

SEND in TER-PE.

Although studies have investigated teacher effectiveness in PE (Rink, 2013; Thomson, 2017), they have neglected the teaching of pupils with SEND. Nesbitt et al.'s (2021) systematic review of literature did not yield a study related to PE teacher effectiveness when educating pupils with SEND. However, Nesbitt et al.'s (2021)

search was limited to USA studies which had positive results relating to pupil achievement, thus it is problematic to generalise findings due to bias within the study and its limited geographic location. Nevertheless, upon reviewing literature, nationally and internationally which highlight a mixture in pupil outcomes, a dearth of TER-PE focuses on educating pupils with SEND and research investigating effective teaching of pupils with SEND is clearly warranted (Smith & Thomas, 2006; Nesbitt et al., 2021). For example, research should identify and analyse why exemplar PE curriculums are effective for pupils with SEND (Block, Haegele, Kelly & Obrusnikova, 2021). As Vickerman (2007) highlights, if pupils with SEND participate in PE, educators must examine what effective inclusion means and how to assess it. TER for pupils with sensory needs is less researched compared to other SEND groups (Carrol et al., 2017). In particular, TER surrounding d/Deaf pupils has been neglected (Knoors & Hermans, 2010). Also, it is problematic to generalise research from different subjects as the support pupils with SEND require may vary (Maher, 2010; Palmer & Maher, 2012), and generic teaching strategies are not always effective in different subjects (Campbell et al., 2004). Currently, there is no TER-PE when educating d/Deaf pupils in mainstream settings, thus this study seeks to address this gap in knowledge.

Summary of literature.

This chapter reviewed literature surrounding mainstream education for d/Deaf pupils, particularly in PE, to identify gaps in knowledge and justify the selected research topic. Much of the research concerning d/Deaf pupils' education in mainstream settings has focused upon general mainstream experiences rather than specific curriculum subjects. However, when d/Deaf pupils' experiences have been examined in specific subjects, those focused on Physical Education are largely overshadowed by classroom-based subjects such as Mathematics. Research has shown d/Deaf pupils frequently describe their PE experiences as exclusionary and isolating and these findings have significant implications for understanding d/Deaf pupils' experiences and the barriers d/Deaf pupils' face. Current research concerning d/Deaf pupils' PE experiences is geographically limited to the US and Brazil thus, as previously discussed, the transferability of these findings to the UK is unknown considering cultural differences and varying educational policies. Nevertheless, literature has provided foundations for future research to be built upon surrounding d/Deaf pupil's education in mainstream settings. Currently, gaps in knowledge exist in the following areas:

1. Recent research on d/Deaf pupils' experiences in mainstream education within the UK.
2. The perspectives of multiple stakeholders in one context regarding d/Deaf pupils' education in mainstream settings.
3. d/Deaf pupils' experiences in mainstream PE within the UK.
4. PE teacher's experiences educating d/Deaf pupils within the UK.
5. The implications of mainstream PE on d/Deaf pupil's identity.
6. Empirical evidence for PE teaching strategies when educating d/Deaf pupils.
7. PE teacher effectiveness research when educating d/Deaf pupils.

This literature review highlighted the necessity to explore how d/Deaf pupils can be taught effectively in mainstream PE. Although this study seeks to address some of the gaps in knowledge surrounding the education of d/Deaf pupils, additional research is required to enhance knowledge on this neglected research area. Analysis of literature concerning d/Deaf pupils' education in mainstream settings reveals research has tended to overlook theories such as phonocentrism, Audism, Bourdieu's notions of capital (1990) and hegemony, which may facilitate a deeper analysis of research findings.

CHAPTER THREE.

METHODOLOGY.

Introduction.

In this chapter, I engage in a critical discussion of the methodological choices to defend them as the most appropriate research approach for coming to understand how d/Deaf pupils can be taught effectively in mainstream PE. To begin, the chapter outlines the research paradigm underpinning the research study, then explores the rationale for relativist and social constructionist approaches in conjunction with d/Deaf ontologies and epistemologies when researching d/Deaf people.

Through ethnography, my study seeks to move beyond what people say they do by examining what they actually do (Herbert, 2000; Forsey, 2010; Walford, 2018). As this chapter will explore, ethnography provided a contextual understanding of 'Buttermere Primary School' and how perceptions of teacher effectiveness were constructed. After justifying research methods, the chapter discusses the rationale of purposeful heterogeneous sampling to ensure the research question was addressed. Following this, the process of identifying and negotiating access at Buttermere school will be discussed. Next, the data analysis process will be explained to help the reader comprehend how findings have been drawn (Braun & Clarke, 2022). Moving on, the chapter discusses research ethics, particularly those involved when researching d/Deaf children in education, including my own experiences of working with interpreters. The chapter finishes by discussing personal, functional and disciplinary reflexivity within the study. Analysing unique reflexive moments when researching d/Deaf people, as a hearing researcher provides an opportunity to examine how this influenced the research process and product.

Research paradigm.

A research paradigm can be defined as a researcher's ideas, beliefs or outlook to generate knowledge and guide research (Guba, 1990; Kilam, 2013; Fossey, Harvey, McDermott & Davidson, 2002; Denzin, Lincoln, Giardina & Cannella, 2024). My beliefs guided my ontological and epistemological positions alongside the study's research methods (Guba & Lincoln, 1994; Denzin & Lincoln, 2000). Ontological, epistemological and methodological beliefs influence how a qualitative researcher perceives the world and acts within it (Denzin et al., 2024). Research paradigms highlight a researcher's philosophical preferences and methodological inclinations (Sprake & Palmer, 2022). It is vital researchers are aware of their beliefs and

assumptions as these determine a study's research questions, methodology and data analysis (Davies & Fisher, 2018). However, whether a research paradigm is fit for purpose depends upon the research question being addressed (Killam, 2013; Landi, 2022). Therefore, consideration was given to how methods were informed by the research paradigm to ensure a coherent research design (Landi, 2022). Previously, research paradigms have been divided into four key components including axiology, ontology, epistemology and methodology (Denzin & Lincoln, 2000; Killam, 2013; Spencer, Pryce & Walsh, 2014; Denzin al., 2024). However, more recently, reflexivity has been identified as an integral role in qualitative research paradigms (Sprake & Palmer, 2022). This study adopts the following integrated paradigmatic awareness framework for qualitative researchers:

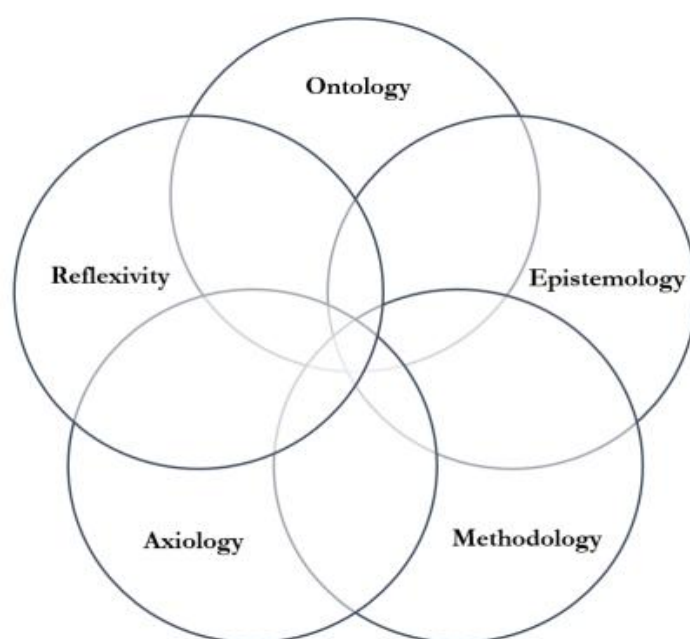


Figure 1: Integrated Paradigmatic Awareness framework (Sprake, 2022 cited in Sprake & Palmer 2022, p.48)

At the heart of this study's research paradigm is interpretivism, whereby researchers view the world through participants' experiences and perceptions, allowing them to construct their understanding from generated data (Thanah & Thanah, 2015). The ontological and epistemological assumptions of interpretivism align strongly with qualitative research (Willis, 2007). Qualitative and interpretivist research are commonly used by social scientists, particularly in education (O' Donoghue, 2018), and more specifically in PE (Pope, 2006; Maher & Coates, 2020). To date, interpretivism has improved knowledge within the PE field by asking new questions and implementing tools to answer them (Pope, 2006).

From an interpretivist perspective, various viewpoints exist amongst different groups of people to reflect their interests, beliefs and goals (Sparkes, 1992). Participants' perspectives can help discover their experiences and meanings behind them whilst acknowledging multiple truths exist (Sparkes, 1992; Gratton & Jones, 2015; Thanh & Thanh, 2015; Thorpe & Olive, 2017; Maher & Coates, 2020). Under interpretivism, reality is socially constructed (Willis 2007; Mallet & Tinning, 2014). Interpretivism perceives research as an interactive activity influenced by an individual's background e.g. gender, social class or race (Denzin et al., 2024). Consequently, individuals within the same situation may have different meanings of it depending upon their previous interactions with the world (Gray, 2009). Accordingly, my research was underpinned by interpretivism to generate new knowledge of PE (Pope, 2013), specifically concerning different stakeholders' perceptions of effective PE teaching for d/Deaf pupils.

Ontology.

Ontology relates to understanding the nature of existence and reality in the world (Sparkes, 1992; Denzin & Lincoln, 2005; Lee, 2012; Gratton & Jones, 2015; Maher & Coates, 2020; Landi, 2022) and examines what can be known about the world (Guba & Lincoln, 1994; Ritchie, Lewis, Nicholls & Ormston, 2013). Ontological assumptions are vital to comprehend how a researcher makes meaning of data (Kivunja & Kuyini, 2017).

Within this study, a relativist ontological position was adopted, whereby reality is an outcome of human activities, experience and interaction (Levers, 2013; Braun & Clarke, 2022). Thus, "knowledge, truth, and morality exist in relation to culture, society, or historical context, and are not absolute" (Sprake & Palmer, 2022, p.55). Relativism appreciates multiple socially constructed realities exist which depend on an individuals' experiences, actions and interactions (Guba, 1992; Denzin & Lincoln, 2005; Lee, 2012; Braun & Clarke, 2013; Levers, 2013; Thorpe & Olive, 2017). Different socially constructed realities exist within one setting (Guba & Lincoln, 1994). As multiple realities exist, various research findings may occur (Levers, 2013; Braun & Clarke, 2022), specifically concerning perceptions of effective PE teaching for d/Deaf pupils.

Alongside relativism, d/Deaf ontologies were adopted, which are concerned with d/Deaf ways of being, whereby subjectivity is key, and bodies influence an individual's experiences and thoughts (Kusters et al., 2017). Notably, the term d/Deaf ontologies have been adopted over d/Deaf ontology as I acknowledge the heterogeneity of

d/Deaf people (Skyler, 2021). Various d/Deaf ontological theories exist, emerging from Deaf Studies and Disability Studies, however, adopting a singular d/Deaf ontological theory would exclude some d/Deaf individuals. For example, Ladd's (2003) Deaf ontological theory of Deafhood excludes d/Deaf people who do not use or know sign language (Kusters & De Meulder, 2013). Meanwhile, theories emerging from Disability Studies exclude culturally Deaf people (Scully, 2019). Through adopting d/Deaf ontologies, the diverse experiences of d/Deaf people can be gained whilst accounting for the fluidity and contextual nature of identity which influence their reality in disabled-and-deaf ontologies (Skyer, 2021). The application of d/Deaf ontologies and d/Deaf epistemologies (to be discussed next) provides a 'bottom-up' way to create knowledge to shift from restraining theories to liberating ones (Kusters et al., 2017).

Epistemology.

Epistemology is "a way of understanding and explaining how I know what I know" (Crotty, 1998, p.3). Here, epistemology explores beliefs made about how knowledge becomes known (Gratton & Jones, 2015; Landi, 2022). Thus, epistemology is the study, belief and justification of knowledge (Denzin & Lincoln, 2011; Creswell & Poth, 2018). Epistemological positions influence the foundations of truth and knowledge (Lincoln, Lynham & Guba, 2011), including what knowledge is considered legitimate (Gray, 2022) and how it can be generated (Braun & Clarke, 2022). Within this study, epistemological views relate to how knowledge about effective PE teaching of d/Deaf pupils is generated.

Furthermore, epistemology explores the relationship between the inquirer and knowledge (Guba & Lincoln, 1994; Creswell & Poth, 2018; Denzin et al., 2024). To acquire knowledge about participants' subjective experiences, qualitative researchers must become close to participants (Creswell & Poth, 2018). Within social research, objectivism, constructionist and subjectivism are the main epistemological positions (Crotty, 1998). For this study, a social constructionist epistemological approach was adopted in alignment with its relativist ontological position (Guba & Lincoln, 1994; Denzin & Lincoln, 2000; Willig, 2013; Braun & Clarke, 2022). First introduced by Berger and Luckman (1966), social constructionism attempts to comprehend how social reality is constructed, its process and how it is given meaning (Crotty, 1998; Denzin & Lincoln, 2000; Charmaz, 2008; Holstein & Gumbrium, 2013; Creswell & Poth, 2018). From this perspective, knowledge is positioned within historic and cultural contexts and intertwined in human actions (Braun & Clarke, 2022). At the

heart of social constructionism is the belief that participants actively construct everyday life (Holstein & Gubrium, 2008). Therefore, a social constructionist attempts to comprehend the phenomenon in its natural setting (Smith & Sparkes, 2014).

Although social constructionism has previously been used interchangeably with constructivism, their meanings differ, constructivism suggests that the individual mind is responsible for meaning making while social constructionism is concerned with the shared generation of meaning (Lee, 2012). This is important when exploring the subjectivity of perceptions regarding teacher effectiveness as will later be explored. Moreover, as this section will later highlight, social constructionism has great potential to explore the influential nature of language when researching d/Deaf pupils' experiences of mainstream PE.

Social constructionists explore the meaning behind experiences and interactions alongside how these can influence actions (Denzin & Lincoln, 2000; Smith & Sparkes, 2014; Lincoln, Lyham & Guba, 2024). From a social constructionist perspective, knowledge stems from experiences in the social world (Crotty, 1998). Thus, different individuals can give various meanings to the same event (Crotty, 1998; Moon & Blackman, 2014). A social constructionist may identify that multiple social realities exist in one culture to investigate their circumstances and comprehend their implications on social practice (Willig, 2013). A constructionist approach in ethnography provides useful insight through documenting the phenomenon in its natural setting (Walsh, 2012; Holstein & Gubrium, 2008). As teacher effectiveness is a social construction (Thomson, 2017), a social constructionist approach was beneficial to comprehend stakeholders' varying perspectives towards effective PE teaching of d/Deaf pupils.

Social constructionist research appreciates everyday interactions and how language constructs reality (Andrews, 2012; Willig, 2013; Braun & Clarke, 2022). Thus, social constructionism was valuable when exploring the influential nature of language on d/Deaf pupils' PE experiences and constructions of effective PE teaching within Buttermere School. As social constructionism can challenge how language is used to represent reality (Young & Temple, 2014), it helped identify and analyse phonocentric practices within PE. From a constructionist epistemology, I am inextricably linked to the research study as my values shaped what was understood, meaning that my findings were co-constructed (Sparkes & Smith, 2014). Considering meanings are negotiated among the researcher-researched, their relationship must be explored, thus reflexivity was essential and will be discussed later (Finlay, 2002).

d/Deaf epistemologies.

d/Deaf epistemologies are concerned with the nature and level of knowledge that a d/Deaf person obtains and generates compared to a hearing person in a phonocentric world (Hauser et al., 2010; Moores, 2010c; Pudans-Smith et al., 2019). Deaf Studies scholars have suggested that as primarily visual learners, the d/Deaf episteme develops different knowledge and experience compared to the hearing episteme (McKee & Hauser, 2012). Thus, d/Deaf epistemologies are driven by the desire of equality and for d/Deaf people to reach their potential (De Clerck, 2012). Through utilising individuals' experiences, d/Deaf epistemologies help comprehend justified beliefs of d/Deaf people (Holcomb, 2010). Historically, educational researchers have neglected d/Deaf epistemologies (Moores, 2010c). However, over the past 15 years, d/Deaf epistemologies have gained popularity from their potential to improve the quality of life and education of d/Deaf children (Moores, 2010c; Hauser et al., 2010; Holcomb, 2010; Young & Temple, 2014).

Under d/Deaf epistemologies, it is suggested that d/Deaf pupils may learn differently compared to hearing pupils (Moores, 2010c). Therefore, d/Deaf epistemologies in educational research may enhance knowledge and lead to effective teaching of d/Deaf pupils, contributing to their holistic development (Holcomb, 2010; Holcomb, 2012). Alongside this, d/Deaf epistemologies may generate new questions, theories and methods in research whilst facilitating liberating movements for d/Deaf people (Robinson & Henner, 2017; Kusters et al., 2017). Therefore, Holcomb (2012) highlights d/Deaf educational research should be evidence informed and utilise d/Deaf epistemologies. In this study, d/Deaf epistemologies advanced knowledge surrounding effective PE teaching of d/Deaf pupils.

Previously, it has been suggested those who identify as deaf (do not identify as culturally Deaf) are not carriers of Deaf epistemology (De Clerck, 2010; Holcomb, 2010). Whilst Deaf epistemology has helped understand a Deaf worldview, this does not reflect the d/Deaf experience (Pudans-Smith et al., 2019). Therefore, more recently, the term d/Deaf epistemologies has been used to acknowledge the diversity and fluidity of identity (Moores & Paul, 2010; Paul & Moores, 2012; De Clerck, 2012). This study implemented d/Deaf epistemologies alongside social constructionism to acknowledge the fluidity and diversity of participants' identities (Young & Temple, 2014). As a hearing researcher, I do not know what it means to be d/Deaf (De Clerck, 2010). Nevertheless, I support the use of d/Deaf epistemologies (Moores, 2012), and I am aware of the benefits of them (Robinson and Henner, 2017). Therefore, multiple

d/Deaf people's perspectives with experience-based knowledge were obtained to facilitate analysis of language and how phonocentric and audist practices were reinforced and challenged in PE (De Clerk, 2010; Robinson and Henner, 2017). Adopting d/Deaf epistemologies as a hearing researcher resulted in several reflexive moments which will later be discussed.

There is no God's eye view of epistemology or d/Deafness, meaning multiple approaches for exploring d/Deaf epistemologies are possible (Paul & Moores, 2012). One approach to d/Deaf epistemologies is a positivist approach which utilises a standard epistemology requiring a scientific and objective outlook whilst being rooted in medical model thinking towards d/Deaf people (Holcomb, 2010; Holcomb, 2012). For example, experiments on deaf gerbils which attempt to restore a "damaged sensory circuit" (Chen et al., 2012, p.490 cited in Young & Temple, 2014, p.30). Comparatively, a social constructionist epistemology can be used, whereby it is believed multiple realities exist created by various perspectives, experiences and interactions (Young & Temple, 2014). As Holcomb (2010) suggests a standard epistemology may not shape educational policies or address hearing centred approaches in education. To promote inclusive education for d/Deaf pupils, this study adopted a social constructionist approach to explore d/Deaf epistemologies. Combining social constructionism with d/Deaf epistemologies enabled reflection on language by gaining d/Deaf people's knowledge and beliefs founded on their lived experience (Young & Temple, 2014; Robinson & Henner, 2017). Therefore, d/Deaf epistemologies helped challenge phonocentrism and audism (De Clerck, 2010; De Clerck, 2016), and work towards inclusive education for d/Deaf pupils (Reagan, Matline & Pielick, 2021).

Axiology.

The chapter now turns its attention to axiology which derives from two Greek words, axios referring to worth or value and logos meaning logic or theory (Killam, 2013; Biedenback & Jacobsson, 2016). Previously, axiology has been highlighted as the study of values and their role in research (Lincoln & Guba, 1985; Schwadt, 2014; Biedenback & Jacobsson, 2016; Spencer, Pryce & Walsh, 2020). Thus, axiology is concerned with values that influence right and wrong behaviour in research (Guba & Lincoln, 1994 cited in Goodwin, 2020; Kivuja & Kuyini, 2017). More recently, academics have highlighted axiology is not only the study of values but also ethics (Denzin and Lincoln, 2000; Biddle & Schaft, 2015; Sprake & Palmer, 2022). Axiology focuses on what the researcher perceives ethical and valuable (Killiam, 2013).

Historically, axiology has often been overlooked by academics (Biddle & Schaft, 2015; Biedenback & Jacobsson, 2016). However, if researchers are more explicit on axiology, this may facilitate philosophical debates that challenge taken for granted assumptions (Biedenback & Jacobssin, 2016). Therefore, the following paragraphs express the study's axiology and present axiological reflexivity.

The interpretivist and social constructionist paradigm are value-laden and cannot escape bias (Myers, 1995; Greene, 2000; Landi, 2022). From an interpretivist perspective, my values and experiences are inseparable from research (Ponterotto, 2005). Interpretivism is embedded in values whereby personal viewpoints may impact the credibility, trustworthiness and presentation of research (Sprake & Palmer, 2022). My background, experience, training and skills influenced my empathy towards participants and engagement in fieldwork and analysis (Patton, 2015). Having completed an undergraduate degree in Physical Education with no prior experience teaching d/Deaf pupils, I could empathise with teachers' initial lack of confidence when educating d/Deaf pupils. Additionally, my prior experience as a novice in BSL facilitated empathy towards hearing participants who had limited BSL skills but attempted to improve their signing abilities. Adopting an empathetic position meant I integrated gestures such as nodding when participants expressed their views (Brown & Danaher, 2019). I communicated my understanding and empathy to participants by sharing my own experiences (Taylor, Bogdan & DeVault, 2016). By displaying empathy, I could establish rapport with participants (Clifford, 1983; Brown & Danaher, 2019). Empathy improved my relationships with participants and illuminated their stories allowing richer data to be generated (Gair, 2012). Therefore, empathy was an essential component in fieldwork (Jones & Ficklin, 2012).

Additionally, I demonstrated respect to all participants, particularly those who were d/Deaf. Most obviously, this study adopted the term d/Deaf, as discussed within the introduction to appreciate that self-identity is important and varies amongst d/Deaf people (Iantaffi et al., 2003a). Respect was also shown to d/Deaf participants by communicating via BSL (Harris, Holmes & Mertens, 2009). Communicating via BSL facilitated stronger relationships with d/Deaf participants and richer data to be generated which will later be discussed (Singleton et al., 2014; Graham & Horeges, 2017). Overall, being genuine, empathetic and employing participants' language was vital to establish rapport (Taylor, Bodga & Devault, 2016).

As an interpretivist, I adhered to a balanced axiology when interpreting subjective perceptions to gain understanding (Kivuja & Kuyini, 2017; Goodwin, 2020). Transparency during research processes and writing up occurred (Sprake & Palmer, 2022). The study's research outcomes reflect my values and provide a transparent report of findings (Kivuja & Kuyini, 2017). Axiological reflexivity helped identify moments which were meaningful to research participants and me (Peers, 2018). To demonstrate axiological reflexivity, reflexive moments are provided throughout this thesis.

Qualitative research.

Considering the philosophical approaches underpinning this research, the study adopted a qualitative approach to ensure methodological congruence (Krauss, 2005; Sparkes & Sparkes, 2014; Braun & Clarke, 2022). Qualitative research has previously been described as a complex set of interpretive practices whereby researchers work in an interdisciplinary field that interweaves topics (Denzin et al., 2024). As qualitative research is an open-ended concept, providing an all-encompassing definition is difficult (Smith & Sparkes, 2016). For this thesis, the broad definition below will be followed:

“qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them. (Denzin & Lincoln, 2011, p.3).

Qualitative research is an interpretative form of social research that examines how participants interpret and comprehend their experiences (Hastie & Hay, 2012; Sparkes & Smith, 2014). A qualitative researcher often investigates the selected phenomenon in its natural setting (Denzin & Lincoln, 2011; Sparkes & Smith, 2014; Denzin et al., 2024). Qualitative research generates various data such as interviews to comprehend participants' thoughts, experiences and the feelings attached to them (Malterud, 2001; Hastie & Hay, 2012; Willig, 2013; Gratton & Jones, 2015; Smith & Sparkes, 2016; Flick, 2018; Denzin, et al., 2024). Here, qualitative researchers seek to understand socially constructed realities, the researcher's relationship with the researched and situational factors that shape findings (Denzin & Lincoln, 2000). In doing so, qualitative researchers can create rich insights which enhance understanding of participants' experiences (Sprake & Palmer, 2022). To gain rich insight into participants' thoughts, experiences and feelings alongside the multiple

socially constructed realities within Buttermere school, this study undertook an ethnographic approach.

Ethnography.

The word ethnography derives from two Greek terms *ethos* (people) and *graph* (writing) (Reeves, Peller, Goldman & Kitto, 2013; Atkinson, 2016). Early ethnographers studied those different to themselves, for instance those in an exotic location by living with participants, learning the local language and participating in daily life (Tedlock, 2000; Wolcott, 2008). However, more recently, ethnography has evolved to conduct research in familiar settings e.g. schools (Wolcott, 2008). Social and educational ethnography entails studying people in their natural settings through various methods to obtain first-hand experience, which involves interaction mostly through participant observation to gain a social understanding (Brewer, 2000; Hammersley, 2006; Wolcott, 2008; Gobo, 2008; Emerson, Fretz & Shaw, 2011; Sparkes & Smith, 2014; Coffey, 2018). Ethnography has been referred to as a 'toolkit', whereby a set of 'tools' (methods) are combined in a multimethod approach (Reeves et al., 2013; Reyes, 2018). During the 1980s, educational ethnography flourished, yet studies struggled to challenge familiarity (Delamont, 2014).

Within ethnography, research is focused on a singular setting, community or culture to gain an in-depth understanding (Hammersley & Atkinson, 2019). Educational ethnography attempts to portray the subjective reality of participants (Pole & Morrison, 2003). Within this study, ethnography involved studying Buttermere Primary School, a mainstream school within England, which has a DRB for approximately ten moderate to profound d/Deaf pupils. Throughout fieldwork, I became a primary instrument for data generation through listening, enquiring, interacting and recording participants (O'Reilly, 2009; Coffey, 2018). I spent a significant amount of time at Buttermere school (11 months), attempting to become an insider to comprehend their 'way of life' which is detailed later (Sparkes, 1992; Wolcott, 2005; Coffey, 2018). Thus, specific events were positioned in a more meaningful context (Tedlock, 2000). Ethnography provided in-depth description of interactions at Buttermere school (Hammersley, 2018). Such insight enabled a rich description of culture to be obtained (Sparkes & Smith, 2014), particularly power relations and social interactions which significantly influenced d/Deaf pupils' educational experiences.

It has been suggested prolonged engagement allows ethnographers to better comprehend participants' actions, beliefs and rationales compared to other research

approaches (Tedlock, 2000; Sparkes & Smith, 2014). From a naive outsider, the ethnographer becomes an expert through a process of self-enlightenment (Coffey, 1999). However, being in the field does not guarantee ethnography is taking place (Wolcott, 2008; Thomson, 2017). Fieldwork involves deep immersion and additional time than case studies, producing more extensive datasets (Hammersley, 2006; Parker-Jenkins, 2018). To ensure fieldwork was ethnographic, I immersed myself within Buttermere school (Delamont, 2009), negotiating a reciprocal role. Over the course of fieldwork, I took up additional roles including DRB PE teacher, football coach, DRB swimming interpreter, DRB teaching assistant and equipment carrier, enabling trust and rapport to be established with participants, which is explored in detail later. Throughout fieldwork, I also followed ethnography's principles laid out by Gobo (2008):

- Establish relationships with participants.
- Spend a period in the setting.
- Naturalistic inquiry.
- Observe and describe participants' behaviours.
- Interact with participants and participate in everyday life.
- Learn participants' codes to comprehend the meaning of their actions.

Ethnography was divided into two phases that occurred in two distinct periods of time which constituted a period of access ethnography near the end of the 2022-23 academic year, followed by a longer period of ethnographic immersion throughout the subsequent academic year. During June 2023 to July 2023, for 2 days a week 'phase one' of fieldwork was completed. Phase one, known as 'access ethnography' involved initial observations, reflection, alongside practicing of social skills and research before deeper immersion (Brighton, 2016). Data was generated via participant observation, informal/formal conversations and analysis of documents. During this time, trust and rapport with research participants was developed, whilst data was collected to inform phase two (Brighton, 2016). Also, phase one developed my d/Deaf awareness and helped practice reflexive thematic analysis (RTA). From September 2023 to May 2024, phase two of fieldwork occurred for 3 days per week which involved longer and deeper immersion, whereby most of the data that informed research findings was generated. During this time, data generation was expanded to include participant observation, semi-structured interviews, informal/formal conversations, analysis of school documentation, narrative inquiry and drawing elicitation. Through utilising various research methods and triangulating these with one another, a rich

understanding was obtained (Brockmann, 2011; Reeves et al., 2013; Coffey, 2018).
The timeline below indicates the key phases in fieldwork:

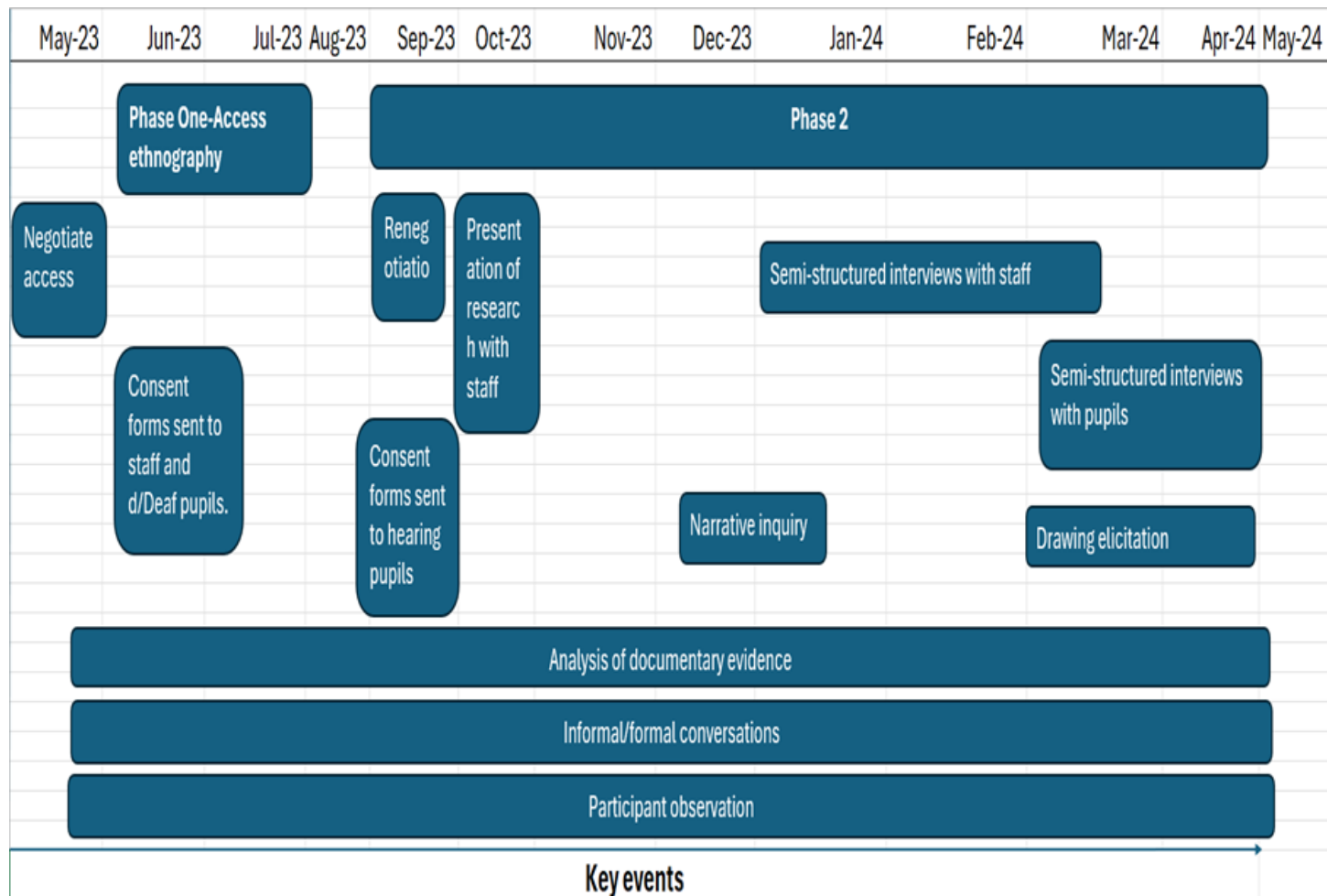


Figure 2: Timeline of fieldwork phases.

Sampling.

Within this study, purposeful sampling was utilised, whereby participants were selected due to their characteristics, including specific knowledge or experience which was relevant to the study (Morse, 1991a; Higginbottom, 2004; Wolcott, 2008; Silverman, 2014; Smith & Sparkes, 2014; Gratton & Jones, 2015; Etikan, Musa, & Alkassim, 2016). Purposive sampling is frequently criterion based, which involves selecting predetermined criteria before data generation and then choosing a suitable sample (Suri, 2011; Jones, Brown & Holloway, 2013). Purposeful sampling can yield rich information on a culture, and is commonly utilised within ethnographic studies (Morse, 1991a; Moser & Korstjens, 2018). Within this study, research participants were from Buttermere school. Purposeful sampling selected research participants who were likely to generate the richest insight into the research question (Devers & Frankel, 2000; Kelly, 2010; Suri, 2011; Patton, 2015; Schreier, 2018). Consequently, purposeful sampling improved trustworthiness and rigour of the study (Campbell et al., 2020).

Whilst purposeful sampling limits the variation of participants and adds bias into samples, this was a deliberate technique to gain understanding (Morse, 1991a; Deineffe, 2020; Doyle, McCabe, Keogh, Brady & McCann, 2020). The goals of inquiry were focused on information richness rather than statistical-probabilistic generalisation (Gratton & Jones, 2010; Schreier, 2018; Staller, 2021). Indeed, statistical-probabilistic generalizability undermines ontological and epistemological beliefs of qualitative research (Smith, 2018). Moreover, considering the d/Deaf population is heterogenous, attempting to generalise to all d/Deaf people would act as a form of 'tokenism' (Graham and Horejes, 2017). Qualitative studies aim to achieve depth rather than breadth (Patton, 1990; Palinkas et al., 2015), through a small sample size (Jones et al., 2013). In this study, a small sample size was utilised, including sixteen staff members, three hearing pupils and seven d/Deaf pupils. A small sample is not unique to d/Deaf educational research, though the diversity of these samples and their experiences can be (Cawthorn & Garberoglio, 2017). In this study, d/Deaf pupils had different educational backgrounds, preferred methods of communication and constructions of effective PE teaching which provided a diverse data set. Also, differing lived experiences and perceptions of effective PE teaching for d/Deaf pupils existed amongst mainstream teachers, DRB staff, hearing pupils and d/Deaf pupils. In this study, a small, diverse sample provided a detailed insight into teaching PE effectively for d/Deaf pupils.

Although various purposeful sampling strategies exist (Collingridge & Gantt, 2008; Palinkas et al., 2015; Schreier, 2018), this study adopted heterogenous sampling. Heterogenous sampling involved including stakeholders with differing experiences and perspectives (Jones et al., 2013). Variations included age, gender, job roles, teaching experience, cultural community, educational backgrounds, preferred communication methods, d/Deaf participants and hearing participants. Throughout fieldwork, everyone regardless of power was listened to (Walford, 2009a). A 'diagonal slice' through the school's hierarchy was taken to ensure participants from a range of departments were included such as mainstream teachers, DRB teachers, DRB LSAs and the senior leadership team (Suri, 2011; Saunders, 2012). Heterogenous sampling enabled the diverse perspectives surrounding effective PE teaching of d/Deaf pupils to be obtained. Notably, throughout the thesis, all participants and the selected school were allocated pseudonyms to protect their privacy (BERA, 2018), and to remind the reader that the participants were real people, each with their own identities, characteristics and stories. At Buttermere school, the following staff members acted as research participants:

Mainstream teachers:	DRB class teachers:	DRB LSAs:
Mr Greenbank	Mrs Mulligan	Miss Rodriguez
Mrs Goodison	Mrs Hayes	Mrs Doyle
Mr Luck	Miss Harrison	Miss Aitchison
Mrs Jones		Mr Brakell
Mr Wilcock		Mrs Dodd
		Mrs Phillips
		Mrs <u>Coubourne</u>
		Ms Ross

Figure 3: Table of staff research participants.

Also, the following pupils were research participants:

Profoundly d/Deaf pupils who did not wear hearing assistive devices:	Profoundly d/Deaf pupils who had cochlear implants:	d/Deaf pupils with moderate to profound d/Deafness who communicated via speech and used radio aids and hearing aids:	Hearing pupils:
Dan	James	Daisy	Jackson
Jen	Josh		Katie
Hannah	Joe		Oliver

Figure 4: Table of pupil participants.

Identifying and Negotiating Access.

Identifying the research setting is a vital moment in research as these contexts provide opportunities to address the research question (Hatch, 2023). Whilst obtaining access to the relevant setting is fundamental to successful research (Johl & Renganathan, 2010), it is rarely straightforward (Hammersley & Atkinson, 2019). Within this study, identifying potential participants and gaining access required patience (Devers & Frankel, 2000). Initial targeted gatekeepers for access at a secondary school were slow to reply, requiring patience when nerves of gaining access were increasing. Whilst I waited to hear back from gatekeepers, I kept myself busy by conducting an initial literature review and searching for alternative schools. After four months, gatekeepers at the secondary school expressed that they did not want to participate in the study. Within my reflexive diary, I documented feelings of frustration as I began to feel “back at square one”, though determined to succeed I searched for alternatives. This involved changing the targeted research setting from a secondary school to a primary school. Although this was not anticipated, changing the research setting to a smaller primary school provided close contact to participants, allowing rapport to be established quickly. Also, as research has tended to focus on high school settings when researching d/Deaf pupils in PE (Reich & Lavay, 2009; Tanure Alves et al., 2021), focusing on a primary school enabled new insight to be gained. Moreover, it was perceived logical to first comprehend a primary school before examining d/Deaf pupils’ PE experiences in secondary settings. Primary school years are formative in developing positive physical activity experiences and increasing the likelihood of lifelong participation (Martins et al., 2018; DfE, 2024).

Therefore, it is essential to firstly research d/Deaf pupils' experiences of PE within a primary setting as these experiences will impact d/Deaf pupils' perceptions of and attitudes towards mainstream PE as they transition into secondary school.

Utilising personal relationships, I contacted a 'gatekeeper' within Buttermere school who promptly expressed their interest. Following this, a formal meeting occurred with the gatekeeper to discuss the research study, provide information sheets and clarify any queries that existed. Alongside being transparent, I used sensitivity and negotiation skills (Gray, 2022). In attempt to gain access, I emphasised my undergraduate degree in Physical Education, my sporting qualifications and BSL skills to act as a bargaining tool (Smith, 2007) and highlight the reciprocal role I could offer. Originally, it was 'agreed' I would assist with PE lessons and extracurricular activities whilst generating data. Shortly after the meeting, the gatekeeper gave written consent on behalf of Buttermere Primary School to participate within the research study. Here, established relationships with gatekeepers facilitated easier access to research participants (Hoffman, 1980).

Prior to phase one, I attended Buttermere school to introduce myself and the study. After this, d/Deaf pupils, class teachers and DRB LSAs were provided individual information sheets and consent forms to complete and return if they wished to participate. Initial consent forms were sent out in June 2023 and whilst return rates of consent forms were high it was believed the amount of completed consent forms could be increased. Alongside this, at the beginning of phase 2, a key gatekeeper raised concerns about the study due to miscommunication between the original gatekeeper and another key gatekeeper meaning they required some reassurances, and I had to renegotiate access. Re-negotiation involved myself and my supervisors meeting with the concerned gatekeeper to address any queries they had. At the time, a key gatekeeper expressing concerns about my study was disappointing considering I had been informative and transparent from the outset. This incident was unpredicted and shocked me as I was beginning to establish rapport with d/Deaf pupils and had become immersed within the setting. Prior to the meeting, I was nervous and felt as though my PhD hinged on the outcome, despite this I attempted to prepare as best as possible to minimise any concerns about my study. Although I was daunted by the prospect of losing access, after the meeting in my reflexive diary I noted how this experience felt very productive in progressing my research forward. As part of my re-negotiation and to increase return of consent forms, I delivered a presentation during a staff meeting to provide further information regarding the study, address any queries

and offer staff who had not yet consented an opportunity to join phase two of the study. Also, at the beginning of phase two, consent forms were distributed to hearing pupils in one mainstream class based on the number of d/Deaf pupils present within their PE lessons. Although selecting hearing pupils from one class raises concerns of whether these views represented the views all hearing pupils, securing parental consent for pupils in all classes would have been difficult (Hammersley & Atkinson, 2019).

Access extended beyond formal permission to the research setting and was a continuous process (Hammersley & Atkinson, 1995; Johl & Renganathan, 2010; Hatch, 2023). Once in the setting, I had to develop and maintain rapport with relevant stakeholders to collaborate with them (Johl & Renganathan, 2010). Impression management became vital to maintain access during fieldwork (Goffman, 1959; Walsh, 2012; Reeves et al., 2013; Grant, 2017; Hammersley & Atkinson, 2019). As Harrington (2003) puts it, ethnographers are identity managers and data gathers. To maintain access, I performed identity work such as mirroring staff demeanours (politeness, professionalism and inclusive ethos), speech of hearing participants (local dialect and slang) and behaviours of participants in the DRB (utilising BSL) (Walsh, 2012; Hammersley & Atkinson, 2019). I negotiated a situational identity at Buttermere school (Angrosino & Mays de Perez, 2000). As Delamont and Atkinson (2021) highlight what ethnographers wear is critical in developing rapport, gaining access and building trust as clothes may be used to judge the ethnographer's moral character, competence, knowledge and trustworthiness. During initial visits, I dressed smart-casual to 'blend in' with staff members and facilitate rapport (Hammersley & Atkinson, 2019). Though as fieldwork progressed, I wore my UCLan branded PE kit to appear competent within the PE field and establish my role as a researcher and marginal member at Buttermere school (Hammersley & Atkinson, 2019).

Establishing rapport with d/Deaf participants and DRB staff took time and effort considering I was hearing and not from the Deaf community (LeCompte & Schensul, 1999). Identity work took place by adopting the culture and language of those I was studying. As a hearing researcher, becoming competent in BSL was vital to build trust and rapport (Graham & Horeges, 2017). As refining my BSL skills to the county variation took time, so did developing rapport within the DRB, which will be discussed later. Gradually, I created a 'new' version of myself and over time moved from the periphery to become a legitimate member at Buttermere school that allowed me to generate data (Walsh, 2012).

“Experiencing, enquiring, and examining” (Wolcott, 2008, p.48).

Throughout fieldwork, interpretation and analysis, Wolcott’s (1999; 2008) framework of experiencing, enquiring and examining was followed. In doing so, I could acknowledge my embodied experience as a researcher throughout research processes (Wolcott, 2008), allowing reflexivity to be embedded in research. This framework involved conducting participant observation to experience culture, then enquiring, for instance via the means of interviewing, to comprehend what was happening and finally examining by analysing archival data including newsletters (Wolcott, 2008). The following section explores how different research methods were drawn upon using Wolcott’s (2008) experience, enquire and examine framework during fieldwork.

Experiencing.

Participant observation.

Under Wolcott’s (2008) experience, enquire and examine a key tenant of experience is participant observation. Broadly, participant observation is an umbrella term for everything ethnographers do in the field (Wolcott, 2008). Participant observation is data generation over a sustained period through observing, listening, and asking questions as participants engage in their everyday life whilst the ethnographer somewhat becomes a member of the culture they are studying (Payne & Payne, 2004). Ethnography differs from observational methods which make “systematic observations about behaviour in situ” (Reeves et al., 2013, p.1367). Through participant observation, understandings of social practices could be obtained that are usually hidden from the public (Reeves, Kuper & Hodges, 2008; Vermeulen, Denessen, & Knoors, 2012). Prolonged time within the setting increased my sensitivity to details in speech and action that may have been initially overlooked (Small, Calarco & McCrory, 2022). Despite this, I never became a complete member compared to those who were ‘naturally’ in the setting (Emerson et al., 2011). Nevertheless, participant observation enabled rich data about the setting and those within it to be obtained (Coffey, 2018). During fieldwork, my positioning on the participant-observer continuum was fluid (Wolcott, 2008) and was contextually, socially and temporally contingent which will later be discussed (Hammersley & Atkinson, 2007; Brockmann, 2011; Smith & Sparkes, 2014). As my positioning upon the participant-observer continuum shifted, experiences could be analysed from different viewpoints (McIntyre, 2008; Thomson, 2017).

Reflexive note: Throughout fieldwork, challenging situations arose regarding when to intervene or observe (Van der Smee & Valerio, 2023). By intervening rapport was built with participants (Van der Smee & Valerio, 2023). However, this posed ethical implications to an ethnographic study which sought to be a naturalistic inquiry (Dennis, 2009). Though my decision to intervene was an ethical one and was influenced by my care for participants (Dennis, 2009). As an ethnographer, it was difficult to extract myself from the field and considering my morals about inclusion, I frequently intervened, though this influenced the data generated. The following incident, taken from my reflexive journal is an example of when I attempted to navigate an “ethical and moral labyrinth” (Goodwin, Pope, Mort & Smith, 2003, p.572).

13/11/23. Today I was asked to take year 6 DRB pupils to their mainstream PE lesson as normal. I was anticipating a DRB staff member would shortly follow us down, however this did not happen. During the lesson, the mainstream teacher delivered instructions in speech. As I was based in the DRB and with arguably the most signing abilities in the room, I felt the role of interpreting the PE lesson for d/Deaf pupils fell to myself, though I felt far from an expert. At this time, my BSL fluency was limited to basic sentences. Here, I was beyond my role of a researcher, but it felt morally wrong to not intervene and watch d/Deaf pupils’ struggle. Despite intervening, I still felt complicit in exclusionary practices as my limited BSL skills meant I was unable to provide d/Deaf pupils full access to communication, thus at the end I apologised to d/Deaf pupils for my poor signing abilities. Despite my feelings of inadequacy, at the end of the lesson the mainstream teacher thanked me for assisting with BSL interpretation. Reflecting on this incident, had I not intervened I could have obtained data regarding exclusionary PE experiences for d/Deaf pupils, however considering my morals about inclusion my intervention felt necessary, but this undoubtedly influenced the data generated. Nevertheless, if I hadn’t of intervened and helped d/Deaf pupils this may have negatively influenced their perceptions of me, rapport and the data generated for the rest of fieldwork. From this perspective, my decision to intervene would have impacted data generation either way. However, by intervening I risked treading on the toes of the mainstream teacher and becoming an outsider with them. Thankfully, my intervention was welcomed due to the collaborative working environment at Buttermere school and because of the strong rapport between myself and the teacher, established through previously assisting with PE lessons. However, moving forward, I reminded myself I would only intervene with BSL interpretation when absolutely necessary, for which I perceived this incident was.

Informal/formal conversations.

Alongside participant observation, interviewing was utilised to enable one data source to enlighten the other (Hammersley & Atkinson, 2019). During ethnography, interviews can vary from a casual conversation to a formal interview (Wolcott, 1999; Hammersley, 2006; Wolcott, 2008; Hammersley & Atkinson, 2019). Naturally occurring conversations acted as a key data source about Buttermere school and participants' perspectives (Hammersley & Atkinson, 2007; 2019). Conversations gave insight into the school context and d/Deaf pupils' social interactions that may usually be hidden in formal contexts (Reeves, Kuper & Hodges, 2008; Vermeulen, Denessen, & Knoors, 2012). For instance, after observing football practice, Miss Rodriguez asked me "Did they even pass to him (Dan)?", and expressed "it's so frustrating", "he was standing there and nobody passed to him, so annoying because he's a good player". This informal conversation offered insight into Miss Rodriguez's thoughts and feelings towards the situation. By engaging in conversations trust and rapport with participants was formed (Swain & Spire, 2020). Through establishing rapport with participants my understanding of participants and context was improved (Small et al., 2022). Accounts were often provided to me by participants, particularly DRB staff who explained the rationale of teaching strategies to ensure I 'understood' events correctly from their perspective (Hammersley & Atkinson, 2007). For example, Mr Brakell often commented on teacher positioning considerations surrounding sunlight to ensure d/Deaf pupils understood. Therefore, conversations facilitated a deeper understanding of the actualities of teaching at Buttermere.

As interviewing in ethnography may vary from an informal conversation to a formal interview, it is difficult to distinguish between participant observation and interviewing (Hammersley & Atkinson, 2007). Informal conversations may overlap between experience and enquiry domains. During participant observation I 'got nosy' and sought information regarding events (Wolcott, 1995). This involved following up events with questions relevant to the study (Reeves et al., 2013; Corbin & Strauss, 2015). However, considering informal questions may be seen as threatening or rude (Hammersley & Atkinson, 2007), I considered the number of questions, how direct to be and whether to ask questions (Wolcott, 2008). Questions were asked once trust and rapport with participants had been built (O'Reilly, 2009). Informal questions were cautiously worded and were open-ended. In doing so, participants could share their perspectives and experiences if they were comfortable, enabling light to be shed on issues that previously may have been missed. Through complimenting participant

observation with 'interviews' richer insight into everyday life was given (Reeves et al., 2013).

Whilst concerns have been raised about making private, informal conversations public (Hammersley & Atkinson, 2007) data generated through naturally occurring conversations provided a closer insight to participants' thoughts, perspectives and experiences as there was less 'performativity' (Forsey, 2010; Swain & Spire, 2020; Swain & King, 2022). Participants were made aware that informal conversations would be used as a data source within information sheets, consent sheets, verbally and during the presentation of research for staff members. Overall, informal conversations generated a detailed understanding about Buttermere's culture and those within it, allowing research aims to be achieved.

Fieldnotes.

Participant observation involved generating fieldnotes of observations and experiences which became data (Emerson et al., 2011; Coffey, 2018). Within this study, fieldnotes included:

- Descriptions of the research setting.
- Descriptions of research participants.
- Events of what happened, where and how.
- Behaviours, interactions and actions of participants.
- Conversations and non-verbal data (Coffey, 2018).

Fieldnotes have been referred to as the foundation of ethnographies (Walford, 2009b). As Delamont (2002, p.59) suggests "Our data are only as good as our fieldnotes". Indeed, fieldnotes facilitated a deeper understanding of Buttermere school and those within it. Fortunately, educational ethnographers are in a setting where 'writing' is a normal activity (Pole & Morrison, 2003). However, caution was taken to prevent disruption (Hammersley & Atkinson, 2007). Throughout fieldwork, I was aware that my presence could influence the data generated. Yet, completing fieldnotes was urgent considering memories are selective and fragile (Denscombe, 1998 cited in Pole & Morrison, 2003), particularly in the fast-paced nature of school life. Throughout fieldwork, I carried a small notepad to make notes when I had time. Raw fieldnotes took the format of jotted notes, whereby key phrases were written to aid recall of events which were elaborated on every evening (Emerson et al., 2011).

Fieldnotes were the first opportunity for interpretation and analysis (Emerson, et al., 2001). Here, I co-constructed data (Brockman, 2011) as I selected what was meaningful to me and the study (Hammersley & Atkinson, 2007; Walford, 2009b). As fieldnotes were selective and subjective (Emerson et al., 2001), different descriptions of events were possible (Emerson et al., 2011). Therefore, fieldnotes did not supply a complete picture of Buttermere school (Hammersley & Atkinson, 2007). Considering this, fieldnotes were triangulated with a range of research methods to ensure accurate and reliable findings.

The reflexive note that follows illustrates how, despite participants being informed of, and consenting to, my notetaking for research purposes, the act of taking notes was sometimes challenging:

Reflexive note: *When writing fieldnotes, I faced several situational ethical dilemmas, particularly surrounding whether to be transparent about fieldnotes, in fear this may prevent further data generation. Similar to Vanner (2020) when making notes of what I had observed, I was conscious of participants noticing my notepad. **October 2023.** Today, whilst observing year 5 PE, I jotted down my thoughts as usual. Upon noticing this, Mr Brakell asked me “What are you writing down?” and peered over my shoulder. I had somewhat been expecting this question, but I now faced the dilemma of whether to disclose my notes. Recognising the importance of transparency, I shared my fieldnotes surrounding d/Deaf pupils attempting to watch demonstrations and signed instructions simultaneously. Mr Brakell took this well and agreed “it is important that there is an awareness on both behalf’s”. Following this, I continued to be transparent with Mr Brakell regarding my interests and in return he explained what was happening and why. In this moment, transparency about my fieldnotes provided further access to data, though I remained aware this might not always be the case if participants are portrayed negatively. Moving forward, I made ‘mental notes’ in class, only making physical notes when necessary and out of sight of participants to minimise discomfort and the fear of judgement (Vanner, 2020).*

Enquiring.

Although enquiring may seem the natural progression of participant observation, there is a difference between being a passive observer and taking an active role by asking what is happening (Wolcott, 2008). When enquiring, interview data complimented participant observation and informal conversations (Hammersley, 2006; Brockmann, 2011; Hammersley & Atkinson, 2019). As Small et al. (2022) argue

following up sheds light on issues that had not been anticipated. Enquiring deepened understanding of perceptions of effective PE teaching for d/Deaf pupils, d/Deaf pupils' PE experiences and meanings connected to events. Although various types of interviewing techniques exist (Wolcott, 2008), this study used conversations (as previously mentioned) and semi-structured interviewing.

Semi-structured interviews.

Considering ethnographic interviews aim to facilitate conversation and provide interviewees with some control (Hammersley and Atkinson, 2007), the semi-structured interview was deemed most appropriate. Semi-structured interviews involved asking a flexible set of questions whilst altering the sequence of questions and using probes to gain further insight (Gratton and Jones, 2015; Smith & Sparkes, 2016; McIntosh & Morse, 2015; Roulston & Choi, 2018). The flexibility of semi-structured interviewing enabled the interview to be shaped as it developed (Wolcott, 2008). Although the same topics formed the foundation of the interview (see appendix 1, 2, 3 & 4), the schedule of questions was interviewee led (Roulston & Choi, 2018). As interviewees were provided control their confidence grew throughout interviews, allowing them to delve into the meaning attached to their experiences and perspectives (Sparkes & Smith, 2014; Brinkman, 2014; Corbin & Strauss, 2015; Sparkes & Smith, 2016). Whilst participants had some control over the interview, I could 'steer' interviews to ensure alignment with research aims (Harvey-Jordan & Long, 2001; Fylan, 2005; Corbin & Strauss, 2015). Therefore, semi-structured interviewing enabled the research question to be addressed and interviewees to offer new meanings to the study (Galletta, 2013). Consequently, unexpected themes emerged from semi-structured interviews (Gratton & Jones, 2015; Richards & Morse, 2013), enhancing my knowledge of d/Deaf pupils' education in mainstream PE.

During interviews, I actively listened (Hammersley & Atkinson, 2019) and watched participants' signs. Attention was given to how a participant's narrative was unfolding, and decisions were made regarding when to interrupt (Galletta, 2013). Watching and listening to interviewees answers helped develop the interview by altering the order of questions or utilising prompts when appropriate (Hammersley & Atkinson, 2019). Thus, I was able to delve into participants' answers to obtain a detailed understanding of their perceptions and experiences. Through conducting interviews after eight months and once rapport had been built, it was hoped participants felt comfortable disclosing certain information to me that they might not have been had the interviews

been conducted at the beginning of fieldwork. Staff interviews were completed first to explore their perceptions regarding effective teaching of d/Deaf pupils in PE before interviewing d/Deaf pupils to examine the realities of their experiences. Following this, hearing pupils' interviews were conducted to shed light upon their social interactions with d/Deaf pupils and provide further insight into d/Deaf pupils' mainstream PE experiences. Staff and d/Deaf pupils' interviews with interpreters present were completed in private offices or classrooms. Comparatively, for hearing and d/Deaf pupils who did not require an interpreter, interviews were completed outside on a bench approximately twenty meters away from their PE lesson to allow for a comfortable setting whilst myself and pupils could still be seen by their teachers but without their answers being heard. When conducting interviews outside, I was mindful of potential distractions and that the location may have needed to be changed at short notice, though this issue did not arise.

I selected certain participants to act as a major source of information (Wolcott, 2008). Key informants were chosen from participant observation (Hammersley & Atkinson, 2019) and were perceived to be 'more-willing-to reveal' (Hammersley & Atkinson, 2007). These 'more-willing-to reveal' participants had good rapport with myself (Renganathan, 2009; Duncombe & Jessop, 2012), were perceived to add value to the study and had motives to reveal (Walsh, 2012; Hammersley & Atkinson, 2007). Key-informant interviewing provided information about participants and the cultural behaviours and beliefs within Buttermere school (Pelto, 2016).

Throughout interviews, I ensured good rapport was built and maintained with participants (Hammersley & Atkinson, 2007). As Brown and Danaher (2019) highlight semi-structured interviews rely upon trust and rapport between the researcher and the researched. The first few minutes were vital in establishing the tone for the interview (Hammersley and Atkinson, 2007). Upon commencing interviews, I reintroduced myself and my research, I then reassured participants of confidentiality, made them aware of their right to refuse a question and begun the interview with small talk (Hammersley & Atkinson, 2007; Raworth et al., 2012). Here, I was able to 'break the ice' and build rapport (Gratton & Jones, 2015). Meanwhile, the conversational format of the interview established a comfortable setting whereby interviewees could share their views (Brown & Danaher, 2019).

However, semi-structured interviews are not without their limitations. Data was only provided about what participants were willing to reveal about their experiences whilst

perspectives are subjective may change over time (Walford, 2007). Moreover, like all self-report measures, the quality of semi-structured interviews depends on interviewee responses who may encounter issues of recall, misinterpretation and incorrect knowledge (Gratton & Jones, 2015). Thus, what an individual says they do and what they do may vary (Hodder, 2000; Roulston & Choi, 2018). However, ethnography provided an opportunity to examine what people do alongside what they said (Herbert, 2000). Therefore, ethnography facilitated more in-depth findings than interviews alone, providing an opportunity for witness interactions and events as they occurred (Paulson, 2011; Jerolmack & Khan, 2014). The synthesis of multiple research methods in ethnography can be of considerable value, allowing information to be checked via different research methods (Roulston & Choi, 2018). In particular, checking information from d/Deaf pupils' interviews was vital considering that an interpreter may have filtered information and the impact of power relations between two adults being present (Harr, 2001). By checking information via different research methods, greater insight into d/Deaf pupils' mainstream PE experiences was gained whilst ensuring that findings were trustworthy (Shenton, 2004).

During ethnography, triangulation via different research methods can heighten the accuracy of representations regarding the PE experiences of pupils with SEND whilst placing their voices at the forefront of a study (Meegan, 2010). To ensure d/Deaf pupils' voices were valued and d/Deaf pupils were afforded agency, participatory methods including narrative inquiry and drawing elicitation were utilised (Fitzgerald, 2009). Previously, children with SEND have been marginalised and treated as inferior when research has been conducted on them rather than with them, particularly in sport and PE contexts (Fitzgerald, Jobling & Kirk, 2003; Fitzgerald, 2009; Meegan, 2010). Therefore, academics have recently advocated that researchers should amplify the voices of pupils with SEND (Haegele & Maher, 2023; Maher, van Rossum & Morley, 2023; Lamata, Grassi, Coterón, Becerra-Muñoz & Pérez-Tejero, 2025). Within this study, amplifying d/Deaf pupils' voices helped comprehend their experiences and identify necessary improvements to work towards inclusion (Vickerman & Maher, 2018; Lamata, et al., 2025). In this manner, to achieve inclusive PE it is essential to value the voices of pupils with SEND (Jarvis & Iantaffi, 2006; Coates & Vickerman, 2010). However, pupils must also feel respected and empowered during the research process (Meegan, 2010). The next sections discuss how narrative inquiry and drawing elicitation were used to empower pupils to capture their experiences in a more creative way.

Narrative inquiry.

Although narrative inquiry is multidisciplinary (Dowling, 2012), in this study narrative inquiry involved asking pupils to write about their PE experiences. As will be discussed in more detail within the contextual chapter, d/Deaf pupils only entered mainstream lessons for a select few curriculum subjects including PE. Alongside mainstream PE lessons, d/Deaf pupils had a DRB PE lesson once a week. To explore how pupils felt about these different PE contexts they were asked to compare the two. Considering the literacy levels of d/Deaf participants, during narrative inquiry I limited the use of technical language and provided the following three prompts:

- What happens in PE?
- How do you feel before, during and after PE?
- What is the difference between your year groups and DRB PE?

The task was interpreted by a DRB staff member who also checked pupils' understanding before beginning. Pupils were given 35 minutes to complete their writings of PE and were given flexibility on how they presented this and what they wrote about PE (see appendix 5). A narrative approach can provide the insights of pupils with SEND in PE whose voices might have previously been suppressed (Fitzgerald & Stride, 2012). More specifically, for d/Deaf people narrative can challenge perspectives and hegemony through creating counternarratives (Young & Temple, 2014). Through providing d/Deaf pupils with agency, oppressive hegemonic practices could be challenged to facilitate more inclusive PE. However, narratives are situated within a specific time and place (Young & Temple, 2014). Considering this, writings may not provide a complete of d/Deaf pupils' education, thus these were triangulated with other research methods.

Drawing elicitation.

Another method utilised was asking d/Deaf pupils to draw about their mainstream PE experiences and DRB PE. Whilst I had been waiting for Mrs Mulligan's approval on a set date and time to complete the drawing activity, the opportunity arose spontaneously by an emergency staff meeting which the majority of DRB staff were required to attend. Recognising this opportunity, I asked Mrs Mulligan if I could use the lesson time to complete the drawing activity to which she agreed. Upon

introducing the drawing activity to pupils both in BSL and speech, I reiterated the study aims and explained that I was interested in their experiences of mainstream PE before asking them to draw a typical mainstream and DRB PE lesson. Prior to beginning the activity, I asked Miss Aitchison to check all pupils understood. Here, I was not interested in pupils' drawing abilities but rather how drawings could enhance understanding of the research topic (Bagnoli, 2009). Using drawing as an elicitation tool, pupils were given flexibility over what they drew to help understand what was meaningful to them without any topics being predetermined. Pupils could explore topics without anyone influencing their answers (Sutherland & Young, 2014). Thus, pupils could introduce ideas and concepts to the study that they considered important (Johnson et al., 2012; Barton, 2015). Pupils were perceived the "producers of knowledge" (Eldén, 2012, p.68), and were given control to tackle ethical issues relating to power, agency and privacy (Martin, 2019). Drawing elicitation was d/Deaf-centred and child friendly (MacPhail & Kinchin, 2004; Sutherland & Young, 2014), offering d/Deaf pupils a way to express themselves that might not have been possible in interviews. Once pupils' drawings were completed (see appendix 6), they were asked to write a short sentence explaining the pictures. Drawings were utilised as an elicitation tool during individual interviews with all d/Deaf pupils who had completed drawings. Using drawings as a reference point, participants had a prompt to discuss topics in greater detail (Sutherland & Young, 2014; Barton, 2015). Here, pupils could add detail to their drawings and express their feelings towards the situation they had drawn. Through providing pupils an opportunity to discuss their experiences and take control over the conversation, drawing elicitation encouraged pupil agency (Martin, 2019), empowering d/Deaf pupils in the research process. Drawings provided rich insight into d/Deaf pupils' feelings, experiences and perceptions of effective PE teaching. However, they did not account for the dynamic emotions and feelings children experience (Sewell, 2011), which is important when analysing inclusion as an intersubjective experience. Therefore, the study utilised various research methods to gain a comprehensive picture of how d/Deaf pupils' feelings, perceptions and experiences differed over times, spaces and with different individuals.

Examining.

Fieldwork also included collating written records including letters, diaries and photographs to supplement participant observation (Wolcott, 1995; Wolcott, 2008). Examining in this study involved collecting and analysing documentary evidence including Ofsted reports, pupil and staff timetables, school displays, school website

and school newsletters. Participants were made aware documentary evidence would be utilised as a key data source when gaining access, which was reiterated during the presentation of research during phase 2 and within consent forms. Obtaining access to documentary evidence was relatively straightforward as the senior leadership team shared copies of private documents including schemes of work and informed me where I could access public documents. Analysis of documentary evidence was informed by the following questions:

“How are documents written? How are they read? Who writes them? Who reads them? For what purposes? On what occasions? With what outcomes? What is recorded, and how? What is omitted? What does the writer seem to take for granted about the reader(s)? What do readers need to know in order to make sense of them?” (Hammersley & Atkinson, 2019, p.133).

Documentary evidence provided useful insight into Buttermere school and its context that was not available from other sources (Hammersley & Atkinson, 2007; Reeves et al., 2009). For example, newsletters highlighted that Buttermere promoted d/Deaf awareness through community events which demonstrated a positive ethos towards inclusion. Documentary evidence highlighted the subjectivity of social life (Finn & Waring, 2006). Thus, deeper understanding of the meanings connected to ones' lives were obtained (Hodder, 2000). Such insight provided a rich description of Buttermere's culture (Smith & Sparkes, 2014), which was acknowledged by participants as crucial in effective teaching of d/Deaf pupils. As Iantaffi et al., (2003b) suggests more broadly, gaining a holistic picture of d/Deaf pupils' experiences may facilitate improvements in that setting, or similar settings if generalised. Therefore, documentary evidence provided a rich understanding of d/Deaf pupils' mainstream PE experiences to share good practice and identify necessary improvements.

Leaving the field.

Although a leaving date was planned at the beginning of fieldwork, leaving the field occurred a few weeks earlier than anticipated as it was believed that enough data had been generated (Hammersley and Atkinson, 2019). Following Bryman's (2012) advice when I experienced déjà-vu, I began the process of leaving the field. Prior to my departure, I read about exiting the field, in hope this would help me navigate this process (Smith & Delamont, 2023). However, exiting the field was determined by unpredicted and predicted contingencies (Michailova et al., 2014). As I had

established positive relationships with participants, I made them aware my exit would be approaching weeks prior to exiting the field to help prepare them (Gobo, 2008). Whilst my final departure depended upon participants' availability to complete the last few interviews.

Reflexive note: *After completing staff interviews, some inquired how long I would be with them for. Being transparent with participants, I informed them it would be another month or so dependent upon my ability to complete pupil interviews. After this, I noticed how fieldwork 'winded down' and staff placed less responsibility on me than previously. I was no longer asked to engage in tasks that were beyond my role as a researcher e.g. interpreting swimming lessons or fulfilling TA roles. This was a perfect opportunity to begin disengaging from the field to minimise the impact of my departure.*

Once all interviews were completed, I did not simply grab the information and run (Gobo, 2008) but was aware of my impending PhD thesis deadline. Considering this, I decided to spend a final day at Buttermere to say goodbye to those impacted by my study. During the final day of fieldwork, I thanked participants via BSL and spoken English for their contribution to the research. Good field relations made it tougher to leave the field (Hammersley and Atkinson, 2019). Nevertheless, leaving the field signified a new relationship with participants about remembering, reciting and representing (Coffey, 2018).

Reflexive note: *Whilst I had read that leaving the field can be an emotional experience (Coffey, 2018), I did not think mine would be. After leaving Buttermere, I was flooded with emotion, I underestimated how much participants valued me and my study. On my last day, in the afternoon Miss Harrison asked if I would like to teach Key Stage 2 (KS2) DRB pupils for the final time. The lesson was a huge success, partially due to my growing fluency in BSL. All pupils engaged and thanked me for teaching PE after the lesson. This lesson was my 'last dance' with DRB pupils and was a truly monumental moment. As we made our way inside, Key Stage 1 (KS1) DRB pupils joined us to say our final goodbyes. Miss Harrison exclaimed "today is a sad day because someone is leaving... Miss Williams is leaving". Following this declaration, all pupils had a sad expression and Miss Harrison asked pupils to give out their homemade cards, flowers and chocolates. During this time, we discussed how the interviews and conversations we had may be published. Hannah, a d/Deaf pupil expressed her excitement and stated that she would like to read my PhD. Miss*

Harrison also added “I’d like to read it I think it would be really interesting”. I informed participants that I would let them know once its published. The promise of feedback aimed to give back to participants (Gobo, 2008; Michailova et al., 2014). As the day drawn to a close, DRB staff thanked me and wished me luck.



Figure 5: Image of leaving gifts.



Figure 6: Image of leaving cards.

To Miss Williams

good luck with your PhD
it's was lovely have you here
but it is your time to leave
I wish a very good luck on you

Figure 7: Image of message inside leaving card.

to miss Williams

I Miss you you
have good LUCK

Figure 8: Image of message inside leaving card 2.

Data analysis.

Qualitative data analysis involves grouping and interpreting linguistic or visual materials to produce accounts of data and structure them alongside the meanings behind data (Harding & Whitehead, 2013; Flick, 2014). To develop data into new knowledge, a researcher must engage in data analysis (Thorne, 2000). Data analysis underpins high quality research that addresses research questions whilst ensuring methodological congruence in a study (Ruona, 2005; Draper & Swift, 2011; Fade & Swift, 2011; Armour & McDonald, 2012). Therefore, this chapter now examines this study's analytical methods.

Within research, three evaluation criteria positions exist including foundational, quasi-foundational and nonfoundational positions (Denzin, 2001; Flaherty, Denzin, Manning and Snow, 2002). Foundationalists assess the quality of work by "validity, reliability, objectivity, and generalizability" (Amis & Silk, 2008, p.459). Foundationalists apply positivistic principles to qualitative research (Flaherty et al., 2002; Denzin & Lincoln, 2011). From this perspective, the researcher is absent from the data (Pozzebon, Rodriguez & Petrini, 2014). Similar to foundationalism, quasi-foundationalism reflects the "normal science paradigm" (Pozzebon, 2018, p.281). Quasi-foundational researchers move away from searching for an objective reality by seeking a subtle or neorealism that looks for an estimate of reality (Amis & Silk, 2008). Emphasis is placed on a generic theory that is founded in evidence and can be generalised to other settings (Amis & Silk, 2008). A quasi-foundational researcher reflects upon their influence on data, whilst accounting for multiple realities that exist (Amis & Silk, 2008). From a quasi-foundational positioning, credibility, transferability, dependability and confirmability are intertwined with quality (Lincoln & Guba, 1985).

Comparatively, nonfoundationalists argue that a quasi-foundationalist approach is problematic considering there are no certain truths, as these are context dependent and determined by the researcher (Amis & Silk, 2008). Relativism is a nonfoundational position (Denzin, 2001; Burke, 2017). From this perspective, researchers do not seek universal criteria e.g. validity or trustworthiness (Burke, 2017). To evaluate the quality of work, qualitative researchers use open-ended criteria that may change depending on the study (Smith & McGannon, 2018). Criteria for nonfoundationalism is fluid which appreciates that subjectivity and relationality is part of making judgements (Pozzebon et al., 2014). Consequently, quality is not checked upon completing the study but rather is an underlying philosophy (Amis &

Silk, 2008). However, this does not mean ‘anything goes’, but rather a ‘one size fits all approach’ is inappropriate (Smith & McGannon, 2018). As this study attempts to comprehend a range of experiences, perspectives and meanings surrounding teacher effectiveness, which is context dependent (Day et al., 2006; Kirk, 2010b; Thomson, 2017), a foundationalist approach concerned with objectivity and generalisability would be inappropriate (Amis & Silk, 2008). This study adopts elements of quasi-foundationalism and nonfoundationalism, integrating reflexivity and appreciating that multiple realities exist.

Abductive RTA.

There is not a universal way to analyse qualitative data (Gratton & Jones, 2010; Fade & Swift, 2011; Richards & Morse, 2013). A data analysis method depends on a researcher’s philosophical, methodological and theoretical approach (Harding & Whitehead, 2013; Grbich, 2013; Punch, 2013). Although inductive and deductive analysis have been more widely used in research compared to abduction (Thornberg, 2022), over recent years abductive analysis has grown in popularity through the works of Timmermans and Tavory (2012; 2014; 2022), Earl Rinehart (2021) and Thompson (2022). Abductive analysis is “an inferential creative process of producing new hypotheses and theories based on surprising research evidence” (Tavory & Timmermans, 2012, p.170). Abductive analysis involves a mixture of inductive and deductive analysis (Pelto, 2016), whereby empirical observations and theoretical suggestions are utilised (Tavory & Timmermans, 2014). Thus, abductive analysis is concerned with the relationship between empirical data and theoretical knowledge (Brinkmann, 2014b).

Whilst studies have begun to use abductive analysis in PE (Taylor, Ntoumanis & Smith, 2009; Sparks, Dimmock, Whipp, Lonsdale & Jackson, 2018; Bjørke & Mordal Moen, 2020), and more broadly when researching d/Deaf people (Skyer, 2021), less attention has been paid to using abductive analysis when researching d/Deaf pupils in PE. Most ethnographic studies utilise abductive analysis as it can generate new concepts (Agar, 2006; Pelto, 2016). In this study, abductive analysis was adopted to generate new knowledge concerning how d/Deaf pupils can be taught effectively in mainstream PE.

During fieldwork, observations depended upon my sensitivity to theoretical frameworks and my ability to notice their relevance to observations (Tarvoy & Timmermans, 2012). Observations were continuously cross-examined with theory

(Timmermans & Tavory, 2022). This involved revisiting theories and empirical data to find the most appropriate explanation (Tavory & Timmermans, 2012; Brinkmann, 2014b; Atkinson, 2018; Kennedy & Thornberg, 2018). The quality of abduction relied on how relevant theories were to data (Thornberg, 2022). Theoretical insight allowed me to notice things in the data that might have overlooked e.g. phonocentrism whilst empirical data pushed theories in unexpected directions such as the negative implications of phonocentrism on d/Deaf pupils' motivation, development and inclusion in PE (Tavory & Timmermans, 2014).

Notably, I had familiarity with theories within Deaf Studies, Disability Studies and the Physical Education field and utilised these as 'navigation tools' (Tavory & Timmermans, 2012). These 'navigation tools' (theoretical concepts) acted as a provisional hypothesis to explain data which were investigated (Thornberg, 2022). Findings were positioned in existing knowledge and enhanced it by developing, altering and questioning theories whilst combining ideas to comprehend the data (Tavory & Timmermans, 2012; Kennedy & Thornberg, 2018; Thompson, 2022). Abduction involved "socially located, positional knowledge" that was developed and shaped for theory construction (Tavory & Timmermans, 2012, p.172). Abduction was dependent upon my 'cultivated position' (Tavory & Timmermans, 2022), considering I acted not only as a qualitative researcher but also as a 'craftsperson' (Brinkmann, 2014b). As my research positionality influenced the research, reflexivity occurred to demonstrate how I reached the insights presented (Earl Rinehart, 2021).

Data generation and analysis occurred parallel to each other, though as the study progressed, data analysis gained a dominant role (Flick, 2014; Holstein & Gubrium, 2013; Grønmo, 2020). Also, after phase one early data analysis occurred. Continuous data analysis helped decide what data was generated next and where (Kennedy & Thornberg, 2018), whilst early data analysis assessed the study's ability to address research questions whilst shaping research methods for phase two (Hatch, 2002). Thematic analysis (TA) was employed for data analysis, which is informed by social constructionism, appreciating analysis is an interactive process between the researcher and the data (Tuckett, 2005; Corbin & Strauss, 2015). Accordingly, TA examines attitudes, feelings and experiences (Kiger & Varpio, 2020), in this case concerning effective PE teaching d/Deaf pupils. TA is a "method for identifying, analysing and reporting patterns (themes) within data" (Braun & Clarke, 2006, p.79). TA comprehends the whole data set by examining each theme which is connected to a central idea throughout the data set (Hardin and Whitehead, 2013). Thus, TA can

produce detailed data (Joffe, 2012; Braun & Clarke, 2006; Tuckett, 2005). TA has been widely implemented in qualitative sport and exercise research, yet academics have often failed to engage with its underlying theoretical and philosophical assumptions (Braun & Clarke, 2019; Braun & Clarke, 2021b). Therefore, TA has been inappropriately implemented (Kiger & Varpio, 2020; Byrne, 2022). Consequently, Braun and Clarke (2019; 2021a; 2022; 2023) have recently altered the term of TA to reflexive thematic analysis (RTA).

RTA acknowledges the researcher's role in coding, theme development, the subjectivity of these processes and how these may shape analysis, appreciating the importance of reflexivity (Braun & Clarke, 2022). Similarly, abductive analysis appreciates coding and theme development are influenced by a researcher's theoretical knowledge (Thompson, 2022; Timmermans & Tavory, 2022). RTA involved the following phases laid out by Braun and Clarke (2022, p.6):

1. "data familiarisation;
2. data coding;
3. initial theme generation;
4. theme development and review;
5. theme refining, defining and naming;
6. writing up"

Familiarisation was the starting point of analysis, whereby I immersed myself in the data and searched for patterns and meanings through transcribing data, reading data, re-reading and writing initial thoughts (Braun & Clarke, 2006; Terry, Hayfield, Clarke & Braun 2017). Throughout fieldwork, data familiarisation was a continuous process. Familiarisation involved note taking, 'active listening', transcribing interview verbatim and reading (Campbell et al., 2021; Byrne, 2022). Alongside this, I documented my thoughts, feelings and researcher positionality within a reflexive diary. Familiarisation was a key component of the abductive process where I became an expert in the data (Earl Rinehart, 2021).

Reflexive note: Having completed RTA previously albeit as an undergraduate student, I possessed some knowledge of it. Though the task of becoming familiar with a yearlong ethnographic study was much more complicated. As I re-familiarised myself with data after fieldwork, I became overwhelmed with the abundance of data. Considering this, I attempted to tackle one data source at a time, beginning with my

fieldnotes. During re-familiarisation, I was aware of my role of co-constructing the data and how fieldnotes were selective (Hamersley & Atkinson, 2019). I had reported on incidents that stood out to me; influenced by my interests, experiences and knowledge. For example, my prior reading of literature drawn my attention to demonstrations and how they were delivered. Considering this, it was important I acknowledged how my positionality influenced the research process and product.

Once I became familiar with the dataset, initial codes were generated (Terry et al., 2017). Coding was data-driven and theory-driven to align with an abductive approach (Trainor & Bundon, 2021). Each interaction e.g. observations or interviews was worked through individually which were semantically and latently coded (Terry & Hayfield, 2020). Semantic codes were concerned with surface level data, summarising content and capturing its explicit meaning (Terry et al., 2017; Braun & Clarke, 2022). Comparatively, latent codes explored ideas, meanings, assumptions, beyond the expressed meaning and captured implicit meanings (Terry et al., 2017; Braun & Clarke, 2022). Coding involved developing short meaningful codes for words, sentences and paragraphs (Terry & Hayfield, 2020; Campbell et al., 2021). Similar to Byrne (2022), initial codes were made utilising the 'comments' function of Microsoft Word. Through coding semantically and latently the widest scope for theme development was provided (Braun & Clarke, 2022). Following an abductive process, coding firstly involved defamiliarisation by isolating observations and stakeholder's perspectives and experiences and refamiliarisation by positioning these alongside theories (Timmermans & Tavory, 2022). Here, coding assessed the relevance of theories (Earl Rinehart, 2021). Coding allowed data to be looked at from a new perspective whilst providing insight which addressed the research question (Braun & Clarke, 2022). Though, coding is never complete in RTA (Braun & Clarke, 2022), meaning I had to decide when to begin the next phase.

Reflexive note: *My prior knowledge of theories influenced what was meaningful to me and the codes assigned to the data set. Prior to fieldwork, I was aware of phonocentrism and audism, alongside theories including stigma (Goffman, 1963), othering and Bourdieu's notions of capital (1990). During coding, I found myself looking for connections between data and theories. After initial codes had been created utilising the comments function in Word, I created a table with three columns: data extracts, codes and abductive inferences (see appendix 7). In doing so, I became more familiar with data and could examine the relevance of theories to better explain findings.*

Next, themes were developed through working with data and codes (Terry et al., 2017). Consideration was given to the relationships of codes and how numerous codes could be combined to build a theme (Braun & Clarke, 2006). Codes that were combined to create a theme had a commonality and provided significant information about the data, relevant to the study (Braun, Clarke & Weate, 2017; Byrne, 2022). During theme generation, a thematic map was created to demonstrate the connections between main and sub themes, as shown below (Braun and Clarke, 2006).

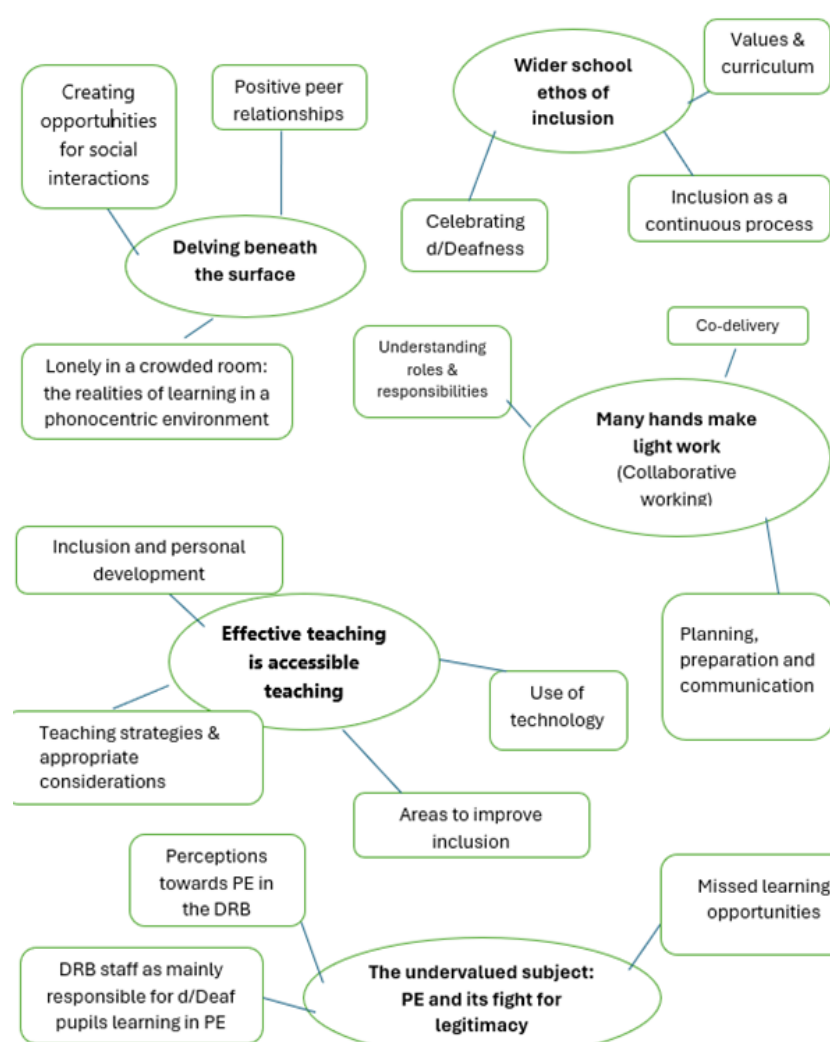


Figure 9: Initial thematic map.

As coding and theme development is a subjective and interpretative process (Terry et al., 2017), I considered how my beliefs, attitudes and skills shaped them (Braun &

Clarke, 2021b). Throughout coding and theme development researcher reflexivity occurred as demonstrated through reflexive notes.

Reflexive note: *During theme generation, I became conscious similar themes to those generated during my MPhil to PhD transfer report were emerging although transfer had occurred prior to phase 2 of fieldwork. I did not want to be narrow minded, but I could not ignore findings that were staring me blue in the face. Considering this, I remained open minded to new themes but was aware that I needed to report on generated data.*

Following this, I reviewed themes, ensuring each theme had enough supporting data, here I combined overlapping themes and refined codes and themes (Campbell et al., 2021). My supervisory team acted as critical friends who probed and questioned me to encourage reflection, exploration and alternative interpretations of data (Smith & McGannon, 2018). During this time, themes were added, combined, edited and disregarded (Kiger & Varpio, 2020). Additionally, theories were modified with other theoretical ideas to better understand the dataset (Thompson, 2022). After refining the thematic map, I named themes and sub-themes relevant to the dataset and study (Terry & Hayfield, 2020; Byrne, 2022). Theme names were selected based on their ability to articulate the central idea (Terry & Hayfield, 2020). Reviewing themes ensured findings addressed the research question (Terry et al., 2017). Following theme refinement, the finalised thematic map was established as listed below:

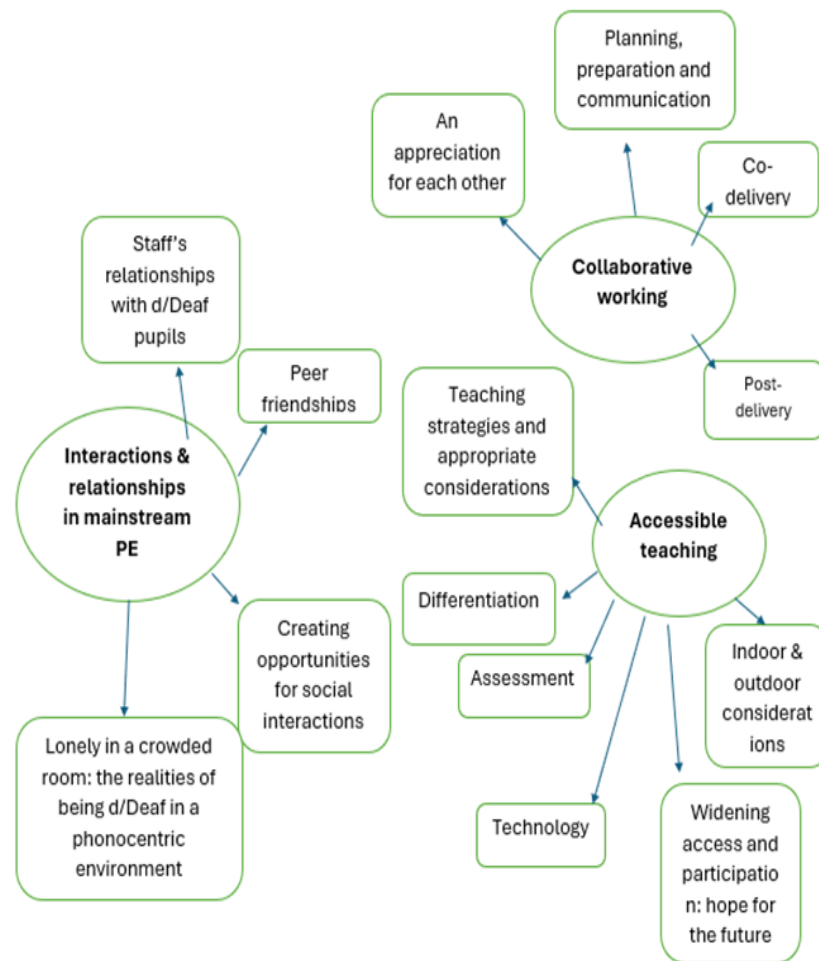


Figure 10: Finalised RTA map.

Finally, findings were written up to provide an account which the data told within and across themes, allowing research questions to be addressed (Campbell et al., 2021). Writing up occurred simultaneously to analysis and offered an opportunity to develop writing and position this within the overall picture of the study (Terry et al., 2017).

Although RTA phases are sequentially ordered, analysis involved revisiting phases (Braun & Clarke, 2022; Byrne, 2022). Abductive RTA facilitated rich data analysis for knowledge production (Braun & Clarke, 2022; Thompson, 2022), concerning effective PE teaching of d/Deaf pupils. More specifically, RTA ensured methodological congruence by appreciating the subjective nature of experiences and meanings, enabling the achievement of research aims (Braun & Clarke, 2022). Abductive RTA appreciated my role in the co-production of data, as ‘meaningful’ themes were influenced by my philosophical and theoretical assumptions, values, interests, experiences and positionings (Terry & Hayfield, 2020; Braun & Clarke, 2019; 2022;

2023). Therefore, personal, functional and disciplinary reflexivity occurred which will later be discussed.

Procedural ethics.

Ethics are at the heart of quality research (Government Social Research, 2006; Ramrathan et al., 2017), particularly in education (Small, 2001, as cited in Brooks, Te Reiele & Maguire, 2014). Ethical considerations are evident throughout all research processes (Goodwin, Pope, Mort & Smith, 2003). When researching d/Deaf people, researchers encounter unique ethical dilemmas and must ensure research protects participants' rights and the study's integrity (Singleton & Jones, 2014). To avoid harm and risk to participants while attempting to maximise the benefits (Guillemin & Gillam, 2004; Wright & O'Flynn, 2012; Miller, 2013), various ethical considerations were given, which are discussed below.

Conditional ethical approval for this study was granted in January 2023, subject to providing permission of relevant gatekeepers and full approval was permitted in early June 2023. Although gaining ethical approval was a challenging process (Mapedzahama & Dune, 2017), this helped develop the study's methodological approach. During this time, I became acquainted with British Educational Research Association's (BERA) (2018) ethical guidelines. Following BERA's (2018) guidelines I acknowledged my responsibilities to participants and adhered to these. Additionally, I familiarised myself with the United Nations Convention on the Rights of the Child (UNCRC) legislation particularly regarding privacy, personal data and parental consent to research (DfE, 2010).

Situational and relational ethics.

A disconnection between ethics on paper and real-world ethics exists (Miller, 2013; Armstrong, Gelsthorpe & Crewe, 2014). In qualitative studies, ethical considerations are continuous and continue after approval has been granted, meaning researchers must respond on the spot to ethical dilemmas (BERA, 2018; Reid, Brown, Smith, Cope & Jamieson, 2018). Considering the naturally occurring nature of ethnography, unexpected ethical issues may arise (Goodwin et al., 2003; Miller, 2013; Delamont & Atkinson, 2018). Alongside this, when researching children their voices may be unforeseen and messy (Ingulfsvann, Moe & Engelsrud, 2020). After ethical approval has been granted, it was vital I ensured it was effectively practiced (Burgess, 2005), this required 'ethical competence' to recognise ethics in practice (Guillemin & Gillam, 2004).

Informed consent is perceived as an 'ethical norm' when conducting research (Grønmo, 2020; Economic and Social Research Council, 2020). Within this study, potential participants were given an information sheet and consent form to return if they wished to participate (Hammersley & Atkinson, 2019; Silverman, 2020). To ensure child participants understood what the research entailed they were provided with an information sheet (see appendix 8) which was accessible to their age and literacy levels (BERA, 2018). Information sheets and consent forms were written so d/Deaf participants understood what the research involved (Graham & Horejes, 2017). Also, parents/guardians were given information sheets detailing what the study involved and its rationale. Parents/ guardians were provided a consent form and child assent form to read and complete if they wanted their child to participate in the study. Similar protocols were followed with staff, supplying them with information sheets and consent forms. Alongside this, verbal and BSL information was supplied to stakeholders regarding the study's purpose and aims. Through giving relevant and accurate information potential participants were provided a comprehensive understanding of the study to make their decision of consent (Sparkes & Smith, 2014; Hammersley & Atkinson, 2019).

Gaining informed consent in an institution with multiple stakeholders was a challenging process (Sparkes & Smith, 2014). Within schools, consent form return rates are not usually high as forms get forgotten and lost (Hammersley & Atkinson, 2007). Alongside this, the formality of consent forms can alienate some individuals (Miller & Bell, 2012), e.g. parents whose first language is not English. Moreover, in ethnography concerns have been raised regarding 'full' informed consent considering it is often unstructured and exploratory (Brewer, 2000; Hammersley & Traianou, 2012; Hammersley, 2017; Delamont & Atkinson, 2018; Hammersley & Atkinson, 2019). Nevertheless, potential participants were made aware of anticipated research methods.

The importance of anonymity and confidentiality to protect research participants is well documented (Economic and Social Research Council, 2020). Although anonymity and confidentiality have been used interchangeably, their meanings differ (Saunders, Kitznger & Kitzinger, 2015). Whilst confidentiality is an umbrella term for all information that is kept hidden, anonymity is primarily concerned with not revealing participant's names (Wiles, Crow, Heath & Charles, 2008; Saunders et al., 2015). Within this study, confidentiality and anonymity was promised to research participants considering they were from a unique primary mainstream school with a DRB.

Upon writing up findings, participants were given pseudonyms to protect their privacy (Guenther, 2009; BERA, 2018). Although interest in allowing participants to select their pseudonyms has grown, it is not without its limitations (Allen & Wiles, 2016). For instance, when working with children they could select their nicknames, meaning participants could identify each other (Morrow, 2008). Alongside this, participants may select family member's names or a name which is problematic, thus this process may not always be advantageous (Allen & Wiles, 2016). Therefore, I allocated participants their pseudonyms. However, in ethnographic studies informants' identities cannot be protected simply by using pseudonyms as they still may be identifiable to others within the setting through rich descriptions (Wang, 2013; Ramrathan et al., 2017). Moreover, promising full confidentiality when researching the Deaf community, a close community may be problematic as someone could easily recognise somebody else, thus the conventional definition of confidentiality requires revision (Singleton et al., 2013; Young & Temple, 2014).

To prevent participants' pseudonyms being discovered, ethnographers often engage in 'masking' which involves concealing aspects of an individual's biography, identifying features of the context or merging characters (Jerolmack & Murphy, 2017). Whilst masking can be perceived as ethical, there may be some incidents where disclosure may be deemed appropriate e.g. it is seen as rewarding (Jerolmack & Murphy, 2017). Also, masking can make it difficult for readers to compare or contextualise data (Jerolmack & Murphy, 2017). Thus, confidentiality may conflict with the ethnographer's aim of providing a detailed account (Delamont & Atkinson, 2018). Nevertheless, 'masking' may be essential to ensure participants' privacy (Jerolmack & Murphy, 2017). Ethnographers must engage in the balancing act of protecting participants' privacy and ensuring the reliability of data (Saunders et al., 2015). When writing up I had to navigate the "ethical minefield" (Wang, 2013, p.776). Therefore, I carefully considered what data I presented and how it was presented to prevent participants' identities being revealed without losing the authenticity of the data.

Trust between the research and the researched is essential (BERA, 2018). Social constructionists completing educational ethnographies have tended to focus on the complexities and subtleties of the researcher's relationship with participants. Within this study, the relationship between myself and d/Deaf participants was interesting. A researcher's limited language fluency may pose barriers and ethical dilemmas when researching d/Deaf people (McKee, Schlehofer & Threw, 2013; Singleton et al., 2014). For instance, this may lead to mistrust, misunderstandings or disempower participants (Singleton et al., 2014). Nevertheless, hearing researchers can

demonstrate cultural competence with d/Deaf people, particularly with an interpreter assisting communication (Singleton & Jones, 2014; Graham & Horeges, 2017). Although an interpreter was utilised for interviews, I continuously developed my BSL skills to develop rapport with d/Deaf participants. Additionally, I attempted to 'give back' to participants through offering reciprocal roles such as football coach (Singleton & Jones, 2014).

Nevertheless, using interpreters during interviews posed ethical dilemmas. For example, the presence of an interpreter and researcher in interviews with pupils may create an imbalance of power whereby pupils feel withdrawal from the study or declining a question is impossible (Harr, 2001). Moreover, considering a staff member acted as an interpreter, the relationship between the interpreter and pupils may have influenced pupils' answers if they feared judgement or losing confidentiality (Harr, 2001). In this study, pupils' positive relationship with the interpreter established a comfortable setting whereby pupils could freely express their views. Throughout fieldwork, pupils laughed with this staff member and expressed feelings or experiences of discomfort, and the interview was no different. Also, it has been suggested pupils may feel pressure to participate due to their teacher's approval and to be 'helpful' to guests (David, Edwards & Alldred, 2001). Pupils may not understand that their participation is voluntary as it is taking place during school time (Denscombe & Aubrook, 2006). To mitigate any pressure on pupils to participate, they were reminded throughout fieldwork e.g. prior to interviews that their participation was voluntary, and they were able to withdraw at any point. Furthermore, interpreters posed risk of misinterpretation and the alteration of participants' answers, posing risk to the validity of data (Harr, 2001). To minimise the influence of interpreter's presence on the data generated, interpreters were reminded prior to interviews to interpret in full. Moreover, d/Deaf pupils were asked to write stories and draw pictures of their PE experiences to triangulate these with interview data.

Reflexivity.

Following the dual crisis of representation (how researchers write up and represent the social world) and legitimisation (the rethinking of validity, reliability and generalisability) (Denzin & Lincoln, 2000), qualitative researchers recognised the importance of reflexivity and engaged with its processes (Sparkes, 1995; Delamont, 2002; Sparkes & Smith, 2014). Reflexivity is "a conscious experiencing of the self as both inquirer and respondent, as teacher and learner, as the one coming to know the self within the processes of research itself" (Denzin & Lincoln, 2000, p.183). Thus,

reflexivity is critical self-reflection undertaken by a researcher (Finlay & Gough, 2003; Lincoln, Lynham & Guba, 2024). A researcher must reflect on all aspects of research including the chosen research topic alongside how their values, beliefs, knowledge, experiences and positionalities influenced research processes and product (Finlay & Gough, 2003; Hastie & Hay, 2012; Sprake & Palmer, 2022; Lincoln et al. 2024; Maher, 2025). Reflexivity acknowledges researchers are shaped by their socio-historical locations, including how a location's values and beliefs influence them (Hammersley & Atkinson, 2007; Hammersley & Atkinson, 2019). As Denzin and Lincoln (2005) highlight, no objective observations exist, only those that are socially positioned within and between the spheres of the observed and the observer. Researchers should not perceive reflexivity as a hinderance but rather embrace it (Delamont, 2002; Attia & Edge, 2017; Sprake & Palmer, 2022). Here, researchers can understand how their prior knowledge, beliefs and values influence data generation (Attia & Edge, 2017). Therefore, researchers must play Devil's advocate with themselves during fieldwork and reflection (Wolcott, 1995).

Considering that a qualitative researcher is a central role in the research process, critical self-reflection must occur and the process of arriving at findings must be transparent so a reader can comprehend how conclusions have been drawn (Hastie & Hay, 2012). Through reflexivity richer meanings concerning personal, theoretical, ethical and epistemological research components can be produced (Kleinasser, 2000) to demonstrate and enhance methodological coherence (Maher, 2025). Consequently, reflexivity is fundamental to good qualitative research (Kleinasser, 2000; Delamont, 2002). Reflexivity is particularly important within ethnography (Pope, 2005; O'Reilly, 2009; Reeves, Kuper & Hodges, 2008; Collins & Gallinat, 2010; Coffey, 2018). Indeed, "as a positioned, contexted individual, the ethnographer is undeniably part of the complexities and relations of the field." (Coffey, 1999, p.22). Therefore, an ethnographer must examine how their subjectivities act as the foundation to comprehend other's culture and reflect upon their roles when producing research findings (Davis, 2000). As Graham and Horejes (2017) highlight, ethnographers studying d/Deaf education who appreciate their positionality may positively contribute to literature on d/Deaf education. Consequently, ethnographers must identify how their positioning on the insider-outsider continuum may influence what is reported, acting as a form of inquiry into themselves (Wolcott, 1995). Whilst multiple forms of reflexivity exist (Haynes, 2012), in this section attention will be given to personal, functional and disciplinary reflexivity.

As a qualitative researcher, it is important to acknowledge one's positionality (Hennik, Hutter & Bailey, 2020). I am inseparable from my background and experiences which shape my perceptions of others' behaviours (Grbich, 2013). One's positionality impacts field interactions including "who gets studied and who gets ignored; which questions asked on which you left unanswered; how people are written in and out of accounts; and how "others" and the self of the researcher are represented" (Sparkes, 2002, p.17). Personal reflexivity is important considering the ethnographer plays a key role in the research process and product (Tedlock, 2000; Walford, 2009a). As Richardson (2000, p.39) highlights "The ethnographic life is not separable from the Self". Ethnographers construct reality as they study it (Cunliffe, 2003), meaning I co-created findings with participants (Small et al., 2022).

Within this study, consideration was given to how being a young, white, hearing, non-disabled female impacted interpretation of data (Brockman, 2011; Hammersley & Atkinson, 2019). Although I had completed an introductory BSL course before fieldwork, I had no prior connections with the Deaf community. Previously, it has been suggested hearing researchers, with no affiliation with the Deaf community or knowledge of sign language may look at d/Deaf people through a disability lens (Singleton et al., 2014). This is worrying considering that a researcher's ideological beliefs can influence d/Deaf children when constructing their lives and meanings (Graham & Horejes, 2017). Notably, I considered Deaf culture and the heterogeneity of d/Deaf people throughout the research planning, process and product. Whilst as a hearing researcher I cannot fully comprehend a d/Deaf person's life (Young & Temple, 2014), through working collaboratively with d/Deaf people, and demonstrating cultural competence by utilising BSL and providing an interpreter (Singleton et al., 2014), new knowledge was generated. Reflexivity as a hearing researcher studying a d/Deaf population continuously occurred to examine how this influenced the research. Notably, I was also shaped by the research (Attita & Edge, 2017). As Grbich (2013) acknowledges multiple selves exist - the previous constructed self, the present self, the self that undergoes change and the reflexive observer of this process. Therefore, this section explores my journey of learning about myself within research (Lincoln et al., 2011; Lincoln et al., 2024), including how this influenced the research process and product.

During fieldwork, I acquired numerous roles which meant my position as a participant observer became complex. Similar to Brockmann (2011, p.233), throughout fieldwork I resonated with the following roles, "researcher as PhD student", 'researcher as work

experience student', 'researcher as auxiliary help". In addition to this, I adopted roles as:

- **DRB PE teacher.** Frequently, I delivered PE lessons to KS2 DRB and taught Handball, Football, Yoga, teamwork and balance-based activities.
- **Football coach.** Every Thursday night, I assisted coaching the school's football team which welcomed three year groups. On occasion, if an interpreter could not attend, I would interpret for up to four d/Deaf pupils.
- **DRB swimming interpreter.** As pupils were split into different swimming groups based on their ability, this meant a staff member was required with each group to interpret and frequently, I would assist with interpretation.
- **DRB teaching assistant.** Due to staff illness, at the beginning of phase 2, I became involved with everyday activities in KS2 DRB which included helping with English and Maths when required.
- **Equipment carrier.** To be perceived helpful, I often carried equipment to and from PE lessons and football sessions. When doing so, I would have conversations with staff members regarding what had happened.

Researcher roles were dynamic (Pope, 2005), continuously negotiated and context dependent (Hammersley & Atkinson, 2007; Brockmann, 2011; Smith & Sparkes, 2014). My identity was continuously "constructed, reconstructed and deconstructed" (McGinty, 2012, p.770). For example, when asking me to cover 1 to 1 support in English, Mrs Mulligan stated "I know this isn't what you signed up for but...". Thus, my roles were also constructed by participants. Adopting various roles generated different interactions and allowed analysis from various perspectives (Hammersley & Atkinson, 2007; McIntyre, 2008; Brockmann, 2011 Thomson, 2017). Meanwhile, different roles provided an opportunity to develop shared understanding and co-construct meaning (Brockmann, 2011). Throughout fieldwork, I reflexively analysed my role(s) in producing research findings as will later be explored (Davis, 2000; Brockman, 2011; Collins & Gallinat, 2011; Galletta, 2013; Braun & Clarke, 2022).

The various roles adopted within fieldwork influenced my positionality on the insider/outsider continuum (Barnes, 2021). For example, upon delivering my first PE lesson Mrs Doyle and pupils created a BSL sign name for me. My sign name (the same sign for football) was given on the basis it had an association with me, in this case my interest in football. I was allocated a sign name as I adopted a PE teacher role. Being given a sign name can symbolise a person's entry into the Deaf

community (Meadow, 1977). This moment was a key turning point on my positioning on the insider/outsider continuum, whereby I moved from the periphery to a member in Buttermere's DRB.

Throughout fieldwork, my positioning on the participant-observer continuum varied (Wolcott, 2008; Thomson and Gunter, 2010). Researcher positioning depended on who I was interacting with, alongside linguistic and socio-cultural norms (Milligan, 2016). Thus, positioning on the insider/ outside continuum was context dependent (Mercer, 2007), and fluid (Le Gallais, 2008; Thomson & Gunter, 2010; Barnes, 2021). I resonated with Thomson and Gunter's (2010) concept of a liquid researcher and Milligan's (2016) concept of 'inbetweeners' which appreciates how researchers negotiate their positioning in the field by actively attempting to establish rapport (Milligan, 2016). To comprehend how I operated the 'space-between' (Dwyer & Buckle, 2009), the following section explores reflexive moments when my insider/outsider positioning throughout fieldwork fluctuated.

Reflexive note: *Initially, I was an outsider with mainstream staff, noticed as a researcher who was surveying their practice. Upon introducing myself to Mr Wilcock, a mainstream teacher he stated, "Ah, so you're the person whose been making everyone nervous". Although Mr Wilcock joked, perhaps there was some truth in this, and my presence influenced a teacher's practice. However, my relationships with mainstream staff improved with time in the field. The staffroom was a key site in developing relationships with mainstream staff and gaining 'insiderness'. My strong background and interest in football enabled me to quickly gain social capital with some staff members. Alongside this, my willingness to volunteer as football coach was welcomed. As the weeks progressed, some staff, particularly Mr Wilcock, who I had built a strong relationship with through assisting football practice gave me additional roles in PE lessons and always thanked me for my assistance. Although I became somewhat an insider, my presence as a researcher remained constant. For example, at the beginning of phase two, Mr Greenbank joked "does this mean I've been trying hard on Fridays for nothing" when I reiterated that pseudonyms would be used.*

Reflexive note: *Initially, as a hearing researcher, with limited BSL skills I was an outsider amongst DRB staff. Although during phase one I had managed to obtain various roles, such as 'DRB PE teacher' which provided notions of 'insiderness' I remained an outsider. Feelings of outsidership were evident in early September 2023*

when staffing issues raised concerns about who would interpret a PE lesson. Although Mrs Mulligan asked me to interpret, and I agreed, Mrs Doyle interrupted and stated, “she doesn’t sign”. Evidently, my BSL skills were still perceived inadequate by Mrs Doyle. However, by the end of September 2023, my role and status within the DRB began to change. I was given responsibility for interpreting swimming lessons and football practice alongside delivering more DRB PE lessons. These roles developed my competence and confidence in BSL whilst improving my relationships in the DRB. I became a ‘different’ self through an interactional process (Coffey, 1999). By mid-October, the development of my BSL was recognised by DRB staff which helped gain insidership, as Mrs Doyle stated, “we will leave you with the pupils, your signing has really come on”. Over the following months, my contribution to the DRB continued to be appreciated by several DRB staff members whether this be a high five or a simple “thanks”. Here, I experienced a notion of insidership within the DRB, in Mrs Mulligan’s words, I had “become a member of staff”.

As time progressed, DRB staff perceived me as a PE ‘expert’ whilst, mainstream staff perceived me as an expert in d/Deaf pupils’ education. This dual role provided access to different types of data and to analysis from different viewpoints (Hammersley & Atkinson, 2007). However, the dual role sometimes placed me in a compromised situation. Within my reflexive journal, I recalled my first dual role conflict in September 2023:

Reflexive note: *“Today, during football team trials, Mrs Doyle exclaimed to me “they never get picked” when referring to d/Deaf pupils and instructed me to put one of their names down for the football team. This instruction placed me in an uncomfortable situation. Whilst I believed everyone should be given an opportunity to participate, it felt morally wrong to pick somebody because I had been told to. If I didn’t, would this impact my ability to collect data? I continued observing pupils and walked away from Mrs Doyle, I knew I couldn’t pick pupils if they weren’t displaying the criteria Mr Wilcock desired. I wished for Dan to show ability so I could pick him. However, I didn’t need to wish, later, Dan scored a fantastic goal which resulted in him being picked. What a relief this was, I now didn’t have to fear Mrs Doyle’s judgement or how my roles within the school would impact data generation”.*

This experience highlighted the importance of power relations and how decisions made within the field may impact the availability of data. Whilst I was able to swerve this situation, I remained aware of the challenges I would encounter as I adopted a

dual role. In the coming months, I faced several dual role conflicts including where to sit at lunchtime. Most DRB staff had their lunch in a classroom within the DRB, whilst the select few that entered the staffroom sat on the final table which was frequently uninhabited. Not only faced with the dilemma of where to have my lunch, I then faced the dilemma who to sit with; mainstream staff or the few DRB staff who sat in the staffroom? I often opted to sit in the staffroom, changing where I sat on a regular basis to allow an opportunity to develop rapport with mainstream and DRB staff.

However, becoming a complete 'insider' was problematic, as staff remained aware of my primary goal to report data. Also, becoming a complete insider with d/Deaf participants was impossible due to my hearingness. Nevertheless, I was not a complete outsider just because I lacked the experience of those I was studying (Macbeth, 2010), in this case being d/Deaf. Instead, my positioning on the insider/outsider continuum was fluid whilst I attempted to navigate the space-between' (Dwyer & Buckle, 2009).

Reflexive note: Reciprocity was vital in facilitating meaningful relationships with participants (Coffey, 1999). Adopting a football coach role helped build stronger relationships with d/Deaf pupils, in particular Dan. Alongside reciprocity, learning the county variations of BSL signs was key in developing rapport with d/Deaf pupils. As a hearing person, having only completed a basic sign language course, I was unaware of different county variations of signs e.g. PE. Thus, when entering Buttermere school, I experienced a learning curve whereby I had to adjust my BSL skills to the county variation to ensure that participants understood me and that rapport could be established. Initially, Dan would barely acknowledge me as I said good morning and asked how he was. However, after a few weeks, things began to change. During the second week of football training, there was no interpreter, so DRB staff asked I'd interpret, willingly I agreed. This provided an opportunity to put my BSL skills into practice. In the following weeks, I maintained an active role with d/Deaf pupils through giving instructions, teaching points and feedback through sign and speech. Gradually, Dan began to say hello first, ask how I was, ask about football and fist pump me. During a cold October morning, it was DRB breaktime time on the multi-use games areas (MUGA). However, Dan unexpectedly passed the ball to myself on the sideline as I talked to a staff member. Dan asked for the ball back, attempting to make me join in. The next week, Dan asked me via BSL to play football with DRB pupils at lunch, I responded "I'm having my dinner", he replied "after your dinner?". After, I pondered if declining Dan's invitation was right, I had missed an opportunity

to develop a stronger relationship with pupils but spending time in the staffroom at lunch was also vital to build rapport with staff. In the following weeks, Dan asked me again to play football at lunch, having felt guilty about turning down Dan's last invitation, I agreed. Upon noticing my arrival, Dan exclaimed "Yes!" he then enquired "football?", I replied yes and then clenched his hand and brought it into his chest to celebrate. As a researcher, rather than an 'official teacher' I engaged in activities that teachers would not and was able to navigate the power imbalance between myself and pupils by utilising my adult authority selectively to build trust with pupils (Van der Smee & Valerio, 2023). By November 2023, I had good rapport with DRB pupils, whilst they noticed my absence, for example Miss Rodriguez recalled pupils asking her "Where's Olivia? Where's Olivia?" whilst I attended a conference. My continuous development of BSL, d/Deaf awareness and cultural competence helped gain insider status. This was noticed by staff such as Mrs Doyle who stated, "they (DRB pupils) will come over to you, they'll communicate with you ... your signing has really come on you know since you've been here". The development of BSL helped develop trust with participants and gain information that may not have otherwise been available (Graham & Horeges, 2017).

Additionally, functional reflexivity occurred which involved reflecting on research design. Although, the term methodological reflexivity has been used interchangeably with functional reflexivity, for simplicity the term functional reflexivity will be utilised. Functional reflexivity involves considering research tools and processes (Braun & Clarke, 2013) including research methods or interpretation of results (Wilkinson, 1988; Lumsden, Bradford & Goode, 2019). Within this study, functional reflexivity involved considering how DRB staff members who acted as interpreters during interviews may have influenced the data generated. As previously discussed, consideration was given to how interpreters may have influenced pupil's answers from fear of judgement or confidentiality concerns (Harr, 2001). The interpreter's social identity may have impacted d/Deaf participants' answers depending on what participants perceived important to myself and the interpreter (Young & Temple, 2014). Also, interpreters during interviews raised concerns regarding whether an interpreter would only interpret information they deemed important or put 'words' in the participant's mouth (Harr, 2001). Therefore, I remained cautious of the interpreter's translation of participant's answers (Harr, 2001), whilst reminding interpreters to fully translate. Additionally, interview answers were triangulated with other research methods as previously mentioned.

Reflexive note: *During d/Deaf pupils' interviews, I was cautious of how participants' answers and my response would influence the DRB staff member who acted as interpreter. I wondered what the interpreter thought of participants' responses and how happy they would be for me to probe into these issues further. I was fearful that if the interpreter felt I was negatively reporting on Buttermere school that this may have risked continued access to the field. I 'walked a tightrope' between attempting to gain rich data whilst also attempting to maintain access. I also reflected on if the research would influence the DRB staff member moving forward, whether they would alter their practice or indeed encourage their colleagues to.*

Lastly, disciplinary reflexivity occurred to examine how academic disciplines shaped knowledge (Wilkinson, 1988 cited in Braun & Clarke, 2022). This entailed reflecting upon my positioning in relation to different paradigms, including norms and academic ideals (Knaggård, Ness & Harnesk, 2018). I reflected on how field values surrounding the research area, theory, questions and methods shaped the study (Humphreys, Lewis, Sender & Won, 2021). Here, I acknowledged how my background in PE initially resulted in a taken for granted assumption that mainstreaming was the best method to achieve inclusion. Initially, I was unaware of the argument of mainstreaming as a form of symbolic violence (Branson & Miller, 1993) or how the ideals of mainstreaming have been perceived contradictory (Branson & Miller, 2002), as discussed within Chapter One. Initial beliefs regarding mainstreaming influenced how this research study was approached including the decision to focus solely on a mainstream setting. However, whilst d/Deaf pupils continue to be educated within mainstream settings, it is important to review their PE experiences and strive towards more inclusive practice regardless of my beliefs regarding the most suitable educational setting for d/Deaf pupils.

Throughout the study, I developed a reflexive journal which acted as a repository for reflecting and documenting thoughts, emotions and prejudices for reflection, examination and meaning making (Tedlock, 2000; Braun & Clarke, 2022). Here, I documented how ideas mattered to myself to intertwine the academic world and wider cultural experiences (Tedlock, 2000). Such approach allowed me to question and become aware of my biases (Corbin & Strauss, 2015). Consequently, reflexive journalling promoted high-quality research and researcher development (Kleinsasser, 2000; Meyer & Willis, 2019).

Many scholars have expressed their concerns over reflexivity (Finlay, 2003; Pringle & Thorpe, 2017), suggesting there has been a "romance of reflexivity" (Pringle & Thorpe, 2017, p. 37). It has been suggested that reflexivity acts as a method to claim more authority (Finlay, 2002). Yet, reflexivity should not be used as a method to privilege certain voices over others (Lumsden, Bradford & Goode, 2019). Pillow (2003) highlights researchers have attempted to solve issues of representation through self-reflexivity, though reflexivity must go beyond merely discussing positionalities and a validity method. Thus, Pillow (2010) suggests researchers should engage with reflexivity which challenges and deconstructs hegemonic aspects of life. Although reflexivity may not solve all challenges facing qualitative research including voice, power and representation, it enables researchers to unpick and complete research (Pillow, 2010). As Finlay (2003) highlights to avoid the swamp of reflexivity may compromise a research study, thus researchers must select their path to navigate it.

Chapter summary.

This chapter outlined the study's research paradigm including its' ontological, epistemological, axiological positions alongside its methodology, ethical considerations and reflexivity. Through combining relativism and social constructionism with d/Deaf ontologies and epistemologies, a detailed analysis of the diverse PE experiences amongst d/Deaf pupils in mainstream education can occur. By employing d/Deaf ontologies and epistemologies, the study offers the potential to draw upon theories from Deaf studies and look of things anew within the PE field to enhance knowledge. Interpretivism was placed at the heart of the study, appreciating multiple truths exist regarding effective teaching of d/Deaf pupils. Thus, the importance of gaining multiple stakeholders perceptions became apparent to comprehend subjectivity surrounding teacher effectiveness. After this, the study's balanced axiological position was highlighted alongside how respect and empathy enabled rapport and trust to be established with participants.

Next, the rationale for an ethnographic approach was discussed to move beyond what people say they do to examine what they do (Forsey, 2010), facilitating a richer understanding of PE. The chapter discussed how purposive heterogeneous sampling enabled stakeholder's diverse perceptions of effective PE teaching to be gained. Then, the chapter explored how access was granted, negotiated and maintained throughout fieldwork, reflecting upon critical incidents which could have been detrimental to the study if not carefully managed. Moving on, research methods were

discussed and placed into Wolcott's (2008) experience, enquire and examine framework to comprehend fieldwork activities. Through discussing leaving the field, personal reflections were drawn on to demonstrate how this was navigated to minimise the impact on participants. Next, the chapter highlighted how abductive RTA can enhance knowledge in the PE field. Following this, the chapter explored how ethics extended beyond procedural ethics to situational and relational ethics and discussed how these were managed during fieldwork. Finally, the importance and presence of personal, functional and disciplinary reflexivity in this study were discussed. This provided the reader with a comprehensive picture of how the socio-cultural world influenced this study. The following chapters present the study's theoretical lens for analysing research generated through ethnography.

CHAPTER FOUR.

THEORETICAL CHAPTER.

Introduction.

This chapter introduces and discusses theories that were brought to the field space and had relevance to the dataset, acting as tools for analysis on how d/Deaf pupils can be taught effectively in mainstream PE. The chapter will outline how theoretical concepts have previously been applied and how these will help make sense of the research. As Tavallaei and Talib (2010) highlights qualitative researchers can apply theoretical frameworks from various disciplines to address research questions and create a unique perspective. This study utilised abductive analysis which combined elements of cultural studies, Deaf studies and the work of Bourdieu which aligned with empirical data to examine d/Deaf pupils' experiences in mainstream PE. The chapter begins by highlighting the importance of theoretical frameworks more generally before focusing on their usefulness in educational and ethnographic research. Cultural studies will be introduced to highlight its relevance to this research study and provide a contextual background in which power and hegemony can be situated. The chapter defines power and highlights how it may manifest within education to emphasise its usefulness to analyse social interactions and relationships. Next, hegemony is introduced as a valuable tool to analyse how cultural power is acquired, used, reproduced and resisted in education. More specifically, the chapter explores the concept of phonocentrism which has been applied by Deaf Studies scholars to examine the hegemony of speech in society. Through exploring the presence of phonocentrism in education and its impacts, the necessity to disrupt hegemonic phonocentrism will become apparent. Moving on, the chapter explores the concept of audism to highlight its usefulness for analysing d/Deaf pupils' educational experiences. Also, the chapter demonstrates how the application of Bourdieu's concepts of habitus, field and capital to research concerning d/Deaf pupils in mainstream PE can enhance knowledge of power relations, social interactions and identity. Throughout this chapter, the selected theoretical concepts will be justified to highlight how they can contribute to the advancement of knowledge.

Theoretical frameworks.

Theoretical frameworks act as guidance to create and support a study whilst offering structure on how it will be philosophically, epistemologically, methodologically and analytically approached (Ennis, 1999; Jarvie, 2013; Grant & Osanloo, 2014).

Theoretical frameworks act as a 'blueprint' of a research study (Grant & Osanloo, 2014), highlighting existing knowledge and gaps within it (Ennis, 1999). Through employing a theoretical framework researchers know what to look for and where they may find it (Maher & Coates, 2020).

In ethnography, theory guides analysis as a researcher selects the most relevant themes, patterns and supporting data (Ennis, 1999; Green & Bloome, 2005). However, data should not be dismissed if it does not align with theories but rather act as an opportunity to modify them (Morse, 1991b; Cutcliffe & McKenna, 1999; Connelly, 2014; Maher & Coates, 2020; Thompson, 2022). Indeed, theoretical refinement generated by "the smallest interactions, exchanges, or contextual anomalies" is a vital aspect of abductive thematic analysis and demonstrates a researcher's meaningful engagement with both empirical data and existing theory (Thompson, 2022, p.1415). To ensure detailed analysis, a theoretical lens was developed to strengthen findings whilst supporting or challenging existing research.

Theories can help comprehend complex social topics including how societies and institutions operate, the formation of cultures alongside why people interact as they do (Reeves, Albert, Kuper & Hodges, 2008). In educational research, theories can explain social and contextual factors that result in exclusion of pupils due to their characteristics (Juvonen, Lessard, Rastogi, Schacter & Smith, 2019). Alongside this, theory can encourage educational leaders to make organisational improvements (Evans, Thornton & Usinger, 2012). Thus, this study's theoretical lens helped comprehend why d/Deaf pupils may experience exclusion in mainstream PE and identify relevant improvements. Consequently, a theoretical lens addressed the research question and objectives (Mills, 1993 cited in Anfara & Mertz, 2014).

Cultural studies.

Cultural studies "is concerned with the social significance and systematic analysis of cultural practices, experiences and institutions" (Hargreaves & McDonald, 2000, p.48). Thus, cultural studies is an interdisciplinary field, where methods have merged associated with literary humanism, culturalism, Marxism, poststructuralism and postmodernism which have examined how culture interacts with various power relations such as class, race, gender and education (Andrews & Loy, 1993; Turner, 2003; Grossberg, 2013; McCormack, Anderson, Jamie & David, 2018). The concept of power is vital to understand culture (Oswell, 2006). Power is embedded in everyday life within society, for example relations between individuals (Clegg & Haugaard, 2009). More specifically, power is critical during social relations in schools, particularly

in PE lessons as it maintains and challenges everyday discourses (Webb & Macdonald, 2007). Therefore, cultural studies helped comprehend the culture of Buttermere Primary School.

Power relations are central components of cultural studies and sport sociology work (Fisher, Butryn & Roper, 2003). Cultural studies appreciate sport and education are arenas of contestation and struggle between dominant and subordinate groups (Giroux, 1995; Hargreaves & McDonald, 2000). Here, power relations can be understood whereby practices and social struggles can be created, reproduced or challenged through social interactions and agency (Hargreaves and McDonald, 2000; Fisher et al., 2003). Education can produce an advantaged space for some pupils whilst being an arena that creates inequality and subordination for others (Giroux, 1995). Cultural studies can highlight power and cultural practices used to exclude oppressed, marginalised groups (Giroux, 1995; Hargreaves and McDonald, 2000; Fisher et al., 2003). Notably, cultural studies strive for positive social change (Miller, 2001) through exposing power relations and acknowledging the potential of oppressed, marginalised groups (Hargreaves & MacDonald, 2000). Cultural studies can help understand and transform the world, acting as a tool for activists and policy makers (Barker, 2003), in this case within education. Consequently, cultural studies helped uncover the reproduction and resistance to hegemonic practices within Buttermere school. Through highlighting structural practices, social interactions and underlying processes which reproduce/resist inequalities it was possible to facilitate a movement toward inclusive PE by highlighting potential methods to do so.

Recently, cultural studies have analysed sport and educational culture and, more recently the (physical) education of pupils with SEND (Hargreaves, 1982; Maher & Macbeth, 2014, Maher, 2016; Maher, 2018; Maher, Fitzgerald & McVeigh, 2020). However, no study has yet applied cultural studies when investigating d/Deaf pupils' experiences of mainstream PE. This study applied cultural studies to investigate Buttermere's culture and the power relations within it to comprehend effective PE teaching of d/Deaf pupils and advance knowledge.

Power.

Power is a person's or department's ability in an organisation to achieve desired outcomes (Daft, 1999). Educational environments act as a key site where power relations can be played out (Gore, 1995). Within schools, power "establishes, maintains and challenges particular discourses within everyday life and social relations" (Webb & Macdonald, 2007, p.280). Power can help comprehend how

inequalities are produced and reproduced in everyday practice (Flintoff & Fitzgerald, 2012). Power is multi-directional meaning that it can operate top down, lateral or bottom up (Foucault, 1975). Thus, power is fluid, contextual and situational (Maher et al., 2024; Maher, Quarmby, Hooper, Wells & Slavin, 2025). Although power can be restrictive, it may also be productive, meaning that taken for granted assumptions can be challenged (Webb & Macdonald, 2007). The concept of power offers potential to confront hegemonic discourses and inequalities relating to d/Deaf pupils' education. As stories can provide insight to how power operates in schools (Dowling, 2012), this study gains the experiences and perspectives of individuals at Buttermere school to comprehend how power can facilitate or hinder effective PE teaching of d/Deaf pupils.

Power has previously been broken down into the following categories:

- Legitimate power- authority from a formal position in an organisation.
- Reward power-gaining authority by giving rewards to other people.
- Coercive power- used to punish or suggest punishment.
- Expert power- used by an individual with specialist knowledge or skill.
- Referent power- characteristics such as respect that followers emulate from their leader.

(Webb & Macdonald, 2007).

Whilst categorising power into types is somewhat useful, it fails to acknowledge the process of how certain bodies become powerful (Webb & Macdonald, 2007). Thus, this study also uses Gore's (1995) eight techniques of power which include:

1. Surveillance- closely observing, threatening to watch or expecting to be watched.
2. Normalisation- discourses which are exclusionary and repressive.
3. Exclusion- being excluded from information, activities, resources, interactions or privileges.
4. Classification- differentiating groups from one another e.g. hard/easy.
5. Distribution- discourses which arrange and separate individuals e.g. rank
6. Regulation- subjecting people to restrictions.
7. Individualisation- giving an individual or oneself characteristics such as courage.
8. Totalisation- using collective terms to give power e.g. 'We'.

Gore's techniques of power have been applied to PE research including (although not limited to) healthism (Webb, Quennerstedt & Ohman, 2008), gender (Webb & Macdonald, 2007; Brown & Macdonald, 2008), teacher relations (Gore, 1995) and

teacher effectiveness more broadly (Thomson, 2017). However, no study has applied concepts of power to analyse d/Deaf pupils' education in mainstream PE. To enhance knowledge, this study utilises the concept of power to analyse effective PE teaching of d/Deaf pupils.

Hegemony.

Hegemony is "the ideological/cultural domination of one class by another achieved by engineering consensus through controlling the consent of cultural forms and major institutions" (Jarvie, 2006, p.28). Hegemony occurs through complex social interactions (Hoffman, 1997 cited in DeLuca, 2013). This involves subordinate groups experiencing situations, negotiating relations and struggling rather than simply conforming to dominant ideologies (Hargreaves & MacDonald, 2000). Hegemony occurs through consent rather than coercion, whilst dominant interests become accepted as 'commonsense' by subordinate groups even if these are counterproductive to them (Hargreaves, 1994). Hegemony is apparent in many cultural institutions including schools (Hargreaves & MacDonald, 2000; Jones, 2006). The use of hegemony in education and sport acknowledges power-relations beyond class, demonstrating they do not solely reflect a neoliberal society (Maguire et al., 2002). Through hegemony, power can be acquired, maintained and challenged by individuals and groups, whilst hegemonic ideologies can influence PE culture and how inclusive it is (Maher & Macbeth, 2013; Maher, 2016; Maher, 2018). This study applied hegemony to comprehend how d/Deaf pupils can be taught effectively in mainstream PE, which involves discussions surrounding inclusion and power.

Hegemony is a dynamic and ever-changing process (Hargreaves & McDonald, 2000; Maher et al., 2020). From a Gramscian perspective, all individuals are active agents of culture (Hargreaves & MacDonald, 2000). Hegemony offers new thinking about culture and power that agents can use to bring about change (Lawson 1988; Bennett, 1998, cited in Barker, 2003). Consequently, potential lies to challenge 'taken for granted' assumptions, specifically in PE, particularly those relating to success being dependent upon an individual's ability to meet ableist criteria or more specifically audist criteria. However, it is difficult to highlight hegemonic processes as they are usually discreet and involve active consent of subordinates who may misinterpret interactions (Molnar and Kelly, 2013). By adopting an ethnographic approach, whereby I was somewhat an outsider which was discussed within Chapter Three, hegemonic practices within Buttermere school could be identified. However, agency can be limited by power, structures, situations and individual abilities, meaning it may

not be possible to bring about change (Lawson, 1988). As Lawson (1988) states even when this is possible, it is unlikely individual agents will transform the PE field, rather they may just change their location in the field (Nentwich, Ozbilgin & Tatli, 2015). Nevertheless, through a Bourdieusian lens, it is plausible that collective agency could transform the PE field through changes in practice and doxa (Nentwich et al., 2015). Therefore, this study also applied Bourdieu's (1990) concepts of habitus, field and capital which will be explored later. The fluidity of hegemony and power mean potential lies to transform a field regardless of how difficult this may seem. Through highlighting hegemonic practices and methods to disrupt them a movement towards more inclusive PE can occur.

Gramsci's work has largely been neglected by research in the PE field (Maher, et al., 2020; Maher, Parkinson & Thomson, 2022; Maher et al., 2025). Arguably, Gramsci's work has been marginalised from PE literature as hegemonic processes and practices including privilege discourses around performance-based outcomes in PE are unconsciously accepted as 'commonsense' (Kirk, 1992; Hargreaves, 1994). When focusing upon SEND in PE, only some academics have applied hegemony to explore its role in shaping views and experiences of LSAs and SENCOs, resources and training, power-relations, the inclusivity of a PE culture and PE curriculum in alternative provision (Maher & Macbeth, 2013; Maher, 2016, Maher et al., 2020; Maher 2020; Maher et al., 2025). Additional research exploring the implications of hegemonic practices in PE for pupils with SEND, specifically d/Deaf pupils in mainstream settings is needed to enhance knowledge. To explore dominant discourses surrounding d/Deaf pupils' experiences in mainstream PE, this study used hegemony, specifically hegemonic phonocentrism to make sense of data which will be explored next.

Hegemonic phonocentrism.

Having established what hegemony is and how it may be present within cultural institutions such as schools, the chapter now integrates hegemony with Deaf Studies and Bourdieu's (1991) work on language to highlight when combined, they are a useful tool to comprehend d/Deaf pupils' experiences in mainstream PE.

Bourdieu's (1991) work illustrates how the dominance of a specific language or linguistic method has emerged and its social conditions of existence (Thompson, 1991). Although Bourdieu (1991) did not explore d/Deaf people, his work on language is useful when exploring how speech has become the dominant method of communication over sign language. At the beginning of society there was no certainty

speech would be dominant (Emery, 2009). As Thompson (1991), the editor of Bourdieu's work explains, a language or set of linguistic practices become dominant and legitimate in a society through a complex process of conflict as other languages or dialects have subordinated to. Although Bourdieu does not explicitly use the term 'hegemony', his position aligns with it (Woolard, 1985; Blackledge, 2002). Whilst hegemony focuses on establishing consent and Bourdieu concentrates on institutional processes reproducing it (Friedman, 2005 cited in Ives, 2009; Friedman, 2009), the combination of the two concepts helps comprehend how the power of dominant language undermines progressive hegemony (Friedman, 2009). Consequently, this study applied Bourdieu's work on language alongside hegemony to comprehend underlying processes behind the dominant form of communication.

Bourdieu (1991) highlights education plays a key role in the formation, legitimisation and imposition of a language by establishing similarities from which consciousness derives from. As DeLuca (2013) explains within education hegemonic practice can occur through a 'normative' concept, whereby minority groups may be integrated within a social setting but must follow dominant discourses such as language. Through normalisation (Gore, 1995), speech has become the dominant method of instruction in education, 'commonsense' and a method to maintain power of the dominant hearing majority. Through hegemony, proficiency in the dominant language within a specific environment is linked privilege and dominance (Dei, James, Karumanchery, James-Wilson & Zine, 2000).

The dominance of speech can be linked to phonocentrism, which is "the privilege of sound and the spoken word in relation to being human" (Derrida, 1976 cited in Maher, 2020, p.318). The term phonocentrism has previously been used interchangeably with audiocentrism, however for simplicity this study uses the term phonocentrism. As Bauman (2008b) highlights Derrida believed the voice is not only for communicating but is the root for truth, existence and presence in Western society. Although Derrida did not consider d/Deaf people, his analysis highlights how a hearing, speaking human gained dominance and became intertwined in perceptions of human identity, thus, phonocentrism has been applied by Deaf Studies scholars (Young, Oram, Napier, 2019a; Young, et al., 2019b). Through reading Derrida's work via a Deaf lens, writing can be swapped with sign language to highlight when phonocentrism is disrupted, sign would be equal to speech which would have profound impacts upon language and identity (Bauman, 2004). Deaf Studies scholars have adopted phonocentrism to explore the dominance of speech over sign language

(Bath, 2016), and its discriminatory implications on d/Deaf people (Young et al., 2019b).

Within education, dominant hearing majorities consolidated their power “by enforcing a normalcy that privileges speech over sign and hearing over deafness” (Bauman, 2004, p.245). When phonocentrism is institutionalised in education in an attempt to ‘normalise’ d/Deaf people (Bauman, 2008b), it may enable and justify ‘othering’ and hegemonic privilege (Eckert & Rowley, 2013). Phonocentric teaching strategies result in a hearing-centred society, whereby d/Deaf people commonly experience audism, prejudice and discrimination (Bauman, 2004). Thus, mainstreaming becomes a form of symbolic violence as it reinforces views of d/Deaf people as ‘disabled’ (Branson & Miller, 2002). Consequently, hegemonic phonocentric teaching practices must be challenged to facilitate an inclusive PE environment for d/Deaf pupils (Maher, 2020).

However, phonocentrism is not without its critics in Deaf Studies. Myers and Fernandes (2010) argue Bauman’s (2008) examples of discrimination are outdated and that d/Deaf people now mostly have equal rights in the law. Nevertheless, Myers and Fernandes (2010) acknowledge audism still exists. Here, ‘slippage’ (Ball, 2008) can be seen between the laws of society and the realities of d/Deaf people’s lives. As Anglin Jaffe (2011) highlight, assumptions about language and identity must be challenged whilst acknowledging historical oppression. Furthermore, Myers and Fernandes (2010) argue phonocentrism is inappropriate to understand audism or the methods to tackle individual and institutional audism. However, as phonocentrism is the cause of audism (Bauman, 2008a; 2008b), it is firstly essential to comprehend how phonocentrism manifests in culture to tackle audism which will later be discussed. Therefore, Myers and Fernandes’ (2010) argument should not prevent further application of Derridean theory when examining d/Deaf people’s experiences (Anglin Jaffe, 2011).

As discussed within Chapter Two, no study has applied phonocentrism to d/Deaf pupils’ education in mainstream PE. Whilst Maher (2020) enhances knowledge by applying phonocentrism to d/Deaf people in PE, his experimental study was not completed in a natural PE setting, meaning that phonocentrism is yet to be applied to an authentic PE setting. To address this gap, this study applied phonocentrism to explore its impacts in mainstream PE and highlight methods to tackle it to facilitate d/Deaf pupil’s inclusion (Maher, 2020).

Audism.

Audism creates a hierarchy of dominance based on hearing ability which links identity with speech (Bauman, 2004). Here, d/Deaf people are perceived as “inferior and subject to repair” (Hauser et al., 2010, p.490). As phonocentrism has become part of hearing people’s ‘commonsense’ d/Deaf people often encounter audist attitudes and actions (Bauman, 2004). Audism may be used to justify differences in power, stratification and hegemonic privilege between the dominant hearing majority and d/Deaf people (Eckert, & Rowley, 2013). Several types of audism exist including metaphysical, institutional, individual, laissez-faire and dysconscious audism which can be exercised overtly, covertly and aversively (Eckert & Rowley, 2013; Gertz & Boudreault, 2016). The table below which draws primarily on the work of Eckert and Rowley (2013) outlines the several types of audism and their expressions:

Types of Audism	Metaphysical	Institutional	Individual	Laissez-faire	Dysconscious
Definition	Metaphysical audism also known as ideological audism, intertwines human identity with speech and hearing (Bauman, 2008; Gertz & Bauman, 2016).	Physical and pedagogical coercion of d/Deaf people into adopting hearing norms via oralism, mainstreaming, hearing aids etc (Gertz & Bauman, 2016).	Individual audism is “audiocentric assumptions and attitudes that are used to rationalize differential stratification, supremacy, and hegemonic privilege” (Eckert & Rowley, 2013, p.105)	Laissez faire audism is “a postmodern perspective, where the human identity of the Deaf is acknowledged, but autonomy is denied or denigrated” (Eckert, 2010, p.329).	Dysconscious audism is “a form of audism that tacitly accepts dominant hearing norms and privileges.” (Gertz, 2008, p.219).
Overt expression – practices which make hearing superiority commonsense and dehumanise	Assuming hearing indicates someone is more intellectual e.g. believing a d/Deaf person cannot be a doctor (Eckert &	Overt institutional audism is “structural exclusion, schematic isolation, and rejection of Deaf praxis” (Eckert &	Claiming linguistic privilege, promoting structural inequalities and rejecting Deafhood (Eckert & Rowley, 2013). An example is when a d/Deaf person asks someone to repeat something, and the other person replies	Perceiving d/Deaf people as intellectually inferior alongside assumptions of physical deficiencies and denying access to opportunities leading to	A d/Deaf person hiding/ removing their hearing assistive device.

d/Deaf people (Musengi, 2020).	Rowley, 2013; Musengi, 2020).	Rowley, 2013, p.112). Examples include using the spoken language for teaching (Musengi, 2020).	'nevermind' (Eckert & Rowley, 2013).	the reproduction of stereotypes (Eckert & Rowley, 2013).	
Covert expression- practices that are hidden and difficult to notice (Stapleton, 2015).	Assuming d/Deaf people have physical and cognitive deficiency so should be denied autonomy e.g. genetic counselling for a d/Deaf couple (Eckert & Rowley, 2013).	Interpreters deciding what information to pass on to d/Deaf individuals depending on what they deem important (Eckert & Rowley, 2013).	Disguising structural barriers, reinforcing assumptions of cultural deficiency, despite acting as though they do not reject Deaf Culture (Eckert & Rowley, 2013).	Denying that audism exists yet 'others' d/Deaf people and focuses on overcoming a disability instead of overcoming audism (Eckert & Rowley, 2013).	Not requesting an interpreter due to embarrassment (Stapleton, 2015).
Aversive expression – equality	Perceiving sign language as inferior and	Stating a d/Deaf person should not access further	Promoting d/Deaf people's inclusion but not acknowledging their own prejudices e.g. an	Claiming to support Deaf autonomy but imposing heteronomy,	

accommodations with contradictory practices surrounding d/Deaf people (Eckert & Rowley, 2013).	imposing heteronomy (Eckert & Rowley, 2013).	education (Eckert & Rowley, 2013).	interpreter summarising a message rather than interpreting the message in full (Eckert & Rowley, 2013). Another example is when an interpreter does not treat d/Deaf pupils as competent (Stapleton, 2015).	they also deny audism exists e.g. assuming mainstreaming is a success (Eckert & Rowley, 2013).	
--	--	------------------------------------	---	--	--

Figure 11: Types of Audism (Adapted from Eckert, 2010; Eckert & Rowley, 2013; Stapleton, 2015; Gertz & Bauman, 2016; Musengi, 2020).

Research has suggested the hegemony of speech had led to a perception of superiority and audism (Saikia, 2021). As previously discussed, phonocentrism is the root of audism (Bauman, 1997; Bauman, 2008a; Bauman, 2008b). This may be linked to metaphysical audism, whereby the dominance of speech in society results in varying treatment through connecting identity with audiocentric expectations and attitudes to justify subordination of d/Deaf individuals (Bauman, 2004; Eckert & Rowley, 2013), acting as a form of symbolic violence (Fernandes and Myers, 2010b). Within this study, the concept of audism, rather than ableism, was applied. Deaf scholars do not believe ableism allows for a “dual reality of integration and pluralism in a context that recognizes the realities of Deaf ethnicity” (Eckert & Rowley, 2013, p.119). Considering some d/Deaf participants may have identified as culturally Deaf, the concept of audism was more appropriate than ableism to comprehend the lived realities of d/Deaf participants.

The spectre of audism seems to haunt institutions that are for d/Deaf people, particularly education (Bauman, 2004). For example, oralist educational policy is a key underlying influence behind the poor treatment of d/Deaf children (Lane, 1992 cited in O'Connell, 2022). Teacher training and teaching practices that emphasise English over sign language may have profound negative impacts on d/Deaf children's development (Simms & Thumann, 2007). Arguably, an oralist education which dismisses sign language denies d/Deaf children a human right (Emery, 2009). Additionally, audism may result in teachers perceiving d/Deaf pupils as disabled and lowering their expectations for them (Simms, & Thumann, 2007). These negative stereotypes towards d/Deaf people are concerning considering a teacher's attitude towards pupils with SEND are often replicated by pupils (Lieberman & Houston, 2009). Negative stereotypes surrounding d/Deaf people often cause them to be stigmatised (O'Connell, 2022; Wearmouth, 2023).

Within Fitzgerald's (2005) study focused on SEND more broadly in PE, it has been suggested that hearing peers can reproduce stigma, othering and marginalisation of d/Deaf pupils. Stigma is an extremely devalued characteristic due to stereotypes surrounding it (Goffman, 1963). A hearing person may perceive a d/Deaf child to have a stigma (O'Connell, 2016). Moreover, d/Deaf pupils may internalise negative attitudes (Ladd, 2003; O'Connell, 2022). This may be referred to as self-stigmatisation (Kent & Smith, 2006), or more specifically dysconscious audism which has similarities to internalised ableism (see Campbell, 2008). Individuals may attempt to manage the stigma through concealment or selective disclosure techniques to pass as normal (O'Connell, 2016; Wearmouth, 2023). For example, d/Deaf people may minimise the

obviousness of being d/Deaf by removing hearing aids, reading lips or using speech (Mauldin & Fannon, 2021). Attempting to hide a stigmatised identity may lead to isolation, anxiety, depression and low self-esteem (Leary, 1999; O'Connell, 2016; Wearmouth, 2023). However, it is noteworthy that with other d/Deaf children, d/Deaf pupils may not be perceived to possess a stigma (O'Connell, 2016). Thus, stigma is context dependent (Mauldin & Fannon, 2021).

Although some scholars have applied Goffman's concept of stigma to d/Deaf people (Mauldin & Fannon, 2021; O'Connell, 2022), only a few of these have focused on education (O'Connell 2016), specifically mainstream education (Kent & Smith, 2006; Kermitt, 2019). Moreover, no study has employed stigma to help make sense of d/Deaf pupils' experiences in mainstream PE. Therefore, this study applied Goffman's (1963) concept of stigma to unravel the complex nature of social interactions in education (O'Connell, 2016).

Whilst several studies have discussed how audism may be present within mainstream education (Bauman, 2004; Gertz, 2008; Myers & Fernandes, 2010; Eckert & Rowley, 2013), few empirical studies use audism to analyse d/Deaf pupils' experiences in mainstream education. More specifically, no research study has applied audism to analyse d/Deaf pupils' education in mainstream PE. Yet, audism can help to examine the causes of d/Deaf people's discrimination and marginalisation (O'Connell, 2022). Therefore, the application of audism to this study addressed the existing gap in literature. Crucially, awareness of audism may "guide resistance to audist behavior on several levels, from its sources to its daily manifestations" (Bauman, 2004, p.240). The application of audism encouraged a movement away from phonocentric orientations to ocularcentric paradigms to enable d/Deaf pupils to reach their potential (Bauman, 2004). Accordingly, the application of audism promoted educational improvements for d/Deaf pupils.

Othering.

As metaphysical audism facilitates justification of 'othering' d/Deaf people, the study also utilised the concept of 'othering' to comprehend the consequences of metaphysical audism. Othering involves exaggerating differences whilst downplaying similarities (Silva & Howe, 2012). Here, 'othering' is a form of social oppression as people are considered different and inferior (Israelite et al., 2002). The concept of othering is useful to comprehend power differentials in a setting whereby the dominant group attempts to marginalise those they perceive 'different' (Israelite et al., 2002; Silva & Howe, 2012). Although 'othering' has commonly explained the

experiences of people with disabilities (Silva & Howe, 2012), it has been suggested that hearing people often make d/Deaf people the other (Israelite et al., 2002). Thus, the concept of 'othering' helps comprehend the marginalisation of d/Deaf pupils within mainstream PE. Furthermore, the theory of 'othering' can help understand how d/Deaf people self-identify (Brice & Strauss, 2016). Thus, 'othering' may help understand how d/Deaf pupils construct their identity alongside their educational and social experiences (Israelite et al., 2002). Consequently, the application of 'othering' enabled critical analysis of d/Deaf pupils' PE experiences which included discussions surrounding marginalisation and identity.

Habitus, field and capital.

Additionally, this research study applied Bourdieu's theoretical concepts of habitus, field and capital (1990). Bourdieu's theory is deeply intertwined with culture (Grenfell & James, 2003). Similar to Gramsci, Bourdieu rejected Marx's concept of culture as 'superstructure' and considered culture and economics as equally important (Laberge & Kay, 2002). Bourdieu developed a theory which considered power dynamics spread across the economic, cultural and symbolic spheres of social life (Honneth, 1986; Desan, 2013). Culture is embodied and reproduced through engagement in social and everyday activities at the intersection of field and habitus through social structures and agents (Hunter, 2004). To gain a comprehensive understanding of Buttermere's culture, Bourdieu's (1990) notions of habitus, field and capital were employed.

At the heart of Bourdieu's framework is habitus (Power, 1999). Habitus is expressed by an individual's bodily practices and is the manifestation of embodied values, actions and relations (Fernandez-Balboa & Muros, 2006; Wrench & Garrett, 2015). As Sima, Tinning and Rossi (2010) highlight, the body is a vital aspect of habitus as through practice it embeds social and cultural norms which are present through gestures, opinions, behaviours and tastes. Habitus can be shaped by past experiences or influence future practices, for example PE may construct pupils' habitus or be constructed by them (Hunter, 2004; Wrench & Garrett, 2012; Wrench & Garrett, 2015). Bourdieu considered habitus as the product of conflict, which is a form of tacit knowledge, reproduced in the continuous struggle for status among groups (Haugaard, 2009). Habitus is closely tied to one's social positioning as individuals within the same social group have similar experiences which determines their behaviour; thus habitus is class specific (Stuij, 2015; Wiltshire, Lee and Williams, 2019). As d/Deaf people have differing physical and sensory experiences of

environments, they develop different habitus to their hearing peers even though other aspects of their social positioning may initially appear similar (O'Brien & Emery, 2014; O'Brien, 2021). When d/Deaf people are integrated into a mainstream hearing field they may display behaviours, values and practices that mismatch with the field, placing d/Deaf people at a disadvantage and lower social positions compared to the dominant hearing group (O'Brien & Emery, 2014).

How habitus is constructed, embodied and played out.

The concept of habitus facilitates a detailed understanding of social activities in ethnographic studies (Wacquant, 2011; Kitchin, Telford, Rachael & Howe, 2022). As habitus is linked to social class, its application enables a detailed understanding of inequalities in PE (Wiltshire, Lee & Williams, 2019). The application of habitus to this study's findings facilitated a detailed understanding of social processes and actions within Buttermere school, including d/Deaf pupils' social positioning, allowing research aims to be achieved.

Also, field plays a key role in Bourdieu's theory of practice (Laberge & Kay, 2002). Bourdieu described fields as social spaces such as school, sport, and of relevance to this study, PE (Wrench & Garrett, 2012). The PE field consists of social relations between educational authorities, PE teachers and pupils (Hunter, 2004). Through practice in fields, people sculpt their habitus and shape the field's habitus (Sirna et al., 2010). Prolonged involvement within a field, results in the development of habitus as embodied structured and unstructured dispositions (Aldous & Brown, 2010). Through the continuous process between habitus and field, identities can be formed (Sirna et al., 2010).

Importantly, PE acts as a vital site for identity production (Armour, 1999). Habitus may be converted into capital (Brown, 2005), which is the resources a person possesses and can be broken down into economic, symbolic, cultural and social capital (Bourdieu, 1986). The external manifestation of habitus can be seen on a body, whilst the symbolic value given to the visual appearance of these bodies represents physical capital as a form of cultural capital (Shilling 1993a in Croston & Hills, 2017). Hence, the body represents a form of physical capital (Shilling, 2004). Physical capital is "the social formation of bodies by individuals through sporting, leisure and other activities in ways which express a class location, and which are accorded symbolic value" (Shilling, 1991, p.654). Physical capital places value upon the size, shape and appearance of a body whilst considering its abilities (Shilling, 2004; Fitzgerald & Kirk, 2008; Sirna et al., 2010). Within PE, physical capital is produced through "gaze,

performance, measurement and categorization" (Hunter, 2004, p.178). Healthy, slim and athletic bodies are accorded most physical capital in PE (Hunter, 2004; Sirna et al., 2010). Consequently, those closest to the 'ideal' body attain the most capital (Hunter, 2004), meaning significant inequalities exist in the symbolic value given to bodies (Shilling, 1991).

Physical capital can be converted into other types of capital, such as social capital, economic capital, and cultural capital (Shilling 1991; Hills, 2007; Light, 2011). The PE field provides a context whereby capital can be exchanged (Hay & Lisahunter, 2006). As bodies are given different values in society, individuals may have differing opportunities to convert physical capital into other forms of capital which may exacerbate social inequalities (Shilling, 1991). PE's ability to enculture bodies and reproduce dominant discourses may marginalise some pupils (Hunter, 2004). For example, pupils with SEND may lack physical capital in PE, which may impede their ability to gain social capital and be included (Fitzgerald, 2005). Here, the capital available to pupils in PE may support educational opportunities for some pupils whilst limiting others (Hay & Lisahunter, 2006; Evans & Penney, 2008). Therefore, capital determines the status of certain groups and individuals within the PE field (Light, 2011).

Notably, physical capital of d/Deaf pupils may be more complicated than it is for other pupils with SEND. Although d/Deaf pupils may have slim, healthy and athletic bodies giving them some physical capital in the PE field, which is a notoriously ableist and audist field, being d/Deaf may reduce their physical capital. As highlighted more broadly, d/Deaf people's physical capital may initially be similar to their hearing peers, as sign language may not be used or hearing aids may be hidden, however once being d/Deaf is revealed their physical capital may decrease from the perspective of hearing peers (O'Brien, 2021). In mainstream education, d/Deaf pupils often lack social capital with their hearing peers (Byatt, Duncan & Dally, 2023). This is worrying considering d/Deaf pupils' social capital can improve educational outcomes, self-esteem and inclusion within a school and wider society (Byatt, Duncan & Dally, 2022). As PE heightens focus upon bodies (Armour, 1999), this may intensify the importance of physical capital and exacerbate social inequalities. However, capital is not fixed (Shilling, 1991), thus potential lies to challenge doxa (Bourdieu cited in Hunter 2004; Wrench & Garrett, 2013), and create a more inclusive society (Hunter, 2004). As previously highlighted, hearing peers determine the extent to which d/Deaf pupils can acquire, maintain and covert types of capital in mainstream education (O'Brien, 2021; Byatt et al., 2023). Alongside this, educators and practitioners play a key role in

d/Deaf pupils' acquisition of capital (Byatt et al., 2022). Therefore, this study explored d/Deaf pupil's capital in PE, including how educators, d/Deaf pupils and hearing pupils may challenge doxa to enhance understanding of identity processes.

Also, linguistic forms of capital were relevant to this study, which is "fluency in, and comfort with, a high-status, world-wide language which is used by groups who possess economic, social, cultural and political power and status in local and global society" (Morrison & Lui, 2000, p.473). Bourdieu (1991) perceived linguistic capital as the product of political domination whereby education creates, legitimises and imposes a language by forming similarities from which the community of consciousness derives from. Language and linguistic exchanges act as a vital aspect of social life and play key roles in the relations of symbolic power within society (Bourdieu, 1991; Thompson, 1991). To gain a comprehensive understanding of Buttermere's culture, it was vital to acknowledge the role of language and linguistic exchanges. Similar to Bourdieu's other forms of capital, individuals possess different amounts of linguistic capital which can be distributed for other forms of capital such as economic or cultural capital (Thompson, 1991). Those who can use the dominant language are able to access employment, social and economic spheres of life (Blackledge, 2002; Goldstein, 2008 cited in Flynn, 2015). Individuals with access to or opportunities to advance their linguistic capital may have better life prospects as they may convert this for other forms of capital (Morrison & Lui, 2000). To promote equity in society, doxa, specifically linguistic capital and the dominance of a language type in society must be disrupted.

Whilst Bourdieu used linguistic capital to explore the development of French, Bourdieu's work could be transferred to examine English and so on (Thompson, 1991). Linguistic capital has commonly been applied to analyse the teaching of pupils who did not speak English in primary schools (Flynn, 2013; 2015). However, Deaf Studies scholars have utilised linguistic capital to analyse a variety of topics relating to d/Deaf people's communication, experiences and identity (see Listman, Rogers & Hauser, 2011; Braun et al., 2017; De Meulder & Murray, 2021). More specifically, linguistic capital has been applied to empirical studies exploring general mainstream education for d/Deaf pupils (Zevenbergen, 2000; O'Brien & Emery, 2014). Academics have highlighted d/Deaf people who use sign language lack linguistic capital in institutions e.g. schools whose dominant language is speech, regardless of their sign language skills (O'Brien & Emery, 2014). As d/Deaf pupils have a linguistic difference to their hearing peers and may use sign language, gaining capital and exchanging

this for other forms of capital in phonocentric contexts may be difficult (Byrne, 2014). Therefore, applying linguistic capital to analyse d/Deaf pupils' educational experiences may help comprehend inequalities they face and highlight how 'doxa' can be disrupted.

Whilst Bourdieu's notions of field, capital and habitus (1990) have explored the capital of d/Deaf people in Deaf studies (Ladd, 2003; Byrne, 2014; O'Brien, 2021), research focused on d/Deaf pupils' experiences in mainstream education is limited. Meanwhile, studies examining the capital of d/Deaf pupils' capital in mainstream schools have tended to focus upon classroom-based subjects or general education (Zevenbergen, 2000; Wilkens & Hehir, 2008; O'Brien & Emery, 2014; O'Brien, 2021). However, as previously discussed, the generalisation of classroom-based subjects would be problematic considering teaching d/Deaf pupils in PE significantly differs (Maher & Haegele, 2022), thus research within PE is necessary. Despite Bourdieu's concepts being widely applied to education and PE research (Aldous & Brown, 2010), it has not been applied to research investigating d/Deaf pupils in mainstream PE. To address this gap, this study used Bourdieu's notions of habitus, field and capital to analyse data to comprehend d/Deaf people's experiences (O'Brien, 2021), specifically in mainstream PE.

Chapter summary.

This chapter discussed the theoretical lens that was utilised to explore how d/Deaf pupils can be taught effectively in mainstream PE. The diagram below summarises this study's theoretical lens:

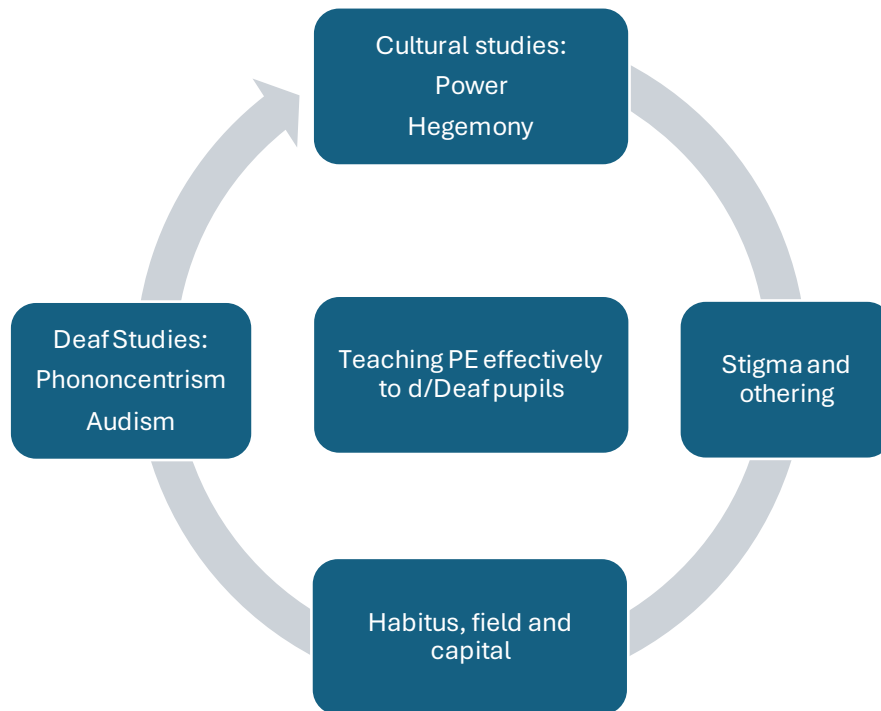


Figure 12: Theoretical lens.

Cultural studies was highlighted as beneficial to gain a comprehensive understanding of Buttermere's culture. More specifically, this chapter highlighted how power can be used productively or restrictively in education to reinforce or challenge hegemonic discourses which may have implications on d/Deaf pupils' experiences and the extent to which effective teaching can be achieved. Also, the chapter emphasised the usefulness of hegemony to comprehend culture, power, dominant discourses and potential to disrupt them. As this chapter explored, hegemonic practices in education working against d/Deaf people can be seen through verbal teaching representing phonocentrism which can result in audism. Moving on, the chapter highlighted audism as a useful tool for analysing d/Deaf pupils' experiences in mainstream education, suggesting that increased awareness may disrupt its manifestation in everyday life (Bauman, 2004). Lastly, Bourdieu's (1990) concepts of habitus, field and capital were identified as beneficial to explore power relations, social interactions and d/Deaf pupils' identity in mainstream PE. As previously discussed, no empirical research study investigating d/Deaf pupils in mainstream PE has applied power, phonocentrism, audism or Bourdieu's concept of habitus field and capital when analysing findings. Therefore, this study's theoretical lens helped generate new knowledge about d/Deaf pupils' education in mainstream PE. Previously, Deaf Studies and cultural studies have remained separate, however this has led to d/Deaf

pupils being expected to comply with 'normative' expectations and ITT programmes adopting a medical perspective towards d/Deaf pupils (Lawyer, 2018). Through integrating cultural studies and Deaf Studies to analyse findings, the study bridges gaps in knowledge whilst offering fruitful analysis of how d/Deaf pupils can be taught PE effectively.

CHAPTER FIVE.

A CONTEXTUAL UNDERSTANDING OF BUTTERMERE PRIMARY SCHOOL.

School information.

Before discussing the study's findings, it is important to provide contextual information on Buttermere Primary School. The school is in a working-class area and is on the most deprived decile in the UK on the index of multiple deprivation (CDRC, 2019). Buttermere school is a mainstream school with a DRB and has approximately 250 pupils on roll; ten of whom have moderate to profound deafness. Within the local area, there is no school for the d/Deaf, meaning that Buttermere school provides the highest specialist provision in the area for d/Deaf primary aged children. Over recent years, all year 6 DRB leavers have moved to secondary schools for the d/Deaf. At Buttermere school, most d/Deaf pupils receive their education in the DRB and only enter mainstream classes for a select few lessons across the curriculum including PE, for two lessons a week. During this time, a mainstream teacher, often non-specialist, delivers the PE lesson assisted by DRB LSA who provides BSL interpretation for d/Deaf pupils. Alongside mainstream PE, a DRB PE lesson was delivered once a week as disconnections between the mainstream and DRB timetable sometimes resulted in DRB pupils missing PE lessons, an issue which is discussed in Chapter Seven.

Prior to commencing fieldwork, Buttermere school had undergone an Ofsted inspection whereby they were rated 'good' for their fourth consecutive inspection. Ofsted recognised a key strength of Buttermere school was their inclusive provision for pupils with SEND. Approximately 30% of pupils were identified as having a SEND (Buttermere SEND information, 2023-24). SEND provision catered for social, emotional, mental health, cognition and learning, communication and interaction alongside sensory and physical needs. To cater for pupils' needs, Buttermere school employed several LSAs and staff had training in ASD, multi-sensory impairments, ADHD, BSL, and many other areas.

For pupils with SEND, Buttermere school aimed to:

1. Create an inclusive learning environment.
2. Have high expectations to enable pupils to reach their potential.
3. Create confident learners (Buttermere's SEND policy).

Values.

Inclusion was at the heart of Buttermere's ethos evident throughout school documents such as the SEND report and published school values. Policy documentation at Buttermere school emphasised successful inclusion was not determined by the time spent in the DRB or mainstream class but rather by providing the necessary support to enable pupils to reach their potential. Buttermere has an excellent reputation for inclusivity and has received special recognition awards. Buttermere school prided itself on its inclusivity and argued this is what sets itself apart from other schools, meaning that d/Deaf pupils travelled across the county to attend.

Curriculum.

The school reinforced its aspirations of inclusion through its curriculum. An adapted curriculum which incorporated all aspects of National Curriculum was provided which taught pupils about diversity, culture and social responsibilities, with the ambition of creating an inclusive society. Within History, Geography and Religious Education lessons all pupils were educated about social issues, for example in history lessons pupils were taught about civil rights to educate them on racism. In Personal, Health, Social and Economic education (PSHE), pupils covered various topics including bullying, disability, inclusivity, stereotypes, prejudice and discrimination to foster a sense of belonging for all pupils. Through their curriculum, Buttermere aimed to provide equal learning opportunities and a sense of belonging to facilitate pupils' social, physical and cognitive development whilst improving their self-esteem. For DRB pupils, curriculum delivery was adapted to their individual needs as outlined in school documentation. Alongside this, DRB pupils were provided with daily BSL lessons to enhance their functional language skills. Comparatively, mainstream pupils had weekly BSL lessons which were delivered by a d/Deaf staff member. BSL lessons enabled hearing pupils to communicate with d/Deaf pupils within everyday school life, facilitating the inclusion of d/Deaf pupils, as will be discussed in Chapter Eight. The PE Curriculum also aimed to promote inclusivity and follow the National Curriculum which will now be discussed in more detail.

Physical Education Curriculum and School Sport.

As outlined on Buttermere's website, the school aimed to provide high quality PE and sport experiences. In PE, pupils engaged in a range of activities including (although not limited to) agility, tennis, cheerleading, rounders, athletics, football, dance and gymnastics. All Year 3, 4, 5 and 6 pupils attended swimming lessons with specialist swimming teachers. Furthermore, the PE curriculum provided various

adventurous activities such as climbing and developed pupils' understanding of fitness and diet. By providing various sporting opportunities, Buttermere school hoped all pupils would experience holistic development, including:

- Confidence.
- Self-esteem.
- Respect.
- Improvement of health and well-being.
- Determination (PE curriculum outcomes from school website).

Whilst mainstream PE provided various structured activities following their adapted curriculum, which aimed to facilitate pupils' holistic development, DRB PE was largely unstructured. DRB PE lessons would be delivered by DRB LSA as planning, preparation and assessment (PPA) for DRB class teachers would take place during this time. Upon observation of DRB PE, there was no organisation on what was to be taught and once a Dodgeball game was commonly selected, this was delivered without teaching points or differentiation for differing abilities or year groups. Additionally, DRB pupils would not receive feedback on how to improve their performances which resulted in pupils making little progress throughout the year. On one occasion, despite Mrs Dodd, who was delivering the DRB PE lesson, stating that she did not know the rules of Dodgeball, when I and Mr Greenbank informed her of them, she failed to introduce these. Consequently, DRB PE lessons often lacked educational value, and instead acted as a physical activity opportunity for DRB pupils.

Buttermere school competed against local schools in extracurricular sport. Alongside their hearing peers, d/Deaf pupils participated in extracurricular activities and represented the school football team at the time of fieldwork. The selection of a DRB pupil on the school football team was something the school was extremely proud of since this had not happened for many years. DRB pupils also enjoyed representing Buttermere at d/Deaf sporting events whereby they would compete against other DRBs in various sports including boccia, bowling and cricket.

Over recent years, Buttermere school had received funding from the PE and School Sport Premium, enabling them to join the 'expert PE programme' (pseudonym) which provided schemes of work and lesson plans to ensure PE lessons were aligned with the NCPE (DfE, 2013b). This programme meant that Buttermere's PE curriculum was divided into six units which focused on pupils'

physical, social, cognitive, creative and personal development whilst promoting health and fitness.

Sporting facilities.

Buttermere had indoor and outdoor sporting facilities for PE and extracurricular sport. In the winter, Buttermere's school hall was also utilised as a sports hall with two badminton courts. Within the hall, soundfield equipment was fitted to meet d/Deaf pupils' needs. Also, the school building and playground were wheelchair accessible for pupils with SEND.

Recent funding from the PE and School Sport Premium enabled Buttermere school to significantly develop their sporting environment, particularly outdoors where they had recently installed a 3G AstroTurf MUGA to accompany their existing outdoor football court. Buttermere school believed that the development of the MUGA area enhanced PE and extracurricular sport. On the perimeters of the school playground, a running track had been created to complete initiatives such as the Daily Mile and encourage physical activity. Furthermore, Buttermere school had recently benefited from new outdoor gym equipment which pupils were able to utilise during playtimes. The variety of sporting facilities at Buttermere school provided optimal conditions to facilitate physical activity and sporting development amongst pupils.

Equipment for d/Deaf pupils.

Buttermere school had various assistive hearing technology to enhance d/Deaf pupils' understanding and inclusion. Firstly, they had invested in radio aid technology for mainstream teachers who would wear the transmitter and connect via Bluetooth to pupils' hearing aids. Whilst Buttermere school had multiple radio aids, only a select few pupils utilised these (those who communicated via speech). Also, DRB staff had a good understanding of when hearing aids and cochlear implant speech processors were running low on charge and knew how to change batteries to ensure d/Deaf pupils could access verbal communication.

Buttermere school had achieved their Accessibility Plan's aims, which sought to invest in assistive hearing technology throughout mainstream areas to improve d/Deaf pupils' access to verbal teaching. As previously mentioned, the school hall, which was used for PE lessons, assemblies and a dining room, had soundfield equipment fitted to enhance d/Deaf pupils' access to verbal communication. Also, appropriate fire alarm systems which flashed a red light alongside making a sound were fitted in every room to ensure all pupils and staff were aware when fire alarms

were activated. Although equipment for d/Deaf pupils enhanced accessibility, hearing assistive technology is strongly connected to oralist approaches which may have adverse effects on d/Deaf pupils' inclusion than those intended, an issue which is discussed in Chapter Six.

Celebrating being d/Deaf.

Buttermere school was a sign-bilingual environment meaning that pupils learnt sign and spoken language (NDCS, n.d., d). Assemblies began with a teacher stating and signing "Good morning" to which pupils responded in BSL and speech "Good morning (teacher's name), good morning, everybody". For the rest of the assembly, speech was predominantly used with a DRB staff member providing BSL interpretation. Frequently, pupils would sing and sign songs which often had an uplifting and inclusive atmosphere. Through utilising BSL during assemblies, Buttermere School challenged hegemonic phonocentrism and fostered a sense of belonging for all pupils.

Throughout Buttermere school, various d/Deaf awareness books were on display e.g. 'I can't hear like you', 'Dacy's Deaf' and 'Max and George make new Friends'. These books aimed to promote d/Deaf awareness, a positive Deaf identity and inclusion of d/Deaf pupils. Also, Buttermere school celebrated d/Deaf awareness and Sign Language weeks. During this time, hearing pupils learnt about d/Deaf people, including how to communicate effectively with d/Deaf pupils. Furthermore, extra-curricular activities which celebrated Deaf culture, which both hearing and d/Deaf pupils could attend, were provided to raise d/Deaf awareness in the local community and promote a positive Deaf identity amongst d/Deaf pupils. This was something the school was extremely proud of and was promoted across their social media platforms.

d/Deaf role models.

At the time of fieldwork, a DRB pupil was selected as Head Boy by his fellow peers. Throughout the school year, head pupils attended the local university and local parliament to share their experiences at Buttermere school. A d/Deaf Head Boy enabled younger d/Deaf pupils to have a positive d/Deaf role model in the older years to aspire to and promoted positive d/Deaf identities. The school employed both hearing and d/Deaf staff to provide positive d/Deaf role models for pupils. Alongside this, external d/Deaf role models visited the school including a chef, cricketer, TV presenter and dancer. When external d/Deaf role models delivered sessions, these would be given in BSL with a speech interpreter for hearing pupils. This reverse inclusion strategy subverting phonocentrism promoted d/Deaf awareness and

positive d/Deaf role models. Staff members recognised how internal and external d/Deaf role models inspired all pupils. Moving forward, staff members desired additional d/Deaf sporting role models to visit and motivate d/Deaf pupils to participate in physical activity.

CHAPTER SIX.

ACCESSIBLE TEACHING.

Introduction.

This chapter aims to provide a comprehensive understanding of accessible teaching for d/Deaf pupils, representing the first theme generated through abductive thematic analysis, identified as a key component of effective PE teaching at Buttermere school. To achieve this, the chapter discusses and analyses the effectiveness of PE teaching strategies for d/Deaf pupils, in alignment with Buttermere's aims of PE. In doing so, it offers the first insight into teaching strategies being used in England for educating d/Deaf pupils in mainstream PE. The chapter applies phonocentrism and audism to comprehend the implications of teaching strategies on d/Deaf pupils. To analyse the effectiveness of teaching strategies, the perceptions of multiple stakeholders are drawn upon, in doing so this study builds upon previous research on this topic by providing empirical evidence. The chapter is structured around several sub-themes. First, the chapter highlights appropriate considerations when implementing teaching strategies for d/Deaf pupils to share across the PE field to inform practice. Next the chapter identifies how technology can be used to educate d/Deaf pupils in PE. This will enable analysis of its potential benefits, before discussing how technology could be more accessible for d/Deaf pupils. Moving on, the importance of differentiation is discussed, leading to the identification of strategies which can promote d/Deaf pupils' development in mainstream PE. Then, the chapter explores how indoor and outdoor PE settings may influence d/Deaf pupil's experiences. Analysing the differing PE environments sheds light on the unique considerations to facilitate d/Deaf pupils' inclusion and development. The chapter closes by offering suggestions to increase d/Deaf pupils' access and participation in PE and wider sporting opportunities.

A common perception towards effective PE teaching was creating an accessible learning environment to maximise d/Deaf pupils' learning and development. Questioning Mr Greenbank on what effective PE teaching of d/Deaf pupils meant to him, he stated "Making sure everybody can access what it is that's being taught and making sure everybody can ... achieve their potential". Similar feelings were echoed by Mr Wilcock who stated effective PE teaching of d/Deaf pupils meant "making the object of the lesson accessible to them". In this sense, accessible teaching was fundamental to notions of effective PE teaching at Buttermere school. This finding supports NDCS (2019b) who emphasise that accessible teaching strategies can enable d/Deaf pupils to fulfil their potential. In this study, accessible PE teaching

meant making teaching visual to facilitate d/Deaf pupils' learning and inclusion. As Mrs Mulligan highlighted effective PE teaching of d/Deaf pupils is "making everything as visual as possible". Similarly, both Mrs Cobourne and Mrs Dodd stated, "the more visual, the better". Effective teaching was connected to challenging hegemonic phonocentric teaching and learning strategies. Acknowledging the visual-spatial nature of PE, Mr Luck recognised how "PE can be a great subject to include sort of everyone it can be really visual if done right and it can be sometimes it can be quite easy to support people visually". From this perspective, teachers can utilise the visual-spatial nature of PE to their advantage to support and include d/Deaf pupils. Through visual teaching strategies, hegemonic phonocentrism can be challenged to create a more inclusive PE environment for d/Deaf pupils (Maher, 2020). However, teachers should not assume all d/Deaf pupils are visual learners (Marschark et al., 2017). Instead, teachers must consider the heterogeneity of d/Deaf pupils and cater for their needs which will later be discussed. Although a fundamental component of effective teaching was accessible teaching, accessible teaching did not automatically lead to inclusive PE and needed to be considered alongside a host of factors as discussed throughout this thesis.

Teaching strategies and appropriate considerations.

Communication.

Considering that communication is fundamental to pedagogy (Zwozdiak-Myers, 2020), it firstly seems necessary to explore communication methods when educating d/Deaf pupils in mainstream PE. As highlighted by Mr Brakell when discussing effective PE teaching of d/Deaf pupils "communication is key". At Buttermere school, mainstream PE lessons were delivered via speech by a mainstream teacher whilst a DRB LSA provided BSL interpretation. In Mrs Mulligan's words, DRB staff are "listening for that child and passing the information on through BSL. Just making sure that the child has got access to everything that's going on in that room". As most d/Deaf pupils communicated via BSL, participants recognised the necessity of BSL interpretation during mainstream PE to assist d/Deaf pupils' inclusion and development. Commenting on BSL interpretation, Mr Luck stated that it is:

"really important especially as I said, if you need to give that really specific feedback on something or really specific advice obviously I don't sign, I know a little bit of sign but I'm not great at it and so I wouldn't be able to give specific feedback if there wasn't a 1 to 1 or a member of staff to interpret for me".

BSL interpretation was essential to provide detailed, meaningful feedback to enhance d/Deaf pupils' development within mainstream PE. Also, the importance of BSL interpretation was acknowledged by Hannah, a d/Deaf pupil who stated, "if I have someone there signing what's been said then that helps me". Therefore, BSL interpretation was crucial to assist d/Deaf pupils' understanding and learning within PE, acting as a key component of effective teaching within Buttermere school. This finding echoes Powers (2002) who emphasises that an effective communication environment uses sign language. To promote d/Deaf pupils' inclusion and learning within PE, schools should ensure that d/Deaf pupils who require BSL interpretation are provided with an interpreter to deliver accessible teaching. Other methods of communication e.g. radio aids will later be discussed in the sub-theme of technology.

Within this study, participants believed d/Deaf pupils were ocularcentric, thus they believed effective teaching of d/Deaf was visual. Hand gestures were frequently utilised during the explanation of PE activities. For example, prior to a game of dodgeball, Mr Wilcock instructed pupils to not pass the white line, he then stood behind it and pulled a hand across his neck and shook his head. Confirming his understanding, Dan nodded his head to Mr Wilcock. Reflecting upon visual cues, Mrs Doyle emphasised "the kids especially Mr Wilcock's class ... cause he's so animated, I'll sign and they'll just look at him and I go that's great so I won't sign because Mr Wilcock is doing it himself". Through visual cues, Mr Wilcock overcame communication barriers, meaning that d/Deaf pupils had immediate access to instruction which promoted their inclusion in PE. Similarly, to overcome communication barriers during PE, Mrs Jones would raise her hand to stop an activity without providing any verbal instruction. Here, a visual stimulus was provided to all pupils instructing them to stop at the same time, providing pupils were looking in her direction. Hand gestures challenged phonocentric teaching and encouraged a more inclusive PE for d/Deaf pupils (Maher, 2020). However, the effectiveness of hand gestures was contingent upon all pupils looking in the teacher's direction, thus prior to implementing visual cues a teacher should assess whether they have the visual attention of all pupils. Nevertheless, caution is needed to avoid substituting phonocentric practices for ocularcentric practices, as Derrida (1974, p.241) warns "It is once again the power of substituting one organ for another" which would alienate blind or visually impaired people. Therefore, teachers of PE must alter communication methods in alignment with pupils' needs and avoid reinforcing hegemonic teaching practices.

In this study, hand gestures during PE teaching contrasts from previous literature which found that PE teachers did not offer other methods of communication to improve d/Deaf pupils' understanding of activities (Tanure Alves et al., 2021). Though, the contrasting findings could be explained by the differing samples / schools who have varying conceptions of effective PE teaching, impacting the teaching strategies employed. For Mr Luck, hand gestures were used alongside BSL during instruction. For example, during a feedback demonstration to Hannah, he signed "forward" and then placed his hand under his chin whilst holding his head high to instruct Hannah to keep her head up when completing a cheerleading jump. Following this, Hannah practiced the jump again with her head up and straight, as instructed. The use of visual cues in combination with BSL enhanced d/Deaf pupils' development in PE. This was acknowledged during Mr Wilcock's interview, whereby he emphasised opting for visual cues over auditory cues promoted d/Deaf pupils' learning and inclusion in PE. This supports Maher (2020) who suggests hand gestures may be advantageous when teaching d/Deaf pupils in PE. Consequently, teachers should utilise hand gestures to enhance d/Deaf pupil's learning and inclusion within mainstream PE. However, as previously mentioned, Maher and Haegele (2022) warn that PE teachers should not assume all non-verbal communication is effective, but rather explore what works best, in what contexts and with whom. In this study, the varying PE environments and diversity of d/Deaf pupils required staff alter their communication methods to meet pupils' needs to ensure their learning and inclusion. As Mr Luck explained, for Daisy, who usually communicated via speech, the removal of her hearing aids in swimming lessons meant that she relied on visual cues such as demonstrations. Comparatively, d/Deaf pupils who communicated via BSL would be provided BSL interpretation during swimming lessons which was tailored to their literacy levels, as will later be discussed. Consequently, visual cues should be considered alongside d/Deaf pupils' needs and the context to maximise their effectiveness.

Despite Buttermere demonstrating some practices which challenged phonocentrism, it was deeply rooted in PE pedagogy. This supports studies in wider mainstream education of d/Deaf pupils, whereby visual cues during teaching were overshadowed by verbal instruction (Paatsch & Toe, 2020). Throughout fieldwork, phonocentric teaching and learning strategies were evident often leading to d/Deaf pupils misunderstanding activities and being excluded. Observing Mrs Goodison's PE lesson, she stated "change movements when the music changes". Noticing Mrs Goodison's requests, Miss Rodriguez, a DRB LSA, turned to me and sarcastically

commented “change movement when the music changes that’s good isn’t it, jot that down”. As the activity unfolded, Miss Rodriguez stood at the back of the sports hall and utilised BSL to indicate the transitions as pupils moved around the sports hall. Although Hannah kept a close eye on Miss Rodriguez so that she could quickly transition into the next movement, she frequently noticed cues to change movements by watching her peers. In this instance, hegemonic phonocentric teaching was evident through the changing of the music to provide a prompt for pupils to transition into the next movement. Through normalisation (Gore, 1995; 1997) sound and speech has become ‘commonsense’, whilst phonocentric practices were reproduced and became embodied in the habitus of individuals (Hunter, 2004). As phonocentrism became embodied in the teacher’s habitus and was reproduced via their practice, Hannah was excluded from classroom dynamics and was unable to receive information at the same time as her hearing peers. Thus, this study supports Simms and Thumann (2007) more broadly who highlight teaching practices which prioritises English over sign language can have profound negative implications on d/Deaf pupils’ development. Due to the mainstream teacher possessing more legitimate power, Miss Rodriguez arguably felt uncomfortable to intervene despite being aware of the activity’s limitations, perhaps influenced by a fear of future exclusion. However, by failing to challenge power, it resulted in d/Deaf pupils’ exclusion who Miss Rodriguez was meant to serve, whilst maintaining the hearing majority’s power over d/Deaf people. Consequently, schools must empower DRB staff to act as agents and challenge power relations to ensure d/Deaf pupils’ learning and inclusion. Phonocentric teaching was also evident within other PE lessons, in games such as ‘What’s the time Mr Wolf’ when a whistle was utilised to start the game and continue it after the ‘wolf’ turned around.

Reflexive note: After observing the whistle being blown to begin the activity and d/Deaf pupils experiencing a delay starting the activity, only noticing that the activity had begun from copying their hearing peers, I decided to intervene. Considering that mainstream staff possessed limited signing abilities and no DRB staff member was present, I was the ‘DRB expert’ in this setting. I felt a duty to ensure that d/Deaf pupils could access the lesson content at the same time as their hearing peers. In this instance, my intervention was appropriate considering I had strong rapport with Mr Wilcock, and he would often thank me for assisting his teaching, particularly with regards to BSL interpretation within PE and extracurricular activities. When the whistle blew, I signed go, and when the ‘wolf’ attempted to get the class to move via

distracting techniques, I provided BSL interpretation. DRB pupils watched me carefully and successfully completed the activity.

Both examples of phonocentric teaching led to delays for d/Deaf pupils accessing instructions and posed risk to their inclusion in mainstream PE. Phonocentric teaching could be perceived as institutional audism whereby communication methods preferred by hearing people are used for teaching (Eckert & Rowley, 2013; Musengi, 2020). As Mr Luck acknowledged, traditional PE teacher practices are phonocentric and inappropriate when educating d/Deaf pupils

“in other schools I always would have used like a whistle to like get attention to stop people but obviously that's not appropriate with people who aren't gonna hear a whistle you think that's just one example but you think of different ways to get people's attention... so you need to think of ways to alter your lessons... it's not all about maybe using your voice”.

Consequently, teachers of PE must move away from phonocentric teaching to promote d/Deaf pupils' inclusion and development (Maher, 2020).

Notably, in the examples above the presence of a DRB LSA or myself somewhat helped overcome the phonocentric PE environment. However, when DRB staff did not provide BSL interpretation the impacts of phonocentric teaching became evident. For example, when beginning a game of dodgeball Mr Luck stated “go” to begin the game, meaning pupils could collect the balls lined up in the middle of the pitch. However, Mr Brakell forgot to interpret, meaning that Hannah only knew the game had begun once her hearing peers ran out for the ball and she was immediately hit by the opposing team. Utilising a mixture of body language and BSL, Hannah immediately expressed her frustration to Mr Brakell that she did not have an opportunity to collect the ball. Mr Brakell apologised and began to refocus his attention on the PE lesson. Similarly, when year six was setting up for a dodgeball game, Miss Aitchison did not sign girls vs boys meaning that while all hearing pupils moved to the correct side, James remained stationary and was positioned on the girls' team. Following this, all hearing pupils began to stare at James, who was visibly confused. Thus, phonocentric teaching during mainstream PE led to d/Deaf pupils' exclusion. This finding is concerning when analysing d/Deaf pupils' inclusion as intersubjective experiences of belonging, acceptance and value (Haeghele and Maher, 2023). Unequal access to communication through phonocentric teaching symbolised low levels of belonging, acceptance and value of d/Deaf pupils representing their exclusion in mainstream PE. This finding supports Tanure Alves et al. (2021) who

found that inaccessible communication methods during PE was a contributing factor to d/Deaf pupils' exclusion. Within this study, phonocentric teaching arguably represents institutional audism whereby hearing people have a system of advantage by having access to information whilst d/Deaf people are denied access to sign language or a visually rich environment (Gertz & Bauman, 2016). Under institutional audism, d/Deaf people experience physical or pedagogical coercion to adopt hearing standards (Gertz & Bauman, 2016). As Gertz and Bauman (2016) explain, institutional audism is often 'commonsense' - that is the hegemony of hearing. Evidently, phonocentric teaching has become 'commonsense', creating barriers for d/Deaf pupils accessing communication, acting as a form of overt institutional audism. As evidenced above, when institutional audism occurs in PE, hearing is privileged meaning that d/Deaf pupils experience exclusion. However, phonocentric teaching could also be seen as aversive, laissez-faire audism whereby the dominant hearing majority enforce heteronomy despite claiming to appreciate Deaf culture (Eckert, 2010; Eckert & Rowley, 2013). An example of aversive, laissez-faire audism is when d/Deaf children are integrated in mainstream education with aspirations for inclusion, but this does not occur (Eckert & Rowley, 2013). Utilising the example above, it is evident Buttermere school integrated d/Deaf pupils into mainstream PE to promote d/Deaf pupils' inclusion but instead reinforced speech, having adverse effects to its claimed purpose of inclusion, symbolising aversive laissez-faire audism. Regardless of whether the example above is categorised as institutional audism or aversive, laissez-faire audism, it is apparent that phonocentric teaching is an audist practice which excludes d/Deaf pupils. Thus, phonocentric teaching is not accessible teaching and must be disrupted to promote d/Deaf pupils' inclusion and work towards more accessible, and effective PE teaching. The presence of audism in Buttermere school, is concerning considering that a school with a DRB should have d/Deaf pupils included in every aspect of school life (BATOD, 2011). Moreover, it is plausible that audism is more likely to be evident in schools without a DRB. Future research should explore d/Deaf pupils' experiences in mainstream schools without a DRB, whilst remaining vigilant to how audism may manifest in school life.

Through practice, phonocentric teaching was reproduced and accepted by subordinate groups as commonsense (Hargreaves & McDonald, 2000), acting as a hegemonic practice. Hegemonic phonocentric teaching in PE was identified by d/Deaf pupils as inaccessible. During his interview, Dan explained how "I just I don't know what they're saying, I don't know what I have to do". Adding to this, James expressed "I don't like mainstream PE because hearing talk, it goes over my head". Similarly,

Hannah stated within mainstream PE “sometimes it is harder, I do get a bit confused”. Verbal instruction can cause confusion for d/Deaf pupils resulting in feelings of exclusion and negative attitudes towards mainstream PE. Here, hegemonic practices which are reproduced by mainstream teachers are accepted - albeit through gritted teeth by d/Deaf pupils, perhaps influenced by the power relations between the teacher-pupil relationship. As highlighted by Dan “I don’t understand what he’s saying then I end up giving up... fed up of it, year 6 PE”. Phonocentric teaching may cause misunderstanding and low motivation for d/Deaf pupils in mainstream PE, which is problematic considering that intrinsic motivation is strongly correlated with positive pupil outcomes, enjoyment and intended physical activity levels (Ntoumanis, 2001; Alderman, Beighle & Pangrazi, 2006). To prevent misunderstanding and low motivation of d/Deaf pupils in PE, teachers must challenge phonocentrism whilst empowering pupils to act as agents through engaging in open and reflective conversations.

Frequently, phonocentric teaching led to audist expectations, for example when teaching Mr Luck frequently made comments such as “Show me your listening” when attempting to gain the attention of all pupils. Similarly, during an assembly Mr Greenbank stated “make sure we have our listening ears on” prior to giving verbal information. These examples illustrate how phonocentrism may lead to audist expectations, which may ‘other’ d/Deaf pupils and promote hegemonic privilege of hearing pupils over d/Deaf pupils. These examples act as a form of metaphysical audism; whereby audiocentric assumptions and attitudes are used to justify the subordination of the d/Deaf people (Eckert & Rowley, 2013). More specifically, this may be related to aversive, metaphysical audism as the teachers perceive sign language inferior and impose heteronomy through expecting d/Deaf pupils to communicate via speech (Eckert & Rowley, 2013). This reinforces pathological views towards d/Deaf pupils and unintentionally promotes a stigma towards them which ‘others’ from their hearing peers (Eckert & Rowley, 2013). Therefore, when attempting to gain the attention of pupils, teachers should avoid reinforcing audism by intertwining human identity with speaking and hearing.

Reflexive note: After witnessing phonocentric practices at Buttermere school, I jotted down what I had witnessed and its implications on d/Deaf pupils. Am I a hypocrite? I wondered how I have slipped into a phonocentric being at Buttermere school whilst reporting on phonocentrism as a critique. I am cautious how my critique of phonocentric teaching would be interpreted by stakeholders if they were ever to read

my thesis considering I also slipped into phonocentric ways for example, predominantly communicating via speech at the beginning of fieldwork. However, as fieldwork progressed, and my signing abilities developed, I challenged phonocentrism more frequently due to my growing competence of confidence utilising BSL. Whilst Buttermere was taking positive steps towards d/Deaf pupils' inclusion in mainstream PE, phonocentrism remained prominent which needed to be reported on. Evidently, this issue runs more deeply than just Buttermere school but rather society in general. Moreover, it is noteworthy, nor me or participants are 'finalised' characters but rather are unfinished characters who are developing and learning (Frank, 2005).

Demonstrations and feedback.

Within mainstream PE, demonstrations were identified as a key component of effective teaching to facilitate d/Deaf pupils' learning and inclusion. Upon observation, demonstrations were frequently provided to assist the explanation of PE activities.

"make it really visual with lots of demonstrations so in PE lessons, I always hope to always have opportunities where either I model something that I expect to be done or I get children to model things in a way that I expected to be done as they do... and as they do it, we sort of highlight a different aspects of what success might look like so whether that's landing on your balls of your feet, whether that's bending your knees, whether that's bowling in cricket ... like the side pass in rugby, what sort of success looks like and being able to slow children down to say 'oh look this is (child's name) this is look at how she's doing it and what's successful about it' and I think this could translate really well for d/Deaf pupils if you're able to highlight what something looks like and show them what you want it to look like that might be easier that will support them in achieving that skill" (Mr Luck)

From this perspective, demonstrations provide a visual method of instruction to communicate activity expectations and teaching points. As Miss Rodriguez highlights "he (Mr Luck) has been doing all demonstrations and they've seen it clearly of what's expected of them". The visual nature of demonstrations offers an alternative method to communicate instructions within PE, assisting d/Deaf pupils' understanding of activity expectations. Throughout interviews, d/Deaf pupils identified how demonstrations assisted their understanding in PE. As Dan highlighted:

“sometimes the teachers stands, say if they spoken and I don't know what's being said, and I said I don't understand then they will stand up and show me how to do something so and then I understand it and then I can do it”.

Dan explained how verbal instructions can often cause misunderstandings for d/Deaf pupils, however a demonstration following instructions can aid understanding. This finding supports Lieberman (2016) who highlights demonstrations and modelling skills can enhance d/Deaf pupils' understanding of PE activities. Consequently, participants believed demonstrations were a key component of effective PE teaching which advanced d/Deaf pupils' understanding and learning.

Also, participants suggested that demonstrations assisted hearing pupils' understanding in PE. As Mrs Goodison states “I think that works for the d/Deaf children just as much as it does for mainstream children”. The visual nature of demonstrations enhanced all pupils' learning within mainstream PE. These results support the claims of Schultz et al., (2013) who suggests demonstrations may also be useful for hearing peers. Consequently, teachers should provide demonstrations to enhance all pupils' learning in PE.

Furthermore, teachers highlighted providing feedback via demonstrations can assist d/Deaf pupils' development in mainstream PE. As highlighted by Mr Luck, feedback can be given visually via a demonstration to give pupils relevant teaching points to improve their performance. Demonstrations can clarify misunderstandings and provide pupils with meaningful feedback to improve their attainment. For example, during one PE lesson, Dan and James were practicing their karate defence technique when Mr Wilcock then approached them and stated, “right show me how you're doing” and closely observed. Mr Wilcock recognised Dan was incorrectly performing the technique and told Dan to move his right leg forward and demonstrated this, though as Mr Wilcock was facing opposite, Dan copied parallel and moved his left leg forward. In response, Mr Wilcock then tapped Dan's leg which he needed to move, Dan had a blank look on his face and did not move so Mr Wilcock tapped Dan's leg again and then the floor, Dan seemed to understand and moved his leg forward. Mr Wilcock then stood next to Dan as he explained the karate move step by step using BSL “watch me” and when Dan and James correctly performed it, Mr Wilcock signed “Well done”. Thus, demonstrations, visual cues and tactile methods such as tapping and BSL can assist d/Deaf pupils' understanding. However, considering the power

implications regarding a teacher initiating contact, teachers must have initial and ongoing communication with d/Deaf pupils regarding the use of touch (Maher, 2020).

These findings suggest demonstrations enhance d/Deaf pupils' understanding, inclusion and development in mainstream PE. Demonstrations disrupted phonocentric ideologies and established a more inclusive PE environment for d/Deaf pupils (Maher, 2020). However, there are other crucial elements of demonstrations which determine their effectiveness when teaching PE to d/Deaf pupils such as pace, positioning and the timing of instructions which will now be discussed.

Pace and timing.

When delivering demonstrations, participants highlighted the importance of considering its' pace. As highlighted by Mrs Doyle and Mrs Phillips demonstrations should be slower and repeated to assist d/Deaf pupils' understanding of the activity. In Mrs Doyle's words, it needs to be "slower, slower, slower yeah repeat it, just repeat it". Expanding on this Mrs Doyle highlights:

"we'll say to them (mainstream teachers) do that again if they they (d/Deaf pupils) weren't watching because you see with the mainstream (pupils) they can hear everything, so they can turn around they may not be facing the teacher, but they can hear it can't they? Or the teacher may be turned around and not facing the kids but they're still talking ... the mainstream (pupils) is just like in PE they can hear, they can hear it, our children have to see it."

By completing demonstrations slower and repeating these when appropriate, participants suggested d/Deaf pupils would have a greater understanding, increasing the likelihood of success within the activity. This finding supports Maher (2020) who highlights it is essential PE teachers consider the speed of demonstrations when educating d/Deaf pupils. The usefulness of completing demonstrations slower and repeating these has also been highlighted more broadly by Strangwick and Zwondiak-Myers (2004) who suggest this will maximise all pupils' understanding. Therefore, upon implementing a demonstration in PE, a teacher must consider its pace to enhance all pupils' understanding.

Similarly, pace must be considered when giving instructions to d/Deaf pupils in PE, allowing time for BSL interpretation. Frequently, mainstream teachers forgot to allow time for interpretation meaning they would move onto the next activity whilst DRB LSAs were interpreting. For example, during a tennis lesson, Mr Luck gathered the

class in to provide a brief overview of the lesson. After explaining, Mr Luck quickly moved on and chose five pupils (one of whom was Hannah) to stand behind different coloured cones. However, as Hannah was still watching Mr Brakell sign to her, she missed Mr Luck's instructions. Persistent, Mr Luck verbally asked Hannah again to stand behind the cone and stared at her, with his stare from behind Mr Brakell leaving Hannah confused. As Mr Brakell explained "In mainstream PE it can be a lot more fast-paced, and it can be harder to keep up sometimes with the mainstream way of teaching". Whilst some DRB LSAs were comfortable to pause the mainstream teacher such as Mrs Doyle who would state "Hang on, I'm just explaining", other DRB LSAs were less comfortable and would rush interpretation, not signing in full, meaning d/Deaf pupils would miss teaching points. In these instances, conflict between the mainstream teacher's legitimate power and the DRB LSA's expert power were played out. By intervening the teaching of a mainstream teacher with more legitimate power, DRB LSAs risked potential exclusion, though by not doing so they would not fulfil their job role to ensure d/Deaf pupils' understanding and inclusion. Moving forward, mainstream teachers must allow time for interpretation when teaching d/Deaf pupils whilst a collaborative working environment should be established which encourages DRB LSAs to challenge legitimate power with their expert power to ensure d/Deaf pupils' learning and inclusion in mainstream PE.

Within the PE field, there has been a tendency for teachers to explain a demonstration at the same time as delivering it. The practice of delivering instructions and demonstrations simultaneously during PE teaching has become naturalised, which Hargreaves and McDonald (2000, p.50) describe more broadly as 'commonsense'. However, at Buttermere school, it was believed that effective PE teaching for d/Deaf pupils involved separating instructions and demonstrations. As Mrs Mulligan stated, "good practice is separating your demo and your dialogue". Expanding on this Mrs Mulligan explained that:

"the class teacher might say right so I'm going to demonstrate this now and this is what I hope to do and now I'm gonna do it, watch, rather than talking and doing the demonstration at the same time because it's too much going on".

Adding to this, Mr Luck explained that "it can be hard when you're modelling something and talking you've got someone signing next to you but if a child is watching the signing they may miss the actual physical modelling". To avoid d/Deaf pupils missing teaching points it is vital instructions and demonstrations are provided

separately, and time is allocated for BSL interpretation as previously discussed. Unfortunately, upon observation of PE, teachers tended to provide instructions and demonstrations simultaneously. Meanwhile, DRB staff often provided BSL interpretation simultaneously to the demonstration. Consequently, some d/Deaf pupils were torn between watching the demonstrations or the BSL interpretation of the instructions. During her interview, Mrs Couborne explained the difficulties of providing instructions and demonstrations simultaneously:

“I’m trying to explain to them, but they’re also attracted to the person, the mainstream teachers so they can’t watch the two they can’t watch the two, they can’t watch the mainstream teacher and if their demonstrating something and also you know me”.

This finding indicates that d/Deaf pupils struggle to watch the signer’s instructions and the demonstration simultaneously, thus d/Deaf pupils would miss one of the key methods of communication leading to d/Deaf pupils misunderstanding activities. For example, during a tennis lesson, when Mr Luck gave his demonstration, he added key teaching points alongside it such as “Get my feet behind me”. After this, the class was instructed to practice their backhand hits, however as instructions and demonstrations were provided simultaneously, d/Deaf pupils experienced confusion. Hannah sought out Mrs Doyle enquiring whether they were supposed to be practicing a forehand or backhand hit. Meanwhile, Daisy asked her peers “will you have the racket, I just don’t understand”, handing the racket to her partner and taking up the role of feeding the ball. Thus, when instructions and demonstrations are provided simultaneously, d/Deaf pupils may misunderstand PE activities. These findings highlight the necessity of providing instructions and demonstrations separately to promote more inclusive PE for d/Deaf pupils.

When instructions are provided at the same time as demonstrations, Miss Rodriguez highlights that it:

“can be hard then obviously they’re having to look at me and look at the demonstration at the same time so I’ll just try and stand as close to the person who’s doing it as possible or I’ll let them watch it and then I’ll explain afterwards so they’re getting both making sure they get in both of the information clearly”.

When instructions are given during a demonstration, DRB staff must remember to provide pupils with instructions following the demonstration to maximise d/Deaf

pupils' understanding and development. However, unless d/Deaf pupils are informed of this in advance, they may experience confusion by the teacher's instruction or demonstration. Moreover, it is possible that as time passes, DRB staff may forget the instruction given and provide lower quality instruction than those initially provided. Therefore, teachers of PE should refrain from providing instructions and demonstrations simultaneously as this may lead to distractions, confusion and misunderstanding for d/Deaf pupils, negatively influencing their inclusion and development. Moving forward, Mrs Coubourne and Mrs Mulligan suggest teachers should provide instructions prior to a 'silent' demonstration. This finding is supported by NDCS (2015) who emphasise PE teachers should provide silent demonstrations when educating d/Deaf pupils. Notably, Strangwick and Zwondiak-Myers (2004) highlights providing instructions before a demonstration may help all pupils as they know what they are looking for during the demonstration to maximise their development. Consequently, teachers should provide instructions prior to demonstrations to enhance all pupils' understanding in PE.

Reflexive note: *Having read literature surrounding demonstrations, I was sensitive to how instructions were delivered with demonstrations considering that this had been neglected. This influenced how much attention I paid to them during fieldwork, frequently I observed mainstream teachers giving demonstrations and instructions simultaneously which sparked my interest in how d/Deaf pupils reacted afterwards. Would they be merely copying the demonstration, or would the demonstration enhance understanding? Additionally, my sensitivity to demonstrations and instructions being provided simultaneously influenced the questions I asked participants. During interviews, I asked staff if there were any considerations needed when providing a demonstration to d/Deaf pupils. Surprisingly, some mainstream staff who reported the importance of delivering instructions and demonstrations separately did not do this in reality. This made me feel a sense of disappointment that considerations for demonstrations would often be forgotten amidst the chaos of the lesson.*

Instructions.

Throughout this study, most participants highlighted clear, concise instructions were vital for effective PE teaching of d/Deaf pupils. Mainstream teachers believed concise, clear instructions facilitated d/Deaf pupils' understanding and engagement. As Mr Luck highlighted "I try and sort of make my language more sort of simple and clear

and concise so that it it just sort of aids in the signing and aids in their understanding of lessons". This finding suggests that reducing the quantity of phonocentric teaching by providing clear and concise instructions can improve d/Deaf pupils' understanding in PE. The use of concise, focused teaching input was promoted throughout school documentation including Buttermere's accessibility plan. Importantly, this finding supports Reich and Lavay (2009) who suggest PE teachers should keep verbal instructions short and concise to enhance d/Deaf pupils' understanding. This is important as teachers who have clear and effective communication can support d/Deaf pupils' learning alongside their social and emotional development (NDCS, 2015). Notably, Strangiwick and Zwondiak-Myers (2004) extend the usefulness of clear, concise instructions to all pupils to maximise physical activity and pupil engagement. Through clear concise instructions, teachers can reduce the quantity of phonocentric teaching whilst maintaining the clarity of instructions to enhance all pupils' development in mainstream PE.

Positioning during demonstrations and instructions.

When providing demonstrations, the positioning of mainstream teachers and d/Deaf pupils was highlighted as an important consideration. The extract below illustrates the importance of teacher and pupil positioning during demonstrations:

"we'll say to them (mainstream teachers) do that again if they (d/Deaf pupils) weren't watching because you see with the mainstream they can hear everything, so they can turn around they may not be facing the teacher, but they can't hear it, can they? Or the teacher may be turned around and not facing the kids but they're still talking it's like ... the mainstream is just like in PE they can hear, they can hear it, our children have to see it" (Mrs Doyle)

Prior to giving a demonstration d/Deaf pupils must be facing the right way, can see and are watching the teacher. Observing PE, Mr Luck often verbally asked Daisy who communicated via speech "can you see me?" which would often prompt her to move to the front of the class. Similar comments would be made by DRB staff during PE to ensure that d/Deaf pupils who communicated via BSL could see demonstrations being delivered such as "can you see?" (Miss Rodriguez). As Mr Wilcock stated, "use lots of eye contact when you're when you're demonstrating a drill and just keeping the connection between you and the d/Deaf children in your class making sure that they're focused and engaged". Thus, eye contact during demonstrations ensured d/Deaf pupils were focused to increase their understanding of activities. These

findings echo Reich and Lavay (2009) who highlight PE teachers should face d/Deaf pupils and make eye contact when demonstrating or speaking. Although d/Deaf pupils would be smoothly moved to the front most of the time, occasionally these requests seemed to single out d/Deaf pupils. For example, prior to one demonstration, Mrs Doyle shouted and signed “come forward, you can’t see back there, come on DRB, come forward”. As instructed, Dan and James shuffled to the front of the class with rosy cheeks, under the gaze of their hearing peers. In this instance, Mrs Doyle’s attempts to ensure d/Deaf pupils’ learning and inclusion ‘othered’ Dan and James from their hearing peers. Mrs Doyle’s attempts to include d/Deaf pupils within mainstream PE had an adverse effect to those intended. This finding supports Reich and Lavay (2009) who suggest teaching strategies intended to include d/Deaf pupils may be counterproductive if d/Deaf pupils feel embarrassed or singled out. Consequently, staff must carefully consider how they alter the positioning of pupils and themselves during instructions and demonstrations which will now be discussed.

When teaching outdoors, it was vital mainstream teachers and DRB staff considered the direction of the sunlight in relation to their positioning during demonstrations and instructions. If incorrectly positioned sunlight could restrict a d/Deaf pupil’s ability to lipread or watch signs. Considering this, mainstream teachers would often alter their positioning depending on the direction of the sun. For example, when delivering a tennis PE lesson, as the class gathered in for instructions, Mr Luck noticed the direction of the sun. Following this, Mr Luck asked pupils to turn around whilst he moved to face opposite from his original positioning, so the sunlight was in his eyes rather than the pupils. This incident was acknowledged by Mr Brakell who suggested Mr Luck’s positioning symbolised his d/Deaf awareness as d/Deaf pupils may struggle to lipread or watch the interpreter when facing the sun. Thus, teachers and DRB staff must consider their positioning during demonstrations and instructions in relation to sunlight to ensure d/Deaf pupils’ learning and inclusion in PE. Although previous literature has highlighted the importance of PE teachers’ positioning in relation to sunlight when teaching d/Deaf pupils who lip-read (Hodge et al., 2012; Lieberman, 2016; Maher & Haegele, 2022), this finding extends this to BSL users. Considering the direction of sunlight when providing a demonstration may enhance all pupils’ learning and understanding (Srangwick & Zwondiak-Myers, 2004). Therefore, teachers must consider the direction of sunlight when providing a demonstration to enhance all pupils’ learning and development in PE.

Observing PE lessons, DRB staff would position themselves next to mainstream teachers during instruction to ensure d/Deaf pupils’ attention was directed to one

area. This finding corroborates Lieberman's (2016) argument that an interpreter should stand next to PE teachers during instruction. As Mr Brakell acknowledges if he is positioned incorrectly in PE, d/Deaf pupils may encounter confusion and misunderstandings. Upon observation, when DRB staff were poorly positioned in relation to d/Deaf pupils and the mainstream teacher, d/Deaf pupils experienced misunderstandings. For example, during Mr Wilcock's PE lesson, he stood at the front of the class with all pupils facing him including Dan and James who had positioned themselves near the front. Mr Wilcock explained how to use the fitness circuit, first by verbally explaining and then by demonstrating. As previously mentioned, providing instructions prior to a demonstration was recognised by participants as good practice, however this was contingent on appropriate staff positioning. In this instance, Miss Aitchison positioned herself at the side of the hall, behind d/Deaf pupils, thus Dan and James kept turning around to see instructions, meaning that they either missed key instructions or parts of the demonstration. Consequently, DRB staff's positioning was a key determinant of d/Deaf pupils' understanding and learning within mainstream PE. This finding supports Maher and Haegele (2022) who highlight the interpreter's positioning as crucial to successful communication. Therefore, interpreters and mainstream teachers must be positioned next to each other when providing instructions to enhance d/Deaf pupils' understanding and learning in PE. This requires an awareness on both behalf's to be flexible with their positioning during PE lessons. Considering the importance of staff positioning in conjunction with how instructions and demonstrations are given, various teaching components must exist simultaneously to enable effective teaching of d/Deaf pupils as discussed throughout this thesis.

Additionally, participants acknowledged how a teacher's positioning and movement may influence d/Deaf pupils' understanding of PE activities. DRB staff suggested a teacher's continuous movement coupled with verbal instructions exacerbated the likelihood of misunderstandings for d/Deaf pupils in PE as they often lacked eye contact or sight of facial expressions. The following quote by Miss Harrison expresses the difficulties for d/Deaf pupils when a mainstream teacher is continuously moving and communicating via speech in PE:

"I was in there the other day and ... the class teacher was all over the hall just walking here there and everywhere you know he did have the radio aid on, he had the transmitter but he was facing the other way, it's really nosy in the hall, it's really echoey so it's almost impossible for our children

to follow the teacher, what's going on its also really hard for the support staff to be chasing the teacher around to see what's going on".

This is concerning as eye contact is a key aspect of communication for d/Deaf pupils (NDCS, n.d., e). A teacher's continuous movement coupled with verbal instructions and background noise may exacerbate the likelihood of misunderstandings for d/Deaf pupils in PE. Adding to this, Mrs Cobourne, a DRB LSA expressed that "it's really difficult to keep eye contact and for them (d/Deaf pupils) to understand what's going on". From this perspective, a teacher's continuous movement infringed on DRB staff's ability to maintain eye contact when communicating instructions to d/Deaf pupils, negatively impacting d/Deaf pupils' understanding in PE. These findings echo Reich and Lavay (2009) who highlight PE teachers should avoid walking around when providing verbal instructions as this may orientate their mouth away from pupils or make it difficult for d/Deaf pupils to hear. Consequently, teachers should remain stationary when giving instructions to facilitate d/Deaf pupils' learning in PE.

Notably, the strategies identified above were deemed effective or ineffective by stakeholders at Buttermere in alignment with their aims of PE. Considering this, the teaching strategies previously discussed may not be universal or deemed effective in other schools, yet they may provide useful guidance for similar settings (Iantaffi et al., 2003b). Also, the teaching strategies proposed by stakeholders were not consistently applied at Buttermere, with staff's self-report often differing from their practice confirmed by fieldwork observations. For example, whilst Mr Luck expressed that he ensured his facial expressions were always visible by facing pupils when giving instructions, this did not always occur as prior stating this he gave Hannah verbal feedback and asked her to give a demonstration to the rest of the class whilst he was stood behind her. Although staff recognised key components of effective PE teaching and attempted to implement these, they would often be forgotten during the lesson. Additionally, whilst several teaching strategies were highlighted as effective practice, these needed to be implemented alongside numerous components of teaching as previously discussed. Moreover, staff were mindful the effectiveness of teaching strategies depended upon the learner's needs. As highlighted by Miss Rodriguez "different strategies work for different groups... what works for year five and six is completely different to year 3 and 4". The heterogeneity of d/Deaf pupils meant that the effectiveness of teaching strategies varied depending on the learner's needs. Therefore, an effective teacher of PE will be flexible in the teaching strategies they employ, altering these when appropriate to maximise d/Deaf pupils' learning and inclusion. This finding supports Reich and Lavay (2009) who state PE teachers must

be aware of the d/Deaf pupils' individual needs. Consequently, there is not a universal teaching strategy that is effective for every d/Deaf pupil (Wang, 2010).

Differentiation.

At Buttermere school, effective teaching was closely connected to differentiation whereby a focus on personal achievement and inclusion was prevalent. Throughout school documentation, the importance of differentiating teaching to meet pupils' needs and staff training in differentiation was highlighted. Through differentiation, school policies suggested teachers could enhance the accessibility of their lessons and work towards more inclusive and effective teaching in all subjects, including PE. This finding supports Vickerman and Blundell (2012) more broadly who suggest that effective teaching requires a commitment to inclusion and differentiation to meet pupils' needs.

For DRB staff, differentiation involved communicating language in a manner that was appropriate to d/Deaf pupils' literacy levels to ensure their understanding and development in mainstream PE. As Mrs Phillips suggests effective teaching is:

“making sure that information is communicated to the child at the child's level as well so it's not just about being able to sign the information, it's about knowing the level of the child and what level to deliver the information to”.

Similarly, Mr Brakell explained that his role required him to have knowledge of d/Deaf pupils' literacy levels to cater to their needs. Thus, DRB staff must have a sound understanding of d/Deaf pupils to successfully differentiate their language. These findings support Knoors and Hermans (2010) more broadly in education who highlight the importance of interpreters and teachers altering their language to pupils' linguistic and cognitive needs. Consequently, effective PE teaching of d/Deaf pupils at Buttermere school involved differentiating language appropriate to the literacy levels of the learner to facilitate their learning and development. However, differentiating language to cater for d/Deaf pupil's literacy needs may be somewhat problematic as illustrated through the example below:

“the teachers can be standing there and they'll say like loads of stuff but our kids languages is that far down, it's not it's not like at the level of like a year 6 hearing child so we break it down, so we break that language down to whatever the level the child is sometimes it might just need two

signs, the whole sentence of like this (stretches arms apart) and we will just no do that, that way or watch (points and signs watch)” (Mrs Doyle)

Although this statement could be seen as simply differentiating teaching to meet pupils’ literacy levels, some Deaf studies scholars would suggest this is an example of individual, aversive audism or institutional covert audism, whereby an interpreter filters information depending on what they perceive relevant (Eckert & Rowley, 2013). The juxtaposition between these two interpretations sheds light on the difficulties DRB staff face when attempting to provide d/Deaf pupils access to all classroom interactions and differentiate teaching to facilitate d/Deaf pupils’ understanding and learning in mainstream PE. However, in Miss Harrison’s opinion:

“there’s no quality teacher teaching first, because their learning has to come three ways. So the class teacher is speaking to the person who is signing, so the person who is signing is actually teaching the child because if you take away the interpreter then the child isn’t going to learn anything so it’s the interpreter that’s the vital role there but the interpreter isn’t a qualified teacher and so hasn’t been through teacher training and isn’t maybe a PE specialist and also maybe isn’t thinking about all the language acquisition that’s acquired.”

From this perspective, d/Deaf pupils are not receiving the same lesson content or learning opportunities as their hearing pupils to develop their language acquisition in mainstream PE, limiting their development. This finding supports literature more broadly which has suggested when interpreters filter information, d/Deaf pupils do not have access to the same lesson content as their hearing peers, placing them at greater academic risk and denying them opportunities to develop their language acquisition from their teacher’s input (Schick, Williams & Kupermintz, 2006). To facilitate d/Deaf pupils’ development in PE mainstream teachers should become fluent in BSL and DRB staff should undertake PE training whilst interpreting in full.

Throughout fieldwork, mainstream staff integrated differentiation into their practice in various ways. During one PE lesson, Mr Wilcock introduced an obstacle course whereby pupils worked in a group of three with one pupil being blindfolded and guided by their teammates through the course. Upon introducing this activity, Mr Wilcock stated that pupils did not have to complete the obstacle course in the same way that he demonstrated, and pupils can adapt their movements. Moreover, due to safety reasons, Mr Wilcock adds that d/Deaf pupils will not be blindfolded “if I’m d/Deaf, I’ll look up and they’ll guide me through”. Mr Wilcock adds that pupils should verbally

support each other but highlights “if somebody in your team is d/Deaf you won’t be able to do that, you may need to do it another way so using touches”. Here, Mr Wilcock provided pupils with adaptations to differentiate the activity to ensure d/Deaf pupils’ inclusion within mainstream PE. Therefore, differentiation promoted d/Deaf pupils’ inclusion, making differentiation a key aspect of effective teaching at Buttermere school.

Throughout the Spring term, Mr Wilcock encouraged pupils to consider differentiation and the inclusion of pupils with SEND through introducing a scheme of work whereby pupils assessed the success criteria of a PE activity by its understanding, accessibility, enjoyment and inclusivity. On one occasion, Mr Wilcock specifically asked Dan and James how inclusive the dodgeball game was for a d/Deaf person, James replied “good, its easy”. Gathering the opinions of d/Deaf pupils regarding the inclusivity of activities is promising considering Vickerman and Maher (2018) suggests PE teachers should engage in discussions with pupils with SEND and listen to their PE experiences to understand their needs, contributing to more inclusive PE. However, Mr Wilcock’s attempts to foster d/Deaf pupils’ inclusion may have had an adverse effect than those intended. As Jarvis (2003) highlights more broadly some d/Deaf pupils do not want to be singled out in front of their peers, thus caution must be taken to avoid embarrassing them.

As Mr Wilcock proceeded, he asked how inclusive the game was for visually impaired individuals and how pupils could adapt it for someone with a visual impairment. After receiving pupils’ answers and confirming the adaptation of adding a ball with a bell in, Mr Wilcock explained how activities can be adapted. This is important considering teaching pupils without SEND about pupils with SEND and appropriate adaptations can foster positive attitudes towards pupils with SEND (Ruscitti, Thomas & Bentley, 2017). By educating pupils about differentiation and the needs of pupils with SEND, Mr Wilcock fostered an inclusive learning environment and positive attitudes towards pupils with SEND.

Additionally, differentiation involved adapting activities as they unfolded to enhance d/Deaf pupils’ development within PE. For example, after Mr Luck observed Daisy having little success returning a forehand hit to her partner during a tennis lesson, he intervened and told pupils via speech and hand gestures to move closer to one another. Following this, Daisy gradually began to experience greater success and was able to return the ball to her partner accurately. In differentiating activities to meet Daisy’s needs, Mr Luck enhanced her development within PE. As differentiation

promoted the development of all pupils within PE, it was a key component of effective teaching at Buttermere school.

Assessment.

Assessment is a key element of pedagogy (Newton & Bowler, 2020; Casey & Kirk, 2024; Lieberman, Houston-Wilson & Grenier, 2025). Therefore, the following section explores assessment to gain a detailed understanding of its contribution to pedagogical decisions and strategies at Buttermere school. Teaching policies highlighted that summative assessment should be utilised to enable monitoring and appropriate provision for all pupils (Buttermere's teaching policy).

Each term, class teachers met with the Headteacher and SENCO to discuss class progress in all curriculum subjects. Following this, appropriate plans were established to support all pupils learning needs (e.g. School Improvement and Development Plan (SIDP)). Therefore, summative assessment helped identify areas of improvement to promote all pupils' learning and development and helped inform policies such as the SIDP.

Although teaching policies promoted summative assessment, it was neglected in PE. Within PE, summative assessment only occurred at the beginning and end of swimming terms to monitor pupil progress, ensure ability grouping and comply with water safety regulations in the NCPE (DfE, 2013b). An external swimming teacher delivered all swimming assessments. Summative assessment in swimming was criterion-referenced whereby both hearing and d/Deaf pupils were assessed on the same predetermined criteria (the ability to swim twenty-five meters) (Newton & Bowler, 2020). Also, summative assessment during swimming was norm-referenced whereby students were ranked and ordered relative to a group based on their ability (Lok, McNaught & Young, 2015). Norm-referenced assessment was evident by pupils being split into three groups based on their swimming abilities (swimmer, beginner and non-swimmer). Although criterion-referenced and norm-referenced swimming assessment was underpinned by ableism, and for the dominant majority, assessment was not audist as with BSL interpretation, d/Deaf pupils could fully engage. Nevertheless, criterion-referenced and norm-referenced assessment did not consider other aspects of a d/Deaf pupil's life which influenced their abilities within assessment. During fieldwork, Mrs Mulligan emphasised that

“our kids (DRB pupils) won't necessarily have access to the same sporting opportunities that mainstream children will have... This is why I always

get ours whether it's their year group or not into swimming because they just haven't got that opportunity".

Adding to this, Mrs Dodd highlighted that d/Deaf pupils have less opportunities to attend swimming lessons outside of school compared to their hearing counterparts due to the lack of BSL interpreters at local swimming classes. Similarly, Miss Harrison highlighted that:

"95% of the children in school can go and access their local swimming lessons or the local football team or the local gymnastics club, it's much harder for our children because the people who lead the clubs aren't sign language users".

As d/Deaf pupils have less physical activity opportunities outside of school, this may negatively impact their ability which is problematic when they are criterion-referenced and norm-referenced against the hearing majority. Norm-referenced assessment discriminates high and low achievers (Loy et al., 2015). Although d/Deaf pupils have the same physical capabilities as their hearing peers, many pedagogical and life factors influence d/Deaf pupils' ability during PE assessment for which must be accounted. For example, pedagogical factors e.g. previous phonocentric instruction and life factors e.g. fewer physical activity opportunities and incidental learning opportunities can influence d/Deaf pupils' attainment in PE. As criterion-referenced assessment and norm-referenced assessment do not consider the confounding factors of pupils' attainment, it may be beneficial to move away from them during PE assessment. Nevertheless, ensuring all pupils' water safety is paramount before beginning swimming lessons. For this reason, further research regarding the most appropriate form of assessment for d/Deaf pupils within mainstream swimming lessons is needed to ensure accessible and inclusive assessment practices.

Although teaching policies promoted summative assessment, Buttermere's accessibility plan encouraged teachers to assess pupils' understanding in various ways, and within PE formative assessment was frequently utilised. Formative assessment consisted of gathering information about pupils' attainment through teacher observation which could be utilised as feedback to alter teaching and learning activities (Black and Wiliam, 1998 cited in Chng and Lund, 2018). Upon observation, mainstream teachers provided individual feedback based on pupils' abilities to meet learning objectives and enhance pupils' skill acquisition. As mentioned earlier in the chapter, after Mr Luck observed Daisy, a d/Deaf pupil having little success returning the ball to her partner during a Tennis lesson, Mr Luck instructed pupils to move closer

to one another by using speech and hand signals. In this instance, delivering instructions via speech and hand signals was appropriate as this was Daisy's preferred method of communication and enabled her to understand Mr Luck's instructions. Following this, Daisy experienced greater success returning the ball to her partner accurately. By gathering information on pupils' progress and adapting activities to meet pupils' needs, Mr Luck used formative assessment to enhance pupils' skill acquisition. In Mrs Goodison's words:

"if I can see that they're struggling, I'll suggest something else you know if it's throwing and catching you might suggest start closer together first and then move back each time rather than getting all fed up with the ball going all over the place so just addressing things as you see them"

As Mrs Goodison suggests, formative assessment which alters activities to meet pupils' needs may enhance their success, motivation and engagement in PE. This finding supports literature more broadly which suggests that formative assessment optimises pupil learning and motivation (Chng & Lund, 2018; Leenknecht et al., 2021; Slingerland, Weeldenburg & Borghouts, 2024). Therefore, mainstream teachers should integrate formative assessment to improve d/Deaf and hearing pupils' development and motivation in PE.

Frequently, formative assessment took place using assessment for learning strategies (AfL) in PE. AfL involves "seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there" (Chng and Lund, 2018, p.30). A notable example of AfL which has previously been mentioned was when Mr Luck observed Hannah's cheerleading jump and gave her a feedback demonstration where he instructed her to keep her head up and look straight when completing the jump. After this, Hannah altered her technique to ensure that she kept head up and straight to enhance her performance. By recognising how improvements could be made and providing feedback to pupils to help them achieve lesson outcomes, Mr Luck used AfL to enhance pupils' development (Capel & Whitehead, 2015). Thus, Mr Luck productively used assessment as Teacher's Standards (DfE, 2011) desires.

Also, plenaries were provided throughout PE to enhance d/Deaf and hearing pupils' learning. Mrs Goodison highlighted that effective teaching involved:

"stopping them and going 'no this is what we need to do this is where we went wrong' and acknowledging the mistakes in the misconceptions and

then bringing them back and showing them, this is how we need to be doing it to try to do it”.

Through observing pupils and utilising plenaries to acknowledge mistakes and highlight areas of improvement, AfL was incorporated into the PE lesson to help learners reflect on lesson content and identify the next steps (Capel & Whitehead, 2015). Here, pupils were encouraged to use information to make decisions and take ownership of their learning (Black & William, 2009; Chng & Lund, 2018). This finding is encouraging as Stewart and Ellis (1999) suggest that d/Deaf pupils who are given ownership during PE are more interested and participate more. Therefore, to create positive PE experiences for d/Deaf pupils, teachers should implement AfL.

Also, in Mrs Goodison's statement above, she states that plenaries can clarify misconceptions to advance pupils' learning. This statement was echoed by Mrs Mulligan who highlighted that plenaries in mainstream PE lessons assist d/Deaf pupils understanding of lesson content. Addressing misconceptions during plenaries is particularly important for d/Deaf pupils who may have initially experienced communication barriers due to phonocentric teaching. The benefits of plenaries are supported by Elliott (2019) more broadly in education who suggests plenaries can identify and explore any misconceptions amongst pupils. Consequently, plenaries as part of the AfL may assist all pupils' understanding, acting as a key component of effective PE teaching.

Whilst AfL strategies including plenaries were the same for both hearing and d/Deaf pupils, how instructions were delivered varied to ensure accessible teaching. For example, during plenaries d/Deaf pupils were provided with BSL interpretation whilst hearing pupils were given instructions in speech as previously discussed. Therefore, implementing AfL strategies alone is not enough to guarantee positive PE experience for d/Deaf pupils and must be considered alongside a host of factors including pupils' preferred method of communication.

Although AfL was commonly performance orientated (Lorente-Catalán & Kirk, 2016), occasionally AfL was utilised to encourage pupils' social development. For example, during one PE lesson, upon asking each group to demonstrate the activity they had created focused on teamwork, Mr Wilcock asked the rest of the class to assess the groups' teamwork out of ten and provide feedback on how they could improve. Here, AfL via peer assessment encouraged pupils to reflect on performances, consider what constituted good teamwork and areas for improvement. Despite Mr Wilcock encouraging all pupils to provide peer-feedback, Dan and James did not engage with

the wider class discussion and instead discussed their answers between themselves in BSL, demonstrating their understanding but lack of confidence engaging in group discussions. Nevertheless, through AfL via peer-assessment, pupils acquired knowledge and skills to achieve desired outcomes, in this case an understanding of effective teamwork (Newton & Bowler, 2015; Chng & Lund, 2018). This finding supports Newton and Bowler (2020) who suggests that assessing peers can positively impact pupils' own attainment by enhancing their understanding of the activity. As AfL assisted pupils' development, Buttermere school achieved a key desired outcome for PE, thus AfL was strongly connected to practices of an effective teacher. These findings support Wong (n.d. cited by Shelton & Pollingue, 2005) that an effective learning environment will utilise AfL. However, moving forward, to maximise the effectiveness of AfL alongside d/Deaf pupils' confidence and inclusion in PE, teachers must be aware of competent bystanders and encourage their engagement in AfL and peer-assessment.

Notably, AfL occurred through ipsative assessment whereby pupils' performances were compared with their own previous attainment (Newton & Bowler, 2020). As Mr Greenbank states, a focus on personal achievement means that "We can now see everybody making progress at their own level at their own speed and they're not pitched up against each other... watching the kids kind of become more and more confident". No set ability criteria for assessment meant that pupils' individual factors could be accounted for whilst focusing on personal development helped pupils become more confident and motivated. Thus, ipsative assessment encouraged pupils to become competent, confident and motivated learners in PE. This finding supports Maher, van Rossum and Morley (2023) more broadly who found that PE teachers who focused on pupils' individual development motivated pupils with SEND in PE. A focus on personal development during ipsative assessment was particularly important for d/Deaf pupils considering that various factors influenced their performance during assessment as previously mentioned. Therefore, teachers of PE should implement ipsative assessment to motivate pupils and promote all pupils' development. Nevertheless, for ipsative assessment to be effective, teachers must have clear assessment criteria alongside effective planning and recording of pupil progress (Luke, 2009; Newton & Bowler, 2020). This feedback must also be communicated in an accessible manner to ensure that d/Deaf pupils understand and move forward with to ensure that they are not disadvantaged compared to their hearing peers.

Furthermore, Buttermere school engaged in school self-evaluation (SSE) to assess teacher effectiveness which consisted of pupil interviews, questionnaires and pupil

voice. These tasks were administrated by staff members and were conducted with hearing and d/Deaf pupils. Here, school development priorities and development areas could be identified in alignment with their aims of inclusion. Listening to pupil's voices during SSE is particularly important considering that teacher effectiveness and feelings of inclusion are subjective. Thus, this study echoes Maher, van Rossum and Morley (2023) who emphasise the necessity of listening to the voices of pupils with SEND concerning assessment within PE. SSE enabled Buttermere to assess their teaching effectiveness against their own criteria to improve teaching quality. This finding supports Kyriakides & Campbell (2004) more broadly who suggest SSE can improve the quality of pedagogy. To ensure effective teaching and the improvement of pedagogy, schools should engage with self-evaluation to enable areas of improvement to be identified, appropriate actions to be made and good practice to be shared. Although this study has explored assessment and the benefits of ipsative and formative assessment for both hearing and d/Deaf pupils, it remains a neglected field of study and requires further investigation.

The place for technology.

The implementation of technology acted as a key component of effective PE teaching of d/Deaf pupils at Buttermere. School policies highlighted assistive technology would be purchased where necessary to ensure accessible teaching throughout curriculum subjects. For example, some d/Deaf pupils used radio aids to hear the teacher's voice more clearly through background noise (NDCS, 2019C). Mainstream teachers wore a radio aid transmitter when educating d/Deaf pupils in PE and checked d/Deaf pupil's hearing aid/cochlear implant was connected to the transmitter. The radio aid transmitter would be worn around the teacher's neck to improve d/Deaf pupil's access to verbal information. This finding is encouraging considering that NDCS (2019C) highlight d/Deaf children should have the latest technology to improve their access speech, the curriculum, the auditory environment whilst supporting their language development. Consequently, if d/Deaf pupils utilise radio aids, teachers should wear radio aid transmitters to improve d/Deaf pupil's access to the lesson content and promote their inclusion and development in PE.

When engaging in conversations that did not include d/Deaf pupils who wore the radio aid, teachers temporarily turned the transmitter off to prevent d/Deaf pupils experiencing confusion and disorientation. However, occasionally, teachers would forget to turn the transmitter back on before giving verbal instructions, leading to d/Deaf pupils missing teaching points. Therefore, teachers of PE must remain mindful

of d/Deaf pupils accessing communication via the radio aid and turn this off and on where appropriate. This finding supports the guidance of NDCS (2019c) which highlight teachers should remember to switch the transmitter on when speaking to the whole class or the group the d/Deaf pupil is working in and switch it off when appropriate.

However, assistive technology may be linked with oralist approaches in d/Deaf education (Foss, 2014) and may be seen as a technique to 'overcome deafness' (O'Brien, & Emery, 2014) whilst reinforcing phonocentric teaching. Phonocentric teaching practices may facilitate and justify 'othering' and hegemonic privilege (Eckert & Rowley, 2013). Consequently, assistive technology may 'other' d/Deaf people, whereby they are considered different and inferior (Israelite et al., 2002). Notably, radio aids were utilised in combination with various teaching strategies that challenged phonocentrism, as discussed previously. Moreover, radio aids were predominantly used for d/Deaf pupils whose preferred method of communication was speech. Therefore, when implementing assistive technology teachers should be aware of its potential consequences and consider pupils' preferred methods of communication.

Beyond assistive hearing technology, staff at Buttermere school had various technological devices at their disposal. Firstly, participants identified how iPads within PE lessons could assist the explanation of activities. During her interview, Mrs Phillips, a DRB staff member stated:

"For the younger children who may not higher level of language, I've found useful to take an iPad in on occasion so that if they're talking about... I dunno like say in reception they say we're walking in the woods an obviously I'm thinking the child doesn't know what the woods is so I'd have the iPad there to show the woods 'oh look you're in the woods' to show them a picture that explains and then explain you're going for a walk here, that's called the woods, it's then it's an opportunity to develop their language, learn new vocab."

From this perspective, iPads can provide a visual stimulus for d/Deaf pupils to clarify misunderstandings whilst acting as an opportunity to develop their literacy skills. Thus, iPads can promote d/Deaf pupils' inclusion and development in mainstream PE. This finding supports Schultz et al. (2013) and Lieberman (2016) who claim iPads are an effective way of giving information and instructions to d/Deaf pupils. Therefore,

teachers should explore using iPads when teaching d/Deaf pupils in PE to facilitate their development.

Additionally, instructional videos were identified as beneficial when educating d/Deaf pupils in mainstream PE. Upon observation, many mainstream teachers utilised instructional videos with subtitles to explain activities and provide demonstrations to benefit all pupils. As Mr Greenbank highlighted, instructional videos can overcome communication barriers when educating d/Deaf pupils by reducing verbal instruction. In doing so, Mrs Phillips suggests that d/Deaf pupils can “watch that and get involved and know what they’re doing in the session”. Thus, instructional videos can promote d/Deaf pupils’ understanding and inclusion within mainstream PE. This finding supports previous literature which has highlighted the usefulness of instructional videos when educating d/Deaf pupils in PE (Reich & Lavay, 2009; Lieberman, 2016; Asogwa et al., 2020). Consequently, teachers should utilise instructional videos when educating d/Deaf pupils to foster an inclusive PE environment.

However, implementing instructional videos alone is insufficient to be identified as effective PE teaching of d/Deaf pupils. In Mrs Mulligan’s opinion “in the past... say they were doing a dance programme and it would be something, something on audio which is just complete disaster”. Thus, instructional videos which are phonocentric may have adverse effects from those intended. Upon observation, phonocentric videos were still utilised occasionally whereby instructional videos would be played without subtitles or BSL interpretation, leading to misunderstanding for d/Deaf pupils in mainstream PE. During one PE lesson, ‘PE with Joe’ acted as the instructional video though as verbal instruction was not translated via BSL or with subtitles, Josh experienced misunderstanding. Throughout the lesson, Josh began activities before being instructed to start and experienced delays in stopping the activity, only noticing this from copying his peers. Moreover, when ‘PE with Joe’ asked to high five a friend, Josh remained unaware and copied Joe’s on-screen movements of high fiving an imaginary person. Thus, when instructional videos lack a BSL interpreter on screen and subtitles this may cause misunderstanding and exclusion of d/Deaf pupils. This finding is concerning when drawing upon Haegele and Maher’s (2023) conception of inclusion which suggests the meanings and feelings pupils with SEND experience relating to inclusion are connected to their interactions and relational network. As Josh did not interact with his peers he did not experience a sense of belonging or inclusion. Thus, integration does not guarantee inclusion (Haegele, 2019) but instead can create an ‘illusion of inclusion’ (Maher & Haegele, 2022). Considering this, d/Deaf

pupils must be provided equal access to communication when instructional videos are being utilised to contribute to more inclusive PE.

Whilst some instructional videos included subtitles, Miss Rodriguez highlighted “not all d/Deaf children can read like the infants”, thus a BSL interpreter would make the PE lesson “more accessible for them”. Instructional videos which lack a BSL interpreter on screen can make it difficult for d/Deaf pupils with low literacy levels to understand activities and instructions in PE. Although previous literature has highlighted instructional videos must be subtitled (Reich & Lavay, 2009; Schultz et al., 2013; Lieberman, 2016; Asogwa et al., 2020) this study builds upon previous literature by demonstrating that teachers should also consider d/Deaf pupils’ literacy levels when subtitles are relied upon. In addition, this study positively contributes to literature by demonstrating that instructional videos must include an on-screen BSL interpreter to promote d/Deaf pupils’ understanding in PE.

Furthermore, participants recognised how instructional videos tend to opt for hearing, able-bodied characters. As Mrs Doyle recognised “none have hearing aids, none with glasses, no wheelchairs, you know no one that’s had a with a prosthetic arm or leg”. This finding is problematic considering this may ‘other’ pupils with SEND, including d/Deaf pupils whereby they are viewed as different and inferior (Israelite et al., 2002). Moving forward, Mrs Doyle acknowledged how instructional videos could include pupils with SEND:

“I think that would make a huge difference not only to d/Deaf children but to mainstream children as well... say like that a child with you know that was blind and they their their white stick with the ball that rattled or whatever whatever adaptation that you have to do, do it. I think it's something it's so small but what an impact that would have 'cause what if you were like a d/Deaf child you know like seeing that on there like 'oh god they've got a hearing aid' ooo I'll look at that, that little cartoon character has a hearing aid if it was child who only had one arm you know they can still do that and all these kids and I know there only cartoon characters or whatever animated but make that more positive so the things they put out there for all children, make it positive because these characters on the screen”.

From this perspective, including pupils with SEND during instructional videos could enhance their motivation in PE. This is important considering that intrinsic motivation can determine positive pupil outcomes within PE (Ferrer-Caja & Weiss, 2000;

Ntoumanis, 2001; Moreno, González-Cutre, Martín-Albo & Cervelló, 2010). Thus, instructional videos which utilise characters with SEND may benefit all pupils with SEND, contributing to their development in PE. Also, instructional videos with characters with SEND would normalise pupils with SEND. As Mrs Doyle suggests this would promote positive attitudes towards pupils with SEND, contributing to their inclusion in mainstream PE. Future research should explore the impacts of including pupils with SEND on instructional videos to support or challenge this study's findings.

Indoor and outdoor teaching considerations.

Throughout this study, participants recognised that teaching PE indoors and outdoors offered differing PE environments which required unique considerations when teaching d/Deaf pupils. As Mr Luck put it "there is different sort of distractions in the environment, and they do vary between sort of outside and inside".

Within indoor PE, several auditory distractions existed for d/Deaf pupils who had hearing aids or cochlear implants. Staff members suggested that reverberation in the sports hall could make sounds echoey. Sports hall acoustics alongside a noisy PE environment was identified as an auditory distraction for some d/Deaf pupils, making it difficult to hear for a hearing aid or cochlear implant user. Consequently, some d/Deaf pupils, particularly Josh, who was sensitive to sounds, would often remove his cochlear implant processor during PE and sign "noisy" and then tap his head with his fingers. Similarly, Daisy commented on how "it's hard when people are shouting in the background". For Josh, whose preferred method of communication was BSL, when the PE environment was too loud, he removed his cochlear implant processor and continued to engage within the PE lesson. As Mr Brakell highlighted

"children just like take their processors off because it won't let the sound through and that's their way of coping but they're still able to go on with the lesson you know because it's all sign on our side things that you know, it doesn't stop them".

Thus, cochlear implant users may minimise auditory distractions by removing their processors and utilising BSL for communication in PE, allowing their continued participation and development. However, for d/Deaf pupils who communicated via speech, removing their hearing aids would exacerbate communication difficulties and was therefore not a viable option, meaning that they still experienced auditory distractions. Background noise leads to confusion and misunderstanding for some d/Deaf pupils. These findings support Reich and Lavay (2009) who suggest background noise and poor acoustics may negatively impact d/Deaf pupils'

understanding of PE activities. Consequently, teachers must remain mindful of sports hall acoustics, attempting to reduce background noise which may act as an auditory distraction for some d/Deaf pupils.

Comparatively, when teaching PE outdoors, participants suggested due to the vast outdoor area noise easily dissipates. As Miss Harrison highlights “outside your voices is lost, so it's harder to hear”. In this sense, Mr Luck suggests teachers must consider that d/Deaf pupils “may be far, too far away or their group that you want to keep closer to you when you're outside because the space”. When teaching outdoors, Mr Luck frequently gathered the class in for instructions, demonstrations, progressions and feedback. This finding supports NDCS (2015) guidelines for PE which state teachers should bring the class in prior to giving instructions. Consequently, teachers of PE must ensure close proximity to d/Deaf pupils when giving verbal instructions outdoors. Nevertheless, teachers must remain mindful that misunderstandings may still occur when communicating via speech in mainstream PE.

Additionally, when teaching PE outdoors, teachers must consider potential visual distractions for d/Deaf pupils. As Miss Harrison puts it:

“when you go outside whether it be the weather, the leaves growing or someone decorating a house so that's it's can be harder to focus in that sense because d/Deaf children... d/Deaf people you know are d/Deaf so their other sensors are often heightened and so visual distractions are really kind of prevalent”.

Mrs Harrison suggests as d/Deaf pupils are visual-spatial beings, they may experience visual distractions during outdoor PE. These findings support the claims of Dye, Hauser and Bavelier (2008) and Guardino and Anita (2012) more broadly who suggest d/Deaf pupils are prone to visual distractions, negatively impacting their focus on academic tasks. Therefore, teachers should be aware of potential visual distractions in outdoor PE, seek to minimise these where possible and ensure they have d/Deaf pupils' attention before and during instructions, demonstrations and activities.

Widening access and participation: hopes for the future.

Throughout this study, participants identified how Buttermere school could improve d/Deaf pupils' access and participation in mainstream PE and extracurricular activities. For d/Deaf pupils, the availability of interpreters acted as a source of anxiety when attending mainstream PE. Upon observation, when d/Deaf pupils were told to

attend mainstream PE lessons, they frequently asked me “signing who?”(Dan). Whilst this question may have been easily dismissed as nothing more than a curious question, d/Deaf pupils would wait until they had reassurance that a DRB LSA was coming to interpret the lesson. Therefore, it can be assumed that without the presence of an interpreter, d/Deaf pupils felt uncomfortable to attend mainstream PE. These findings highlight the necessity to improve the accessibility of mainstream PE teaching and d/Deaf pupils’ inclusion in mainstream PE.

Furthermore, staff members identified the limited availability of interpreters as a barrier to d/Deaf pupils’ participation in sporting extracurricular activities. As highlighted by Mr Wilcock:

“if an interpreter can't stay after school then that's ... that's it you know it's a massive barrier and you might not be confident enough as a d/Deaf kid to to go along and just rely on motions and whatnot so yeah after school is probably quite a restrictive thing unless you've got people, staff that can always stay after school”.

Analysis of Mr Wilcock’s quote highlights speech as the dominant method of communication in sports clubs and suggests without an interpreter, alternative methods of communication may not be provided, acting as a barrier to d/Deaf pupils’ participation. Upon observation, only Miss Rodriguez regularly attended sports clubs to provide BSL interpretation. However, Miss Rodriguez recognised being the only DRB staff member who attended extracurricular activities restricted d/Deaf pupils’ participation when she was unavailable. Therefore, the limited availability of interpreters was a key barrier to d/Deaf pupils’ participation in sports clubs at Buttermere school. Consequently, Buttermere should increase the availability of interpreters attending extracurricular activities whilst making communication in sports clubs more accessible for d/Deaf pupils.

The following quote outlines Miss Rodriguez’s hopes for the future:

“Just knowing there's someone there for them, cause’ they love the football because you can see they absolutely love it cause’ I remember one of them worrying every week saying, ‘who’s with us tonight, who’s with us tonight’, and they shouldn’t have to worry about that or think about it, it should just be there for them.”

Moving forward, Miss Rodriguez desires additional interpreters to be available after school hours to increase d/Deaf pupils’ accessibility to extracurricular activities. In

doing so, the barriers d/Deaf pupils face to attending extracurricular activities may be removed to encourage their participation. This is important considering the involvement of d/Deaf pupils in extracurricular activities is a key aspect of inclusion and equal rights (Powers, 2001; Powers, 2002). Therefore, increased accessibility to sports clubs via the means of interpreters may facilitate greater inclusion of d/Deaf pupils in Buttermere school.

Notably, most mainstream teachers lacked experience or knowledge of teaching d/Deaf pupils before being employed at Buttermere school. Thus, mainstream teachers learnt about teaching strategies for educating d/Deaf pupils through experience.

“My background working with d/Deaf pupils started when I started working at Buttermere, you know I'd never had a d/Deaf child in my class in previous schools, so it was a big learning curve, knowing what to get used to, I needed to adapt myself to fit with them and to fit with the base.” (Mrs Goodison)

Similar feelings were echoed by other mainstream staff who recalled no experience or training of educating d/Deaf pupils, meaning that they learnt how to educate d/Deaf pupils ‘on the job’. These findings support Vermeulen, Denssen and Knoors’ (2012) study who found that a PE teacher had no training or experience teaching d/Deaf pupils prior to a d/Deaf pupil’s integration into her class. Therefore, this research echoes statements that ITT is not equipping trainee teachers with adequate knowledge or skills for educating d/Deaf pupils in mainstream settings (Barboza et al., 2019; Ridsdale & Thompson, 2002; Vermeulen et al., 2012). Such findings are concerning considering that literature more broadly has suggested a lack of ITT surrounding d/Deaf pupils may negatively impact d/Deaf pupils’ learning (Eriks-Brophy & Whittingham, 2013). Indeed, mainstream teachers only learning about how to educate d/Deaf pupils when in post at Buttermere may have come at the detriment of the d/Deaf pupils they first taught.

As Mr Luck highlighted his inexperience teaching d/Deaf pupils negatively impacted his confidence when first teaching d/Deaf pupils.

“I started here as an NQT and obviously I didn’t have... as I mentioned not really any experience of teaching children who were d/Deaf or d/Deaf children, so I was quite nervous to begin with, sometimes when people come in to interpret your lessons, at the beginning anyway you get a bit nervous that you’re like ‘Oh my God this person listening to me they’re

interpreting everything I'm saying', sometimes you think 'Oh my God I'm just saying it's like isn't very effective or accurate or clear' ... but I definitely have got more confident from being obviously in this school" .

Mr Luck's inexperience surrounding teaching d/Deaf pupils led to uncertainty over the effectiveness of communication and PE teaching of d/Deaf pupils. This is somewhat concerning considering literature has previously suggested effective communication by PE teachers can facilitate a positive physical activity (PA) experience (Reich & Lavay, 2009). Therefore, a mainstream teacher's inadequate knowledge surrounding how to educate and communicate with d/Deaf pupils may negatively influence d/Deaf pupils' PE experiences.

Inadequate knowledge surrounding educating d/Deaf pupils led to Mr Luck experiencing anxiety when first educating d/Deaf pupils. This finding supports literature more broadly which reported mainstream teachers feeling anxious when teaching d/Deaf pupils (Vermeulen et al., 2012). The current study corroborates NDCS (2022D) who suggest 86% of teachers receive inadequate ITT to teach d/Deaf pupils. Consequently, there was a strong consensus amongst mainstream staff that ITT programmes should include training on educating d/Deaf pupils. As Mr Wilcock highlights "it should really be part of every teaching course that you learn how to make sure that d/Deaf children are accessing your lesson that should be key". Mr Wilcock alludes that increased ITT surrounding d/Deaf pupils could facilitate accessible teaching, whereby d/Deaf pupils are included and develop within mainstream PE. This finding is consistent with the claims of Barboza et al. (2019) who suggests more training for PE teachers educating d/Deaf pupils is required to equip them with the appropriate knowledge and skills. Insufficient ITT surrounding teaching pupils with SEND has been a pressing issue in England for decades, with some academics suggesting that little has changed since the 1978 Warnock Report, acting as a barrier to successful implementation of SEND strategies (Hodkinson, 2009; Hodkinson, 2015). There have been various calls for ITT surrounding teaching pupils with SEND to better equip prospective teachers (Vickerman & Maher, 2018; Ofsted, 2024b). Moving forward, ITT programmes should provide knowledge and experience for trainee teachers to enhance their competence and confidence when teaching pupils with SEND, specifically d/Deaf pupils.

As previously discussed, most mainstream teachers received education about teaching d/Deaf pupils whilst being employed at Buttermere, this largely occurred internally through mentoring or CPD programmes. This finding echoes Powers'

(2002) study who found that mainstream teachers tend to learn about educating d/Deaf pupils through in-service training. In this study, Mrs Goodison commented how mentoring from other staff was instrumental in developing her knowledge on how to educate d/Deaf pupils, “they’re really good at letting you know what they need, or what you how you could improve, what you were doing because I was complete and utter novice”. Similar feelings were reiterated by Mr Greenbank who highlighted “what I know is just kind of what I’ve seen and what you pick up in and around every day so I’m the least expert, expert.”. A lack of training during ITT meant that teachers new to educating d/Deaf pupils are reliant upon the time and expertise of their colleagues. However, this is problematic if the mentors have limited time or are passing down ineffective or harmful practices. Considering this, mainstream schools should provide new teachers support and guidance on how to effectively educate d/Deaf pupils, in alignment with their aims of PE. Future research should investigate how teachers learn how to educate d/Deaf pupils while in post and its impacts on d/Deaf pupils.

Although participants did not have CPD training specifically on educating d/Deaf pupils in PE, they had separate internal CPD training in PE and on teaching d/Deaf pupils more generally. Throughout policy documentation, including the SEND report and teaching policies, the importance of supporting class teachers with their CPD needs via ongoing training was fundamental to effective teaching. Upon observation, class teachers were given various CPD opportunities including BSL courses and sensory courses to enhance their knowledge of teaching d/Deaf pupils. Reflecting upon attending a BSL course Mr Wilcock stated, “it was brilliant it was great, and you know every teacher should do it the lessons were brilliant I really enjoyed doing the level 1 BSL and it certainly made me have a go signing”. As explained, BSL courses at Buttermere school enabled Mr Wilcock to develop his signing abilities. In doing so, Mr Wilcock was equipped with basic BSL skills to challenge phonocentric teaching and provide more accessible PE teaching for d/Deaf pupils. This is significant considering Maher (2020) suggests that teachers who challenge phonocentric teaching through utilising more accessible and visual teaching strategies will facilitate d/Deaf pupils’ inclusion in mainstream PE. These findings support literature more broadly which recognise CPD as instrumental in improving the quality of teaching and pupil learning (Day, 1999; de Vries, van de Grift & Jansen, 2014). CPD training regarding d/Deaf pupils may assist teachers in creating a more accessible and inclusive PE environment. However, the true impacts of CPD training depend upon the effectiveness of CPD being provided and how teachers apply CPD training to their

practice (Kelchtermans, 2004; Armour, Quennerstedt, Chambers & Makopoulou, 2017). Thus, participation in CPD training is only the beginning of teacher development (Elliot & Campbell, 2015). Moreover, if ITT included training on teaching d/Deaf pupils in PE, there would be less demand for CPD which would reduce anxiety when first teaching d/Deaf pupils whilst improving D/deaf pupils' experiences with newly qualified teachers. Considering this, ITT programmes must equip teachers with the knowledge and skills to educate d/Deaf pupils in PE.

Chapter summary.

This chapter presented PE teaching strategies used for educating d/Deaf pupils at Buttermere school to better understand d/Deaf pupils' education in mainstream PE within England. The chapter shared participants' views on the effectiveness of teaching strategies to provide empirical evidence to support certain teaching strategies over others. Here, a strong rationale for the implementation or avoidance of certain teaching strategies was given when educating d/Deaf pupils in PE. Upon investigation, PE teacher effectiveness was inextricably linked to the perceived accessibility and inclusivity of teaching. Participants recognised that teaching needed to challenge phonocentrism to be effective for d/Deaf pupils. Through exploring the consequences of phonocentric teaching and teaching strategies that seek to destabilise hegemony, this study demonstrated that by challenging phonocentric teaching, PE teachers can foster an inclusive PE environment. This study echoes Maher's (2020) calls for hegemonic phonocentric teaching and learning strategies to be challenged to promote d/Deaf pupils' inclusion in PE. These findings have significant implications on PE teaching, challenging traditional phonocentric teaching practices which have filtered down as 'commonsense'. Additional research concerning the impacts of phonocentric PE teaching may be advantageous to build upon this study's findings.

Within this study, effective teaching was considered multidimensional, which required a mainstream teacher to employ various teaching methods simultaneously. Components of effective teaching strategies included:

- Providing alternative methods of communication, particularly BSL and visual cues.
- Avoiding verbalising and visualising simultaneously during demonstrations.
- Providing verbal and signed instructions, followed by a silent demonstration.
- Providing demonstrations and completing these slower and repeating them when necessary.

- Ensuring d/Deaf pupils can see demonstrations.
- Considering positioning in relation to pupils and the direction of light during demonstrations.
- Providing clear, concise instructions.
- Remaining stationary when explaining instructions and standing next to an interpreter.

Moving on, the chapter explored assessment strategies for educating d/Deaf pupils in PE. Summative assessment in PE was only delivered by an external swimming coach who utilised criterion-referenced and norm-referenced assessment. Examining criterion-referenced and norm-referenced assessment raised questions regarding whether d/Deaf pupils should be assessed against/with the dominant hearing majority as many aspects which influenced pupils' attainment were not acknowledged in assessment processes. Within PE, ipsative assessment and AfL was commonly utilised, and findings emphasised that these encouraged all pupils to become more confident, competent and motivated. These findings provide empirical support for the implementation of ipsative assessment and AfL when educating d/Deaf pupils in mainstream PE. Future research should investigate the effectiveness of assessment strategies for educating d/Deaf pupils in PE to support or dismiss this study's findings.

Next, detailed analysis of the potential and pitfalls of technology when teaching PE to d/Deaf pupils was given. Through discussing assistive technology, such as radio aids, the study provided suggestions for PE teachers when educating d/Deaf pupils. This study found that iPads and instructional videos can enhance d/Deaf pupils' learning and development. However, instructional videos must include a BSL interpreter on screen, subtitles and characters with SEND to promote d/Deaf pupils' learning and inclusion. When examining teacher effectiveness, emphasis was often placed on catering to pupils' needs via differentiation to enable all pupils to reach their potential. Also, this chapter highlighted the importance of acknowledging the environment whilst understanding how this may alter d/Deaf pupils' PE experiences. These findings suggest that some d/Deaf pupils may experience auditory distractions within indoor PE whilst outdoor PE may cause noise to dissipate quicker alongside visual distractions. Analysing teaching d/Deaf pupils in relation to their environment shared useful considerations to inform educators.

Whilst acknowledging their strengths, staff members recognised areas for development to work towards more effective PE teaching of d/Deaf pupils with a particular focus on training and increasing the availability of interpreters within

sporting extracurricular activities. In doing so, PE and extracurricular activities may become more inclusive for d/Deaf pupils. The effectiveness of teaching strategies proposed within this chapter was contextual to Buttermere school, in alignment with their aims of accessible, inclusive teaching. Also noteworthy is that Buttermere school has a DRB and has received special recognition for inclusive practice as previously discussed. It is plausible that d/Deaf pupils' experiences in mainstream schools without a DRB may be less inclusive and thus require further investigation. Future research concerning d/Deaf pupils' education in mainstream PE is necessary to support or challenge this study's findings.

CHAPTER SEVEN.

COLLABORATIVE WORKING.

Introduction.

This chapter analyses collaborative working as a vital component of effective teaching within Buttermere school. As Buttermere school is a mainstream school with a DRB, d/Deaf pupils entered mainstream education for a select few lessons such as PE. During mainstream lessons, it was essential mainstream and DRB staff worked collaboratively to ensure that d/Deaf pupils could access lesson content and fulfil their potential. Contextually, school documentation emphasised the importance of collaborative working between staff members, stating that there must be “effective and varied use of staff”. Therefore, the section that follows explores the roles of both mainstream and DRB staff, with a particular focus on how they worked collaboratively to facilitate effective teaching of d/Deaf pupils in PE. The chapter is organised in four subthemes: 1) planning, preparation and communication; 2) co-delivery; 3) post-delivery and 4) an appreciation for each other. Drawing on hegemony, the chapter demonstrates that when hegemonic ideologies, such as collaborative working; outlined as effective teaching in school documentation is accepted by teachers and LSAs, this influences how a lesson is planned, delivered and resourced (Maher, 2018). The chapter also examines Buttermere’s hierarchy of power whereby DRB LSAs were subordinate to mainstream teachers who had more legitimate power (Webb & Macdonald, 2007) as they had undertaken teacher training. Through examining power relations at Buttermere school, it becomes possible to comprehend how hierarchical structures and relationships between teachers and support staff may limit effective collaboration (Mackenzi, 2011). Although power can be restrictive; the chapter appreciates how power is dynamic and can be used productively whilst schools are arenas of struggle where power is played out between stakeholders (Maher et al., 2024). In doing so, the chapter highlights the potential of staff members to act as agents to facilitate more effective PE teaching of d/Deaf pupils.

Planning, preparation and communication.

A key component of effective teaching at Buttermere school was differentiated lesson plans to foster the inclusion and development of all pupils. As outlined in Chapter Five, Buttermere school encouraged teachers to follow ‘the expert PE programme’, which provided lesson plans with differentiated activities. Nevertheless, teachers still needed to consider how to differentiate their instruction to include d/Deaf pupils.

Moreover, as some mainstream teachers were sceptical of the expert PE programme and its ability to appropriately differentiate lesson plans to pupils' needs, they often created their own PE lesson plans. When planning a PE lesson, Mr Brakell explains an effective teacher "would plan for all the children of all different abilities within their class". Similarly, Mr Luck stated that when planning for d/Deaf pupils "you need to think about how you can make sort of visual cues or physical cues like tapping shoulders". Considering differentiation when planning PE lessons was identified as vital to ensure that policy played out in practice, as discussed within Chapter Six. In considering all pupils' needs during planning, participants suggested an inclusive PE environment could be established whereby all pupils could reach their potential, acting as a key component of effective teaching. This finding supports existing literature that highlights the importance of planning PE lessons to ensure d/Deaf pupils' development and inclusion (Berges, 1969; Schmidt, 1985; Lieberman, 2016; Maher, 2020).

Whilst staff recognised the importance of collaborative working, a mainstream teacher planned PE lessons alone, thus collaborative planning between mainstream and DRB staff did not occur. As Mrs Doyle highlighted "they (mainstream teachers) do all the planning". This statement was supported by fieldwork observations whereby Mrs Doyle would arrive to PE lessons and ask, "What are we doing today?", indicating mainstream teachers would plan their PE lessons without the presence of DRB LSAs. This practice significantly differed from policy documentation which stated mainstream teachers, ToD and DRB LSAs should collaboratively plan lessons and decide how the curriculum will be delivered. This finding is supported by wider literature focused on pupils with SEND which highlights TAs rarely see lesson plans and communication about them takes place as pupils arrive (MacKenzie, 2011; Lehane, 2016). As Webb and Macdonald (2007) highlight power can operate through excluding certain individuals from time, resources or timetabling. In this study, arguably normalisation and exclusion were used as a technique of power (Gore, 1997) whereby DRB staff were excluded from the planning of PE lessons so mainstream class teachers could maintain power over DRB LSAs. As Maher (2016) highlights a lack of collaboration between PE teachers and LSAs during PE planning is problematic as LSAs are most aware of the child's learning needs. The exclusion of DRB LSAs from lesson planning was concerning considering that they were most aware of d/Deaf pupils' needs, as will now be explained. During one PE lesson, pupils were asked to walk around the hall with their eyes closed when completing their warmup as the teacher shouted out instructions for pupils follow. As one's success in

the activity was dependent upon their ability to hear, audist practices were evident which excluded d/Deaf pupils from mainstream PE. More specifically, this can be related to metaphysical audism which intertwines human identity with speech and audiocentric assumptions to rationalise the subordination of the Deaf community (Bauman, 2004; Eckert & Rowley, 2013). Under metaphysical audism, it is believed that "Language is human; speech is language; therefore deaf people are inhuman and deafness is a problem" (Brueggemann, 1999, p.11). The presence of metaphysical audism is concerning as this may reinforce views of d/Deaf people as 'disabled' (Branson & Miller, 2002) and 'othering' of d/Deaf people (Eckert & Rowley, 2013). Here, excluding DRB staff from planning (Salter, Swanwick & Pearson, 2017) alongside the assumption that DRB staff would notice exclusionary activities created additional barriers to d/Deaf pupils' inclusion. Although DRB LSAs possessed less authority compared to mainstream teachers, power was multidirectional (Foucault, 1975) meaning that DRB LSAs could resist power to ensure the inclusion of d/Deaf pupils. In response to this activity, a DRB LSA intervened and instructed d/Deaf pupils to keep their eyes open due to safety concerns. Here, DRB staff acted as agents who challenged hegemony, specifically the practices of mainstream teachers who were more powerful in their relational group (Maher, 2016; 2018). Through challenging hegemonic relationships and utilising their expertise, DRB staff ensured d/Deaf pupils' safety in PE whilst resisting phonocentric and audist teaching which positioned d/Deaf pupils as the 'other'. However, the necessity for DRB LSA intervention could have been prevented through collaborative planning. Explaining the incident above, Miss Rodriguez commented how "I heard them (mainstream teacher) the other day 'cover your eyes' and I was like then our child's now losing their hearing and their sight". Later adding to this, Miss Rodriguez stated that games where pupils are asked to close their eyes / be blindfolded "needs to be adapted to suit [d/Deaf pupils] 'cause you can't take two senses away from the child it's way too much". As planning introduces audist activities whereby one's success depends on their ability to hear, planning is for the hearing majority whilst d/Deaf pupils are constituted as the subordinate group. Evidently, when planning does not involve the contributions of both mainstream and DRB staff it may have negative implications on d/Deaf pupils' safety and inclusion in mainstream PE. Therefore, mainstream teachers should collaborate with DRB staff during the planning of PE lessons to ensure d/Deaf pupils' needs are considered to ensure their inclusion and development. This finding supports the SEND Code of Practice (DfE & DoH, 2015) which highlights under the graduated approach cycle lessons should be collaboratively planned by teachers,

TAs and specialist staff so they are all aware of pupils' needs and appropriate teaching strategies to help pupils achieve desired outcomes.

Once plans were established, participants highlighted the importance of mainstream staff sharing lesson plans and discussing these with the DRB LSA who would be supporting the lesson. In Mr Brakell's words, "working with us and having discussions before sometimes it's a must, really, you've got to know what's going to happen in the PE lessons for it to be effective". This finding supports Maher and Vickerman (2018) who highlight if LSAs attend PE lessons and do not know what will be covered this may impede their ability to support pupils' learning. It is important that those interpreting the lesson understand what will be taught to pre-empt what language needs to be pre-tutored to promote d/Deaf pupils' inclusion and development in mainstream PE. As Miss Harrison suggests d/Deaf pupils may have lower literacy levels than their hearing peers as they have less incidental learning opportunities and are often not in a language rich environment:

"to fully understand what that (word) means they need to understand the word so know what it is, whether it be the spoken word or the sign word and know the culture and the history of that word so if I say ... "we're going to play basketball today" in your head straight away you you know what basketball is you can probably picture basketball pitch you can picture the players. You probably know alright God you know that they're already tall the players so thinking about positions, how many players there were, where it's usually played. You don't have to think about those things because you just know it and that's because when you were growing up you just heard and saw things about basketball you heard that word basketball whether you ever played it or not you will have maybe seen it in films you will have heard some jargon associated to it you know you might even think 'oh they're all going to have some Jordans on' we've all got you've got that connection whether will all this famous basketball player he created these trainers and there now... you know whereas d/Deaf children don't have ... and all of that has all been incidental learning probably for you, you know it was for me, nobody ever sat me down and said right basketball history of basketball this this is the culture this is what the players are like there was this really famous player it's just it's all been learnt incidentally through listening to things maybe hearing someone on the table behind you having a conversation about it watching a film all things like that. d/Deaf children don't have all that because it's

really hard for a d/Deaf child if they're not in the right learning environment to learn incidentally ... often d/Deaf children are not in a real language rich environment and by that I mean everybody around them is signing all the time”.

As d/Deaf pupils have fewer incidental learning opportunities, when pre-tutoring for mainstream PE has not occurred because collaborative planning has not taken place, this can hinder d/Deaf pupils’ understanding. As Miss Harrison highlighted:

“the class teacher might just you know [make a] throw away comment about a piece of equipment, the child doesn't know what the equipment is and that's because we haven't had all that incidental learning so ideally I would have everything, and I'd be able to read through and do that pre-tutoring”.

Miss Harrison suggests through hegemony there are taken for granted assumptions regarding pupils’ sport specific language. As Miss Harrison implies when pre-tutoring does not occur d/Deaf pupils may struggle to develop in mainstream PE. This finding supports Lieberman (2016) who suggests that if appropriate planning does not take place teaching d/Deaf pupils can become difficult. Considering this, collaborative working during the planning phase must occur so that DRB staff can pre-tutor any relevant language before the lesson to ensure that d/Deaf pupils have the functional language to succeed during mainstream PE. Indeed, when questioned on what works well Mrs Goodison stated, “probably just the pre-teaching... being more, being more in tune, being able to pre-teach the signs for whatever they need”. Expanding on this, Miss Harrison explained the process of pre-tutoring:

“for example if they (mainstream teachers) were teaching dance they would tell me ‘oh this term dance is our topic’ and then I'd need to know which form of dance they’re doing, which muscle the focus is going to be on so that I could pre-tutor the children and give them those language skills so that when they go into class they have their sign support is going to sign a word to them they will already know that what that new word may be”.

Through working collaboratively with mainstream teachers, DRB staff could have a clear understanding of lesson content and what needs to be pre-tutored to ensure that d/Deaf pupils have the functional language to reach their potential. Here, class teachers and support staff can transition from the planning aspect to the ‘do’ aspect under the graduated approach cycle whereby pupils with SEND receive group or one-

to-one support away from the main class (DfE & DoH, 2015). Pre-tutoring BSL signs before mainstream PE would enable pupils to develop their language whilst DRB staff could act as agents who challenged hegemonic phonocentrism. In challenging hegemonic phonocentrism, a more inclusive PE environment for d/Deaf pupils could be achieved (Maher, 2020). As pre-tutoring language was perceived to contribute to an inclusive PE environment, it was a vital component of effective teaching at Buttermere school. Therefore, this study supports Lieberman (2016) who states teachers must give lesson plans to interpreters ahead of the PE lesson and meet with them before a scheme of work to clarify sport terminology that may be used.

As Mr Luck, a mainstream teacher highlighted collaborative working between mainstream and DRB staff prior to PE lessons can be particularly advantageous:

“myself and Miss Harrison or Mrs Mulligan would like discuss what we doing in PE, whether we need to pre-teach any language before we get onto that topic or that term of PE and so obviously that’s a big part of collaboration, um obviously with the likes of say it’s Miss Rodriguez as a 1 to 1 coming in, or interpreter coming into PE lessons, I’d always try and sort of discuss what we’re doing, how that’s going to look, what equipment we’re using and where we’re going to be doing it just so she’s able to sort of relay that to her group or the children she’s supporting just so during lesson time we use it efficiently and there’s not lost lesson time of me explaining or Miss Rodriguez trying to figure out what’s going on in the lesson or vice versa the children maybe due to language which they might be struggling with that aspect as well”.

Through discussing lesson content with DRB staff and pre-tutoring language prior to PE lessons, Mr Luck suggests that there will be effective use of lesson time which will maximise d/Deaf pupils’ engagement and learning in mainstream PE. This finding support those of Losberg and Zwozdiak-Myers (2024) focused on SEND more broadly which highlights when teachers work collaboratively with TAs through discussions, effective lesson time and inclusive pedagogy will occur. Notably, Mr Luck was one of the few mainstream teachers who collaboratively planned PE lessons with DRB staff. Here, Mr Luck acted as an agent who challenged power relations at Buttermere school which operated through the normalisation of excluding DRB staff during PE planning. This finding supports those of Webb and MacDonald (2007) who highlighted that some PE teachers work against the influences of normalisation to challenge dominant discourses. As highlighted by Pitman (2009) more broadly,

communication between mainstream teachers and support staff facilitates a shared understanding of the needs of pupils with SEND. By challenging power relations through including DRB LSAs in planning, mainstream teachers may begin to comprehend d/Deaf pupils' needs. In comprehending d/Deaf pupils' needs, mainstream teachers could challenge hegemonic practices and inequalities relating to d/Deaf pupils' education such as phonocentrism to facilitate more inclusive PE. This study supports Powers (2001) claims that joint planning by mainstream teachers, ToD and TAs is a key aspect of effective teaching for d/Deaf pupils. Consequently, mainstream teachers should act as agents and challenge power relations and normative practices through including DRB staff during planning to enhance d/Deaf pupils' learning and inclusion in PE.

Additionally, Miss Harrison suggests sharing lesson content prior to the lesson can be beneficial for DRB LSAs:

“pre-tutoring children with the member of staff that's going to be supporting them so a bit like a joint approach so that so then we're empowering the interpreter that's going in with them so that they know what's going to what's coming up and they will know kind of the coverage that's gonna take place in in the lesson it will also then enable the support staff”.

Here, Miss Harrison suggests collaborative teaching can empower interpreters to become confident and competent during the delivery of the PE lesson. This statement was supported by Mr Wilcock who stated, “it's good for for the d/Deaf support staff to understand that (how the drill works and its purpose) because then they can, they can help you explain that to the children”. In this sense, collaborative working may empower interpreters as they become familiar with lesson content which will in turn benefit d/Deaf pupils' understanding and learning in PE. DRB staff understanding the lesson content was important considering that d/Deaf pupils received most of their support during PE from DRB staff who were not PE experts. As Miss Harrison suggests discussing lesson plans will empower DRB staff to feel more confident and competent when assisting the delivery of PE. This finding supports Vickerman and Blundell (2012) who suggest that planning, preparation and delivery of PE lessons with teachers, empowers LSAs to feel pedagogically valued. To enhance d/Deaf pupils' development in PE and empower DRB LSAs, class teachers should work collaboratively with them when planning and delivering PE lessons.

Despite the benefits of collaborative planning being acknowledged by participants, only some teachers did this, and this occurred on an irregular basis. Frequently, many DRB LSAs attended PE lessons unsure on what would be covered when entering the PE lesson. As previously discussed, I observed Mrs Doyle asking mainstream staff “What are we doing today?” at the beginning of the PE lesson. Moreover, during Mrs Doyle’s interview she stated that “when we go in we will say right what’s happening, and he (mainstream teacher) will say we’re doing this this or doing that and we will say ok”. The quotations from Mrs Doyle, a DRB LSA evidenced above indicate that when entering mainstream PE, she was unsure on lesson content, demonstrating that she had not been involved in planning. Within staff interviews, participants recognised that collaborative planning does not always occur due to a lack of time being allocated for this. As Miss Rodriguez, a DRB LSA highlighted:

“Finding time and time is a big thing we can never really find the time to meet with them (mainstream teachers) 'cos they'll have PPA (Planning, Preparation and Assessment time) but obviously we (DRB LSAs) don't have PPA to be able to go and meet with them but like if we do have anything we will pass it onto Miss Harrison and she'll bring group in PPA or staff meeting”.

However, as mainstream teachers’ PPA often occur at a different time to Miss Harrison, collaborative planning may not always happen, as Mrs Goodison stated:

“most of the d/Deaf support staff are only here when the children are here so trying to get 5 minutes to talk about anything is really quite problematic... we don't have our PPA all at the same time anymore so you tend to only have time with your year group and if the person from the d/Deaf resource base, the teacher isn't there then they might not know where you're up to or vice versa so we're reliant for PE were relying on the 'expert PE programme' (pseudonym) and following the sequence of the scheme”.

Restrictions on time for planning alongside incompatibility in staff’s timetable made it increasingly difficult to complete collaborative planning despite participants being aware of its potential benefits. This finding supports literature more broadly focused on d/Deaf pupils’ education whereby TAs reported limited opportunities to liaise with mainstream or ToD whilst meetings between ToD and the mainstream teacher were rare (Salter et al., 2016). Similarly, more broadly in literature of collaborative working for pupils with SEND, time pressures have been recognised by both teachers and

TAs/LSAs as a barrier to collaborative working (Pittman, 2009; Devecchi et al., 2012; Maher, 2016; Mathers, Botting, Moss and Spicer-Cain, 2024). In this study, issues of collaborative planning between mainstream and DRB staff could be seen across a range of subjects. During Mrs Mulligan's interview she recalled how a history lesson covered subject specific vocabulary such as Auschwitz and the Holocaust but as no pre-tutoring had occurred "she (DRB LSA) had translated what had been said, but because the child had no conceptual understanding of what a concentration camp was it's just absolutely pointless". Whilst a lack of collaborative planning was evident throughout all curriculum subjects, this was a particular issue in PE as this was the most frequently attended mainstream lesson for d/Deaf pupils, involved various activities and teaching points. Limited opportunities for interpreters to liaise with mainstream teachers is concerning as participants in Salter et al.'s (2017) study believed this would remove the challenges d/Deaf pupils encountered. Therefore, additional time needs to be allocated for collaborative planning between mainstream teachers and DRB staff to foster d/Deaf pupils' inclusion and development in mainstream PE. Additional research may be beneficial to build upon this study's findings and offer constructive points to promote effective PE teaching of d/Deaf pupils.

As demonstrated throughout this chapter with effort and planning mainstream teachers can ensure that d/Deaf pupils benefit from an inclusive PE environment (Schultz et al., 2013). However, as Arthur and Capel (2015) highlight, the quality of planning depends upon its flexibility as teachers must be proactive in the field and adapt teaching to provide appropriate learning opportunities for all pupils. Therefore, the following section explores how staff at Buttermere school worked collaboratively during mainstream PE lessons to promote d/Deaf pupils' development and inclusion.

Co-delivery.

To achieve effective PE teaching of d/Deaf pupils at Buttermere school, it was vital that mainstream teachers and DRB staff worked collaboratively during the delivery of a PE lesson particularly when collaborative planning had not occurred. As previously mentioned, mainstream PE lessons were predominantly delivered in speech whilst DRB LSAs would provide BSL interpretation. As highlighted by Mr Brakell, a DRB LSA, his role was "to sort of work alongside the PE teacher and communicate everything what he or she is saying and making sure that the child understands everything what is going on". Although mainstream staff predominantly

communicated via speech and DRB staff interpreted, Mr Luck recognised how he often sought the expertise of DRB staff when communicating with d/Deaf pupils:

“I know a bit of sign but I’m not competent in signing I know bits and pieces which I have sort of developed like a lot for PE really, um I know when obviously when Miss Rodriguez or Mr Brakell or whoever it is it is supporting the PE lesson I always try to ask little signs that will help for that lesson and last that's part of the collaboration really which we talked about earlier, if there's something that I'm going to be saying regularly in the class I do like to try and get the sign for it myself so I'll talk to Mr Brakell or Miss Rodriguez before the lesson to figure that out”.

In this sense, mainstream teachers and DRB staff worked collaboratively by exchanging knowledge of BSL to foster an inclusive and accessible PE environment. This is important considering that Buttermere’s accessibility plan outlined that mainstream teachers should seek the guidance of DRB staff to ensure d/Deaf pupils have full access to the curriculum. These findings corroborate those of Maher (2016) more broadly who states PE teachers often draw upon the expertise of LSAs when educating pupils with SEND. Nevertheless, this study suggests that mainstream teachers should draw upon the expertise of DRB LSAs during planning phases rather than during the lesson to maximise lesson time, a teacher’s BSL fluency and d/Deaf pupils learning and inclusion in PE.

Throughout PE lessons, staff utilised their own skillset to improve d/Deaf pupils’ educational experiences. For example, during one PE lesson, Mrs Doyle reminded Mr Luck to consider his positioning to ensure that d/Deaf pupils were not facing the sun and could see the BSL interpretation. Mrs Doyle’s feedback was well-received by Mr Luck who altered his position accordingly to ensure all pupils were not facing the sun. Here, Mrs Doyle resisted hegemonic power relations in the hierarchy between herself and the mainstream teacher (Maher, 2018) and was able to influence the actions of others (Elias, 1978 cited in Maher 2018). In doing so, Mrs Doyle used her power productively (Webb & Macdonald, 2007) and fostered a more inclusive PE environment to achieve effective PE teaching of d/Deaf pupils. Power through collaboration between two separate groups, in this instance mainstream and DRB staff was important to achieve their collective goals (Kelchtermans & Ballet, 2002; Thomson & Sparkes, 2020), specifically surrounding effective teaching. To facilitate more inclusive PE teaching of d/Deaf pupils, DRB LSAs should act as agents who challenge power relations to impart their knowledge on mainstream teachers to

enhance PE teaching effectiveness. Whilst feedback from DRB LSAs was generally well received by mainstream teachers at Buttermere school, this may be influenced by Buttermere's wider ethos for inclusion and their emphasis on collaborative working throughout school documentation. Indeed, it is plausible that in other schools, a DRB LSA's attempts to challenge power relations through providing feedback on a mainstream teacher's practice may be not well received, resulting in hostility and DRB LSA's exclusion.

Similarly, mainstream teachers would remind DRB staff to alter their positioning where appropriate to ensure accessible teaching. For example, during one PE lesson, Mr Wilcock asked Mr Brakell "Sir, do you mind facing that way so they can see you interpreting and receive the feedback". Responding to this feedback, Mr Brakell changed his positioning to stand opposite d/Deaf pupils, but behind the mainstream group who were providing feedback to the DRB pupils' group who were demonstrating to the rest of the class. Through offering each other constructive feedback throughout the PE lesson, both mainstream and DRB staff fostered an accessible learning environment and worked collaboratively to enhance each other's practice as desired throughout teaching policies.

Furthermore, mainstream teachers would often seek the expertise of DRB staff regarding BSL interpretation if they were ever unsure. As Mrs Phillips, a DRB staff member acknowledged "there are a quite a few teachers that you know do give it (BSL) a good go when tryna' talk to the children and if they're the stuck on anything they will always say to you what's that sign". This statement was supported by fieldwork observations, for example, during one PE lesson, Mr Luck asked Miss Rodriguez "What's the sign for change Miss?". After being informed of the BSL interpretation, Mr Luck practiced the sign for change and integrated it into the activity alongside speech when asking pupils to change groups. Similarly, during one PE lesson, when Mr Greenbank delivered a game of cat and mouse, he asked DRB staff for clarification on the BSL interpretation for cat and mouse to ensure that d/Deaf pupils understood the lesson content. Here, mainstream teachers followed the SEND Code of Practice (DfE & DoH, 2015) which states during the graduated approach cycle during the 'do' aspect class teachers must work closely with support staff. Through integrating BSL by working collaboratively with DRB staff, mainstream teachers attempted to foster an inclusive learning environment whereby all pupils could access instructions at the same time. Seeking the expertise of DRB staff to integrate BSL into teaching meant that both mainstream and DRB staff acted as agents who challenged hegemonic phonocentrism to foster a more inclusive PE

environment for d/Deaf pupils. Through collaborative working and exchanging knowledge, staff at Buttermere school achieved their goals of effective teaching which was connected to accessible and inclusive teaching. Thus, this study supports literature that suggests teachers and LSAs who have positive attitudes, appropriate knowledge and skills towards inclusion facilitate an inclusive educational environment (Powers, 2002; Vickerman & Maher, 2018). Therefore, both mainstream and DRB staff must work collaboratively and draw upon each other's skillset to enhance the effectiveness of teaching and d/Deaf pupils' PE experiences. This finding echoes Angelides and Aravari (2007) more broadly in education who suggest educators who are more collaborative with their colleagues will enhance their effectiveness when teaching d/Deaf pupils.

Notably aspects of collaborative working during PE lessons required improvement, particularly concerning communication between mainstream and DRB staff. Mainstream teachers would often make changes to the PE timetable e.g. starting the PE lesson earlier or extending it without consulting DRB staff. Changes to the PE timetable coupled with short staffing issues in the DRB posed a logistical challenge for DRB pupils' attendance at mainstream PE lessons. When asked about barriers to achieving effective inclusion of d/Deaf pupils, Mrs Mulligan commented "I mean number one, changing PE timetable, changing the time when we do (PE)". This statement was supported by fieldwork observations whereby changes to the PE timetable without consultation with DRB staff led to frustration for DRB staff. For example, on one occasion when Mrs Mulligan found out that year 6 PE was being held an hour early and at the same time as year 5 PE, she informed DRB staff and expressed, "it's too much". In response, Mrs Doyle stated "We can't, we haven't got the staff... they (DRB, year 6 pupils) can't do PE". Whilst recognising short staffing issues, Mrs Mulligan replies that "if the rest are doing PE, ours should have an equal chance". Later, Mrs Doyle commented how mainstream and DRB are slightly "disjointed at the minute". A lack of consultation regarding the changes to the PE timetable alongside short staffing issues posed significant risk to d/Deaf pupils' attendance in mainstream PE. Although the study identified positive elements of collaboration leading to effective teaching, these were jeopardised by a lack of collaboration during the delivery of PE, particularly communication.

Similar instances occurred throughout fieldwork, on another occasion upon noticing the year six, mainstream class going outside for PE, Miss Rodriguez stated "suppose they forgot to ask DRB again". Evidently, Miss Rodriguez experienced frustration that DRB pupils were merely forgotten about. Here, it may be argued that DRB pupils

were not perceived as a valued member of the class. DRB pupils were 'othered' and perceived a subordinate group compared to the hearing majority. Under audism, d/Deaf pupils are unwanted (Hauser et al., 2010), thus this event could be connected to audism. The presence of audism in mainstream PE is concerning as this may lead to hegemonic privilege alongside stigmatisation and othering of d/Deaf pupils (Eckert & Rowley, 2013; O'Connell, 2022; Wearmouth, 2023). Therefore, d/Deaf pupils may have restricted opportunities to develop cultural, linguistic and social capital compared to their hearing peers resulting in their exclusion and isolation in PE.

Alongside this, it is likely that without attending PE on a regular basis, d/Deaf pupils may fall behind their hearing peers' development in PE. For this reason, DRB PE lessons were established though they often lacked educational value and arguably exacerbated segregation between hearing and d/Deaf pupils at Buttermere school. To maximise d/Deaf pupils' development and inclusion in mainstream PE and across the school more broadly, mainstream teachers must consult and communicate with DRB staff regarding changes to the PE timetable.

Moreover, this study found that during PE lessons communication between DRB and mainstream staff required improvement. For example, during a year six PE lesson, it started raining heavy, so the class retreated inside and DRB pupils returned to the DRB. Though five minutes later when I walked through the sports hall, I noticed mainstream, year six was in the hall and had resumed their PE lesson. Noticing my presence, Mr Wilcock asked me to inform DRB that they could join the rest of the class. Here, the lack of communication between mainstream and DRB staff during the PE lesson resulted in missed learning opportunities for DRB pupils, negatively influencing their development. Whilst there was evidence of effective collaborative working at Buttermere school, there remained instances of exclusion resulting from poor communication between mainstream teachers and DRB staff and highlighting the necessity for this to improve.

Post delivery.

A key concern expressed by participants was the fast-paced environment of mainstream PE often made it difficult for DRB staff to address d/Deaf pupils' misconceptions as they occurred. As Miss Harrison stated:

“because you're in supporting a child or two, you can't stop the whole the lesson because 99% of the other children don't have that misconception because they've learned it through incidental learning, language opportunities”.

In this sense, the fast-paced mainstream PE environment did not allow appropriate time for addressing misconceptions which was vital to ensure that d/Deaf pupils' understanding of lesson content. Expanding on this, Miss Harrison highlighted addressing misconceptions for d/Deaf pupils is "hard to do in mainstream because you have to fit in with the rest of the class rather than the rest of the class fitting in with us". Here, Miss Harrison alludes to the notion that d/Deaf pupils are integrated into mainstream PE but not included. Drawing upon Haegele's and Maher's (2022) conception of inclusion, in the example above, it is clear that d/Deaf pupils are not always included in mainstream PE as they are not provided with necessary learning opportunities to facilitate their development. Therefore, it is vital that mainstream teachers allow time to address misconceptions during PE which will support D/deaf pupils' learning and inclusion.

In response to being unable to address d/Deaf pupil's misconceptions in a fast-paced environment Miss Harrison suggested that DRB staff "need to be even more mindful of the environment of the language that's being used and also kind of making a note and thinking when we come out, I need to just go back over". In doing so, Miss Harrison suggests DRB staff could engage with post-tutoring sessions which recap PE lessons and address any misconceptions that d/Deaf pupils may have to "improve language, understanding and awareness and capabilities in PE". This statement was supported by school documentation which highlighted teachers should engage with pre and post tutoring to enhance d/Deaf pupils' learning and inclusion. Consequently, to maximise d/Deaf pupils' development in mainstream PE, it is imperative that pre and post-tutoring sessions occur whereby lesson content is recapped, and misconceptions are addressed. This finding supports wider literature that highlights PE teachers must check d/Deaf pupils understand before during and after the lesson and review key teachable moments (Best, Lieberman & Arndt, 2002; Schultz et al., 2013). Therefore, mainstream teachers should work collaboratively with interpreters to provide post-tutoring lessons to maximise d/Deaf pupils' development in PE.

For mainstream teachers, post-delivery involved reflecting upon pupils' needs and considering how these could be appropriately supported moving forward. School policy documentation highlighted each teacher would meet with the SENCO and headteacher to discuss the progress of all pupils, appropriate interventions (if needed), effective teaching strategies and necessary improvements to support certain individuals. Utilising the graduated approach cycle below, teachers were encouraged to continuously reflect on their practice:

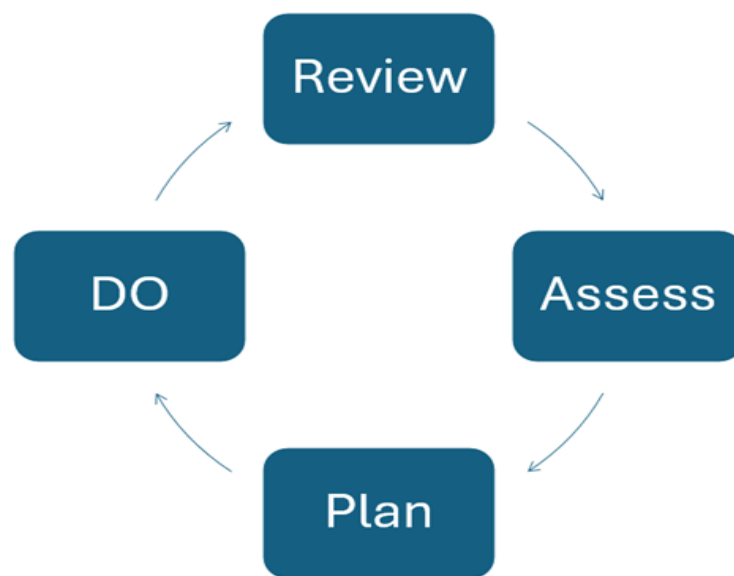


Figure 13: the graduated approach cycle.

Buttermere school implemented the graduated approach cycle from the SEND Code of Practice (DfE & DoH, 2015) into their teaching policies with the aspiration this would lead to effective teaching of all pupils. Teachers attempted to integrate this cycle into their practice where possible. As Mr Luck commented:

“I think a lot of teaching is sort of ... and how to support them then going from there, do you know what I mean? If you know Hannah struggles say for example, I'm not saying she does but say for example, she struggled with balance your then thinking let's go with balance and how we can break that down into smaller steps and build it up so they can confidently develop”.

The quote above illustrates how Mr Luck would assess pupils' needs, plan for these needs, deliver a lesson catering to the pupils' needs and then review/ reflect upon the pupils' progress and the effectiveness of teaching in a lesson. By doing so, Mr Luck followed the graduated approach cycle to cater for pupils' individual needs so that they could confidently develop. Consequently, when educating pupils with SEND, particularly d/Deaf pupils it may be beneficial for teachers to utilise the graduated approach cycle to support pupils' needs and promote their individual progress. The graduated approach cycle is also supported by Ofsted (2021) who argue this enables teachers to support pupils with SEND. Through hegemony, policy makers shaped Buttermere's norms and values (Sissel & Sheard 2001 cited in Maher, 2018), suggesting the use of the graduated approach cycle would lead to effective teaching.

Though merely implementing the graduated approach cycle is insufficient to be considered effective teaching, instead the level of engagement in this cycle needs to be considered alongside various other components when assessing teacher effectiveness. Whilst the graduated cycle approach was highlighted as crucial in policy documentation, participants did not explore reflective practice and post-delivery in depth. Though as Maher and Haegele (2022) highlight PE teachers must reflect upon their practice such as their positioning after PE lessons and discuss this with d/Deaf pupils to evaluate their teaching. Further research of post-delivery and teacher reflections during collaborative working when teaching d/Deaf pupils in PE is needed to enhance knowledge and inform future practice.

An appreciation for each other.

Throughout this study, mainstream teachers and DRB staff expressed a clear appreciation of each other, recognising the importance of both their roles in contributing to effective PE teaching of d/Deaf pupils. As Mr Wilcock highlighted, “not having an effective relationship with the interpreter would be a barrier (to including d/Deaf pupils in mainstream PE) ... by effective I mean that you've got good understanding of each other”. Thus, Mr Wilcock believed that a key contributing factor of d/Deaf pupils' inclusion in mainstream PE was a positive relationship between mainstream and DRB staff who both understood each other's roles. Adding to this Mr Greenbank stated:

“if you're prepared for it you know and you're very used to it then you're gonna have roles and jobs for all of those people (LSAs) and you're gonna know what you can ask them to do and what is kind of overstepping the boundary because there as a communicator....so if you're used to the system, then I would ... having those additional adults is fantastic”.

Whilst collaborative working can be advantageous, as Mr Greenbank highlights for this relationship to be effective a mainstream teacher must understand the roles and responsibilities of DRB LSAs whilst comprehending the boundaries of these. By asking DRB LSAs to complete other tasks which do not relate to their main role as an interpreter may negatively impact d/Deaf pupils' inclusion and understanding in mainstream PE. As DRB LSAs were subordinate to mainstream teachers in the school's hierarchy of power, DRB LSAs would often consent to practices which were counterproductive to them. For example, during a tennis lesson, Mr Luck stopped the class and told them he had witnessed balls going astray, he then instructed pupils to cushion the ball rather than adding more power. Mr Luck asked Mr Brakell to assist

the demonstration by feeding him the ball. Though once Mr Brakell was ready and about to begin the demonstration, Mr Luck added further instructions. Mr Brakell attempted to sign this by placing the ball under his armpit. After Mr Luck had finished speaking, the class began to stare at Mr Brakell who became flustered by the watching class and rushed his interpretation, which left Hannah looking visibly confused. As Mr Brakell quickly fed Mr Luck the ball, Mr Luck added further verbal instructions such as “look at my feet”. Following this, Mr Brakell whispered something inaudible to the class under his breath and asked myself to step in to feed Mr Luck the ball. In this instance, Mr Luck asking DRB staff to become involved with the demonstration took Mr Brakell away from his primary role to communicate for d/Deaf pupils. Notably, Mr Brakell was subordinate to Mr Luck who possessed more legitimate power (Webb & Macdonald, 2007). Despite Mr Brakell having more expert power in relation to supporting d/Deaf pupils, Mr Luck’s legitimate power held more influence. Mr Brakell fulfilled Mr Luck’s request despite this being counterproductive to his role of interpreter and being at the expense of the pupil they were both required to support. As Mr Brakell was unable to complete his role as interpreter fully, d/Deaf pupils had restricted access to teaching points including when Mr Luck encouraged pupils to consider how his feet were positioned. This inevitably placed d/Deaf pupils at a disadvantage when examining their development in comparison to their hearing peers as they did not have the same access to teaching points. Moreover, without my presence which meant that I could take over Mr Brakell’s role during the demonstration, this issue would not have been resolved thus d/Deaf pupils would have continued to miss teaching points. Therefore, when working collaboratively, mainstream teachers must comprehend the roles of DRB staff and their boundaries to avoid adverse impacts than those intended. This finding corroborates Vickerman’s and Maher’s (2018) statement that it is vital PE teachers know the role of LSAs and how to deploy them effectively. Moreover, this finding is supported by wider literature focused on pupils with SEND that highlights the necessity of support staff and teachers understanding each other’s roles and responsibilities to facilitate effective collaboration (Townsend & Parker, 2009; Devecchi et al., 2012).

Mainstream teachers displayed a clear appreciation for DRB staff throughout this study, recognising the role of DRB staff as instrumental in achieving effective PE teaching of d/Deaf pupils. As Mr Wilcock highlighted DRB staff play “a huge role” and are “absolutely crucial”. This statement was supported by fieldwork observations whereby mainstream teachers expressed a clear appreciation for DRB staff. For example, at the end of a PE lesson, Mr Wilcock praised Mr Brakell, the DRB staff

member who interpreted by stating “thanks for your help sir, it was awesome”. In this manner, mainstream teachers appreciated DRB staff and recognised their role as a vital component of effective PE teaching for d/Deaf pupils. This finding supports Vickerman and Blundell (2012) more broadly who highlight the key role LSAs play in fostering the inclusion of pupils with SEND in PE.

Notably, there was reciprocity by DRB staff who also appreciated the role of mainstream teachers. As Mrs Doyle stated, “I don't think we could do it without each other, really”. This statement was echoed by Mr Wilcock who emphasised “it's really important that partnership between you and the interpreter I think that's I think that's crucial”. Therefore, a clear appreciation of each other was a key component of collaborative working which led to effective teaching of d/Deaf pupils in mainstream PE. These findings echo literature more broadly that highlights the necessity of collaboration between mainstream teachers and specialist support staff to enhance d/Deaf pupils' progress and teaching effectiveness when educating d/Deaf pupils (Powers, 2002; Angelides & Aravi, 2006; Salter et al., 2017). In this study, as policy documentation highlighted the importance of collaborative working it may be argued that through hegemony policy makers at Buttermere school influenced mainstream teachers and DRB staff beliefs towards effective teaching of d/Deaf pupils. Nevertheless, participants believed that to promote d/Deaf pupils' development in mainstream PE and meaningful educational experiences, it was vital collaborative working between mainstream and DRB staff took place.

Chapter summary.

This chapter set out to analyse collaborative working between mainstream and DRB staff at Buttermere school, identified as a key component of effective teaching. The study found that collaborative planning between mainstream teachers and DRB staff is vital to ensure that d/Deaf pupils' needs are appropriately met in mainstream PE. Also, the study suggested that collaborative planning would enable DRB staff to pre-tutor language to d/Deaf pupils before PE lessons so that when d/Deaf pupils attended mainstream PE, they had the functional language to succeed. Despite collaborative planning being identified as a component of collaborative working, and in turn effective teaching, time restrictions for planning and difference in staff's timetables were significant barriers to achieving collaborative planning, which had implications for the effectiveness of PE teaching.

Examining the co-delivery of mainstream PE, this study demonstrates the necessity to improve consultation and communication between mainstream teachers and DRB

staff before and during PE lessons to enhance d/Deaf pupils' participation, inclusion and development. Moving on, the chapter explored the benefits of post-tutoring after a mainstream PE lesson to enhance d/Deaf pupils' understanding of lesson content and clarify misconceptions. Through post-tutoring sessions, participants suggested that d/Deaf pupils will experience further development in mainstream PE, a key outcome of effective PE teaching identified by participants. As findings were limited with regards to how staff work collaboratively after the mainstream PE lesson, further research may enhance knowledge. Throughout this study, mainstream teachers and DRB staff appreciated that effective PE teaching of d/Deaf pupils relied on working collaboratively and drawing upon each other's expertise. Thus, this study supports Vickerman & Blundell (2012) more broadly who suggest for PE to be effective for pupils with SEND, mainstream teachers and LSAs must work collaboratively through planning, preparation and delivery to best support pupils with SEND. Findings from this study share good practice when educating d/Deaf pupils in mainstream PE by providing empirical evidence to support the implementation of collaborative working strategies. Through providing empirical evidence on how teachers, pupils and interpreters navigate their relationships and the most effective ways to support each other in mainstream PE this study addresses the current research gap identified by Maher and Haegele (2022). This new understanding may inform future practice in similar settings to enhance d/Deaf pupils' inclusion and development in mainstream PE. Although collaborative teaching was seen as desirable by staff members, achieved through collaborative planning, pre-tutoring, co-delivery and post tutoring, its successful implementation was threatened by a lack of PPA time and poor communication. To enhance collaboration between mainstream and DRB staff, additional time needs to be allocated for planning, preparation and reflection to assist d/Deaf pupils' learning and inclusion. Though it is noteworthy that allocating time for collaboration between mainstream and DRB staff would prove difficult as this would reduce available time on an already restricted timetable. Future research should build upon this study's findings by investigating elements of successful collaborative working between mainstream teachers and DRB staff or interpreters when educating d/Deaf pupils in PE.

CHAPTER EIGHT.

INTERACTIONS AND RELATIONSHIPS IN MAINSTREAM PE.

Introduction.

A key aim of this study was to investigate social interactions between d/Deaf pupils, their hearing peers, mainstream teachers and DRB staff in mainstream PE. To achieve this aim, this chapter analyses several relationships in mainstream PE and its implications on d/Deaf pupils' development and inclusion. Since a dearth of research explores d/Deaf pupils' social interactions in mainstream PE, this study enhances existing knowledge by providing new insight into an under researched area. The first part of this chapter explores d/Deaf pupils' relationships with mainstream PE teachers and DRB staff, which play a critical role in determining d/Deaf pupils' inclusion and attitudes towards PE. Next, the chapter explores interactions and friendships between hearing and d/Deaf pupils in PE and the wider school context. By delving beneath the surface, the chapter highlights how d/Deaf and hearing pupils' friendships may not always be as they seem through exploring how these are often not well established and its implications upon d/Deaf pupils' development. Moving on, the chapter analyses how social interactions between d/Deaf and hearing pupils were promoted at Buttermere school and to what extent this contributed to d/Deaf pupils' inclusion in mainstream PE. The final part of this chapter sheds light on the realities of being d/Deaf in a phonocentric PE environment, highlighting its negative implications and offering suggestions to improve d/Deaf pupils' inclusion in mainstream PE. Through assessing each subtheme in relation to d/Deaf pupils' inclusion and development, it is possible to compare a teacher's practice against their constructs of effective PE teaching and offer suggestions which work towards effective PE teaching of d/Deaf pupils.

Staff's relationships with d/Deaf pupils.

Throughout this study, most participants recognised d/Deaf pupils' relationships with mainstream and DRB staff as instrumental in determining positive PE experiences and effective teaching of d/Deaf pupils. Therefore, the following section explores d/Deaf pupils' relationships with both mainstream and DRB staff.

When educating d/Deaf pupils in mainstream PE, participants believed an effective teacher was one who knew BSL. As mentioned within Chapter Six, Buttermere school ran BSL courses for mainstream teachers which equipped teachers with the appropriate skills to communicate with d/Deaf pupils. In utilising BSL, Miss Harrison

suggests that this will “make the children feel included in the register and part of a class”. Mainstream teachers knowing BSL enabled accessible communication, contributing to d/Deaf pupils’ inclusion, identified as a component of effective PE teaching at Buttermere school. This finding supports Jarvis and Iantaffi (2006) more broadly who suggest the successful education of d/Deaf pupils relies on the attitudes, knowledge and skills of their mainstream teacher. Consequently, mainstream schools must provide various opportunities such as BSL courses to empower teachers to act as agents who challenge phonocentric teaching to create a more inclusive PE environment for d/Deaf pupils. However, it is noteworthy, Miss Harrison commented “some teaching staff are better signers than others”. Whilst all mainstream teachers had basic d/Deaf awareness and BSL skills, their signing abilities varied, meaning that the level and quality of interaction amongst d/Deaf and mainstream teachers differed. Nevertheless, all participants reported positive relationships between mainstream staff and d/Deaf pupils.

Upon observation, Mr Luck frequently used BSL to communicate with d/Deaf pupils in mainstream PE. For example, when he delivered a warmup game of ‘last one to ...’ followed by instructions such as sit down, stand up and jump, he noticed a delay for d/Deaf pupils receiving BSL interpretation and completing the activity. Thus, Mr Luck asked Mr Brakell to lead the warmup until he became familiar with the signs for each movement and could deliver the warmup using BSL. Following this, Mr Luck commented how he would develop his BSL skills in the coming weeks to make activities “more fair”. As the weeks progressed, Mr Luck continued to develop his BSL skills, integrating these into lessons where possible.

Reflexive note: *Despite claiming d/Deaf pupils consistently attended mainstream PE on their school website, throughout fieldwork conversations it was clear that this had not always been the case. As participants explained, prior to fieldwork, d/Deaf pupils attended mainstream PE on a sporadic basis, hence why DRB pupils also had a DRB PE lesson on a Tuesday afternoon. The beginning of fieldwork was a key turning point whereby DRB pupils began to consistently attend mainstream PE. The consistent attendance of d/Deaf pupils in PE coupled with a researcher interested in effective teaching of d/Deaf pupils encouraged teachers to reflect upon the inclusivity of their PE lessons for d/Deaf pupils. Arguably, Mr Luck’s reactive approach to learning BSL was just one example of how the research study had influenced those at Buttermere school.*

As Miss Rodriguez stated, “he’s (Mr Luck) started picking up on some of the signs ... and he’s started using them himself which is really nice to see”. This statement was echoed by fieldwork observations for example, during a tennis lesson when Hannah approached the mainstream group who had already begun their warmup, Mr Luck signed and said “Hello” to welcome Hannah. Replying in BSL, Hannah replied “Hello” and asked what the class was doing. Utilising a mixture of visual gestures, BSL, and speech, Mr Luck explained that Hannah should join in and jog on the spot. Hannah seemed to interpret this and positioned herself in the front row, jogging with the remainder of the class. Through utilising BSL, Mr Luck’s communication was not only accessible but also inclusive, acting as a key component of effective PE teaching at Buttermere school. Therefore, this study supports Reich and Lavay’s (2009) statement that learning how to communicate with d/Deaf pupils is the first step to pedagogical success. As Figure fourteen shows below, for Hannah, Mr Luck knowing BSL is a key determinant of her positive PE experience.

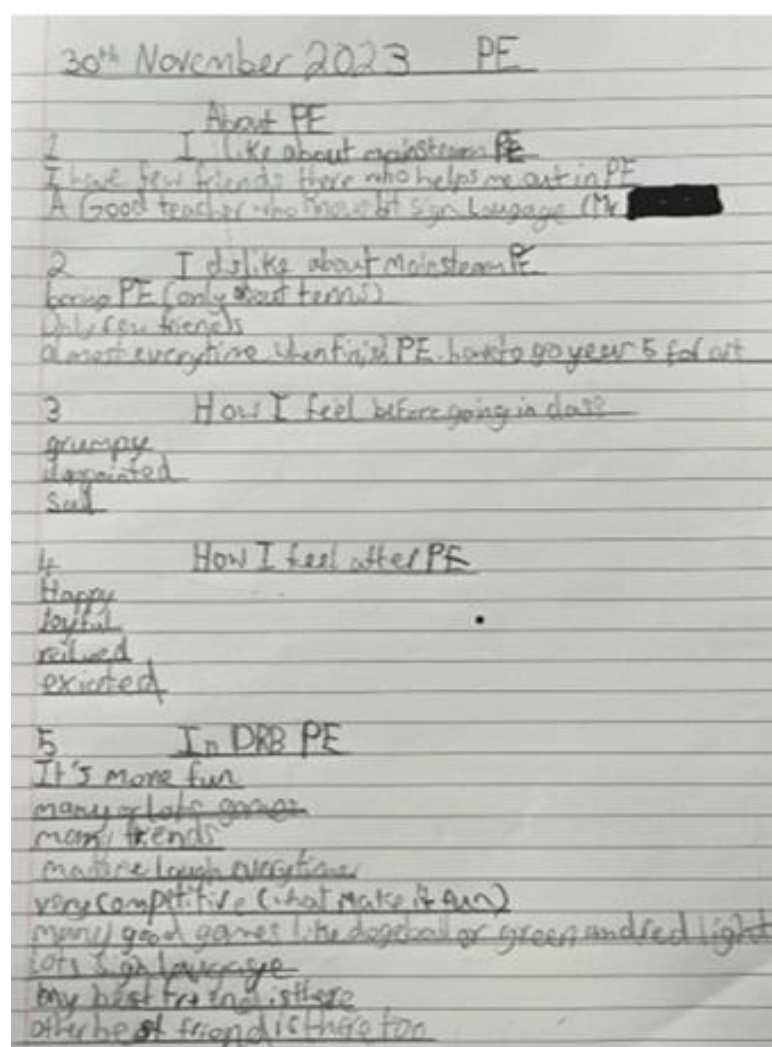


Figure 14: Hannah’s writing about mainstream PE.

From this perspective, a mainstream teacher who uses BSL, contributes to a positive mainstream PE experience for d/Deaf pupils. This study supports Hodge et al. (2012) who highlight PE teachers should learn sign language and use this when teaching d/Deaf pupils. As Barboza et al. (2019) suggest d/Deaf pupils feel valued when mainstream teachers know or desire to learn sign language. Through learning BSL and integrating this into their practice, mainstream teachers can act as agents and challenge hegemonic phonocentrism in PE whilst normalising the use of BSL. Here, a teacher may enhance the accessibility of information to foster an inclusive PE environment for d/Deaf pupils and challenge audism, in particular negative stereotypes surrounding d/Deaf people and BSL that may exist.

However, Mr Luck acknowledged not being fluent in BSL meant that the quality of his relationships with d/Deaf and hearing pupils differed. As Mr Luck commented:

“I’m not fluent in BSL obviously language wise I can’t always express myself in the way I would like to express myself with d/Deaf children and I don’t always sort of understand as well how they’re expressing themselves to me so that’s something that I would want to change in the future and improve on”.

Considering this, Mr Luck exclaims that he desires to become more fluent in BSL to improve his relationships with d/Deaf pupils. The importance of mainstream teachers developing their BSL skills was also recognised by hearing pupils, including Oliver who stated, “Teach the teachers to sign” when advocating for his d/Deaf peers throughout his interview. In doing so, participants believed more accessible teaching for d/Deaf pupils could be provided which would improve their inclusion in mainstream PE. This study encourages teachers to use BSL when educating d/Deaf pupils whose first language is sign language to enhance accessibility of information contributing to d/Deaf pupils’ learning and inclusion in mainstream PE. However, as Knoors and Hermans (2010) highlighted more broadly, whilst good sign language skills are important for effective teaching of d/Deaf pupils, this alone is not enough to achieve it. Therefore, accessible communication methods must be considered alongside other components of effective PE teaching as discussed throughout Chapter Six.

As mainstream staff had limited signing abilities, they predominantly relied upon DRB staff to interpret communication between themselves and d/Deaf pupils. However, throughout fieldwork it was apparent that DRB staff can facilitate or hinder relationships between d/Deaf pupils and mainstream staff. For example, during a PE lesson Mr Luck asks Hannah to demonstrate and verbally states “I want to see your

good cheerleading that Miss Rodriguez was talking about". However, as Miss Rodriguez did not interpret this, Hannah missed the full classroom dynamics which may have improved her relationship with Mr Luck. Arguably, this may be an example of individual, aversive audism, whereby an interpreter only passes on information they perceive important (Eckert & Rowley, 2013). This is concerning as when audism is evident, d/Deaf people have unequal access to communication and incidental capital, reducing their chances of success whilst perpetuating a system of disadvantage where d/Deaf people experience discrimination and marginalisation (Eckert & Rowley, 2013; O'Connell, 2022). As discussed within Chapter Four, institutional, covert audism and aversive individual audism are concerned with interpreters filtering information depending on what they perceive important (Eckert & Rowley, 2013). As evidenced above, audism hinders the development of relationships between d/Deaf pupils and their mainstream teachers which is crucial to d/Deaf pupils' inclusion and development in PE. Considering that phonocentrism is the root cause of audism (Bauman, 2008b), only once phonocentrism is addressed can we move away from audist practices in mainstream PE. Therefore, DRB staff must interpret in full to provide d/Deaf pupils full access to communication whilst mainstream teachers should act as agents and learn BSL to challenge phonocentrism to enhance their relationships with d/Deaf pupils and d/Deaf pupils' inclusion.

Throughout Buttermere school, d/Deaf pupils' relationships with DRB staff were influenced by d/Deaf pupils' participation and inclusion in mainstream PE. As d/Deaf pupils received most of their education in the DRB, over the years DRB staff had established strong relationships with d/Deaf pupils which was beneficial during mainstream PE. As Mrs Coubourne suggested d/Deaf pupils are familiar with DRB staff, meaning that "staff in the base understand the d/Deaf children". Adding to this, Mrs Goodison stated "having a member of staff who's tuned in to their needs in particular and knowing what they need it is crucial for the for them, for their learning". In this manner, the relationships between d/Deaf pupils and DRB staff provided DRB staff with expertise on d/Deaf pupils which enabled d/Deaf pupils' needs to be met in mainstream PE. For example, this involved differentiation of instructions to meet individual literacy levels, as discussed within Chapter Six. Therefore, strong relationships between DRB staff and d/Deaf pupils were a key contributing factor to d/Deaf pupils' inclusion and development in mainstream PE.

Additionally, strong relationships between DRB staff and d/Deaf pupils played a vital role in promoting positive attitudes towards mainstream PE for d/Deaf pupils. For example, when reminding Hannah that it is cheerleading in PE, Miss Rodriguez

mimics a cheerleading with pom poms and states “give me a” followed by each letter of Hannah’s name, Hannah shakes her head and laughs. Here, Miss Rodriguez fosters positive PE experiences and attitudes towards PE, which is vital considering this may influence motivation, learning and future physical activity levels (Linda Rikard & Banville, 2006). To maximise d/Deaf pupils’ learning and future physical activity levels, DRB staff should foster positive attitudes towards mainstream PE amongst d/Deaf pupils.

Similar to existing research, mainstream teachers frequently placed responsibility on interpreters for d/Deaf pupils’ engagement in mainstream PE (Tanure Alves et al., 2021). However, d/Deaf pupils being reliant mostly on DRB staff for their inclusion in PE was somewhat problematic considering DRB staff mostly held low value towards PE. Notably, this view contrasted to those of the SENCO at Buttermere school who regarded PE as important, perhaps influenced by his speciality in PE. Perceiving PE as a low priority compared to other subjects was also found in Maher’s (2016) study focused on LSAs which also emphasised that LSAs can challenge or reject the wishes of their SENCO. As the next paragraph explores, the position of PE as a subordinate subject which challenged the wishes of Buttermere’s SENCO had significant negative implications on d/Deaf pupils’ inclusion and development.

Throughout fieldwork, DRB staff often utilised the visual nature of PE to their advantage to take a break in mainstream PE. For instance, during a year 6 PE lesson delivered by an external tennis coach, two DRB staff members, Mr Brakell and Mrs Doyle sat on a bench and Mrs Doyle stated, “it’s very visual”, Mr Brakell jokingly replied “it’s very visual”. Here, DRB staff members suggested the visual nature of tennis meant they were not required to assist d/Deaf pupils and could use this to justify sitting on the bench. For the remainder of the lesson, they talked about things related and non-related to PE. During this lesson, I witnessed Jen and other d/Deaf pupils requiring assistance, yet Mr Brakell and Mrs Doyle remained sat on the bench. After the lesson, I reminded Mrs Doyle that year 4 PE was next, so she went inside to retrieve pupils. However, it was not until 15 minutes later that she returned with DRB pupils, meaning they had missed the warmup and instructions of the first activity including teaching points. Consequently, DRB staff’s low value towards PE negatively impacted d/Deaf pupils’ participation, learning and inclusion in mainstream PE.

Furthermore, the low value of PE amongst DRB staff reduced d/Deaf pupils’ access to information within PE, for example when James explained that in mainstream PE hearing people talk, Mrs Mulligan responded “but you have someone with you” James

replied “Yes, but they’re always talking”. In this manner, DRB staff’s low value placed on PE impeded d/Deaf pupils’ access to full classroom dynamics, negatively impacting their inclusion and development. An overreliance on DRB staff for d/Deaf pupils’ engagement in PE coupled with their low value towards PE increases the likelihood of misunderstandings, whilst limiting d/Deaf pupils’ learning, participation and inclusion. Therefore, it is imperative that DRB staff’s value towards PE is challenged whilst mainstream teachers take more responsibility for d/Deaf pupils’ learning and inclusion.

Peer friendships.

Throughout this study, peer friendships determined d/Deaf pupils’ PE experiences. Contextually, policy documentation, such as the SEND report, outlined the importance of all children learning BSL to promote friendships and policy was put into practice by providing all hearing pupils weekly BSL lessons. Thus, Mr Brakell suggested hearing pupils are “aware, they have basics and language, they know how to interact they watch us, they learn in class”. During PE lessons, hearing pupils frequently utilised BSL when working with d/Deaf pupils. For example, when it was James’ turn to bat during a game of rounders, his hearing peer signed “ready” before bowling the ball to James. Teaching all pupils BSL facilitated communication between d/Deaf and hearing pupils, positively contributing to d/Deaf pupils’ inclusion in mainstream PE. Reflecting on d/Deaf and hearing pupils’ relationships Miss Rodriguez stated, “you can see the happiness in the DRB kids’ faces when they’ve (hearing pupils) signed to them”. Consequently, Mr Greenbank suggested that “d/Deaf children are always quite comfortable being in the lessons and always interact with the other kids and I think the fact that all other children are taught BSL gives them you know a way to communicate”. From this perspective, teaching all pupils BSL helps overcome communication barriers and contribute to a more inclusive PE environment. It is also noteworthy that PE activities often required more teamwork and communication skills than other subjects, meaning that pupils were provided with a unique opportunity to develop their friendships. In Mrs Doyle’s words:

“it’s really big on teamwork (PE) you know and if our children didn’t go into to mainstream PE, in a mainstream school, we’re so lucky, they won’t know how to play as a team you know because those team games in PE leads onto the team games on the playground and that is a big thing”.

The learning of BSL in the wider curriculum alongside opportunities for social interactions in mainstream PE facilitated d/Deaf pupils’ interactions and friendships

with their hearing peers. To promote the inclusion of d/Deaf pupils who communicate via BSL, schools should provide hearing pupils with opportunities to develop their BSL competence. Therefore, this study supports Columna and Liberman (2011) and Tanure Alves et al's (2021) calls for all pupils to be taught sign language to enhance d/Deaf pupils' inclusion in mainstream PE.

Within PE, hearing pupils used BSL to clarify misunderstandings for d/Deaf pupils. As Katie, a hearing pupil reported "because I kind of know how to sign ... when Hannah didn't know what to do so I explained to her what we're doing". Similarly, when misunderstandings occur with hearing classmates Hannah stated, "I might ask the girl who I've got the relationship with to come and help". This statement was also echoed by Dan, a d/Deaf pupil who highlighted if he experienced confusion during social interactions with peers, he would seek out his hearing peers who knew BSL to assist communication. Furthermore, within Hannah's writing of PE, as seen in Figure fourteen, she acknowledged that "I have a few friends who helps me out in PE". In this manner, hearing pupils knowing BSL was crucial to clarify misunderstandings and assist d/Deaf pupils' development in mainstream PE. These findings support those of Jarvis (2003) and Iantaffi et al. (2003a) more generally in mainstream education who suggest hearing friends may help clarify any misunderstandings that may occur for d/Deaf pupils. Therefore, mainstream schools should teach hearing pupils BSL to encourage them to act as agents who strive for increasing use of sign language (O'Brien & Emery, 2014). Here, mainstream schools can challenge hegemonic phonocentrism in everyday life and create an inclusive educational environment where d/Deaf pupils can thrive. However, these findings should be cautiously interpreted considering that most d/Deaf pupils in this study first language was BSL. It is noteworthy that not all d/Deaf pupils know sign language, meaning that they would not benefit from their hearing pupils learning BSL. Thus, schools must employ a flexible approach, consider the heterogeneity of d/Deaf pupils and cater to their individual needs.

Alongside BSL, hearing pupils would utilise visual gestures to communicate with d/Deaf pupils. As Mrs Goodison highlighted "generally they sign or there's a lot of tapping... so they'll get each other's attention, and they'll show each other what to do". Mrs Goodison's comments were supported by fieldwork observations whereby hearing pupils would often use pointing or tapping to communicate with d/Deaf pupils. For example, during a tennis lesson, Mr Luck asked pupils to verbally instruct their partner to feed the ball into the left or the right. Though as Katie was unsure on the

sign for left and right, she instead pointed to Hannah which side she wanted the ball to be served on. By utilising visual gestures such as pointing Katie was able to overcome communication barriers and successfully complete the activity with Hannah. Commenting on this, Mr Brakell stated “hearing pupils still manage to get their message across visually even if they don’t know the sign”. Thus, Mrs Doyle suggested that the physical and visual nature of PE can assist communication between d/Deaf and hearing pupils, offering a different type of interaction compared to other subjects such as English. Consequently, d/Deaf and hearing pupils may use the visual-spatial of PE to their advantage to overcome communication barriers. The visual-spatial nature of PE may assist teachers in challenging phonocentric learning environment and promote positive interactions between d/Deaf and hearing peers. However, whilst communicating via visual gestures e.g. pointing or tapping, may help overcome initial communication barriers between d/Deaf and hearing pupils, this does not guarantee quality communication. Future research should investigate the quality of communication between d/Deaf and hearing peers to enhance knowledge surrounding d/Deaf pupils’ social interactions in mainstream PE.

Within this study, hearing pupils displayed a positive attitude towards d/Deaf pupils’ inclusion and considered themselves to have d/Deaf friends. For Katie, playing with d/Deaf pupils in PE was “fun”. Whilst Oliver expressed that he would like d/Deaf pupils to attend mainstream PE more often. Hearing pupils displayed positive attitudes towards the integration of d/Deaf pupils in mainstream PE. Positive attitudes displayed by hearing pupils within this study is encouraging considering that previous research has suggested peer attitudes underpin inclusion of d/Deaf pupils in mainstream settings (Stinson & Anita, 1999). In this study, this was evidenced by Jackson who stated if he faced communication difficulties he would “learn different signs if I don’t know what they are ... I sometimes search them up”. Hearing pupils displayed a proactive approach towards d/Deaf pupils’ inclusion in PE and would act as agents who challenged phonocentrism by learning BSL. Acceptance of d/Deaf peers by hearing pupils in this study was encouraging considering that feeling accepted is a key component of Maher and Hagele’s (2022) definition of inclusion. These findings vary from Tanure Alves et al.’s (2021) study who found that hearing peers did not accept their d/Deaf peers. Though differing geographic locations, educational policies and differences between primary and high school may explain the contrasting findings. Additionally, it is plausible that this study’s findings may not represent the views of all hearing pupils at Buttermere school as pupils desire to take part in the study may have been influenced by their attitudes towards their d/Deaf

peers. Nevertheless, this study's findings are supported by research more generally in mainstream education in the UK which highlights d/Deaf pupils are accepted by their hearing peers (Nunes, 2001; Iantaffi et al., 2003a). Moving forward, additional research concerning the acceptance of d/Deaf pupils in mainstream PE within English primary schools with and without DRB is needed to enhance knowledge.

Importantly, relationships established within mainstream PE positively contributed to d/Deaf pupils' inclusion in wider school life. As Miss Harrison comments:

“now I'm seeing there are children at now when it's wet break you know when we don't go outside, and we stay in our own classes we've got some mainstream hearing children come up that want to play and that's never happened before so it's really lovely, it's lovely for our children that they have got hearing friends”.

Social interactions within mainstream lessons such as PE led to hearing pupils actively seeking out their d/Deaf peers during playtime indicating friendships were of good quality. This finding contrasts from Tanure Alves et al. (2021) who found that d/Deaf pupils had no engagement with their hearing peers during free time. Therefore, mainstream teachers and DRB staff should provide opportunities for social interactions between d/Deaf and hearing pupils to promote d/Deaf pupils' inclusion in Buttermere school.

Although participants identified friendships between hearing and d/Deaf pupils, these friendships were often not well established. As Hannah highlighted “There's one girl I've got a good relationship to, I talk to her sometimes not a lot but sometimes, she probably the only one I've got a relationship with, in that class”. Thus, d/Deaf pupils' friendships with hearing pupils are rare and sporadic. It is also noteworthy that Hannah did not know the name of her hearing friend during interview, suggesting that their friendship was not well developed. Concerns over the quality of friendships between d/Deaf and hearing pupils were also echoed throughout staff interviews. As Mr Wilcock highlighted, relationships between d/Deaf and hearing pupils are:

“not as good as I would like ... I still see there's not enough willingness to mingle as I would like I still think that when they are asked to group up, I still think they tend to stick to their own bubble a little bit”.

This statement was supported by Mr Luck who exclaimed, “there's like moments where they do seek each other out but it's maybe not as prominent as I wanted to be in my class”. In this manner, whilst d/Deaf pupils are accepted and have friendships

with hearing pupils, the quality of friendships require improvement. This finding is concerning as policy documentation at Buttermere school highlighted that high quality PE would enable pupils to develop and maintain positive friendships. Alongside this, effective teaching across all subjects at Buttermere school was closely connected to a teacher's ability to foster an inclusive environment. Consequently, it is essential Buttermere improves the quality of friendships between d/Deaf and hearing pupils to achieve their aims of high-quality PE, and effective teaching more broadly.

Furthermore, hearing and d/Deaf pupils' friendships did not extend beyond school life. Within her interview, Mrs Doyle highlighted "there's not much social interaction outside of school hours". As many d/Deaf pupils would not be from the local area, d/Deaf pupils were provided the option to travel to and from school in a taxi with a chaperone if their parents were unable to travel. Mrs Doyle recognised how d/Deaf pupils being transported to school in taxis meant that they missed "school gate culture" where parents talk, become friends and invite each other's children for tea, parties and sleepovers. These findings replicate those of Nunes (2001) more generally in mainstream education who found that d/Deaf pupils' friendships were of poor quality, more likely to be sporadic and did not continue after school hours. This is worrying as friendships have been identified as instrumental to positive mainstream experiences for d/Deaf pupils, as discussed within the literature review (Ridsdale & Thompson, 2002; Jarvis, 2003; Iantaffi, et al., 2003; Batten et al., 2014; Edmondson & Howe, 2019). Consequently, Buttermere school must improve the quality of friendships between d/Deaf and hearing pupils to create a positive educational experience.

However, as acknowledged by Mrs Mulligan the quality of friendships "depends on the personality of the children and their the level of language and the level of skill of communication". For d/Deaf pupils such as Daisy who communicated via speech, her relationships with hearing pupils were of good quality. Fieldwork observations noted Daisy holding hands, laughing and skipping with her hearing peers during mainstream PE, indicating she had a strong relationship with them. These friendships contrasted to those between d/Deaf pupils who communicated via sign language and hearing pupils which were often not well established as previously discussed. Therefore, the diversity of all pupils should be considered when reviewing peer friendships, appreciating that the diversity of d/Deaf pupils will influence their relationships. Nevertheless, Daisy's positive relationships with her hearing peers was overshadowed by the vast amount of data indicating that d/Deaf pupils had low quality friendships with their hearing pupils. This finding is similar to Andersson and Adams

Lyngbäck's (2022) study who reported that, despite some d/Deaf pupils experiencing friendships, most participants recalled a socially unpleasant experience. Overall, at Buttermere school, the quality of friendships between d/Deaf and hearing pupils required improvement, leading to staff promoting social interactions in a variety of ways which will now be discussed.

Creating opportunities for social interactions.

At Buttermere school, creating opportunities for social interactions between d/Deaf and hearing pupils was a key component of effective PE teaching. Throughout interviews, staff recognised that fostering positive social interactions within PE was a vital determinant of pupils' friendships in wider school life. As Mrs Doyle reported "In PE, I'm very big on the social interaction with the other children", suggesting that social behaviour "in PE it will lend itself to the playground". From this perspective, it was essential that hearing and d/Deaf pupils were provided with opportunities for social interactions to promote d/Deaf pupils' inclusion in Buttermere school.

A prominent method to promote social interactions was mixing d/Deaf pupils with hearing pupils during paired or group activities within PE. In Mrs Doyle's opinion, the most effective teaching strategy when educating d/Deaf pupils in PE is "pairing DRB pupils with mainstream pupils" as this promotes "full inclusion", social interactions and the development of social skills. Similarly, Mr Luck acknowledged how group games "can be a really good opportunity for hearing pupils and d/Deaf children to mix and learn sports together... during PE it's a nice opportunity for them to continue to develop those relationships and friendships". From this perspective, creating opportunities for social interactions between d/Deaf and hearing pupils in mainstream PE can foster and maintain friendships, contributing to d/Deaf pupils' inclusion. On a personal level, social interactions provided hearing pupils an opportunity to develop their BSL skills, identified by staff as a useful life skill. Social interactions that enhanced hearing pupils' BSL skills enabled hearing pupils to acquire linguistic capital with their d/Deaf peers, which could be exchanged for social capital. By improving all pupils' BSL skills, habitus within Buttermere school could be transformed whilst doxa, specifically linguistic capital could be challenged. Through changing habitus of the field and the conditions to acquire capital, d/Deaf pupils were able to acquire linguistic capital with their hearing peers which could be exchanged for social and cultural capital, facilitating their inclusion at Buttermere school.

Also, social interactions with hearing peers were identified as beneficial for d/Deaf pupils' development. For example, when Dan resisted going to mainstream PE, Mr

Brakell informed him “at ‘Buttermere’ it’s important d/Deaf pupils and hearing pupils, mainstream classes mix together so you know how to interact with hearing” he then adds “it’s an important life skill”. By encouraging social interactions, Buttermere school facilitated the bridging social capital between d/Deaf and hearing pupils to promote friendships and an inclusive school setting (Putnam, 2000). This finding echoes literature more broadly in sport which suggests that bridging social capital can improve social interactions in a community, especially in relation to inclusion and cohesion (Hoye & Nicholson, 2009). Within this study, promoting social interactions between hearing and d/Deaf pupils within mainstream PE offered various individual and collective benefits for all pupils. This finding supports Jarvis (2003) who identified the reciprocal benefits of peer friendships for both hearing and d/Deaf pupils. Therefore, mainstream teachers should promote opportunities for social interactions between d/Deaf and hearing pupils when possible, to enhance all pupils’ development and foster an inclusive learning environment.

Upon observation of PE lessons, staff would intervene when necessary to promote social interactions between d/Deaf and hearing pupils. As Mrs Doyle acknowledged “sometimes we do have to intervene and say like now don’t forget you you know DRB are here, don’t forget”. During one PE lesson, after asking pupils to get into pairs, Mr Wilcock noticed d/Deaf pupils and hearing pupils were not mixing. Reacting to this, Mr Wilcock exclaimed “we are an inclusive school, I don’t know why we’ve got DRB separate, we are an inclusive school that’s not what we do”. Mr Wilcock proceeded to state that d/Deaf pupils could pick their own team whilst encouraging pupils to mix and reselect their teams. By encouraging d/Deaf and hearing pupils to pair up, Mr Wilcock challenged social divisions between d/Deaf and hearing pupils to promote d/Deaf pupils’ inclusion in mainstream PE. Thus, this study supports Liberman (2016) who suggests that teachers should pair hearing and d/Deaf pupils together during mainstream PE. Consequently, through promoting social interactions between d/Deaf and hearing pupils, a teacher can foster an inclusive PE environment whereby all pupils experience a sense of belonging.

However, staff must carefully consider how they prompt hearing pupils to include d/Deaf pupils, as otherwise a teachers’ good intentions may have adverse effects. For example, during a PE lesson when the class was separated into teams, Mrs Doyle approached Jen’s team. Using speech alone, Mrs Doyle reminded hearing pupils “Don’t forget about Jen, she isn’t an afterthought... remember to include her” whilst prompting pupils to use the signs they had previously learnt. Similar concerns regarding d/Deaf pupils’ inclusion were raised the following week when Mr Wilcock

allowed pupils to pick their own teammates. Mrs Doyle verbally reminded Mr Wilcock to encourage the class to pick d/Deaf pupils because “they’re always left out”. Following this, Mrs Doyle taught hearing pupils how to sign d/Deaf pupils names so they could pick d/Deaf teammates. On both occasions, whilst Mrs Doyle’s attempts to ensure d/Deaf pupils’ inclusion had good intentions, notions of audism were apparent through giving reminders to include d/Deaf pupils by speech alone, excluding d/Deaf pupils from communication. Arguably, Mrs Doyle’s verbal reminders symbolised individual/aversive audism whereby people may advocate inclusion but deny their prejudice e.g. an interpreter filtering information (Eckert & Rowley, 2013). The presence of audism via phonocentric teaching may reinforce notions of superiority amongst hearing people whilst highlighting difference and ‘othering’ d/Deaf pupils (Eckert & Rowley, 2013), preventing their inclusion in PE. Therefore, when prompting d/Deaf and hearing pupils to mix, communication explaining this must be accessible to all pupils.

Reflexive note: *When observing Mrs Doyle’s intervention in the PE lesson to teach hearing pupils their d/Deaf peers’ sign names I was initially inspired by her agency to challenge phonocentrism and power relations whilst promoting d/Deaf pupils’ inclusion in mainstream PE. However, upon reflection I found this somewhat surprising considering that this class was in year six and had been together since reception. This supported participants’ statements who highlighted that d/Deaf pupils had irregularly attended mainstream lessons prior to my arrival. I wondered what implications this had on d/Deaf pupils’ development and inclusion I had witnessed during fieldwork.*

Although mixed groupings were identified as a key component of effective PE teaching, when d/Deaf pupils were split into separate groups this posed a logistical challenge for DRB staff. Due to short staffing, only one DRB staff member attended PE lessons which would often have two or three d/Deaf pupils attending. However, when d/Deaf pupils were put in separate groups coupled with short DRB staffing, Mr Brakell acknowledged how inclusivity may be negatively impacted. Mr Brakell stated, “it can be challenging if our d/Deaf children split into groups where they are not within the same group because we’ve just got to like split ourselves two really to make sure we go around both groups”. In this sense, Miss Rodriguez highlights mixed groupings in PE can be beneficial because “they’re (d/Deaf pupils) not segregated or isolated as just them but it can be hard sometimes in terms of communication ‘cause you’re having to go here there and everywhere”. Thus, Mrs Phillips commented how

attempting to convey information when d/Deaf pupils are in different groups spread across the hall is “pretty much impossible”. Considering that a DRB staff member is split between two groups, d/Deaf pupils may not always have access to the full social dynamics of their group. Therefore, mixed groupings may have an adverse impact from those intended resulting in d/Deaf pupils’ exclusion. Consequently, appropriate staffing levels would be needed to support d/Deaf pupils in PE whilst staff should carefully manage groups to ensure d/Deaf pupils have full access to information and classroom dynamics.

Throughout fieldwork, DRB staff created opportunities for social interactions between d/Deaf and hearing pupils by adapting phonocentric PE activities. For example, when introducing a new activity to his tennis lesson, Mr Luck asks pupils to pair up and for the person feeding the ball to verbally instruct their partner whether to perform a forehand or backhand hit. Noticing Mr Luck’s requests, Mr Brakell interrupts instruction and informs Katie who is paired up with Hannah “you’re going need to sign that”, he then proceeds to teach Katie the signs for forehand and backhand before beginning the activity. In this instance, Mr Brakell’s ability to challenge phonocentric teaching by teaching hearing pupils BSL equipped them with the appropriate skills to act as agents and challenge hegemonic phonocentrism. In doing so, hearing pupils could sign backhand and forehand throughout the activity and communicate with their d/Deaf peers. By challenging phonocentric teaching and empowering pupils to act as agents too, Mr Brakell facilitated d/Deaf pupils’ inclusion in PE and promoted interactions between d/Deaf and hearing pupils. This is important as literature more generally in mainstream education has suggested that peer friendships can contribute to d/Deaf pupils’ social, emotional and cognitive development whilst improving their self-esteem and wellbeing (Batten et al., 2014). Therefore, staff should create opportunities for social interactions between d/Deaf and hearing pupils to increase the likelihood of friendships and positively influence d/Deaf pupils’ development and wellbeing. Consequently, this study supports Barboza et al. (2019) who highlights social interactions between hearing and d/Deaf pupils must be prioritised to facilitate inclusion and pupil development in PE.

Whilst the onus of initiating social interactions was often placed on hearing pupils and staff recognised that social interactions tend to be unidirectional, staff attempted to challenge this. For example, during a year 6 PE lesson, pupils were placed in groups and asked to create their own game. As Mrs Doyle observed pupils, she noticed that James was struggling to engage in conversations with his hearing peers. Thus, Mrs Doyle approached the group and stated, “remember to include James” encouraging

hearing pupils to sign, she then turned to James “and also it’s a two-way street you know how to communicate”. From this perspective, “social interactions are not only down to hearing pupils but also d/Deaf pupils” (Mrs Doyle). Therefore, d/Deaf pupils must be provided with opportunities to develop their communication skills with hearing pupils. Here, all pupils’ linguistic and social capital could be developed, bridging social capital between hearing and d/Deaf pupils to facilitate d/Deaf pupils’ inclusion in mainstream PE. This finding is supported by NDCS (2020D) who suggest schools should teach both hearing and d/Deaf pupils how to communicate with each other to improve their communication and social interactions. However, schools must also foster agency amongst all pupils through educating pupils on how to interact with each other and providing opportunities for pupils to be independent in their social interactions. Here, hearing and d/Deaf pupils can feel confident to interact with each other and act as agents to foster an inclusive learning environment.

More broadly in wider school life, staff promoted social interactions between d/Deaf and hearing pupils by encouraging hearing pupils to communicate via BSL to d/Deaf pupils rather than through an interpreter. For example, during wet play Jackson entered the KS2 DRB classroom and looked at Dan’s holiday pictures that Dan was sharing with the class. Curious as to where Dan had been, Jackson verbally asked Miss Harrison “where’s that?”. Miss Harrison replied, “no come on, you’re in the DRB, just point (pointing to whiteboard) and do this (signs where)”. Miss Harrison then got the attention of Dan and pointed to Jackson, and as instructed Jackson signs “you where?”. Dan replied to Jackson via BSL by stating “Florida” which was then translated into speech by Miss Harrison. Through teaching Jackson BSL, Miss Harrison facilitated communication and encouraged social interactions between Dan and Jackson. As BSL is the predominant form of communication in the DRB, through learning BSL Jackson was provided with linguistic capital in the DRB which he could exchange for social capital. Here, Miss Harrison promoted d/Deaf pupils’ inclusion in wider school life and hearing pupils’ inclusion in the DRB. To foster friendships between d/Deaf and hearing pupils in mainstream PE, teachers should equip hearing pupils with BSL skills to empower them to act as agents and challenge hegemonic phonocentrism whilst supporting this interaction where appropriate.

During PE activities, DRB staff would assist with communication between d/Deaf and hearing pupils where appropriate. As Dan explains, “if the mainstream children are talking, I don’t know what’s being said so teachers have to go with them to let me know what’s going on”. Adding to this, Miss Rodriguez highlights “Some (hearing

pupils) try to sign and if not, they know we're there obviously to help facilitate that". If d/Deaf and hearing pupils experienced communication barriers in PE, DRB staff would intervene to facilitate communication. This finding contrasts from Tanure Alves et al. (2021) study who found that interpreters were not used to enhance communication between d/Deaf and hearing pupils. Thus, the roles and responsibilities of interpreters within mainstream PE may vary depending on the setting. Nevertheless, at Buttermere school, as DRB staff assisted communication exchanges between d/Deaf and hearing pupils leading to a more inclusive PE environment, it contributed to effective PE teaching. However, as the presence of the adult interpreter can reduce the quantity and quality of spontaneous interaction between d/Deaf and hearing pupils (Cawthorn, 2001), it was important that DRB staff also allowed pupils to be independent in their social interactions. Mrs Doyle suggests staff must "know when to step back from the kids you gotta be able to go ok here's the game give them the rules get on with it, get on with it because that's life". In doing so, Mrs Doyle suggests pupils can "figure it out on their own". Here, Mrs Doyle suggests d/Deaf and hearing pupils can learn to be independent in their social interactions which will help in their wider life. This study found that staff need to support communication between hearing and d/Deaf pupils where appropriate whilst also creating opportunities for pupils to become independent communicators. Through exploring the extent to which DRB staff who acted as interpreters facilitated and could hinder relationships between hearing and d/Deaf pupils, this study addresses Maher and Hagele's (2022) calls and enhances existing knowledge. Nevertheless, future research should further investigate how interpreters can facilitate or hinder relationships between d/Deaf and hearing pupils in PE to build upon the findings within this study.

Lonely in a crowded room: the realities of being d/Deaf in a phonocentric environment.

A recurrent theme throughout fieldwork was how phonocentric practices marginalised d/Deaf pupils within mainstream PE. When reflecting upon their mainstream PE experiences, most d/Deaf pupils reported feeling isolated and excluded. As Dan highlighted "they're talking away, and I don't understand what they're saying". Similarly, Hannah commented on how "when the children are talking, and I can't speak, it's difficult for me". Thus, Hannah stated "it's not easy to join in and talk with the hearing children, I find that bit difficult". As speech was the primary method of communication within mainstream PE, the sensory landscape influenced the development of habitus for d/Deaf pupils who communicated via BSL, as their

behaviour and practices did not match the field (O'Brien & Emery, 2014). Here, d/Deaf pupils who communicated via sign language had different habitus from the dominant, phonocentric group, which negatively influenced their ability to develop and exchange linguistic, physical, cultural or social capital in mainstream PE. This finding is supported by Byrne (2014) who highlights gaining linguistic capital and exchanging this for other forms of capital may be difficult for d/Deaf pupils in phonocentric environments. As highlighted within Hannah's drawing of PE and her elicitation interview, gaining social capital in a phonocentric PE setting can be difficult for d/Deaf pupils.

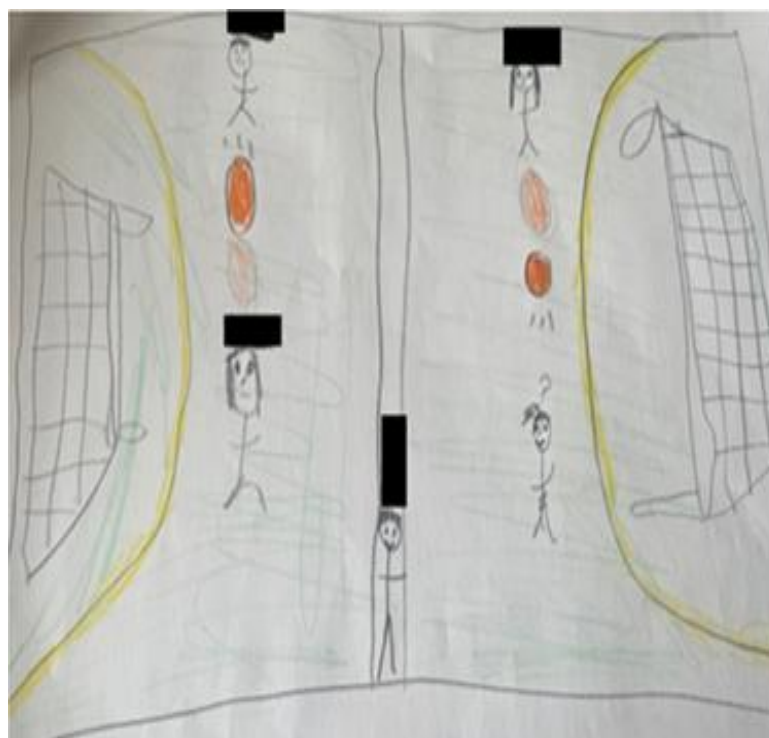


Figure 15: "Y5 PE fun and nice teacher and I have a hard time to understand".

Extract taken from Hannah's drawing elicitation interview:

Interviewer: "Why aren't you smiling?"

Hannah: "because I wanna go out in PE, I want it to finish (expressed passionately) I want to get out of PE, I don't like year 5 PE."

Interviewer: "Why?"

Hannah: "I feel a bit left out feel a bit lonely when we're in groups and they say get in groups in Year 5 they all just quickly getting into groups with each other, and I feel a bit left out."

As explored through Hannah's drawing of PE and her elicitation interview, low linguistic and social capital in mainstream PE leaves her isolated and lonely, contributing to negative attitudes towards PE. This finding was supported by fieldwork observations when Mr Luck asked pupils to pick their own teams, Hannah walked around aimlessly unsure who to pair up with and was one of the last people to join a team. Feelings of exclusion were echoed during Dan's interview who commented on how he did not feel included in mainstream PE. This finding is similar to Lieberman, Columa, Martz de la Vega Mansilla and Taylor (2010) and Tanure Alves et al. (2021) who found that when a PE teacher asked the class to find a partner or group d/Deaf pupils were chosen last. Here, d/Deaf pupils are 'othered', perceived inferior and are marginalised (Israelite et al., 2002). In this sense, social capital is a key influencing factor to social inclusion or exclusion in PE (Jarvie and Thorton, 2012). Expanding upon this, discussing the implications of low social capital, Hannah explores the impacts of being taught PE in a phonocentric environments "I don't like going with all the hearing 'cause I get embarrassed with the pupils so it would be nice to try and get involved, try and be included in the groups that would be nice". As Hannah reports feelings of embarrassment within a phonocentric PE environment, it could be argued she experiences dysconscious audism. Under dysconscious audism, a d/Deaf person accepts hearing norms and privileges (Gertz, 2016; Gertz & Bauman, 2016). Through internalising dysconscious audism Hannah undergoes a process of self-stigmatisation (Kent & Smith, 2006), whereby she internalises negative stereotypes towards being d/Deaf, hence her embarrassment during mainstream PE. These feelings were echoed by Dan who explained that a phonocentric PE environment "makes me feel bad about myself 'cause I can't hear them, I don't know what they're saying". Dan's statement alludes that phonocentrism in mainstream PE leads to dysconscious audism. In both instances, phonocentric PE environment resulted in d/Deaf pupils internalising a negative stigma surrounding being d/Deaf (Gertz, 2003). This finding supports literature more broadly which highlights d/Deaf pupils may experience embarrassment in mainstream settings (Edmondson & Howe, 2019). By internalising dysconscious audism, d/Deaf pupils weaken their Deaf identity and disempower themselves (Gertz, 2008; Gertz, 2016; Gertz & Bauman, 2016). This finding is supported by Kent (2003) more broadly, who highlights a sense of shame amongst d/Deaf pupils may impede identity development. Moving forward, Hannah suggests all hearing pupils should learn and use sign language more frequently to improve d/Deaf pupils' inclusion in PE. In learning BSL, pupils may reconstruct their habitus which can contribute to the construction of the PE field (Hunter, 2004). Here, pupils can act as agents who use sign language to challenge phonocentrism as the

'commonsense' in PE, transforming the requirements to gain capital. Under these conditions, d/Deaf pupils could acquire linguistic and cultural capital in mainstream PE and exchange this for social capital to facilitate their inclusion. To avoid d/Deaf pupils internalising dysconscious audism, teachers of PE must act as agents who challenge hegemonic phonocentrism (Maher, 2020) and doxa (Bourdieu, n.d. in Hunter, 2004) to foster an inclusive PE environment. Moreover, teachers must empower d/Deaf pupils to act as agents and challenge phonocentrism, particularly when it alienates them from the PE environment. To do so, teachers of PE need to be reflective practitioners who engage with ongoing conversations with d/Deaf pupils throughout the school year to encourage pupils to highlight phonocentric practices so appropriate changes can be made. Through drawing upon dysconscious audism to explain the consequences of phonocentric PE environment, this study enhances understanding of phonocentric teaching strategies and d/Deaf pupils' PE experiences. Moving forward, research concerning d/Deaf pupils' agency in challenging phonocentrism would be beneficial, particularly when it alienates them to enhance knowledge. Additional research should explore the impact of a phonocentric PE environment on d/Deaf pupil's self-esteem to support or dismiss this study's findings.

Reflexive note: During d/Deaf pupils' interviews, I sympathised with the negative PE experiences they had encountered. When Dan discussed how mainstream PE negatively influenced his self-esteem, I could almost feel his pain, creating a moment of despondency as Dan shed light on the realities of being d/Deaf in phonocentric PE environment. Despite negative experiences being anticipated, participants' stories which they shared with me were much more impactful than reading d/Deaf pupils' experiences from a journal article or book. This gave me a clear motivation to ensure I appropriately presented their stories and the stories we had constructed together.

As discussed within Chapter Four, physical capital in PE is often generated "through gaze, performance, measurement and categorisation" (Hunter, 2004, p.178). Thus, d/Deaf pupils who displayed a high achievement in sport had greater physical capital and could exchange this for social capital within mainstream PE. For Dan, his sporting ability acted as a key facilitator for gaining physical and social capital alongside his inclusion in PE. This finding supports Martin and Bat-Chava's (2003) work more broadly which suggests d/Deaf boys' friendships in mainstream schools benefitted from a strong sporting ability. On several occasions, when Mr Wilcock asked pupils to pick their teams for a game, Dan would be one of the first pupils to be selected and receive 'bro hugs' and high fives from his hearing peers. As Mrs Mulligan stated,

“they’ll all (hearing pupils) come and try and find Dan to get him on the team”. Thus, Dan’s strong sporting abilities enabled him to reconstruct his physical capital in PE allowing him to convert this for social capital (Hunter, 2004; Hills, 2007). Consequently, Dan’s sporting abilities facilitated his inclusion within mainstream PE. This finding supports Byatt et al. (2023) who states social capital may provide d/Deaf pupils opportunities for meaningful inclusion in schools. Beyond PE, Dan’s sporting abilities enabled him to gain greater physical and social capital during extracurricular activities. For example, at football practice, as his team was setting up for a football match, Dan was approached by his hearing peers who utilised a mixture of sign and speech “if we score, we’re going to do this”, his team then mimicked a pigeon dance celebration, the whole team laughed and practiced this together. Later, when Dan scores, his team huddle together to perform their celebratory dance as planned. Dan’s sporting ability provided him with a wealth of physical capital in the football team, enabling him to become a valued and included member. Acquiring physical capital in mainstream PE may therefore enable d/Deaf pupils to gain social capital regardless of their linguistic capital. Although Dan experienced some positive social interactions with his hearing peers, he still reported feelings of exclusion in mainstream PE, as discussed later.

Comparatively, for James his low sporting abilities meant that he was often one of the last pupils to be selected to join a team in mainstream PE, with his presence hardly being acknowledged by his teammates. James’s low sporting ability meant that he struggled to gain physical capital within PE. As James lacked physical and linguistic capital within a phonocentric PE environment, he could not gain social capital and was marginalised from the PE setting (Hunter, 2004). This finding supports Fitzgerald (2005) more broadly who highlights pupils with SEND who lack physical capital, may struggle to acquire social capital and be included in PE. Thus, the capital available to pupils in PE may support educational opportunities for some pupils whilst limiting others, as discussed within Chapter Four (Hay & Lisahunter, 2006; Evans & Penney, 2008).

Whilst Dan had physical capital and social capital in some contexts, there were also instances where his linguistic capital impeded his inclusion within PE and extracurricular activities. For example, at football practice, Mr Wilcock asked four pupils to be subs which would be rotated every few minutes, though when it was Dan’s turn to be a sub, his hearing peers huddled together and talked on the sideline whilst Dan stood three yards behind them, awkwardly holding his hands in front of him. Dan’s hearing peers made no effort to include him in their conversations.

Arguably, in this instance Dan's low linguistic capital in a phonocentric environment impeded his ability to exchange this into social capital, resulting in his exclusion. This is worrying considering that d/Deaf pupils' social capital can influence their academic attainment, self-esteem and inclusion in school and wider society (Byatt et al., 2023), as discussed within Chapter Four. However, hegemony is dynamic (Hargreaves & McDonald, 2000) and capital is not fixed (Shilling, 1991), potential lies to challenge doxa and transform the PE field to facilitate more inclusive PE (Hunter, 2004; Wrench & Garrett, 2013). Consequently, as previously argued, it is important teachers act as agents and encourage their pupils to also act as agents who challenge phonocentrism and doxa in PE.

Chapter summary.

This chapter examined social interactions between d/Deaf pupils, their hearing peers, mainstream teachers and DRB staff. Drawing upon fieldwork data, this chapter revealed positive and concerning aspects about d/Deaf pupils' interactions and relationships with other stakeholders in mainstream PE, identifying relevant areas of improvement and sharing good practice. Considering that teachers play a vital role in achieving successful inclusion of d/Deaf pupils (Jarvis & Iantaffi, 2006), the chapter firstly focused on d/Deaf pupils' relationships with mainstream teachers. In examining these relationships, it was apparent that participants believed an effective teacher was one who knew BSL as this enabled accessible teaching and stronger relationships with d/Deaf pupils. Consequently, this chapter argued to ensure accessible teaching whereby d/Deaf pupils can flourish, teachers must act as agents who use BSL and challenge hegemonic phonocentric teaching to create a more inclusive PE environment for d/Deaf pupils. Also, the study identified d/Deaf pupils' relationships with DRB staff as a key influencing factor on d/Deaf pupils' participation and inclusion in mainstream PE. DRB staff's prolonged time with d/Deaf pupils resulted in a thorough understanding of their needs, meaning that the responsibility of d/Deaf pupils' learning fell to DRB staff. When DRB staff engaged in lesson content, they fostered a positive PE experience and positive attitudes towards PE for d/Deaf pupils. However, when DRB staff held low value towards PE, this had detrimental impacts on d/Deaf pupils' inclusion and development. Consequently, the study highlighted the necessity to challenge DRB staff's value towards PE and for mainstream teachers to take responsibility for d/Deaf pupils' learning and inclusion in mainstream PE.

Emphasis was placed on mainstream and DRB staff promoting social interactions between d/Deaf and hearing pupils in mainstream PE and wider school life. Participants highlighted the importance of staff equipping hearing pupils with BSL skills to communicate independently with d/Deaf pupils whilst supporting this interaction where appropriate. Alongside this, participants believed that current social interactions between d/Deaf and hearing pupils were unidirectional, highlighting the importance of d/Deaf pupils becoming confident communicating with hearing people. This was particularly important for some d/Deaf pupils who may have had little experience mixing with hearing people before attending Buttermere school. It appears that promoting social interactions between d/Deaf and hearing pupils alone is not enough to facilitate d/Deaf pupils' inclusion. Schools must empower pupils to act as agents who challenge hegemonic phonocentrism and doxa in mainstream PE through integrating the use of BSL into everyday life to facilitate d/Deaf pupils' inclusion. The chapter closed by discussing the realities of being d/Deaf in a phonocentric PE environment whereby, despite some positive experiences, d/Deaf pupils predominantly reported feeling isolated and excluded. Analysing the implications of a phonocentric environment for d/Deaf pupils raised significant concerns regarding d/Deaf pupils internalising dysconscious audism. Hence, the study reinforces the importance of challenging phonocentrism to enhance d/Deaf pupils' learning and inclusion in mainstream PE. Through analysing d/Deaf pupils' relationships and interactions, this study acts as the first empirical research study investigating d/Deaf pupils' social interactions in mainstream PE in England. Despite this, further research regarding d/Deaf pupils' social interactions in mainstream PE is necessary, particularly in mainstream schools without a DRB to enhance knowledge.

CHAPTER NINE.

CONCLUSION, IMPLICATIONS AND FUTURE DIRECTIONS.

Introduction.

This thesis set out to investigate how d/Deaf pupils can be taught effectively in mainstream PE. To achieve this, the following research aims were set:

1. Investigate d/Deaf pupils' experiences within mainstream PE.
2. Explore social interactions in the PE landscape between d/Deaf pupils, their hearing peers, d/Deaf support staff and mainstream teachers.
3. Discover teaching strategies adopted when educating d/Deaf pupils in PE.
4. Explore the effectiveness of existing teaching strategies from the perspectives of d/Deaf pupils, hearing peers, mainstream teachers and d/Deaf support staff.

This chapter summarises this study's key findings in relation its research question and aims to highlight its original contribution to knowledge. Moving on, this chapter reviews the study's limitations and offers directions for future research. This chapter is structured into the following sections: accessible teaching, social interactions and relationships and collaborative working. Notably, each research theme is not distinct to a research objective, meaning that themes overlap between objectives, as will later be explored. Each research theme derives from ethnographic fieldwork which was conducted over a period of 11 months at Buttermere Primary School, a mainstream school with a DRB. Ethnography involved participant observation, analysis of policy documentation, informal/formal conversations, semi-structured interviews, drawing elicitation and narrative inquiry. Adopting an ethnographic approach which utilised various methods enabled a detailed understanding of the actualities of a mainstream PE environment to be obtained. Considering that constructs of teacher effectiveness are subjective and contextual (Rink, 2013; Thomson, 2017), it was vital to understand Buttermere's aims of effective teaching which was closely connected to creating an accessible and inclusive environment whereby all pupils could fulfil their potential. Thus, the research findings that follow provide general guidance for schools educating d/Deaf pupils in mainstream PE who have similar aims for PE and constructs of effective teaching. Nevertheless, educators should be aware of the heterogeneity of d/Deaf pupils and cater to pupils' individual needs.

Accessible teaching.

Within this study, accessible teaching was identified as a key component of effective PE teaching. To achieve accessible teaching of d/Deaf pupils, mainstream teachers employed various teaching strategies. Once key teaching strategies for educating d/Deaf pupils were identified, appropriate considerations for them were reviewed. Teaching strategies were cross examined with a range of sources including policy documentation, participants' perspectives and participant observation to determine their effectiveness based on Buttermere's construct of teacher effectiveness. In doing so, this study achieved research aims three and four which sought to identify teaching strategies utilised and assess their effectiveness from various stakeholder's perspectives. The section that follows discusses the main research findings under accessible teaching that helped achieve research aim three and four.

Upon examination of communication methods used to educate d/Deaf pupils, mainstream teachers predominantly communicated via speech with a DRB staff member interpreting in BSL. The provision of BSL interpretation ensured that d/Deaf pupils could access lesson content and classroom dynamics within PE. To assist the explanation of activities, mainstream teachers utilised visual cues and occasionally BSL which facilitated d/Deaf pupils' understanding and inclusion in PE. Despite Buttermere school attempting to challenge phonocentrism, it was deeply rooted in pedagogy as evidenced throughout Chapter Six. These findings corroborate literature which highlights speech as the dominant form of communication when educating d/Deaf pupils in mainstream PE (Tanure Alves et al., 2021). Within this study, phonocentric teaching negatively influenced d/Deaf pupils' understanding, development and inclusion in PE. For example, Dan stated verbal instruction meant that "I don't understand what he's saying then I end up giving up... fed up of it, year 6 PE.". These findings significantly contributed to literature by identifying the consequences of phonocentric teaching from d/Deaf pupils' perspectives. Given that phonocentrism had considerable negative implications on d/Deaf pupils, this study echoed Maher's (2020) calls for hegemonic phonocentric teaching and learning strategies to be challenged to facilitate an inclusive PE environment. These findings are significant to teachers of PE and schools to (1) ensure that training is provided to support teachers in challenging phonocentrism and (2) a wider school commitment to tackling phonocentrism.

Similar to existing research, this study identified how demonstrations assisted d/Deaf pupils' development in PE (Reich & Lavay, 2009; Schultz et al., 2013; Lieberman,

2016). The study provided empirical evidence to support Maher's (2020) claims that teachers of PE must consider pace, positioning and frequency of demonstrations when teaching d/Deaf pupils. Findings suggested that demonstrations for d/Deaf pupils should be completed at a slower pace and repeated to enhance understanding. Also, the study identified the importance of staff positioning when providing demonstrations to enhance d/Deaf pupils' understanding of activities. The importance of considering sunlight alongside where d/Deaf pupils and DRB staff are positioned was highlighted as crucial. If positioned incorrectly, this could significantly impede d/Deaf pupils' ability to access the lesson content. However, the study highlighted caution should be taken when implementing strategies to avoid embarrassing d/Deaf pupils as this may have adverse effects than those intended. This finding corroborates previous research that highlights modifications to include d/Deaf pupils may be counterproductive if they feel embarrassed or highlighted as different (Jarvis, 2003; Reich & Lavay, 2009). Therefore, teaching strategies for d/Deaf pupils in mainstream PE should be implemented with care and flexibility.

Furthermore, findings highlighted teachers should avoid giving instructions and demonstrations simultaneously in PE. When instructions were given simultaneously to demonstrations, d/Deaf pupils were torn between watching the demonstrations or signed instructions, meaning that they missed one form of communication. This finding adds to Maher and Haegele's (2022) work that highlighted PE teachers should avoid giving demonstrations at the same time as verbal instructions as this may be difficult for d/Deaf pupils who lip-read. This study's findings are significant as it may help inform future practice and move away from providing demonstrations and instructions simultaneously to improve d/Deaf pupils' learning and development in PE. Moving forward, this study suggests that instructions should be provided before a 'silent' demonstration to assist d/Deaf pupils' understanding.

Whilst the study recommended teaching strategies for educating d/Deaf pupils, findings also highlighted the importance of differentiating teaching to appropriately meet pupils' needs. For d/Deaf pupils, differentiation involved altering BSL interpretation to cater for pupils' literacy levels and adapting activities to enable personal development. Staff's comments shed light on the importance of differentiation to enable pupils to fulfil their potential. Differentiated teaching was strongly connected to notions of effective teaching as it could contribute to pupils' development and inclusion. This finding supported wider literature which highlighted effective teaching requires a commitment to inclusion and an ability to differentiate to pupils' needs (Vickerman & Blundell, 2012). By reminding the reader of differentiation,

the study reiterated that d/Deaf pupils are a heterogeneous group and that teachers must adapt to pupils' individual needs.

Next, the chapter explored assessment during mainstream PE to gain a detailed understanding of pedagogy at Buttermere school. Whilst summative assessment was frequently promoted in school documentation and used across various curriculum subjects, within PE formative assessment was predominantly implemented. Participants suggested that formative assessment enabled activities to be adapted to pupils' needs to enhance their success, motivation and engagement. Often formative assessment took place via AfL whereby teachers provided feedback which helped pupils understand how improvements could be made to achieve the desired outcomes. Utilising examples, the chapter demonstrated that AfL occurred through individual feedback, group plenaries and peer-assessment. As highlighted within the chapter, AfL occurred through ipsative assessment whereby pupils compared their current performance with previous ones which enabled all pupils to become competent and confident. Furthermore, findings highlighted how SSE and considering pupil voice can support the improvement of pedagogy, particularly when teacher effectiveness is related to goals of inclusion. These findings are significant for teachers educating both hearing and d/Deaf pupils in mainstream PE by providing empirical support for formative and ipsative assessment and AfL.

The study further highlighted how technology such as radio aids, iPads and instructional videos can enhance d/Deaf pupils' inclusion and development in PE. At Buttermere school, instructional videos were often accompanied by subtitles, however this was problematic for younger d/Deaf students who had low literacy levels. Thus, this study suggested instructional videos must include a on screen BSL interpreter to assist d/Deaf pupils' understanding. Moreover, findings suggested that including pupils with SEND within demonstrations on instructional videos may intrinsically motivate pupils and create a sense of belonging. These findings may assist teachers and schools in the future delivery of instructional videos in PE, making instructional videos more accessible and inclusive for d/Deaf pupils.

The importance of considering the differences between indoor and outdoor PE settings when educating d/Deaf pupils, was also recognised. Indoor PE may create several auditory distractions for some d/Deaf pupils. As Daisy, a d/Deaf pupil commented "it's hard when people are shouting in the background". PE teachers must remain mindful of sports hall acoustics and seek to minimise auditory distractions. Comparatively, during outdoor PE sound may dissipate quickly making it difficult for

d/Deaf pupils who communicate via speech. Thus, teachers should gather the class in when teaching PE outdoors and check pupils' understanding. In offering considerations for teaching d/Deaf pupils accompanied by relevant teaching strategies, the study offers suggestions for the wider PE field which may enhance d/Deaf pupils' education. Overall, this study's findings build upon international research surrounding teaching d/Deaf pupils PE (Reich & Lavay, 2009; Schultz et al., 2013; Lieberman, 2016), by providing empirical evidence to support the implementation of teaching strategies. Therefore, future practice can be evidence informed to ensure that d/Deaf pupils' needs are appropriately met to facilitate their inclusion and development in PE.

Collaborative working.

This study discovered collaborative working between mainstream PE teachers and DRB staff is vital to facilitate effective teaching of d/Deaf pupils. Emphasis was placed upon d/Deaf pupils often having less incidental learning opportunities than their hearing counterparts. Considering this, the study highlighted the importance of DRB staff and mainstream teachers collaboratively planning, preparing and communicating lesson plans so that language can be pre-tutored to d/Deaf pupils. In doing so, d/Deaf pupils will find it easier to comprehend lesson content, maximise learning time and enhance pupils' learning in PE. However, participants acknowledged time constraints alongside incompatibility in PPA timetables can create significant barriers to achieving collaborative working and consequently effective teaching. By excluding DRB LSAs from planning, mainstream teachers could maintain power over DRB LSAs, however, this had damaging impacts as they were most aware of d/Deaf pupils' needs. A key recommendation is that schools allow time for mainstream and DRB staff to collaboratively plan lessons to enhance d/Deaf pupils' learning, development and inclusion in mainstream PE.

When delivering a PE lesson, staff noted the importance of drawing upon each other's expertise to maximise d/Deaf pupils' inclusion and development. Mainstream teachers would often seek the expertise of DRB staff regarding BSL interpretation or d/Deaf pupils' needs whilst DRB staff would seek the expertise of mainstream teachers regarding subject knowledge, teaching points or lesson content. By mainstream teachers and DRB staff exchanging knowledge, d/Deaf pupils had full access to the curriculum and their needs were appropriately supported. This finding supports research more broadly including Maher (2016) who suggests mainstream teachers should seek the guidance of LSA to ensure pupils with SEND have full

access to the curriculum. Findings highlighting the process of collaborative working alongside its benefits for d/Deaf pupils enabled good practice to be shared across the PE field to inform future practice.

Whilst several positive elements of collaborative working were identified, the study recognised areas of improvement such as communication and consultation between mainstream and DRB teachers regarding the PE timetable. Unfortunately, poor communication between mainstream teachers and DRB staff regarding changing the PE timetable often led to missed learning opportunities for d/Deaf pupils. To enhance d/Deaf pupils' educational outcomes within PE it is essential the quality and quantity of communication between mainstream and DRB staff improves.

Participants highlighted that collaborative working should occur after PE lessons and involve post-tutoring language to d/Deaf pupils. Here, DRB staff should clarify any misunderstandings that occurred during a mainstream PE lesson. As Miss Harrison explained, post-tutoring sessions which recap PE lesson content and addresses misconceptions may "improve language, understanding and awareness and capabilities in PE". This demonstrates that post-tutoring sessions can enhance d/Deaf pupils' development in PE. These findings may be of interest to other mainstream schools who educate d/Deaf pupils but are yet to include post-tutoring sessions by highlighting the benefits associated with them. Also, mainstream teachers engaged in post-delivery through reflecting upon pupils' needs and how these could be met moving forward. These findings are significant for teachers and schools to ensure that additional time is allocated for post-delivery reflection to improve d/Deaf pupils' inclusion and development within mainstream PE.

At Buttermere school, mainstream teachers and DRB staff appreciated each other. It was important DRB staff and mainstream teachers understood each other's roles and responsibilities yet worked effectively together as a partnership to provide the optimal learning experience for d/Deaf pupils in mainstream PE. If mainstream teachers did not understand DRB LSA's roles and the boundaries of these, they would ask DRB LSAs to complete tasks that could take them away from their primary role of interpreting. Emphasis was placed upon power relations between DRB LSAs and mainstream teachers to explore that despite DRB LSAs having more expert power, they would often fulfil the requests of mainstream teachers who had more legitimate power to avoid potential exclusion though this would have negative impacts upon d/Deaf pupils. This study found that power relations between teachers and DRB LSAs may limit or enable effective collaborative working and consequently effective

teaching of d/Deaf pupils. Taken together, findings regarding collaborative working are significant because they indicate the necessity for a collaborative partnership between mainstream and d/Deaf support staff to promote d/Deaf pupils' inclusion and development. These findings may be beneficial for the wider PE field who seek to improve the educational outcomes and inclusion of d/Deaf pupils but are unsure on how to do so.

Social interactions and relationships.

Research Aim Two of this study set out to explore d/Deaf pupils' social interactions with their hearing peers, mainstream teachers and DRB staff. Firstly, the results of this study indicate that d/Deaf pupils' relationships with their mainstream teacher is critical in determining a positive PE experience. This study found that a mainstream teacher knowing how to communicate in BSL was a key component of effective teaching for d/Deaf pupils. For instance, during Hannah's writing of PE she highlighted "A good teacher who knows a bit of sign language" was a positive aspect about mainstream PE. Through providing various opportunities for mainstream teachers to learn BSL, Buttermere school equipped them with the appropriate skills to act as agents and challenge phonocentrism. In doing so, mainstream teachers could establish stronger relationships with d/Deaf pupils whilst creating an accessible and inclusive PE environment, achieving their outcomes of effective PE teaching. Moving forward, it would be beneficial for all mainstream teachers to become fluent in BSL to foster an inclusive and accessible learning environment where d/Deaf pupils can thrive.

At Buttermere school, DRB staff possessed strong relationships with d/Deaf pupils which influenced d/Deaf pupils' participation and inclusion in mainstream PE. As Mrs Goodison stated, "having a member of staff who's tuned in to their needs in particular and knowing what they need it is crucial for the for them, for their learning". This demonstrates that DRB staff play a critical role in determining d/Deaf pupils' learning within mainstream PE. This finding is significant for policy makers and teachers by highlighting the importance of DRB LSAs within PE lessons to ensure that d/Deaf pupils' needs are met.

Findings indicated that DRB LSAs were mainly responsible for d/Deaf pupils' learning and inclusion in mainstream PE, supporting Tanure Alves et al., (2021) who found that PE teachers frequently placed responsibility on interpreters for d/Deaf pupils' engagement in mainstream PE. However, this study demonstrated placing DRB LSAs as responsible for d/Deaf pupils' learning and inclusion in PE was problematic when

they held low value towards PE. This was evidenced through DRB staff's late attendance, minimal engagement and informal conversations. This finding adds to those of Maher and Macbeth (2014) who found that LSAs ranked PE low in a hierarchy of subjects, by highlighting that this was at the detriment of d/Deaf pupils' participation, inclusion and development. In this study, a mainstream teacher's lack of responsibility for d/Deaf pupils coupled with DRB staff's low value towards PE exposed worrying concerns regarding d/Deaf pupils' PE experiences. This study calls for the subordination of PE to be challenged and for mainstream teachers to no longer neglect their roles for d/Deaf pupils' inclusion in PE.

Peer friendships and social interactions are critical in determining d/Deaf pupils' PE experiences. The learning of BSL within Buttermere's wider curriculum coupled with opportunities for social interactions in mainstream PE facilitated friendships between d/Deaf and hearing peers. Upon observation, hearing pupils often utilised BSL to clarify misunderstandings that d/Deaf pupils encountered in PE. This demonstrates by teaching hearing pupils BSL, Buttermere school equipped them to act as agents who could challenge hegemonic phonocentrism to foster an inclusive learning environment. These findings are significant to encourage other schools with BSL users to integrate BSL into everyday school life which may promote d/Deaf pupils' inclusion within PE and wider school life.

Whilst this study identified friendships between hearing and d/Deaf pupils, these friendships were often not well established and sporadic. Mainstream teachers expressed their concerns regarding the quality and frequency of social interactions between d/Deaf and hearing pupils. Also, hearing and d/Deaf pupils' friendships did not extend beyond school hours highlighting that these friendships were of poor quality. This finding supports those more broadly of Nunes et al. (2001) who found that d/Deaf pupils are more likely to experience sporadic friendships than their hearing peers and are less likely to have friendships beyond the classroom. This study's findings are important because it highlights social interactions between d/Deaf and hearing pupils require improvement to facilitate d/Deaf pupils' inclusion in mainstream education. Moving forward, Buttermere school should improve the quality of friendships between d/Deaf pupils and hearing pupils by continuing to empower pupils to act as agents, providing opportunities for social interactions and supporting these where necessary.

Despite reports of positive social interactions for d/Deaf pupils in PE, these were overshadowed by most d/Deaf pupils reporting feeling isolated and excluded. This

finding supports literature more broadly in general mainstream education whereby despite some d/Deaf pupils having friendships, most d/Deaf pupils reported an unpleasant social experience (Edmondson & Howe, 2019; Andersson & Adams Lyngbäck, 2022). Within this study, the phonocentric PE environment raised significant concerns with regards to d/Deaf pupils' social interactions and risk of internalising dysconscious audism. For instance, Hannah reported feelings of embarrassment during mainstream PE and desired to be socially included with her hearing peers. Here, the study reiterated the importance of challenging phonocentrism to avoid damaging d/Deaf pupils' identity and negative impacts on learning and inclusion in mainstream PE. Through drawing on dysconscious audism, the study demonstrated that a phonocentric PE environment may negatively influence d/Deaf pupils' self-esteem. In doing so, the study gained detailed insight into d/Deaf pupils' experiences of mainstream PE. Consequently, the study achieved its first research aim which sought to address the existing gap in knowledge concerning d/Deaf pupils' PE experiences in England.

At Buttermere school, many d/Deaf pupils possessed little linguistic capital in mainstream PE which negatively influenced their ability to obtain social capital. Though d/Deaf pupils with a high sporting ability could re-negotiate their identity and gain high physical capital which could be exchanged for social capital. Nevertheless, d/Deaf pupils with high physical capital through their sporting ability still experienced instances where their linguistic capital impeded their inclusion within PE and extracurricular sport. Haegele and Maher's (2023) definition of inclusion helped comprehend d/Deaf pupils' inclusion within mainstream PE as an intersubjective experience. By exploring how d/Deaf pupils' inclusion may fluctuate, the study highlighted the necessity for schools, teachers and pupils to challenge linguistic capital in mainstream PE. Only once linguistic capital and phonocentrism more broadly has been disrupted may d/Deaf pupils begin to experience inclusion in PE.

Limitations and directions for future research.

Research limitations are an inescapable aspect of a research process (Clarke et al., 2024). Through reporting research limitations, a complete picture of research findings can be provided whilst the path for future research can be paved (Ross & Bibler Zaidi, 2019; Clarke et al., 2024). Therefore, this section outlines this study's limitations to provide directions for future research.

Notably, this study has focused upon a singular primary school in England which has received several awards for their inclusive practice. Through rich, detailed findings,

the study offers resonance and empirical transferability (Tracy, 2010; Maher, 2025) for other schools whose outcomes of effective teaching are also related to accessibility, inclusivity and personal development. However, since no other studies like this exist, it is not possible to contextualise or compare this study's findings with other explorations of d/Deaf pupils' mainstream PE experiences in the UK. To build upon the current study, future research should further investigate d/Deaf pupils' mainstream PE experiences within other mainstream schools with and without a DRB, accounting for contextual factors which influence constructs of effective teaching and d/Deaf pupils' PE experiences. Such research will enhance understanding of d/Deaf pupils' mainstream PE experiences and enable the sharing of good practice and relevant improvements that may be transferable across schools who have similar constructs of effective teaching for d/Deaf pupils.

As an interpretivist, my own interpretations of data may be identified as a research limitation. Research fieldnotes were subjective and selective as previously discussed (Emerson et al., 2001) and fieldnotes were influenced by what was perceived meaningful to me and the research study (Hammersley & Atkinson, 2007; Walford, 2009b). In this sense, I co-constructed research findings (Brockman, 2011; Hammersley & Atkinson, 2019). Thus, what I have reported on may have been different to another researcher if they were to study effective PE teaching of d/Deaf pupils at Buttermere school. However, bias is inescapable in qualitative research, meaning that researchers must reflect on the perspectives brought to the study and how this may influence what is reported on (Wolcott, 1995). Therefore, reflexive notes have been embedded throughout this thesis to provide a transparent report of research findings.

Another limitation of this study is the use of BSL interpreters during semi-structured interviews. As discussed within the literature review, interpreters pose risk to the reliability and validity of data. When utilising interpreters a risk of individual/aversive audism or institutional covert audism appears, thus the interpreter may have only translated information they deemed relevant. However, by developing my BSL skills, I sought clarity on any interpretations I felt may have been missed. Moreover, through a range of data sources I triangulated data to ensure that the views of d/Deaf pupils were reliable. Also noteworthy is that interpreters were staff members, thus it is possible that d/Deaf pupils may have felt uncomfortable disclosing certain aspects of their experiences due to confidentiality concerns or fear of judgement (Harr, 2001). Moving forward, it would be interesting for future research to conduct a similar study

with a fluent BSL researcher or with an independent interpreter to support or contend this study's findings.

Although this study has provided new insight into d/Deaf pupils' experiences in mainstream PE, it has focused upon d/Deaf pupils generally. However, as argued throughout this thesis, d/Deaf pupils are a heterogeneous group (Young & Temple, 2014). As such, future research should explore d/Deaf pupils' experiences in PE at the intersection of different factors such as race, gender or additional needs to enhance knowledge. Through exploring the intersectionality d/Deaf pupils' experience, greater insight may be provided into their PE experiences to enhance knowledge. Moreover, whilst this study touched on assessment, a dearth of research has explored assessment when educating d/Deaf pupils in mainstream PE. Additional empirical research on assessment strategies for d/Deaf pupils in mainstream PE would be beneficial to support or contend this study's findings, enhance understanding and inform educators. Finally, as this study focused on key stakeholders within a typical school day, it excluded parents as research participants. Future research should seek to obtain parents' perspectives of their child's PE experiences. For example, a more in-depth understanding of pupils' family contexts, including whether they have d/Deaf family members, communication preferences, and experiences of sport and physical activity outside of school, all have the potential to shape perceptions of PE and constructs of effective PE teaching. Such research would add further insight beyond the scope of this ethnographic study in the school setting.

Closing comments.

Throughout this thesis the actualities of mainstream PE for d/Deaf pupils at Buttermere school have been discussed. This research project acted as the first study investigating d/Deaf pupils' education in mainstream PE in England and has provided an original contribution to existing knowledge. It has also enhanced understanding of d/Deaf pupils' PE experiences internationally and has provided empirical evidence for the implementation of teaching strategies. Within this study, the perceived effectiveness of teaching strategies was assessed by stakeholders based on their ability to create an accessible and inclusive PE environment whereby d/Deaf pupils could fulfil their potential. As constructions of teacher effectiveness are subjective and contextual (Rink, 2013; Thomson, 2017), teaching strategies proposed within this study should not be seen as a manual to be followed but rather as useful guidance. Drawing upon theories from Deaf Studies, including phonocentrism and audism, this

research study applied a novel theoretical lens to positively contribute to existing literature and encourage further application of Deaf Studies within the PE field. It is hoped that this study will act as a stepping stone for research as we seek to carve the path towards inclusive PE for d/Deaf pupils. Finally, it is hoped this study will inform educators to create more accessible and inclusive mainstream PE for d/Deaf pupils.

REFERENCES.

- Agar, M. H. (1997). Ethnography: An Overview. *Substance Use & Misuse*, 32(9), 1155-1173. <https://doi.org/10.3109/10826089709035470>
- Alasim, K. (2023). Inclusion and d/Deaf and hard of hearing students: A qualitative meta-analysis. *International Journal of Disability, Development and Education*, 70(6), 1120-1146.
- Alban-Metcalf, J. (1996). Special education in England. *European Journal of Special Needs Education*, 11(1), 125-143.
- Alderman, B. L., Beighle, A., & Pangrazi, R. P. (2006). Enhancing motivation in physical education. *Journal of physical education, recreation & dance*, 77(2), 41-51.
- Aldous, D., & Brown, D. (2010). Framing bodies of knowledge within the 'acoustics' of the school: Exploring pedagogical transition through newly qualified physical education teacher experiences. *Sport, education and society*, 15(4), 411-429.
- Allen, R. E., & Wiles, J. L. (2016). A rose by any other name: Participants choosing research pseudonyms. *Qualitative research in psychology*, 13(2), 149-165.
- Amis, J. M., & Silk, M. L. (2008). The philosophy and politics of quality in qualitative organizational research. *Organizational research methods*, 11(3), 456-480.
- Anderson, W. G., & Barrette, G. T. (1978). What's Going on in Gym: Descriptive Studies of Physical Education Classes. Monograph 1. Motor Skills: Theory into Practice.
- Andersson, S., & Adams Lyngbäck, L. (2022). 'But I feel more at home in the Deaf world even if I can talk': D/deaf adolescents' experiences of transitioning from a mainstream school to a Deaf school in Sweden. *Deafness & Education International*, 24(3), 249-266.

Andrews, D. L., & Loy, J. W. (1993). British cultural studies and sport: Past encounters and future possibilities. *Quest*, 45(2), 255-276.

Andrews, T. (2012). What is social constructionism? *Grounded theory review*, 11(1), 39-45.

Anfara Jr, V. A., & Mertz, N. T. (Eds.). (2014). *Theoretical frameworks in qualitative research* (2nd ed.). Sage Publications.

Angelides, P., & Aravi, C. (2006). A comparative perspective on the experiences of deaf and hard of hearing individuals as students at mainstream and special schools. *American annals of the deaf*, 151(5), 476-487.

Anglin-Jaffe, H. (2011). Sign, play and disruption: Derridean theory and sign language. *Culture, Theory and Critique*, 52(1), 29-44.

Angrosino, M. V. & Mays de Perez, K. A. (2000). Rethinking Observation From Method to Context. In: N. K. Denzin & Y. S Lincoln (Eds.), *Handbook of Qualitative Research*. (2nd ed, pp. 673-702). Sage Publications Inc.

Armour, K. M. (1999). The case for a body-focus in education and physical education. *Sport, education and society*, 4(1), 5-15.

Armour, K., & MacDonald, D. (Eds.). (2012). *Research methods in physical education and youth sport*. Routledge.

Armour, K., Quennerstedt, M., Chambers, F., & Makopoulou, K. (2017). What is 'effective'CPD for contemporary physical education teachers? A Deweyan framework. *Sport, education and society*, 22(7), 799-811.

Armstrong, D. F. (2008). The gestural theory of language origins. *Sign Language Studies*, 8(3), 289-314.

Armstrong, D., & Squires, G. (2012). *Contemporary Issues In Special Educational Needs: Considering The Whole Child: Considering the Whole Child*. McGraw-Hill Education (UK).

Armstrong, F. (2002). The historical development of special education: humanitarian rationality or 'wild profusion of entangled events'? *History of education*, 31(5), 437-456.

Armstrong, R., Gelsthorpe, L., & Crewe, B. (2014). From paper ethics to real-world research: Supervising ethical reflexivity when taking risks in research with 'the risky'. In K. Lumsden & A. Winter (Eds.), *Reflexivity in Criminological Research: Experiences with the Powerful and the Powerless* (pp. 207-219). Palgrave Macmillan. https://doi.org/10.1057/9781137379405_16 .

Arthur, J., & Capel, S. (2015). *How planning and evaluation support effective learning and teaching* (4th ed.). Routledge.

Asogwa, U. D., Ofoegbu, T. O., Ogbonna, C. S., Eskay, M., Obiyo, N. O., Nji, G. C., Ngwoke, O. R., Eseadi, C., Agboti, C. I., & Uwakwe, C. (2020). Effect of video-guided educational intervention on school engagement of adolescent students with hearing impairment: Implications for health and physical education. *Medicine*, 99(23), e20643.

Atkinson, M. (2016). Ethnography. In B. B. M. Smith, & Sparkes, A. C. (Ed.), *Routledge handbook of qualitative research in sport and exercise*. (pp. 49-61). Routledge.

Atkinson, P. (2018). The spirit of abduction. *American Sociological Association* 47(4), 415-417.

Atkinson, R. (2012). In J. F. Gubrium (Ed.), *The Sage handbook of interview research : the complexity of the craft*. (2nd ed., pp. 115-128). SAGE.

Attia, M., & Edge, J. (2017). Be (com) ing a reflexive researcher: a developmental approach to research methodology. *Open Review of Educational Research*, 4(1), 33-45.

Bagnoli, A. (2009). Beyond the standard interview: The use of graphic elicitation and arts-based methods. *Qualitative research*, 9(5), 547-570.

Baker-Shenk, C., & Kyle, J. (1990). Research with deaf people: Issues and conflicts. *Disability, Handicap & Society*, 5(1), 65-75.

Ball, S. J. (2016). Neoliberal education? Confronting the slouching beast. *Policy futures in education*, 14(8), 1046-1059.

- Barboza, C. F. S., Ramos, A. S. L., Abreu, P. A., & Castro, H. C. (2019). Physical education: adaptations and benefits for deaf students. *Creative Education*, 10(04), 714.
- Barker, C. (2003). *Cultural Studies: Theory and Practice* (2nd ed.). Sage Publications Ltd.
- Barnes, G. J. (2021). Researcher positionality: the liquid inbetween. *Practice*, 1-8. <https://doi.org/10.1080/25783858.2021.1968280>
- Barton, K. C. (2015). Elicitation techniques: Getting people to talk about ideas they don't usually talk about. *Theory & Research in Social Education*, 43(2), 179-205.
- Bates, T. R. (1975). Gramsci and the Theory of Hegemony. *Journal of the History of Ideas*, 36(2), 351-366.
- Bath, P. (2016). Deconstructing Phonocentrism: A New Genre in Deaf Arts. In C. Kelly., & M. Orsini. (Eds), *Mobilizing Metaphor: Art, Culture, and Disability Activism in Canada*, (pp.181-197). UBC Press.
- BATOD. (2011). Units and resource bases. *British Association of Teachers of the Deaf*. <https://www.batod.org.uk/wp-content/uploads/2018/01/Nov-11.pdf>
- Batten, G., Oakes, P. M., & Alexander, T. (2014). Factors associated with social interactions between deaf children and their hearing peers: A systematic literature review. *Journal of deaf studies and deaf education*, 19(3), 285-302.
- Batterbury, S. C. (2012). Language justice for sign language peoples: The UN Convention on the Rights of Persons with Disabilities. *Language Policy*, 11(3), 253-272.
- Bauman, H. D. L. (1997). Toward a poetics of vision, space and the body. In L. J. Davis (Ed.), *The disability studies reader*, (1st ed., pp. 315-329). Routledge.
- Bauman, H. D. L. (2004). Audism: Exploring the metaphysics of oppression. *The Journal of Deaf Studies and Deaf Education*, 9(2), 239-246.
- Bauman, H. D. L. (2008b). Listening to phonocentrism with deaf eyes: Derrida's mute philosophy of (sign) language. *Essays in philosophy*, 9(1), 41-54.

Bauman, H. D. L. (Ed.). (2008a). *Open your eyes: Deaf studies talking*. University of Minnesota Press.

Bauman, H. D., & Murray, J. J. (2017). Sign languages. In O. Garcia, N. Flores, & M. Spotti (Eds.), *Handbook of language and society* (pp. 243-251). Oxford University Press.

Behets, D. (1997). Comparison of more and less effective teaching behaviors in secondary physical education. *Teaching and Teacher Education*, 13(2), 215-224.

Berger, P. L., & Luckmann, T. (1966). *The social construction of reality: A treatise in the sociology of knowledge*. Penguin.

Berges, S. A. (1969). The deaf student in physical education. *Journal of Health, Physical Education, Recreation*, 40(3), 69-70.

Berliner, D. C. (1988). *The development of expertise in pedagogy*. ERIC.

Best, C., Lieberman, L., & Arndt, K. (2002). Effective use of interpreters in general physical education. *Journal of physical education, recreation & dance*, 73(8), 45-50.

Biddle, C., & Schafft, K. A. (2015). Axiology and anomaly in the practice of mixed methods work: Pragmatism, valuation, and the transformative paradigm. *Journal of Mixed Methods Research*, 9(4), 320-334.

Biedenbach, T., & Jacobsson, M. (2016). The open secret of values: The roles of values and axiology in project research. *Project management journal*, 47(3), 139-155.

Bjørke, L., & Mordal Moen, K. (2020). Cooperative learning in physical education: a study of students' learning journey over 24 lessons. *Physical Education and Sport Pedagogy*, 25(6), 600-612.

Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation & Accountability*, 21, 5–31.

Blackledge, A. (2002). The discursive construction of national identity in multilingual Britain. *Journal of Language, Identity, and Education*, 1(1), 67-87.

- Block, M. E., Haegele, J., Kelly, L., & Obrusnikova, I. (2021). Exploring future research in adapted physical education. *Research Quarterly for Exercise and Sport*, 92(3), 429-442.
- Borsay, A. (2007). Deaf children and charitable education in Britain 1790-1944. In A. Borsay & P. Shapely (Eds.), *Medicine, charity and mutual aid : the consumption of health and welfare in Britain, c.1550-1950*. (pp. 71-90). Ashgate.
- Borsay, A. (2012). *Disabled children and special education, 1944-1981. A presentation delivered at the Department for Education*.
- Bourdieu, P. (1986). The Forms of Capital. In: J. Richardson. (Eds.), *Handbook of Theory and Research for the Sociology of Education*. (pp.241-258). Greenwood Press.
- Bourdieu, P. (1990). *The logic of practice*. Stanford university press.
- Bourdieu, P. (1991). *Language and symbolic power*. Polity Press.
- Branchini, C. (2014). *On relativization and clefting: An analysis of Italian Sign Language* (Vol. 5). Walter de Gruyter Inc and Ishara Press.
- Branson, J., & Miller, D. (1993). Sign language, the deaf and the epistemic violence of mainstreaming. *Language and Education*, 7(1), 21-41.
- Branson, J., & Miller, D. (2002). Damned for their difference : the cultural construction of deaf people as disabled : a sociological history. Gallaudet University Press.
- Braun, D. C., Gormally, C., & Clark, M. D. (2017). The deaf mentoring survey: A community cultural wealth framework for measuring mentoring effectiveness with underrepresented students. *CBE—Life Sciences Education*, 16(1), ar10.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Braun, V., & Clarke, V. (2013). *Successful Qualitative Research: A Practical Guide for Beginners*. Sage Publishing.

- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative research in sport, exercise and health*, 11(4), 589-597.
- Braun, V., & Clarke, V. (2021a). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative research in psychology*, 18(3), 328-352.
- Braun, V., & Clarke, V. (2021b). Can I use TA? Should I use TA? Should I not use TA? Comparing reflexive thematic analysis and other pattern-based qualitative analytic approaches. *Counselling and psychotherapy research*, 21(1), 37-47.
- Braun, V., & Clarke, V. (2022). Thematic analysis A practical guide. Sage Publications.
- Braun, V., & Clarke, V. (2023). Toward good practice in thematic analysis: Avoiding common problems and being a knowing researcher. *International Journal of Transgender Health*, 24(1), 1-6.
- Braun, V., Clarke, V., & Weate, P. USING THEMATIC ANALYSIS IN SPORT AND EXERCISE RESEARCH. In A. Smith & A. C. Sparkes (Eds.), *Routledge Handbook of Qualitative Research in Sport and Exercise* (2nd ed., pp. 191-205). Sage Publications.
- Brennan, M. (2003). Deafness, disability and inclusion: The gap between rhetoric and practice. *Policy Futures in Education*, 14(1), 668-685.
- Brewer, J. (2000). *Ethnography*. Open University Press.
- Brice, P. J., & Strauss, G. (2016). Deaf adolescents in a hearing world: a review of factors affecting psychosocial adaptation. *Adolescent health, medicine and therapeutics*, 67-76.
- Brighton, J. (2016). Researching disability sport: Reflections from an (able)bodied ethnographer. In I. Wellard (Ed.), *Embodied Research in Sport*. Routledge.
- Brinkmann, S. (2014). Unstructured and semi-structured interviewing. In P. Leavy (Ed.), *The Oxford handbook of qualitative research* (pp. 277-299). Oxford University Press.
- Brinkmann, S. (2014b). Doing without data. *Qualitative Inquiry*, 20(6), 720-725.

British Association of Teachers OF Deaf Children and Young People (BATOD). (2023). *Special schools for deaf children in the UK*. Retrieved 31st January 2024 from <https://www.batod.org.uk/information/special-schools-deaf-children-uk/>.

British Educational Research Association. (2018). *Ethical Guidelines for Educational Research, fourth edition*. BERA: London. Retrieved on 12th December 2023 from: <https://www.bera.ac.uk/publication/ethical-guidelines-for-educational-research-2018-online> .

British Educational Research Association. (BERA). (2000). *Good Practice in Educational Research Writing (2000). Resources for Research*. Retrieved 17th January 2022 from <https://www.bera.ac.uk/publication/good-practice-in-educational-research-writing-2000> .

Brockmann, M. (2011). Problematizing short-term participant observation and multi-method ethnographic studies. *Ethnography and education*, 6(2), 229-243.

Brooks, R., Te Riele, K., & Maguire, M. (2014). *Ethics and education research*. Sage Publishing.

Brophy, J. E. (1979). Teacher behavior and its effects. *Journal of Educational psychology*, 71(6), 733.

Brophy, J. E. G., T. L. (1984). *Teacher behavior and student achievement*. Institute for Research on Teaching, Michigan State University.

Brophy, J. E., & Good, T. L. (1986). Teacher behavior and student achievement. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 328-375). Macmillan.

Brown, A., & Danaher, P. A. (2019). CHE principles: Facilitating authentic and dialogical semi-structured interviews in educational research. *International Journal of Research & Method in Education*, 42(1), 76-90.

Brown, D. (2005). An economy of gendered practices? Learning to teach physical education from the perspective of Pierre Bourdieu's embodied sociology. *Sport, education and society*, 10(1), 3-23.

Brown, S., & Macdonald, D. (2008). Masculinities in Physical Recreation: the (re) production of masculinist discourses in vocational education. *Sport, education and society*, 13(1), 19-37.

Brueggemann, B. J. (1999). *Lend me your ear: Rhetorical constructions of deafness*. Gallaudet University Press.

Brueggemann, B. J. (2013). Disability studies/disability culture. In M. L. Wehmeyer (Ed.), *The Oxford handbook of positive psychology and disability* (pp. 279-299). Oxford University Press.

Bryman, A. (2012). *Social research methods* (4th ed.). Oxford University Press.

Bucerius, S. M. (2013). Becoming a "Trusted Outsider" gender, ethnicity, and inequality in ethnographic research. *Journal of Contemporary Ethnography*, 42(6), 690-721.

Burch, S., & Kafer, A. (2010). *Deaf and disability studies: Interdisciplinary perspectives*. Gallaudet University Press.

Burgess, R. G. (2005). *The ethics of educational research* (Vol. 8). Routledge.

Burke, S. (2017). Rethinking 'validity' and 'trustworthiness' in qualitative inquiry: How might we judge the quality of qualitative research in sport and exercise sciences? In A. Smith & A. C. Sparkes (Eds.), *Routledge handbook of qualitative research in sport and exercise* (pp. 330-340). Routledge.

Byatt, T. J., Dally, K., & Duncan, J. (2022). Social capital and adolescents who are deaf: Associations with wellbeing, school connectedness, and pragmatics. *Deafness & Education International*, 24(4), 356-374.

Byatt, T. J., Duncan, J., & Dally, K. (2023). Social capital and identity of d/Deaf adolescents: an interpretive phenomenological analysis. *Disability & Society*, 39(8), 1-23.

Byrne, B. (2014). Getting in and getting on? The experiences of young people with visual impairments and hearing impairments in third-level education. *International Journal of Disability, Development and Education*, 61(2), 119-133.

Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity*, 56(3), 1391-1412.

Cameron, A., O'Neill, R., & Quinn, G. (2017). Deaf students using sign language in mainstream science classrooms. *Science teacher preparation in content-based second language acquisition*, 341-360.

Campbell, F. A. K. (2008). Exploring internalized ableism using critical race theory. *Disability & society*, 23(2), 151-162.

Campbell, J., Campbell, R. J., Kyriakides, L., Muijs, D., & Robinson, W. (2004). *Assessing teacher effectiveness: Developing a differentiated model*. Psychology Press.

Campbell, K. A., Orr, E., Durepos, P., Nguyen, L., Li, L., Whitmore, C., Gehrke, P., Graham, L., & Jack, S. M. (2021). Reflexive thematic analysis for applied qualitative health research. *The qualitative report*, 26(6), 2011-2028.

Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8), 652-661.

Cappelli, M., Daniels, T., Durieux-Smith, A., McGrath, P., & Neuss, D. (1995). Social development of children with hearing impairments who are integrated into general education classrooms. *The Volta Review*, 97, 197-208.

Carroll, J., Bradley, L., Crawford, H., Hannant, P., Johnson, H., & Thompson, A. (2017). *SEN support: A rapid evidence assessment*. Department for Education.

Casey, A., & Kirk, D. (2024). *Applying models-based practice in physical education*. Routledge.

Cawthon, S. W. (2001). Teaching strategies in inclusive classrooms with deaf students. *Journal of deaf studies and deaf education*, 6(3), 212-225.

Cawthon, S., & Garberoglio, C. L. (2017). *Research in deaf education: Contexts, challenges, and considerations*. Oxford University Press.

Charmaz, K. (2008). Constructionism and the grounded theory method. *Handbook of constructionist research*, 1(1), 397-412.

Chng, L. S., & Lund, J. (2018). Assessment for learning in physical education: The what, why and how. *Journal of Physical Education, Recreation & Dance*, 89(8), 29-34.

Civitillo, S., De Moor, J. M., & Vervloed, M. P. (2016). Pre-service teachers' beliefs about inclusive education in the Netherlands: An exploratory study. *Support for Learning*, 31(2), 104-121.

Clarke, B., Alley, L. J., Ghai, S., Flake, J. K., Rohrer, J. M., Simmons, J. P., Schiavone, S. R., & Vazire, S. (2024). Looking our limitations in the eye: A call for more thorough and honest reporting of study limitations. *Social and Personality Psychology Compass*, 18(7), e12979.

Clegg, S., & Haugaard, M. (Ed.). (2009). *The SAGE Handbook of Power* SAGE Publications.

Clifford, J. (1983). On ethnographic authority. *Representations*, (2), 118-146.

Coates, J., & Vickerman, P. (2010). Empowering children with special educational needs to speak up: Experiences of inclusive physical education. *Disability and rehabilitation*, 32(18), 1517-1526.

Coffey, A. (1999). *The ethnographic self: Fieldwork and the representation of identity*. Sage Publications Ltd.

Coffey, A. (2018). *Doing ethnography*. SAGE Publications Ltd.

Collingridge, D. S., & Gantt, E. E. (2008). The quality of qualitative research. *American journal of medical quality*, 23(5), 389-395.

Collins, P., & Gallinat, A. (Eds.). (2010). *The Ethnographic Self as Resource: Writing Memory and Experience into ethnography*. Berghahn Books.

Columna, L., & Lieberman, L. J. (2011). *Promoting language through physical education: Using sign language and Spanish to engage everyone*. Human Kinetics.

Connell, R. (2013). The neoliberal cascade and education: An essay on the market agenda and its consequences. *Critical studies in education*, 54(2), 99-112.

Connelly, L. M. (2014). Use of theoretical frameworks in research. *Medsurg Nursing*, 23(3), 187.

Connolly, P. (2009). The challenges and prospects for educational effectiveness research. *Effective Education*, 1(1), 1-12.

Consortium for Research into Deaf Education (CRIDE) (2023). *2023 report for England*. Retrieved 2nd September 2024 from <https://www.ndcs.org.uk/media/9244/cride-2023-england-report.pdf>

Consortium for Research into Deaf Education (CRIDE). (2024). *2024 report for England Education provision for deaf children in England in 2023/24*. Retrieved on 10th February 2025 from: <https://www.ndcs.org.uk/media/9560/cride-2024-england-report.pdf> .

Consumer Data Research Centre (CDRC). (2019). *Index of Multiple Deprivation (IMD)*. Retrieved 11th November 2024 from <https://data.cdrc.ac.uk/dataset/index-multiple-deprivation-imd>

Corazza, S. (1994). The History of Sign Language in Italian Education of the Deaf. In C. J. Erting, R. C. Johnson, D. L. Smith, & B. D. Snider (Eds.), *The Deaf Way Perspectives from the International Conference on Deaf Culture*. (pp. 186-193). Gallaudet University Press.

Corbin, J., and Strauss, A. (2015). *Basics of Qualitative research: techniques and procedures for developing grounded theory* (4th ed.). Sage.

Cowne, E., Frankl, C., & Gerschel, L. (2018). *The SENCo Handbook: Leading and managing a whole school approach*. Routledge.

Creemers, B., & Kyriakides, L. (2015). Process-product research: A cornerstone in educational effectiveness research. *Journal of Classroom Interaction*, 107-119.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage Publications.

Croston, A., & Hills, L. A. (2017). The challenges of widening 'legitimate' understandings of ability within physical education. *Sport, education and society*, 22(5), 618-634.

Crotty, M. (1998). *The foundations of social research : meaning and perspective in the research process*. Sage Publications.

Cunliffe, A. (2003). Reflexive inquiry in organizational research: questions and possibilities. *Human Relations*, 56(8), 983-1003.

Cunliffe, A. L. (2011). Crafting qualitative research: Morgan and Smircich 30 years on. *Organizational research methods*, 14(4), 647-673.

Curtner-Smith, M. (2002). Methodological issues in research. In A. Laker (Ed.), *The sociology of sport and physical education an introductory reader*. (pp. 36-57). Routledge.

Cutcliffe, J. R., & McKenna, H. P. (1999). Establishing the credibility of qualitative research findings: the plot thickens. *Journal of advanced nursing*, 30(2), 374-380.

Daft, R. L. (1999). *Leadership: Theory and practice*. Harcourt Brace.

Daniels, H., & Smith, C. (1999). Foreword. In L. Watson, S. Gregory, & S. Powers (Eds.), *Deaf and hearing impaired pupils in mainstream schools*. (pp. v-x). David Fulton Publishers.

David, M., Edwards, R., & Alldred, P. (2001). Children and school-based research: 'informed consent' or 'educated consent'? *British educational research journal*, 27(3), 347-365.

Davies, C., & Fisher, M. (2018). Understanding research paradigms. *Journal of the Australasian Rehabilitation Nurses Association*, 21(3), 21-25.

Davis, J. M. (2000). Disability studies as ethnographic research and text: research strategies and roles for promoting social change?. *Disability & Society*, 15(2), 191-206.

Davis, L. J. (2008). Postdeafness. In H. D. Bauman (Ed.), *Open Your Eyes: Deaf Studies Talking*. University of Minnesota Press.

Day, C. (1999). *Developing teachers: The challenges of lifelong learning*. Routledge.

- Day, C., Kington, A., Stobart, G., & Sammons, P. (2006). The personal and professional selves of teachers: Stable and unstable identities. *British educational research journal*, 32(4), 601-616.
- De Clerck, G. A. (2010). Deaf epistemologies as a critique and alternative to the practice of science: An anthropological perspective. *American annals of the deaf*, 154(5), 435-446.
- De Clerck, G. A. (2016). Deaf epistemologies, identity and learning: A comparative perspective. Gallaudet University Press.
- De Clerck, G. A. (2019). Creative biographical responses to epistemological and methodological challenges in generating a deaf life story telling instrument. *Contemporary Social Science*, 14(3-4), 475-499.
- De Clerck, G. A. M. (2012). Contributing to an Era of Epistemological Equity: A Critique and an Alternative to the Practice of Science. In P. V. Paul & D. F. Moores (Eds.), *Deaf Epistemologies : Multiple Perspectives on the Acquisition of Knowledge* (pp. 19-44). Gallaudet University Press.
- De Meulder, M., & Murray, J. J. (2021). The illusion of choice in inclusive education. *International Journal of Inclusive Education*, 28(6), 753-767.
- De Vries, S., van de Grift, W. J., & Jansen, E. P. (2014). How teachers' beliefs about learning and teaching relate to their continuing professional development. *Teachers and Teaching*, 20(3), 338-357.
- Dei, G. J. S., James, I. M., James-Wilson, S., Karumanchery, L. L., & Zine, J. (2000). *emoving the margins: The challenges and possibilities of inclusive schooling*. Canadian Scholars' Press.
- Delamont, S. (2002). *Fieldwork in educational settings : methods, pitfalls and perspectives* (2nd ed.). Routledge.
- Delamont, S. (2009). The only honest thing: Autoethnography, reflexivity and small crises in fieldwork. *Ethnography and education*, 4(1), 51-63.
- Delamont, S. (2014). *Key Themes in the Ethnography of Education*. Sage Publications.

Delamont, S., & Atkinson, P. (2018). The ethics of ethnography. In R. Igofen, & Tolich, M. (Ed.), *The Sage handbook of qualitative research ethics* (pp. 119-132). Sage Publications Ltd.

Delamont, S., & Atkinson, P. (2021). *Ethnographic engagements: Encounters with the familiar and the strange*. Routledge.

DeLuca, C. (2013). Toward an interdisciplinary framework for educational inclusivity. *Canadian Journal of Education*, 36(1), 305-347.

Denieffe, S. (2020). Commentary: Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8), 662-663.

Dennis, B. (2009). What does it mean when an ethnographer intervenes?. *Ethnography and Education*, 4(2), 131-146.

Denscombe, M., & Aubrook, L. (2006). "It's Just Another Piece of Schoolwork": the ethics of questionnaire research on pupils in schools. *British educational research journal*, 18(2), 113-131.

Denzin, N. K. (2001). *Interpretive interactionism* (2nd ed., Vol. 16). Sage Publications.

Denzin, N. K. (2008). The new paradigm dialogs and qualitative inquiry. *International Journal of Qualitative Studies in Education*, 21(4), 315-325. <https://doi.org/10.1080/09518390802136995>

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2005). *Handbook of Qualitative Research* (2nd ed.). Sage Publications.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage handbook of qualitative research* (4th ed.). SAGE Publications.

Denzin, N. K., Lincoln, Y. S., Giardina, M. D., & Cannella, G. S. (Eds.). (2024). *The SAGE Handbook of Qualitative Research* (6th ed.). Sage Publishing.

Denzin, N., & Lincoln, Y. (Eds.) (2000). *Handbook of Qualitative Research* (2nd Ed.). Sage Publications: Thousand Oaks.

Department for Education (DfE) & Department of Health (DOH). (2015). *Special educational needs and disability code of practice: 0 to 25 years Statutory guidance for organisations which work with and support children and young people who have special educational needs or disabilities*. Retrieved on 8th

November 2024 from: from
https://assets.publishing.service.gov.uk/media/5a7dcb85ed915d2ac884d995/SEND_Code_of_Practice_January_2015.pdf .

Department for Education (DfE). (2010). The United Nations Convention on the Rights of the Child: How legislation underpins implementation in England. Retrieved on 2nd January 2024 from:
https://assets.publishing.service.gov.uk/media/5a7c0ffb40f0b645ba3c6788/uncrc_how_legislation_underpins_implementation_in_england_march_2010.pdf.

Department for Education (DfE). (2011). *Teachers' Standards overview.* Retrieved 7th February 2023 from
https://assets.publishing.service.gov.uk/media/5a750668ed915d3c7d529cad/Teachers_standard_information.pdf.

Department for Education (DfE). (2013a). *The national curriculum in England Key stages 1 and 2 framework document.* Retrieved 13th March 2022 from
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/425601/PRIMARY_national_curriculum.pdf .

Department for Education (DfE). (2013b). *National curriculum in England: physical education programmes of study.* Retrieved on 22nd January 2025 from:
<https://www.gov.uk/government/publications/national-curriculum-in-england-physical-education-programmes-of-study/national-curriculum-in-england-physical-education-programmes-of-study> .

Department for Education (DfE). (2014). *National curriculum in England: framework for key stages 1 to 4.* Retrieved 11th November 2022 from
<https://www.gov.uk/government/publications/national-curriculum-in-england-framework-for-key-stages-1-to-4/the-national-curriculum-in-england-framework-for-key-stages-1-to-4>

Department for Education (DfE). (2014b). *The Equality Act 2010 and schools.* Retrieved 13th March 2022 from
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/315587/Equality_Act_Advice_Final.pdf .

Department for Education (DfE). (2022). *Education inspection framework*. Retrieved 16th March 2023 from <https://www.gov.uk/government/publications/education-inspection-framework/education-inspection-framework> .

Department for Education (DfE). (2023). *British Sign Language GCSE: Everything you need to know*. Retrieved 30th January 2024 from <https://educationhub.blog.gov.uk/2023/12/21/british-sign-language-gcse-everything-you-need-to-know/>.

Department for Education (DfE). (2024). Enhancing physical education provision and improving access to sport and physical activity in school Non-statutory guidance. Retrieved on 28th April 2025 from: https://assets.publishing.service.gov.uk/media/65fd68f9f1d3a0001d32adbc/Enhancing_physical_education_provision_and_improving_access_to_sport_and_physical_activity_in_school.pdf .

Derrida, J. (1974). *Of grammatology*. Johns Hopkins University Press.

Desan, M. H. (2013). Bourdieu, Marx, and capital: A critique of the extension model. *Sociological theory*, 31(4), 318-342.

Deuchar, M. (2013). *British sign language*. (1st ed.). Routledge. <https://doi.org/https://doi.org/10.4324/9781315005089>

Devecchi, C., Dettori, F., Doveston, M., Sedgwick, P., & Jament, J. (2012). Inclusive classrooms in Italy and England: The role of support teachers and teaching assistants. *European Journal of Special Needs Education*, 27(2), 171-184.

Devers, K. J., & Frankel, R. M. (2000). Study design in qualitative research--2: Sampling and data collection strategies. *Education for health*, 13(2), 263.

Dixon, R., Smith, P., & Jenks, C. (2004). Bullying and difference: a case study of peer group dynamics in one school. *Journal of School Violence*, 3(4), 41-58.

Dodds, P. (1994). Cognitive and behavioral components of expertise in teaching physical education. *Quest*, 46(2), 153-163.

Dodds, P., & Placek, J. H. (1991). Silverman's RT-PE Review: Too Simple a Summary of a Complex Field. *Research Quarterly for Exercise and Sport*, 62(4), 365-368.

dos Santos Pedrosa, V., Beltrame, A. L. N., Boato, É. M., & Sampaio, T. M. V. (2013). A experiência dos professores de Educação Física no processo de inclusão escolar do estudante surdo. *Revista Brasileira de Ciência e Movimento*, 21(2), 106-115.

Dowling, F. (2012). A narrative approach to research in physical education, youth sport and health. In F. Dowling., H. Fitzgerald & A. Flintoff (Eds), *Equity and difference in physical education, youth sport and health* (pp. 37-59). Routledge.

Doyle, L., McCabe, C., Keogh, B., Brady, A., & McCann, M. (2020). An overview of the qualitative descriptive design within nursing research. *Journal of Research in Nursing*, 25(5), 443-455.

Doyle, W. (1977). 4: Paradigms for research on teacher effectiveness. *Review of research in education*, 5(1), 163-198.

Draper, A., & Swift, J. A. (2011). Qualitative research in nutrition and dietetics: Data collection issues. *Journal of Human Nutrition and Dietetics*, 24(1), 3-12.

Duncombe, J., & Jessop, J. (2012). Doing rapport' and the ethics of 'faking friendship'. In: Miller, T., Jessop, J., Mauthner, M., & Birch, M. (Eds.), *Ethics in qualitative research*, (2nd ed., pp.108- 121).

Dunkin, M. J., & Biddle, B. J. (1974). The study of teaching. Holt, Rinehart & Winston.

Dwyer, S. C., & Buckle, J. L. (2009). The space between: On being an insider-outsider in qualitative research. *International journal of qualitative methods*, 8(1), 54-63.

Dye, M. W., Hauser, P. C., & Bavelier, D. (2008). Visual attention in deaf children and adults. *Deaf cognition: Foundations and outcomes*, 250-263.

Dyson, B. (2014). Quality physical education: A commentary on effective physical education teaching. *Research Quarterly for Exercise and Sport*, 85(2), 144-152.

Earl Rinehart, K. (2021). Abductive analysis in qualitative inquiry. *Qualitative Inquiry*, 27(2), 303-311.

Eckert, R. C. (2010). Toward a theory of deaf ethnos: Deafnicity≈ D/deaf (hómaemon• homóglosson• homóthreskon). *Journal of deaf studies and deaf education*, 15(4), 317-333.

Eckert, R. C., & Rowley, A. J. (2013). Audism: A theory and practice of audiocentric privilege. *Humanity & Society*, 37(2), 101-130.

Economic and Social Research Council. (2020) Ethics, Participants' interests, confidentiality, and consent. Retrieved on 27th January 2023 from: <https://esrc.ukri.org/public-engagement/social-science-for-schools/resources/doing-research-ethically/> .

Edmondson, S., & Howe, J. (2019). Exploring the social inclusion of deaf young people in mainstream schools, using their lived experience. *Educational Psychology in Practice*, 35(2), 216-228.

Edwards, M. L. (1997). Deaf and dumb in ancient Greece. In L. J. Davis (Ed.), *The disability studies reader* (1st ed., pp. 29-52). Routledge.

Eichstaedt, C. B., & Seiler, P. J. (1978). Signing: Communicating with hearing impaired individuals in physical education. *Journal of Physical Education and Recreation*, 49(5), 19-21.

Eldén, S. (2013). Inviting the messy: Drawing methods and 'children's voices'. *Childhood*, 20(1), 66-81.

Elliot, D. L., & Campbell, T. (2015). 'Really on the ball': exploring the implications of teachers' PE-CPD experience. *Sport, education and society*, 20(3), 381-397.

Elliott, P. (2019). Planning for learning. In: A. Abbott, P. Huddleston & D. Middlewood (Eds.), *Preparing to Teach in Secondary Schools: a Student Teacher's Guide to Professional Issues in Secondary Education*, (4th ed., pp.52-67). Open International Publishing.

Emerson, R. M., Fretz, R. I., & Shaw, L. L. (2001). Participant observation and fieldnotes. In: P. Atkinson., A. Coffey., S. Delamont., J. Lofland & L. Lofland (Eds), *Handbook of ethnography*, (pp.352-368). Sage Publications Ltd.

Emerson, R. M., Fretz, R. I., & Shaw, L. L. (2011). *Writing ethnographic fieldnotes* (2nd ed). University of Chicago Press.

Emery, S. D. (2009). In space no one can see you waving your hands: making citizenship meaningful to Deaf worlds. *Citizenship Studies*, 13(1), 31-44.

Ennis, C. D. (1999). A theoretical framework: The central piece of a research plan. *Journal of Teaching in Physical Education*, 18(2), 129-140.
<https://doi.org/https://doi.org/10.1123/jtpe.18.2.129>

Ennis, C. D. (2014). The role of students and content in teacher effectiveness. *Research Quarterly for Exercise and Sport*, 85(1), 6-13.

Erickson, F. (2024). A History of Qualitative Inquiry in Social and Educational research. In N. K. Denzin, Y. S. Lincoln, M. D. Giardina, & G. S. Cannella (Eds.), *The SAGE Handbook of Qualitative Research* (6th ed., pp. 33-60). Sage Publishing.

Eriks-Brophy, A., & Whittingham, J. (2013). Teachers' perceptions of the inclusion of children with hearing loss in general education settings. *American annals of the deaf*, 158(1), 63-97.

Eriks-Brophy, A., Durieux-Smith, A., Olds, J., Fitzpatrick, E., Duquette, C., & Whittingham, J. (2006). Facilitators and barriers to the inclusion of orally educated children and youth with hearing loss in schools: promoting partnerships to support inclusion. *Volta Review*, 106(1).

Erting, C. J., Johnson, R. C., Smith, D. L., & Snider, B. D. (1994). *The Deaf Way Perspectives from the International Conference on Deaf Culture*. Gallaudet University Press.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4.

Evans, J. (2014). Neoliberalism and the future for a socio-educative physical education. *Physical Education and Sport Pedagogy*, 19(5), 545-558.

Evans, J., & Penney, D. (2008). Levels on the playing field: The social construction of physical 'ability' in the physical education curriculum. *Physical Education and Sport Pedagogy*, 13(1), 31-47.

Evans, L., Thornton, B., & Usinger, J. (2012). Theoretical frameworks to guide school improvement. *NASSP bulletin*, 96(2), 154-171.

Fade, S. A., & Swift, J. A. (2011). Qualitative research in nutrition and dietetics: data analysis issues: Data analysis in qualitative research. *Journal of Human Nutrition and Dietetics*, 24(2), 106-114. <https://doi.org/10.1111/j.1365-277X.2010.01118.x>

Farrell, P. (2000). The impact of research on developments in inclusive education. *International Journal of Inclusive Education*, 4(2), 153-162.

Fernandes, J. K., & Myers, S. S. (2010). Inclusive deaf studies: Barriers and pathways. *Journal of deaf studies and deaf education*, 15(1), 17-29.

Fernández-Balboa, J.-M., & Muros, B. (2006). The hegemonic triumvirate—Ideologies, discourses, and habitus in sport and physical education: Implications and suggestions. *Quest*, 58(2), 197-221.

Fernández-Viader, M. D. P., & Fuentes, M. (2004). Education of deaf students in Spain: Legal and educational politics developments. *Journal of Deaf Studies and Deaf Education*, 9(3), 327-332.

Ferrer-Caja, E., & Weiss, M. R. (2000). Predictors of intrinsic motivation among adolescent students in physical education. *Research Quarterly for Exercise and Sport*, 71(3), 267-279.

Finlay, L. (2002). "Outing" the researcher: The provenance, process, and practice of reflexivity. *Qualitative health research*, 12(4), 531-545.

Finlay, L., & Gough, B. (Eds.). (2003). Reflexivity: A practical guide for researchers in health and social sciences. Blackwell Science.

Finn, R., & Waring, J. (2006). Ethnographic methods in patient safety. In K. Walshe & R. Boaden (Eds.), *Patient safety: research into practice* (pp. 161-172). Open University Press.

Fiorini, M. L. S., & Manzini, E. J. (2018). Strategies of Physical Education teachers to promote the participation of students with hearing impairment in classrooms. *Revista Brasileira de Educação Especial*, 24, 183-198.

Fisher, L. A., Butryn, T. M., & Roper, E. A. (2003). Diversifying (and politicizing) sport psychology through cultural studies: A promising perspective. *The sport psychologist*, 17(4), 391-405.

Fitzgerald, H. (2005). Still feeling like a spare piece of luggage? Embodied experiences of (dis) ability in physical education and school sport. *Physical education & sport pedagogy*, 10(1), 41-59.

Fitzgerald, H. (2009). 'Drawing' on Disabled Students' Experiences of Physical Education and Stakeholder Responses. In H. Fitzgerald., & R. Bailey (Eds), *Disability and youth Sport*. (pp. 443–462). Routledge.

Fitzgerald, H., & Hay, P. (2014). Understanding dis/ability in physical education through the lens of Bourdieu. In *Pierre Bourdieu and physical culture* (pp. 117-125). Routledge.

Fitzgerald, H., & Kirk, D. (2009). Physical education as a normalizing practice: Is there a space for disability sport? In H. Fitzgerald, & Bailey, R. (Ed.), *Disability and youth sport* (pp. 103-117). Routledge.

Fitzgerald, H., & Stride, A. (2012). Stories about physical education from young people with disabilities. *International Journal of Disability, Development and Education*, 59(3), 283-293.

Fitzgerald, H., Jobling, A., & Kirk 1, D. (2003). Valuing the voices of young disabled people: Exploring experience of physical education and sport. *European Journal of Physical Education*, 8(2), 175-200.

Fitzgerald, H., Jobling, A., & Kirk, D. (2003). Valuing the voices of young disabled people: Exploring experience of physical education and sport. *European Journal of Physical Education*, 8(2), 175-200.

Flaherty, M. G., Denzin, N. K., Manning, P. K., & Snow, D. A. (2002). Review symposium: Crisis in representation. *Journal of Contemporary Ethnography*, 31(4), 478-516.

Flick, U. (2018). Doing qualitative data collection—charting the routes. In U. Flick (Ed.), *The SAGE handbook of qualitative data collection* (pp. 1-16). Sage Publications Ltd.

Flick, U. (Ed.). (2014). *The SAGE handbook of qualitative data analysis*. Sage Publishing.

Flintoff, A., & Fitzgerald, H. (2012). Theorizing difference and (in) equality in physical education, youth sport and health. In *Equity and difference in physical education, youth sport and health* (pp. 11-36). Routledge.

Flynn, N. (2013). Linguistic capital and the linguistic field for teachers unaccustomed to linguistic difference. *British journal of sociology of education*, 34(2), 225-242.

Flynn, N. (2015). Turning a Bourdieuan lens on English teaching in Primary Schools: Linguistic field, linguistic habitus and linguistic capital. In *Theory as Method in Research* (pp. 155-170). Routledge.

Forsey, M. (2010). Ethnography and the Myth of Participant Observation. In S. HILLYARD (Ed.), *New Frontiers in Ethnography*. (pp. 65-79.). Emerald Publishing,.

Foss, K. A. (2014). Constructing hearing loss or “Deaf gain?” voice, agency, and identity in television's representations of d/Deafness. *Critical Studies in Media Communication*, 31(5), 426-447.

Fossey, E., Harvey, C., McDermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. *Australian & New Zealand journal of psychiatry*, 36(6), 717-732.

Foster, R., Fitzgerald, H., & Stride, A. (2019). The socialization and participation of Deaflympians in sport. *Sport in Society*.

Foucault, M. (1975). *Discipline and punish: The birth of prison* (A. Sheridan, Trans.). Pantheon.

- Frank, A. W. (2005). What is dialogical research, and why should we do it? *Qualitative Health Research*, 15(7), 964-974.
- Friedman, P. K. (2009). Ethical hegemony. *Rethinking Marxism*, 21(3), 355-365.
- Fylan, F. (2005). Semi-structured interviewing. In J. Miles & P. Gilbert (Eds.), *A Handbook of Research Methods for Clinical and Health Psychology* (pp. 65-77). Oxford University Press.
- Gair, S. (2012). Feeling their stories: Contemplating empathy, insider/outsider positionings, and enriching qualitative research. *Qualitative health research*, 22(1), 134-143.
- Galletta, A. (2013). Mastering the semi-structured interview and beyond: From research design to analysis and publication (Vol. 18). New York University Press.
- Gannon, J. (1981). *Deaf heritage: A narrative history of deaf America*. Gallaudet University Press.
- Gayle, G. W., & Pohlman, R. L. (1990). Comparative study of the dynamic, static, and rotary balance of deaf and hearing children. *Perceptual and Motor Skills*, 70(3), 883-888.
- Gertz, E. N. (2003). *Dysconscious audism and critical deaf studies: Deaf crit's analysis of unconscious internalization of hegemony within the deaf community*. University of California]. Los Angeles.
- Gertz, G. (2008). Dysconscious Audism: A Theoretical Proposition. In H. D. L. Bauman (Ed.), *Open your eyes: Deaf studies talking* (pp. 219-234). University of Minnesota Press.
- Gertz, G. (2016). Dysconscious audism. In G. Gertz, & Boudreault, P. (Ed.), *The SAGE deaf studies Encyclopedia* (Vol. 1, pp. 329-332). SAGE.
- Gertz, G., & Boudreault, P. (2016). *The SAGE deaf studies encyclopedia*. Sage Publications.
- Gertz, G., Bauman, H. D L. (2016). Audism. In G. B. Gertz, P. (Ed.), *The SAGE deaf studies encyclopedia*. (Vol. 1, pp. 63-65). Sage

Giroux, H. A. (1995). Is There a Place for Cultural Studies in Colleges of Education? *The Review of Education/pedagogy/cultural Studies*, 17(2), 127-142.

Gobo, G. (2008). *Doing ethnography*. SAGE Publications Ltd.

Goffman, E. (1959). *The Presentation of Self in Everyday Life*. Doubleday.

Goffman, E. (1963). *Notes on the Management of Spoiled Identity*. Penguin Books.

Goodman, J., & Hopper, C. (1992). Hearing impaired children and youth: A review of psychomotor behavior. *Adapted physical activity quarterly*, 9(3), 214-236.

Goodwin, D. (2020). Qualitative inquiry in adapted physical education. In J. A. Haeghele, Hodge, S. R., & Shapiro, D. R. (Ed.), *Routledge Handbook of Adapted Physical Education*, (pp. 163-182). Routledge.

Goodwin, D., Pope, C., Mort, M., & Smith, A. (2003). Ethics and ethnography: An experiential account. *Qualitative Health Research*, 13(4), 567-577.

Gore, J. M. (1995). On the continuity of power relations in pedagogy. *International Studies in Sociology of Education*, 5(2), 165-188.

Gore, J. M. (1997). Disciplining Bodies: On the Continuity of Power Relations in Pedagogy. In T. Popkewitz, & Brennan, M. (Ed.), *Foucault's Challenge: Discourse, Knowledge, and Power in Education*. Teachers College.

Government Equalities Office & Women Equalities Unit. (2022). *Disability: Equality Act 2010 - Guidance on matters to be taken into account in determining questions relating to the definition of disability (HTML)*. Retrieved 7th February 2024 from <https://www.gov.uk/government/publications/equality-act-guidance/disability-equality-act-2010-guidance-on-matters-to-be-taken-into-account-in-determining-questions-relating-to-the-definition-of-disability-html#section-a-the-definition>.

Government Social Research. (2006). *Ethics in Social Research: the views of research participants*. HMT Publishing Unit.

Graham, P. J., & Horejes, T. P. (2017). Why positionality matters in deaf education research: An insider ethnographic perspective. In S. W. Cawthon & C. L.

Garberoglio (Eds.), *Research in Deaf education: Contexts, challenges, and considerations* (pp. 55-74). Oxford University Press.

Grant, A. (2017). "I Don't Want You Sitting Next to Me" The Macro, Meso, and Micro of Gaining and Maintaining Access to Government Organizations During Ethnographic Fieldwork. *International Journal of Qualitative Methods*, 16(1), 1-11.

Grant, C., & Osanloo, A. (2014). Understanding, Selecting, and Integrating a Theoretical Framework in Dissertation Research: Creating the Blueprint for Your "House." *Administrative Issues Journal : Education, Practice, and Research*, , 4(2), 12-26. <https://doi.org/10.5929/2014.4.2.9>

Gratton, C., & Jones, I. (2010). *Research methods for sports studies* (2nd ed.). Routledge.

Gray, D. E. (2022). *Doing Research in the Real World* (5th ed.). SAGE Publications.

Grbich, C. (Ed.). (2013). *Qualitative data analysis : an introduction*. (2nd ed.). SAGE Publications Ltd.

Green, J., & Bloome, D. (2004). Ethnography and ethnographers of and in education: A situated perspective. In *Handbook of research on teaching literacy through the communicative and visual arts* (pp. 181-202). Routledge.

Greene, J. C. (2000). UNDERSTANDING SOCIAL PROGRAMS THROUGH EVALUATION. In N. K. L. Denzin, Y. S. (Ed.), *Handbook of Qualitative Research*. (2nd ed., pp. 981-999). Sage Publications Inc.

Gregory, S. (1998). Mathematics and deaf children. In S. Gregory, Knight, P., McCracken, W., Powers, S. & Waton, L. (Ed.), *Issues in deaf education* (1st ed., pp. 119-126). David Fulton Publishers.

Gregory, S. (2017). *Schools for the deaf*. BATOD. Retrieved 31st January 2024 from <https://www.batod.org.uk/information/schools-for-the-deaf/>

Gregory, S., & Hartley, G. (1990). *Constructing deafness*. Bloomsbury Publishing.

Gregory, S., Knight, P., McCracken, W., Powers, S., & Watson, L. (Eds.). (1998). *Issues in deaf education*. David Fulton Publishers.

Gregory, S., Sheldon, L., & Bishop, J. (1995). *Deaf young people and their families: Developing understanding*. Cambridge University Press.

Grenfell, M., & James, D. (2003). *Bourdieu and education: Acts of practical theory*. Routledge.

Grønmo, S. (2020). Social Research Methods: Qualitative, Quantitative and Mixed

Grossberg, L. (2013). The formations of cultural studies: An American in Birmingham. In *Relocating cultural studies* (pp. 29-74). Routledge.

Guardino, C., & Antia, S. D. (2012). Modifying the classroom environment to increase engagement and decrease disruption with students who are deaf or hard of hearing. *Journal of deaf studies and deaf education*, 17(4), 518-533.

Guba, E. (1990). The alternative paradigm dialog. In E. G. Guba (Ed.), *The paradigm dialog*. (pp.17-27). Sage.

Guba, E. and Lincoln, Y. (1994) Competing paradigms in qualitative research (pp. 105- 118). In Denzin, N. and Lincoln, Y. (Eds.), *Handbook on qualitative research*. Sage: Thousand Oaks, USA.

Guba, E. G. (1992). Relativism. *Curriculum Inquiry*, 22(1), 17-23.

Guenther, K. M. (2009). The politics of names: Rethinking the methodological and ethical significance of naming people, organizations, and places. *Qualitative research*, 9(4), 411-421.

Guillemin, M., & Gillam, L. (2004). Ethics, reflexivity, and “ethically important moments” in research. *Qualitative Inquiry*, 10, 261-280. <https://doi.org/10.1177/1077800403262360> .

Haegele, J. A. (2019). Inclusion illusion: Questioning the inclusiveness of integrated physical education: 2019 national association for Kinesiology in higher education Hally Beth Poindexter young scholar address. *Quest*, 71(4), 387-397.

Haegele, J. A., & Maher, A. J. (2023). Toward a conceptual understanding of inclusion as intersubjective experiences. *Educational researcher*, 52(6), 385-393.

Haegele, J. A., & Zhu, X. (2017). Experiences of individuals with visual impairments in integrated physical education: A retrospective study. *Research Quarterly for Exercise and Sport*, 88(4), 425-435.

Hammersley, M. (2006). Ethnography: problems and prospects. *Ethnography and education*, 1(1), 3-14.

Hammersley, M. (2007). The issue of quality in qualitative research. *International Journal of Research & Method in Education*, 30(3), 287-305.

Hammersley, M. (2016). Reading ethnographic research. Routledge.

Hammersley, M. (2017). What is ethnography? Can it survive? Should it?. *Ethnography and education*, 13(1), 1-17.

Hammersley, M., & Atkinson, P. (1995). *Ethnography: Principles in Practice*. Routledge.

Hammersley, M., & Atkinson, P. (2007). *Ethnography: Principles in Practice*. (3rd ed.). Routledge.

Hammersley, M., & Atkinson, P. (2019). *Ethnography : principles in practice* (4th ed.). Routledge, Taylor & Francis Group.

Hammersley, M., & Traianou, A. (2012). Ethics and educational research. British Educational Research Association. Retrieved on 11th December from: <https://www.t-rex.ie/wp-content/uploads/2017/02/BERA-Ethics-and-Educational-Research.pdf> .

Harding, T., & Whitehead, D. (2013). Analysing data in qualitative research. In Z. Schneider, D. Whitehead, G. LoBiondo-Wood, & J. Haber (Eds.), *Nursing & midwifery research: Methods and appraisal for evidence-based practice* (5th ed., pp. 141-160). Elsevier.

Hargreaves, J. (1994). *Sporting Females: critical issues in the history and sociology of women's sport*. Routledge.

Hargreaves, J. A. (Ed.). (1982). *Sport, Culture and Ideology*. Routledge & Kegan Paul.

- Hargreaves, J., & McDonald, I. (2000). Cultural Studies and the Sociology of Sport". In J. a. D. Coakley, E. (Ed.), *Handbook of sports studies*. (pp. 48-61). SAGE Publications.
- Harr, J. (2001). Issues in researching the perspectives of deaf children. *Journal of Research in Special Educational Needs*, 1(3). <https://doi.org/10.1111/j.1471-3802.2001.00151.x>
- Harrington, B. (2003). The social psychology of access in ethnographic research. *Journal of contemporary ethnography*, 32(5), 592-625.
- Harris, R., Holmes, H. M., & Mertens, D. M. (2009). Research ethics in sign language communities. *Sign Language Studies*, 9(2), 104-131.
- Harvey-Jordan, S., & Long, S. (2001). The process and the pitfalls of semi-structured interviews. *Community Practitioner*, 74(6), 219.
- Hastie, P. A., & Saunders, J. E. (1990). A study of monitoring in secondary school physical education classes. *The Journal of Classroom Interaction*, 47-54.
- Hastie, P. A., & Siedentop, D. (2006).² The classroom ecology paradigm. In D. Kirk, MacDonald, D., & O'Sullivan, M. (Ed.), *Handbook of physical education* (pp. 214-224). Sage Publications.
- Hastie, P., & Hay, P. (2012). Qualitative approaches. In K. Armour & D. MacDonald (Eds.), *Research methods in physical education and youth sport* (pp. 79-94). Routledge.
- Hastie, P., & Siedentop, D. (1999). An ecological perspective on physical education. *European Physical Education Review*, 5(1), 9-30.
- Hatch, J. A. (2002). Doing qualitative research in education settings. State University of New York Press.
- Hatch, J. A. (2023). Doing qualitative research in education settings (2nd ed.). State University of New York Press.
- Haugaard, M. (2009). In S. legg, & Haugaard, M. (Ed.), *The SAGE Handbook of Power* (pp. 239-255).

Hauser, P. C., O'Hearn, A., McKee, M., Steider, A., & Thew, D. (2010). Deaf epistemology: Deafhood and deafness. *American annals of the deaf*, 154(5), 486-492.

Hay, P. J., & Lisahunter. (2006). 'Please Mr Hay, what are my poss (abilities)?': Legitimation of ability through physical education practices. *Sport, education and society*, 11(3), 293-310.

Haynes, K. (2012). Reflexivity in qualitative research. In G. Symon & C. Cassell (Eds.), *Qualitative organizational research: Core methods and current challenges* (Vol. 26, pp. 72-89). Sage Publications

Hendar, O., & O'Neill, R. (2016). Monitoring the achievement of deaf pupils in Sweden and Scotland: Approaches and outcomes. *Deafness & Education International*, 18(1), 47-56.

Hennik, M., Hutter, I., & Bailey, A. (2020). *Qualitative Research Methods* (2nd ed.). Sage Publications.

Herbert, S. (2000). For ethnography. *Progress in human geography*, 24(4), 550-568.

Higginbottom, G. M. A. (2004). Sampling issues in qualitative research. *Nurse Researcher* (through 2013), 12(1), 7.

Hilgenbrinck, L. C., Pyfer, J., & Castle, N. (2004). Students with cochlear implants: Teaching considerations for physical educators. *Journal of physical education, recreation & dance*, 75(4), 28-33.

Hills, L. (2007). Friendship, physicality, and physical education: An exploration of the social and embodied dynamics of girls' physical education experiences. *Sport, education and society*, 12(3), 317-336.

HM Government. (2023). *Special Educational Needs and Disabilities (SEND) and Alternative Provision (AP) Improvement Plan, Right Support, Right Place, Right Time*. Retrieved 12th March 2023 from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1139561/SEND_and_alternative_provision_improvement_plan.pdf.

Hodder, I. (2000). THE INTERPRETATION OF DOCUMENTS AND MATERIAL CULTURE. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research*. (2nd ed., pp. 703-715). Sage Publications Inc.

Hodge, S., Lieberman, L. J., & Murata, N. (2012). Essentials of teaching physical education: Culture, diversity, and inclusion. *Scottsdale, AZ: Holcom Hathaway Publishers*.

Hodge, S., Lieberman, L., & Murata, N. (2017). *Essentials of teaching adapted physical education: Diversity, culture, and inclusion*. Routledge.

Hodkinson, A. (2009). Pre-service teacher training and special educational needs in England 1970–2008: is government learning the lessons of the past or is it experiencing a groundhog day? *European Journal of Special Needs Education*, 24(3), 277-289.

Hodkinson, A. (2015). *Key issues in special educational needs and inclusion* (2nd ed). Sage Publications Ltd.

Hoffman, J. E. (1980). Problems of access in the study of social elites and boards of directors. In W. B. Shaffir, R. A. Stebbins, & A. Turowetz (Eds.), *Fieldwork Experience: Qualitative Approaches to Social Research*. St. Martin's Press.

Hoffmeister, R. J. (2008). Language and the deaf world: Difference not disability. In *Language, culture, and community in teacher education* (pp. 71-98). Routledge.

Holcomb, T. K. (2010). Deaf epistemology: The deaf way of knowing. *American annals of the deaf*, 154(5), 471-478.

Holcomb, T. K. (2012). Paving the Way for Reform in Deaf Education. In P. V. Paul & D. F. Moores (Eds.), *Deaf epistemologies: Multiple perspectives on the acquisition of knowledge*. (pp. 125-146). Gallaudet University Press.

Holland, K., Haegele, J. A., Zhu, X., & Bobzien, J. (2023). "Everybody wants to be included": Experiences with 'inclusive' strategies in physical education. *Journal of developmental and physical disabilities*, 35(2), 273-293.

Holstein, J. A., & Gubrium, J. F. (2013). *Handbook of constructionist research*. Guilford Publications.

Holstein, J. A., & Gubrium, J. F. (Eds.). (2008). Handbook of constructionist research. The Guilford Press.

Honneth, A. (1986). The fragmented world of symbolic forms: reflections on Pierre Bourdieu's sociology of culture. *Theory, Culture & Society*, 3(3), 55-66.

House of Commons Education and Skills Committee. (2005). *Special Educational Needs, Third Report of Session 2005–06 Volume I*. Retrieved 4th November 2022 from .

Hoye, R., & Nicholson, M. (2009). Social Capital And Sport Policies In Australia: Policy transfer in action. *Public Management Review*, 11(4), 441–460. <https://doi.org/10.1080/14719030902989524> .

Humphreys, L., Lewis Jr, N. A., Sender, K., & Won, A. S. (2021). Integrating qualitative methods and open science: Five principles for more trustworthy research. *Journal of Communication*, 71(5), 855-874.

Humphries, T. (1977). *Communicating across cultures (deaf-hearing) and language learning*. Union Institute and University.

Hunter, L. (2004). Bourdieu and the social space of the PE class: Reproduction of doxa through practice. *Sport, education and society*, 9(2), 175-192.

Hutchison, I. (2007). Oralism: A sign of the times? The contest for deaf communication in education provision in late nineteenth-century Scotland. *European Review of History—Revue européenne d'Histoire*, 14(4), 481-501.

Hutzler, Y., Meier, S., Reuker, S., & Zitomer, M. (2019). Attitudes and self-efficacy of physical education teachers toward inclusion of children with disabilities: a narrative review of international literature. *Physical Education and Sport Pedagogy*, 24(3), 249-266.

Iantaffi, A., Jarvis, J., & Sinka, I. (2003a). Deaf pupils' views of inclusion in mainstream schools. *Deafness & Education International*, 5(3), 144-156.

Iantaffi, A., Sinka, I., & Jarvis, J. (2003b). Interviewing Deaf pupils about Inclusion. In G. Chiari & M. L. Nuzzo (Eds.), *Psychological Constructivism and the Social World*. (pp. 155-161). FrancoAngeli.

Ingulfsvann, L. S., Moe, V. F., & Engelsrud, G. (2020). The messiness of children's voices: An affect theory perspective. *International Journal of Qualitative Methods*, 19, 1-10.

Israelite, N., Ower, J., & Goldstein, G. (2002). Hard-of-hearing adolescents and identity construction: Influences of school experiences, peers, and teachers. *Journal of deaf studies and deaf education*, 7(2), 134-148.

Ives, P. (2009). Global English, hegemony and education: Lessons from Gramsci. *Educational Philosophy and theory*, 41(6), 661-683.

Jarvie, G. (2006). *Sport, Culture and Society: An Introduction*. Routledge.

Jarvie, G. T., J. (2013). *Sport, culture and society: an introduction* (2nd ed.). Routledge.

Jarvis, J. (2002). Exclusion by inclusion? Issues for deaf pupils and their mainstream teachers. *Education 3-13*, 30(2), 47-51.

Jarvis, J. (2003). 'It's more peaceful without any support': what do deaf pupils think about the support they receive in mainstream schools? *Support for Learning*, 18(4), 162-169.

Jarvis, J., & Iantaffi, A. (2006). 'Deaf people don't dance': challenging student teachers' perspectives of pupils and inclusion. *Deafness & Education International*, 8(2), 75-87.

Jernice, T. S., & Nonis, K. (2017). The Motor Skills of Adolescents with Hearing Impairment in a Regular Physical Education Environment. *International journal of special education*, 32(3), 596-607.

Jerolmack, C., & Khan, S. (2014). Talk is cheap: Ethnography and the attitudinal fallacy. *Sociological methods & research*, 43(2), 178-209.

Jerolmack, C., & Murphy, A. K. (2017). The ethical dilemmas and social scientific trade-offs of masking in ethnography. *Sociological Methods & Research*, 48(4), 801-827.

- Joffe, H. (2012). Thematic Analysis. In D. Harper & A. R. Thompson (Eds.), *Qualitative Research Methods in Mental Health and Psychotherapy: A Guide for Students and Practitioners*. (pp.209-223). Wiley-Blackwell.
- Johl, S. K., & Renganathan, S. (2010). Strategies for gaining access in doing fieldwork: Reflection of two researchers. *The Electronic Journal of Business Research Methods*, 8(1), 42-20.
- Johnson, G. A., Pfister, A. E., & Vindrola-Padros, C. (2012). Drawings, photos, and performances: Using visual methods with children. *Visual Anthropology Review*, 28(2), 164-178.
- Jones, B., & Ficklin, L. (2012). To walk in their shoes: Recognising the expression of empathy as a research reality. *Emotion, Space and Society*, 5(2), 103–112. <https://doi.org/10.1016/j.emospa.2010.10.007> .
- Jones, I., Brown, L., & Holloway, I. (2013). Qualitative research in sport and physical activity. Sage Publishing.
- Jones, R. L., Potrac, P., Cushion, C., Ronglan, L. R. & Davey C. (2011). Erving Goffman: Interaction and impression management. Playing the coaching role. In: R. L. Jones, P. Potrac., Cushion, C., & L. T. Ronglan (Eds.), *The Sociology of Sports Coaching*. (pp. 15-27). Routledge.
- Jones, S. (2006). *Antonio Gramsci*. Routledge.
- Juvonen, J., Lessard, L. M., Rastogi, R., Schacter, H. L., & Smith, D. S. (2019). Promoting social inclusion in educational settings: Challenges and opportunities. *Educational Psychologist*, 54(4), 250-270.
- Kelchtermans, G. (2004). CPD for professional renewal: Moving beyond knowledge for practice. In C. Day & J. Sachs (Eds.), *EBOOK: International Handbook on the Continuing Professional Development of Teachers*. (pp. 217-235). Open University Press.
- Kelchtermans, G., & Ballet, K. (2002). Micropolitical literacy: Reconstructing a neglected dimension in teacher development. *International journal of educational research*, 37(8), 755-767.

- Kelly, S. E. (2010). Qualitative interviewing techniques and styles. In I. Bourgeault, R. de Vries & R. Dingwall (Eds.), *The Sage Handbook of Qualitative Methods in Health Research*. (pp.307-326). Sage Publications.
- Kennedy, B. L., & Thornberg, R. (2018). Deduction, induction, and abduction. In U. Flick (Ed.), *The SAGE handbook of qualitative data collection*. (pp. 49-64). Sage Publications Ltd.
- Kent, B. (2003). Identity issues for hard-of-hearing adolescents aged 11, 13, and 15 in mainstream setting. *Journal of deaf studies and deaf education*, 8(3), 315-324.
- Kent, B., & Smith, S. (2006). They only see it when the sun shines in my ears: Exploring perceptions of adolescent hearing aid users. *Journal of deaf studies and deaf education*, 11(4), 461-476.
- Kermit, P. S. (2019). Passing for recognition—deaf children’s moral struggles languaging in inclusive education settings. *Deafness & Education International*, 21(2-3), 116-132.
- Kiff, P., & Bond, D. (1996). The inner life of deaf children. In V. P. Varma (Ed.), *The inner life of children with special needs*, (pp. 15–26). Athenaeum Press Ltd.
- Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical teacher*, 42(8), 846-854.
- Killam, L. (2013). Research terminology simplified: Paradigms, axiology, ontology, epistemology and methodology. Laura Killam.
- Kim, I., & Ko, B. (2020). Content knowledge, enacted pedagogical content knowledge, and student performance between teachers with different levels of content expertise. *Journal of Teaching in Physical Education*, 39(1), 111-120.
- Kirk, D. (1992). Physical education, discourse, and ideology: Bringing the hidden curriculum into view. *Quest*, 44(1), 35-56.
- Kirk, D. (2010a). *Physical education futures*. Routledge.

Kirk, D. (2010b). The Practice of Physical Education and the Social Construction of Aims. In R. Bailey (Ed.), *Physical Education for Learning: A Guide for Secondary Schools*. Continuum.

Kitchin, P., Telford, R. M., & Howe, P. D. (2022). An empirical use of organizational habitus and ethnography to explore how sport cultures are negotiated. *Sport in Society*, 25(9), 1643-1660.

Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of Higher Education*, 6(5), 26-21.

Kleinsasser, A. M. (2000). Researchers, reflexivity, and good data: Writing to unlearn. *Theory into practice*, 39(3), 155-162.

Knaggård, Å., Ness, B., & Harnesk, D. (2018). Finding an academic space: reflexivity among sustainability researchers. *Ecology and Society*, 23(4). <https://www.jstor.org/stable/26796866> .

Knight, P. (1998). Deafness and disability. In S. Gregory, P. Knight, W. McCracken, S. Powers, & L. Watson (Eds.), *Issues in deaf Education* (pp. 215-224). David Fulton Publishers.

Knoors, H., & Hermans, D. (2010). Effective Instruction for Deaf and Hard-of-Hearing Students: Teaching Strategies, School Settings, and Student Characteristics. In M. Marschark, & Spencer, P. E. (Ed.), *The Oxford handbook of deaf studies, language, and education* (Vol. 2, pp. 57-71). Oxford University Press.

Knoors, H., Tang, G., & Marschark, M. (2014). *Bilingualism and bilingual deaf education Time to take Stock. Bilingualism and bilingual deaf education*. Oxford University Press.

Kouwenberg, M., Rieffe, C., Theunissen, S. C., & de Rooij, M. (2012). Peer victimization experienced by children and adolescents who are deaf or hard of hearing. *PLoS One*, 7(12), e52174.

Krauss, S. E. (2005). Research paradigms and meaning making: A primer. *The qualitative report*, 10(4), 758-770.

Kumari, A., & Bhatt, A. (2014). Academic and intellectual self concept of hearing impaired children. *The International Journal of Humanities and Social Studies*, 2(12), 208-212.

Kumsang, M., & Moore, T. (1998). Policy and Practice in the education of deaf children and young people. In S. Gregory, P. Knight, W. McCracken, S. Powers, & L. Watson (Eds.), *Issues in deaf education* (pp. 235-244). David Fulton Publishers.

Kurková, P. (2015). Emotions in the physical activities of Czech students who are deaf or hard of hearing in general and special education. *Journal of Physical Education and Sport*, 15(4), 823.

Kurz, K. B., Schick, B., & Hauser, P. C. (2015). Deaf Children's Science Content Learning in Direct Instruction Versus Interpreted Instruction. *Journal of Science Education for students with disabilities*, 18(1), 23-37.

Kusters, A., & De Meulder, M. (2013). Understanding Deafhood: In search of its meanings. *American annals of the deaf*, 157(5), 428-438.

Kusters, A., De Meulder, M., & O'Brien, D. (Eds.). (2017). *Innovations in deaf studies: The role of deaf scholars*. Oxford University Press.

Kyle, J. G., Kyle, J., Woll, B., Pullen, G., & Maddix, F. (1988). *Sign language: The study of deaf people and their language*. Cambridge university press.

Kyriacou, C. (2010). *Effective teaching in schools theory and practice*. Oxford University Press-Children.

Laberge, S., & Kay, J. (2002). Pierre Bourdieu's sociocultural theory and sport practice. *Theory, sport and society*, 10, 239-266.

Ladd, P. (2003). *Understanding deaf culture: In search of deafhood*. Multilingual Matters.

Ladd, P. (2008). Colonialism and Resistance: A Brief History of Deafhood. In H. D. L. Bauman (Ed.), *Open Your Eyes : Deaf Studies Talking*. (pp. 42-59). University of Minnesota Press.

- Lamata, C., Grassi, M., Coterón, J., Becerra-Muñoz, W., & Pérez-Tejero, J. (2025). The inclusion of students with special educational needs in physical education according to the opinion of its protagonists: a qualitative study in Spain. *Sport, Education and Society*, 30(3), 353-367.
- Lamont, M., & Swidler, A. (2014). Methodological pluralism and the possibilities and limits of interviewing. *Qualitative sociology*, 37, 153-171.
- Lampropoulou, V. (1994). The history of deaf education in Greece. In C. Erting, R. C. Johnson, D. L. Smith, & B. D. Snider (Eds.), *The deaf way: Perspectives from the international conference on deaf culture* (pp. 239-249). Gallaudet University Press.
- Landi, D. (2022). Thinking Qualitatively: Paradigms and Design in Qualitative Research. In K. A. Richards, Hemphill, M. A., & Wright, P. M. (Ed.), *Qualitative Research and Evaluation in Physical Education and Sport Pedagogy*. Shape America.
- Lane, H. (1984). Why the Deaf Are Angry. In S. Gregory & G. M. Hartley (Eds.), *Constructing Deafness* (pp. 11-120). Continuum.
- Lane, H. (1995). Constructions of deafness. *Disability & Society*, 10(2), 171-190.
- Lang, H. G. (1994). Science for deaf students: Looking into the next millennium. A Futures Agenda: Proceedings of a Working Conference, p.105-108.
- Lang, H. G. (2003). Perspectives on the history of deaf education. In M. Marschark, & Spencer, P. E. (Ed.), *The Oxford Handbook of Deaf Studies, Language, and Education* (Vol. 1, pp. 7-17).
- Lang, H. G. (2011). Perspectives on the history of deaf education. In M. Marschark & P. E. Spencer (Eds.), *The Oxford Handbook of Deaf Studies, Language, and Education* (2nd ed., Vol. 1, pp. 7-17). Oxford University Press Oxford.
- Lavay, B., & Depaepe, J. (1987). The harbinger helper: Why mainstreaming in physical education doesn't always work. *Journal of physical education, recreation & dance*, 58(7), 98-103.

- Lawson, H. A. (1988). Occupational socialization, cultural studies, and the physical education curriculum. *Journal of Teaching in Physical Education*, 7(4), 265-288.
- Lawyer, G. (2018). Deaf education and deaf culture: Lessons from Latin America. *American annals of the deaf*, 162(5), 486-488.
- Le Gallais, T. (2008). Wherever I go there I am: reflections on reflexivity and the research stance. *Reflective practice*, 9(2), 145-155.
- Leary, K. (1999). Passing, Posing, and "Keeping It Real" *Constellations*, 6(1), 85-96.
- LeCompte, M. D., & Schensul, J. J. (1999). Designing and conducting ethnographic research (1st ed.). Altamira Press.
- Lee, A. M. (1991). Research on teaching in physical education: Questions and comments. *Research Quarterly for Exercise and Sport*, 62(4), 374-379.
- Lee, A. M. (2003). How the field evolved. *Student learning in physical education: Applying research to enhance instruction*, 9-25.
- Lee, A. M., & Solmon, M. A. (2005). Pedagogy research through the years in RQES. *Research Quarterly for Exercise and Sport*, 76(sup2), S108-S121.
- Lee, C. J. G. (2012). Reconsidering constructivism in qualitative research. *Educational Philosophy and theory*, 44(4), 403-412.
- Lee, S. O. (2007). Educational perspectives in the ecological paradigm—possibilities and limitations. *Asia Pacific Education Review*, 8, 194-204.
- Leenknecht, M., Wijnia, L., Köhlen, M., Fryer, L., Rikers, R., & Loyens, S. (2021). Formative assessment as practice: The role of students' motivation. *Assessment & Evaluation in Higher Education*, 46(2), 236-255
- Lehane, T. (2016). "Cooling the mark out": experienced teaching assistants' perceptions of their work in the inclusion of pupils with special educational needs in mainstream secondary schools. *Educational Review*, 68(1), 4-23.

Levers, M. J. D. (2013). Philosophical paradigms, grounded theory, and perspectives on emergence. *Sage Open*, 3(4), 2158244013517243.

Lieberman, L. J. (2016). Hard of hearing, deaf, or deafblind. In J. Winnick, D. Porreta *Adapted Physical Education and Sport* (6th ed., pp.253-270), *Human Kinetics*.

Lieberman, L. J., Columna, L., Martz de la Vega Mansilla, P., & Taylor, C. (2010). Infusing sign language and Spanish into physical education. *Journal of physical education, recreation & dance*, 81(4), 45-49.

Lieberman, L. J., Dunn, J. M., Van der Mars, H., & McCubbin, J. (2000). Peer tutors' effects on activity levels of deaf students in inclusive elementary physical education. *Adapted physical activity quarterly*, 17(1), 20-39.

Lieberman, L. J., Houston-Wilson, C., & Grenier, M. (2025). *Strategies for inclusion: Physical education for everyone* (4th ed.). Human Kinetics.

Light, R. L. (2011). Opening up learning theory to social theory in research on sport and physical education through a focus on practice. *Physical education & sport pedagogy*, 16(4), 369-382.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.

Lincoln, Y. S., Lyham, S. A., & Guba, E. G. (2024). Paradigmatic Controversies, Contradictions, and Emerging Confluences, Revisited. In N. K. Denzin, Y. S. Lincoln, M. D. Giardina, & G. S. Cannella (Eds.), *The Sage handbook of qualitative research* (6th ed., pp. 75-113). Sage Publishing.

Lincoln, Y. S., Lynham, S. A., & Guba, E. G. (Eds.). (2011). *Paradigmatic controversies, contradictions, and emerging confluences, revisited* (4th ed.). SAGE Publishing.

Linda Rikard, G., & Banville, D. (2006). High school student attitudes about physical education. *Sport, education and society*, 11(4), 385-400.

Lindsay, G. (2007). Educational psychology and the effectiveness of inclusive education/mainstreaming. *British journal of educational psychology*, 77(1), 1-24.

Lingsom, S. (2008). Invisible impairments: Dilemmas of concealment and disclosure. *Scandinavian Journal of Disability Research*, 10(1), 2-16.

Listman, J., Rogers, K. D., & Hauser, P. C. (2011). Community cultural wealth and deaf adolescents' resilience. In D., Zand., & K. J. Pierce (Eds), *Resilience in deaf children: Adaptation through emerging adulthood* (pp. 279-297). Springer.

Locke, L. F. (1989). Qualitative research as a form of scientific inquiry in sport and physical education. *Research Quarterly for Exercise and Sport*, 60(1), 1-20.

Lok, B., McNaught, C., & Young, K. (2016). Criterion-referenced and norm-referenced assessments: compatibility and complementarity. *Assessment & Evaluation in Higher Education*, 41(3), 450-465.

Lorente-Catalán, E., & Kirk, D. (2016). Student teachers' understanding and application of assessment for learning during a physical education teacher education course. *European Physical Education Review*, 22(1), 65-81.

Losberg, J., & Zwozdiak-Myers, P. (2024). Inclusive pedagogy through the lens of primary teachers and teaching assistants in England. *International Journal of Inclusive Education*, 28(4), 402-422.

Luckner, J. L., & Muir, S. (2001). Successful students who are deaf in general education settings. *American annals of the deaf*, 435-446.

Luke, I. (2009). 2 Assessment and reflection within the physical education lesson. In: Grout, H., & Long G. (Eds.), *Improving teaching and learning in physical education*, (pp.25- 45). McGraw Hill Open University Press.

Lumsden, K., Bradford, J., & Goode, J. (2019). Reflexivity Theory, Method and Practice (Routledge Advances in Research Methods) (1st ed.). Routledge, Taylor & Francis Group.

Lynas, W. (1999a). Identifying effective practice: a study of the educational achievements of a small sample of profoundly deaf children. *Deafness & Education International*, 1(3), 155-171.

Lynas, W. (1999b). Supporting the deaf child in the mainstream school: Is there a best way? *Support for Learning*, 14(3), 113-122.

Lynch, S., Simon, M., & Maher, A. (2020). Critical pedagogies for community building: Challenging ableism in higher education physical education in the United States. *Teaching in Higher Education*, 28(1), 195-210.

Macbeth, J. L. (2010). Reflecting on disability research in sport and leisure settings. *Leisure Studies*, 29(4), 477-485.

Macdonald, D. (2011). Like a fish in water: Physical education policy and practice in the era of neoliberal globalization. *Quest*, 63(1), 36-45.

Mackenzie, S. (2011). 'Yes, but...': rhetoric, reality and resistance in teaching assistants' experiences of inclusive education. *Support for Learning*, 26(2), 64-71.

MacPhail, A., & Kinchin, G. (2004). The use of drawings as an evaluative tool: students' experiences of sport education. *Physical education & sport pedagogy*, 9(1), 87-108.

Maguire, J., Jarvie, G., Mansfield, L. & Bradley, J. (2002). *Sport Worlds: a sociological perspective*. Human Kinetics.

Maher, A. (2010). The Inclusion of Pupils with Special Educational Needs. *Sport Science Review (București)*, 19(1-2), 87-115.
<https://doi.org/10.2478/v10237-011-0006-y> .

Maher, A. (2013). Statements of special educational needs and mainstream secondary physical education in north-west England. *British Journal of Special Education*, 40(3), 130-136.

Maher, A. J. (2016). Special educational needs in mainstream secondary school physical education: Learning support assistants have their say. *Sport, education and society*, 21(2), 262-278.

Maher, A. J. (2018). 'Disable them all': SENCO and LSA conceptualisations of inclusion in physical education. *Sport, education and society*, 23(2), 149-161.

Maher, A. J. (2020). Disrupting phonocentrism for teaching Deaf pupils: prospective physical education teachers' learning about visual pedagogies and non-verbal communication. *Physical Education and Sport Pedagogy*, 26(4), 317-329. <https://doi.org/10.1080/17408989.2020.1806996>

Maher, A. J. (2025). Rigour in interpretive qualitative research in education: Ideas to think with. *British Educational Research Journal*, 00,1–17. <https://doi.org/10.1002/berj.4156> .

Maher, A. J., & Coates, J. K. (2020). Utilizing theory to drive research in adapted physical education. In J. A. Haegele, S. R. Hodge, & D. R. Shapiro (Eds.), *Routledge handbook of adapted physical education* (pp. 81-94). Routledge.

Maher, A. J., & Haegele, J. A. (2022). *Teaching disabled children in physical education:(Dis) connections between research and practice*. Routledge.

Maher, A. J., & Vickerman, P. (2018). Ideology influencing action: special educational needs co-ordinator and learning support assistant role conceptualisations and experiences of special needs education in England. *Journal of Research in Special Educational Needs*, 18(1), 15-24.

Maher, A. J., Fitzgerald, H., & McVeigh, J. (2020). Factors influencing the culture of special school physical education: A Gramscian critique. *European Physical Education Review*, 26(4), 954-969.

Maher, A. J., Haegele, J. A., & Sparkes, A. C. (2022b). Stop fearing blindness! Visually impaired people reflect on the ethics of sighted prospective teachers simulating visual impairment. *Disability & Society*, 39(5), 1196-1214.

Maher, A. J., McVeigh, J., Thomson, A., & Knight, J. (2023). Exclusion, inclusion and belonging in mainstream and disability sport: Jack's story. *Qualitative research in sport, exercise and health*, 15(1), 123-138.

Maher, A. J., Quarmby, T., Hooper, O., Wells, V., & Slavin, L. (2024). Culture, power, and ideology: the purpose and value of physical education (PE) in alternative provision schools in England. *Educational Review*, 1-18.

Maher, A. J., Quarmby, T., Hooper, O., Wells, V., & Slavin, L. (2025). The physical education curriculum in alternative provision schools in England: A Gramscian critique. *The curriculum Journal, BERA*, 1-20.

Maher, A. J., Thomson, A., Parkinson, S., Hunt, S., & Burrows, A. (2021). Learning about 'inclusive' pedagogies through a special school placement. *Physical Education and Sport Pedagogy*, 27(3), 261-275.

Maher, A. J., Williams, D., & Sparkes, A. C. (2019). Teaching non-normative bodies: simulating visual impairments as embodied pedagogy in action. *Sport, education and society*, 25(5), 530-542

Maher, A., & Haegele, J. A. (2022). *Teaching disabled children in physical education : (dis)connections between research and practice*. Taylor & Francis Group.

Maher, A., & Macbeth, J. (2014). Physical education, resources and training: The perspective of special educational needs coordinators working in secondary schools in North-West England. *European Physical Education Review*, 20(1), 90-103. <https://doi.org/10.1177/1356336x13496003>

Maher, A., & Palmer, C. A. (2012). Inclusion of pupils with SENs into mainstream Physical Education–potential research ideas to explore issues of engagement. *Journal of Qualitative Research in Sport Studies*, 6(1), 35-48.

Maher, A., Parkinson, S., & Thomson, A. (2022). The Influence of a Special School Placement on Prospective Teachers' Views About the Nature, Purpose, and Value of Physical Education in England: A Gramscian Critique. *Quest*, 74(3), 266-284.

Maher, A., van Rossum, T., & Morley, D. (2023). Assessing the learning of pupils with special educational needs and disabilities in mainstream school physical education. *British Educational Research Journal*, 49(1), 110-125.

Mallet, C. J., & Tinning, R. (2014). Philosophy of knowledge In L. Nelson, P. Potrac, & R. Groom (Eds.), *Research methods in sports coaching* (pp. 9-17). Routledge.

Malterud, K. (2001). Qualitative research: standards, challenges, and guidelines. *The lancet*, 358(9280), 483-488.

Manross, D., & Templeton, C. L. (1997). Expertise in teaching physical education. *Journal of physical education, recreation & dance*, 68(3), 29-35.

Mansfield, K. C. (2015). The importance of safe space and student voice in schools that serve minoritized learners. *Journal of Educational Leadership, Policy and Practice*, 30(1), 25-38.

- Mapedzahama, V., & Dune, T. (2017). A clash of paradigms? Ethnography and ethics approval. *Sage Open*, 7(1), 2158244017697167.
- Markides, A. (1983). *The speech of hearing-impaired children*. Manchester University Press.
- Marschark, M., & Hauser, P. C. (2012). *How deaf children learn: What parents and teachers need to know*. Oxford University Press.
- Marschark, M., Lang, H. G., & Albertini, J. A. (2002). *Educating deaf students : from research to practice*. Oxford University Press.
- Marschark, M., Paivio, A., Spencer, L. J., Durkin, A., Borgna, G., Convertino, C., & Machmer, E. (2017). Don't assume deaf students are visual learners. *Journal of developmental and physical disabilities*, 29, 153-171.
- Marschark, M., Schick, B., & Spencer, P. E. (2006). Understanding Sign Language Development of Deaf children. In M. Marschark, B. Schick, & P. E. Spencer (Eds.), *Advances in the Sign Language Development of Deaf Children* (pp. 3-19). Oxford University Press.
- Martin, D., & Bat-Chava, Y. (2003). Negotiating deaf–hearing friendships: Coping strategies of deaf boys and girls in mainstream schools. *Child: care, health and development*, 29(6), 511-521.
- Martin, G. M. (2019). Draw (me) and tell: Use of children's drawings as elicitation tools to explore embodiment in the very young. *International Journal of Qualitative Methods*, 18. <https://doi.org/https://doi.org/10.1177/1609406918816230> .
- Martins, J., Marques, A., Rodrigues, A., Sarmiento, H., Onofre, M., & Carreiro da Costa, F. (2018). Exploring the perspectives of physically active and inactive adolescents: how does physical education influence their lifestyles?. *Sport, Education and Society*, 23(5), 505-519.
- Mathers, A., Botting, N., Moss, R., & Spicer-Cain, H. (2024). Collaborative working between speech and language therapists and teaching staff in mainstream UK primary schools: A scoping review. *Child Language Teaching and Therapy*, 40(2), 120-138.

Mathews, E. S. (2017). Language, power, and resistance : mainstreaming deaf education. *Gallaudet University Press*.

Mauldin, L., & Fannon, T. (2021). They told me my name: Developing a deaf identity. *Symbolic Interaction*, 44(2), 339-366.

Mawer, M. (2014). *The Effective teaching of physical education*. (1st ed.). Routledge.

McAlister, J. (1994). Deaf and hard-of-hearing criminal defendants: How you gonna get justice if you can't talk to the judge. *Ariz. St. LJ*, , 26(1), 163.

McCormack, M., Anderson, E., Jamie, K., & David, M. (2021). *Discovering sociology*. Bloomsbury Publishing.

McGinity, R. (2012). Exploring the complexities of researcher identity in a school based ethnography. *Reflective Practice*, 13(6), 761-773.

McIlroy, G., & Storbeck, C. (2011). Development of deaf identity: An ethnographic study. *Journal of deaf studies and deaf education*, 16(4), 494-511.

McIntosh, M. J., & Morse, J. M. (2015). Situating and constructing diversity in semi-structured interviews. *Global qualitative nursing research*, 2, 1-12.

McIntosh, R. A., Sulzen, L., Reeder, K., & Kidd, D. H. (1994). Making science accessible to deaf students: The need for science literacy and conceptual teaching. *American annals of the deaf*, 139(5), 480-484.

McIntyre, P. (2008). Creativity and cultural production: A study of contemporary Western popular music songwriting. *Creativity research journal*, 20(1), 40-52.

Mckee, M. M., & Hauser, P. C. (2012). Juggling Two Worlds. In P. V. Paul & D. F. Moores (Eds.), *Deaf epistemologies: Multiple perspectives on the acquisition of knowledge*. (pp. 45-62). Gallaudet University Press.

McKee, M., Schlehofer, D., & Thew, D. (2013). Ethical issues in conducting research with deaf populations. *American journal of public health*, 103(12), 2174-2178.

McKenzie, T. L., & Lounsbery, M. A. (2013). Physical education teacher effectiveness in a public health context. *Research Quarterly for Exercise and Sport*, 84(4), 419-430.

Meadow, K. P. (1977). Name signs as identity symbols in the deaf community. *Sign Language Studies*, (16), 237-246.

Meegan, S. (2010). Using ethnography to explore the experiences of a student with special educational needs in mainstream physical education. In: M. O'Sullivan., & A. MacPhail. (Eds). *Young People's Voices in Physical Education and Youth Sport*. (pp.113-133). Routledge.

Mercer, J. (2007). The challenges of insider research in educational institutions: Wielding a double-edged sword and resolving delicate dilemmas. *Oxford review of education*, 33(1), 1-17.

Metzler, M. (1983). Using academic learning time in process-product studies with experimental teaching units. In T. J. Templin, & Olson J. K. (Ed.), *Teaching physical education (Big Ten body of knowledge symposium series)* (Vol. 14, pp. 185-196). Human Kinetics.

Metzler, M. (1989). A review of research on time in sport pedagogy. *Journal of Teaching in Physical Education*, 8(2), 87-103.

Metzler, M. W. (2014). Teacher effectiveness research in physical education: The future isn't what it used to be. *Research Quarterly for Exercise and Sport*, 85(1), 14-19.

Meyer, K., & Willis, R. (2019). Looking back to move forward: The value of reflexive journaling for novice researchers. *Journal of gerontological social work*, 62(5), 578-585.

Michael, S. L., Wright, C., Mays Woods, A., van der Mars, H., Brusseau, T. A., Stodden, D. F., Burson, S. L., Fisher, J., Killian, C. M., & Mulhearn, S. C. (2021). Rationale for the essential components of physical education. *Research Quarterly for Exercise and Sport*, 92(2), 202-208.

Michailova, S., Piekkari, R., Plakoyiannaki, E., Ritvala, T., Mihailova, I., & Salmi, A. (2014). Breaking the silence about exiting fieldwork: A relational approach and its implications for theorizing. *Academy of Management Review*, 39(2), 138-161.

Miller, T. (2001). What it is and what it isn't: Introducing... Cultural Studies. *A companion to cultural studies*, 1-19. Blackwell Publishers Ltd.

Miller, T. (2013). Negotiating the Terrain between Ethics Approval and Ethical Practice. In J. MacClancy & A. Fuentes (Eds.), *Ethics in the field: Contemporary challenges*, (1st ed., pp. 140-155). Berghahn Books.

Miller, T., & Bell, L. (2012). Consenting to what? Issues of access, gate-keeping and 'informed' consent. In M. Birch, T. Miller, M. Mauthner, & J. Jessop (Eds.), *Ethics in qualitative research*, (2nd ed., pp. 61-75). Sage Publications. <https://doi.org/10.4135/9781473913912> .

Milligan, L. (2016). Insider-outsider-inbetween? Researcher positioning, participative methods and cross-cultural educational research. *Compare: a journal of comparative and international education*, 46(2), 235-250.

Molnar, G., & Kelly, J. (2013). *Sport, exercise and social theory: An introduction*. Routledge.

Moon, K., & Blackman, D. (2014). A guide to understanding social science research for natural scientists. *Conservation biology*, 28(5), 1167-1177.

Moore, A., & Clarke, M. (2016). 'Cruel optimism': Teacher attachment to professionalism in an era of performativity. *Journal of education policy*, 31(5), 666-677.

Moore, D. F. (2009). Cochlear failures. *American Annals of the Deaf*, 153(5), 423-424.

Moore, D. F. (2010a). The history of language and communication issues in deaf education. In M. Marschark & P. E. Spencer (Eds.), *The Oxford handbook of deaf studies, language, and education* (Vol. 2, pp. 17-30). Oxford University Press.

Moore, D. F. (2010b). Partners in progress: The 21st International Congress on Education of the Deaf and the Repudiation of the 1880 Congress of Milan. *American annals of the deaf*, 155(3), 309-310.

Moore, D. F. (2010c). Epistemologies, deafness, learning, and teaching. *American annals of the deaf*, 154(5), 447-455.

Moore, D. F. (2012). Dueling Epistemologies: Between Scylla and Charybdis in the Education of Deaf Learners. In P. V. Paul & D. F. Moore (Eds.), *Deaf epistemologies: Multiple perspectives on the acquisition of knowledge*. (pp. 107-124). Gallaudet University Press.

Moreno, J. A., González-Cutre, D., Martín-Albo, J., & Cervelló, E. (2010). Motivation and performance in physical education: An experimental test. *Journal of sports science & medicine*, 9(1), 79.

Morley, D., Bailey, R., Tan, J., & Cooke, B. (2005). Inclusive physical education: Teachers' views of including pupils with special educational needs and/or disabilities in physical education. *European Physical Education Review*, 11(1), 84-107.

Morley, D., Banks, T., Haslingden, C., Kirk, B., Parkinson, S., Van Rossum, T., Morley, I., & Maher, A. (2020). Including pupils with special educational needs and/or disabilities in mainstream secondary physical education: A revisit study. *European Physical Education Review*, 27(2), 401-418.

Morrison, K., & Lui, I. (2000). Ideology, linguistic capital and the medium of instruction in Hong Kong. *Journal of multilingual and multicultural development*, 21(6), 471-486.

Morrow, V. (2008). Ethical dilemmas in research with children and young people about their social environments. *Children's geographies*, 6(1), 49-61.

Morse, J. M. (1991a). Strategies for sampling. In J. M. Morse (Ed.), *Qualitative nursing research: A contemporary dialogue* (Revised ed., Vol. 127, pp. 145). Sage Publications.

Morse, J. M. (1991b). Evaluating qualitative research. *Qualitative Health Research*, 1(3), 283-286.

Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *European journal of general practice*, 24(1), 9-18.

Muijs, D. (2006). Measuring teacher effectiveness: Some methodological reflections. *Educational research and evaluation*, 12(1), 53-74.

Mukhopadhyay, S., & Moswela, E. (2010). Inside Practice of Science Teachers for Students with Hearing Impairments in Botswana Primary Schools. *International journal of special education*, 25(3), 57-67.

Musengi, M. (2020). Zimbabwean Disability Activism From a Higher Education Perch: An uncertain present but exciting future. In *The Routledge Handbook of Disability Activism* (pp. 341-353). Routledge.

Myers, J. (1995). The value-laden assumptions of our interpretive practices. *Reading Research Quarterly*, 30(3), 582-587.

Myers, S. S., & Fernandes, J. K. (2010). Deaf studies: A critique of the predominant US theoretical direction. *Journal of deaf studies and deaf education*, 15(1), 30-49.

National Deaf Children's Society (NDCS). (2015). *Deaf-friendly teaching: For secondary school staff*. Retrieved 24th June 2024 from <https://www.ndcs.org.uk/documents-and-resources/deaf-friendly-teaching-for-secondary-school-staff/>

National Deaf Children's Society (NDCS). (2019a). 'Lost generation' of deaf children falling a grade behind at GCSE. Retrieved on 23rd March 2023 from: <https://www.ndcs.org.uk/about-us/news-and-media/latest-news/specialist-teachers-for-deaf-children-at-10-year-low/> .

National Deaf Children's Society (NDCS). (2020a). *Quality standards: Resource provisions for deaf children and young people in mainstream schools*. Retrieved on 12th September 2022 from: <https://www.ndcs.org.uk/documents-and-resources/quality-standards-resource-provisions-for-deaf-children-and-young-people-in-mainstream-schools/>

National Deaf Children's Society (NDCS). (2021a). *2 in 3 teachers don't know how to teach a deaf child*. Retrieved on 3rd February 2023 from: <https://www.ndcs.org.uk/about-us/news-and-media/latest-news/2-in-3-teachers-don-t-know-how-to-teach-a-deaf-child/>.

National Deaf Children's Society (NDCS). (2022a). *Deaf pupils achieve entire grade less at GCSE*. Retrieved 4th September 2023 from <https://www.ndcs.org.uk/about-us/news-and-media/latest-news/deaf-pupils-achieve-entire-grade-less-at-gcse/>

National Deaf Children's Society (NDCS). (2022b). *1 in 20 teachers think the education system supports deaf children*. Retrieved 14th September 2023 from <https://www.ndcs.org.uk/about-us/news-and-media/latest-news/1-in-20-teachers-think-the-education-system-supports-deaf-children/#:~:text=1%20in%2020%20teachers%20think%20the%20education%20system%20supports%20deaf%20children,-Published%20Date%3A%2011&text=Only%205%25%20of%20teachers%20believe,to%20reach%20their%20full%20potential.&text=Deaf%20children%20already%20achieve%20an,is%20not%20a%20learning%20disability.>

National Deaf Children's Society (NDCS). (2022d). *9 in 10 teachers don't get enough training to educate deaf children*. Retrieved on 19 September 2023 from: <https://www.ndcs.org.uk/about-us/news-and-media/latest-news/9-in-10-teachers-don-t-get-enough-training-to-educate-deaf-children/> .

National Deaf Children's Society (NDCS). (2023a). *Reflecting on the Right to Sign campaign*. Retrieved 5th October 2023 from <https://www.ndcs.org.uk/blog/reflecting-on-the-right-to-sign-campaign/>

National Deaf Children's Society (NDCS). (n.d. a). *What is deafness?* Retrieved 2nd September 2024 from <https://www.ndcs.org.uk/information-and-support/childhood-deafness/what-is-deafness/>.

National Deaf Children's Society (NDCS). (n.d. b). *Levels of deafness*. Retrieved on 11th November 2024 from: <https://www.ndcs.org.uk/information-and-support/childhood-deafness/what-is-deafness/levels-of-deafness/>

National Deaf Children's Society (NDCS). (n.d. c). *The Equality Act and your child's education*. Retrieved 13th March 2023 from <https://www.ndcs.org.uk/information-and-support/your-rights/rights-in-education/equality-act-and-education/#:~:text=All%20permanently%20deaf%20children%20will,last%20more%20than%2012%20months.>

National Deaf Children's Society (NDCS). (n.d., e). *About language and communication*. Retrieved 15th July 2024 from <https://www.ndcs.org.uk/information-and-support/language-and-communication/about-language-and-communication/>

NDCS. (2019b). *Deaf-friendly teaching for Secondary school staff*. <https://www.ndcs.org.uk/documents-and-resources/deaf-friendly-teaching-for-secondary-school-staff/#:~:text=It%20provides%20guidance%20on%20ensuring,gaps%20compared%20with%20other%20pupils>

NDCS. (2019c). *How radio aids can help: For families* Retrieved 2nd July 2024 from https://www.ndcs.org.uk/media/4970/jr1098-info-how-radio-aids-can-help-a4_s.pdf

NDCS. (2022c). *Specialist teachers for deaf children at 10-year low*. Retrieved 23rd March 2023 from <https://www.ndcs.org.uk/about-us/news-and-media/latest-news/specialist-teachers-for-deaf-children-at-10-year-low/>.

NDCS. (n.d., d). *Bilingualism*. Retrieved 19th August 2024 from <https://www.ndcs.org.uk/information-and-support/language-and-communication/bilingualism/#:~:text=Professionals%20who%20support%20the%20approach,best%20possible%20access%20to%20education.>

Nentwich, J. C., Ozbilgin, M. F., & Tatli, A. (2015). Change agency as performance and embeddedness: Exploring the possibilities and limits of Butler and Bourdieu. *Culture and Organization*, 21(3), 235-250.

Nesbitt, D., Fisher, J., & Stodden, D. F. (2021). Appropriate instructional practice in physical education: A systematic review of literature from 2000 to 2020. *Research Quarterly for Exercise and Sport*, 92(2), 235-247.

Newheiser, A.-K., & Barreto, M. (2014). Hidden costs of hiding stigma: Ironic interpersonal consequences of concealing a stigmatized identity in social interactions. *Journal of Experimental Social Psychology*, 52, 58-70.

Newton, A., & Bowler, M. (2015). Assessment for and of learning in PE. In: S. Capel & M. Whitehead (Eds.), *Learning to teach physical education in the*

secondary school: A companion to school experience (4th Ed, pp.140-155). Routledge.

Newton, A., & Bowler, M. (2020). Assessment for and of learning in PE. In: S. Capel & M. Whitehead (Eds.), *Learning to teach physical education in the secondary school: A companion to school experience (5th ed, pp. 144-160).* Routledge.

Ntoumanis, N. (2001). A self-determination approach to the understanding of motivation in physical education. *British journal of educational psychology*, 71(2), 225-242.

Nunes, T. (2004). *Teaching mathematics to deaf children*. John Wiley & Sons.

Nunes, T., & Moreno, C. (2002). An intervention program for promoting deaf pupils' achievement in mathematics. *Journal of deaf studies and deaf education*, 120-133.

Nunes, T., & Moreno, C. (2022). Is hearing impairment a cause of difficulties in learning mathematics? In *The development of mathematical skills* (pp. 226-254). Psychology press.

Nunes, T., Pretzlik, U., & Olsson, J. (2001). Deaf children's social relationships in mainstream schools. *Deafness & Education International*, 3(3), 123-136.

O'Brien, D. (2021). Theorising the deaf body: using Lefebvre and Bourdieu to understand deaf spatial experience. *cultural geographies*, 28(4), 645-660.

O'Brien, D., & Emery, S. D. (2014). The role of the intellectual in minority group studies: Reflections on Deaf Studies in social and political contexts. *Qualitative Inquiry*, 20(1), 27-36.

O'Connell, N. (2022). "Opportunity blocked": Deaf people, employment and the sociology of audism. *Humanity & Society*, 46(2), 336-358.

O'Connell, N. P. (2016). "Passing as Normal" Living and Coping With the Stigma of Deafness. *Qualitative Inquiry*, 22(8), 651-661.

Obasi, C. (2008). Seeing the deaf in “deafness”. *Journal of deaf studies and deaf education*, 13(4), 455-465.

O'Donoghue, T. (2018). Planning your qualitative research thesis and project: An introduction to interpretivist research in education and the social sciences. Routledge.

Ofsted & Care Quality Commission. (2023). *Area SEND inspections: framework and handbook*. Retrieved 14th March 2023 from <https://www.gov.uk/government/publications/area-send-framework-and-handbook/area-send-inspections-framework-and-handbook>

Ofsted. (2021). *Supporting SEND*. Retrieved 22nd August 2024 from <https://www.gov.uk/government/publications/supporting-send/supporting-send#executive-summary>.

Ofsted. (2024a). *School inspection handbook*. Retrieved 14th March 2023 from <https://www.gov.uk/government/publications/school-inspection-handbook-eif/school-inspection-handbook#ofsted-judgements> .

Ofsted. (2024b). *Independent review of teachers' professional development in schools: phase 1 findings*. Retrieved 8th August 2024 from <https://www.gov.uk/government/publications/teachers-professional-development-in-schools/independent-review-of-teachers-professional-development-in-schools-phase-1-findings#introduction>.

Olsson, S., Dag, M., & Kullberg, C. (2018). Deaf and hard-of-hearing adolescents' experiences of inclusion and exclusion in mainstream and special schools in Sweden. *European Journal of Special Needs Education*, 33(4), 495-509.

O'Reilly, K. (2009). Key concepts in ethnography. Sage Publications Ltd.

Ormston, R., Spencer, L., Barnard, M., & Snape, D. (2014). The foundations of qualitative research. In J. Ritchie, J. Lewis, C. McNaughton Nicholls, & R. Ormston (Eds.), *Qualitative research practice: A guide for social science students and researchers* (2nd ed., pp. 1-26). SAGE.

O'Sullivan, M., & Doutis, P. (1994). Research on expertise: Guideposts for expertise and teacher education in physical education. *Quest*, 46(2), 176-185.

Oswell, D. (2006). *Culture and society: An introduction to cultural studies*. SAGE.

Paatsch, L., & Toe, D. (2020). The impact of pragmatic delays for deaf and hard of hearing students in mainstream classrooms. *Pediatrics*, 146, S292-S297.

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and policy in mental health and mental health services research*, 42, 533-544.

Palmer, C. (2018). Creating successful experiences for deaf children in physical education and athletics: A Review of the Literature. *Kinesiology, Sport Studies, and Physical Education Synthesis Projects*, 48, 1-45.

Parker-Jenkins, M. (2018). Problematising ethnography and case study: reflections on using ethnographic techniques and researcher positioning. *Ethnography and Education*, 13(1), 18-33.

Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). SAGE Publications, inc.

Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4 ed.). Sage Publications.

Paul, P. V. (2018). Literacy, literate thought, and deafness. *American Annals of the Deaf*, 163(1), 78-86.

Paul, P. V., & Moores, D. F. (2010). Introduction: Toward an understanding of epistemology and deafness. *American annals of the deaf*, 154(5), 421-427.

Paul, P. V., & Moores, D. F. (Eds.). (2012). *Deaf epistemologies : multiple perspectives on the acquisition of knowledge*. Gallaudet University Press.

Paulson, S. (2011). The use of ethnography and narrative interviews in a study of 'cultures of dance'. *Journal of Health Psychology*, 16(1), 148-157.

Payne, G., & Payne, J. (Ed.). (2004). *Participant observation*. Sage Publications.

Peers, D. (2018). Engaging Axiology: Enabling Meaningful Transdisciplinary Collaboration in Adapted Physical Activity. *Adapted physical activity quarterly*, 35(3), 267-284. <https://doi.org/10.1123/apaq.2017-0095> .

Pelto, P. J. (2016). *Applied ethnography: Guidelines for field research*. Routledge Taylor & Francis Group.

Pickersgill, M. (1998). Bilingualism- current policy and practice. In S. Gregory, P. Knight, W. McCracken, S. Powers, & L. Watson (Eds.), *Issues in deaf education*. (pp. 88-97). David Fulton Publishers.

Piéron, M., & da Costa, F. C. (1996). Seeking expert teachers in physical education and sport. *European Journal of Physical Education*, 1(1-2), 5-18.

Pillow, W. (2003). Confession, catharsis, or cure? Rethinking the uses of reflexivity as methodological power in qualitative research. *International Journal of Qualitative Studies in Education*, 16(2), 175-196.

Pillow, W. (2010). Dangerous reflexivity: Rigour, responsibility and reflexivity in qualitative research. *The Routledge doctoral student's companion*, 270-282.

Pittman, M. (2009). Working together Collaborative and supportive partnerships. In M. Parker, Lee, C., Gunn, S., Heardman, K., Hincks, R., Pittman, M., and Townsend, M., A (Ed.), *Toolkit for the Effective Teaching Assistant* (pp. 63-79). SAGE Publications.

Placek, J. H., & Randall, L. (1986). Comparison of academic learning time in physical education: Students of specialists and nonspecialists. *Journal of Teaching in Physical Education*, 5(3), 157-165.

Placek, J., Silverman, S., Shute, S., Dodds, P., & Rife, F. (1982). Academic learning time (ALT-PE) in a traditional elementary physical education setting: A descriptive analysis. *Journal of Classroom Interaction*, 41-47.

Pole, C., & Morrison, M. (2003). *Ethnography for education*. McGraw-Hill Education (UK).

Ponterotto, J. G. (2005). Qualitative research in counseling psychology: A primer on research paradigms and philosophy of science. *Journal of counselling psychology*, 52(2), 126.

Pope, C. (2005). Conducting ethnography in medical settings. *Medical education*, 39(12), 1180-1187.

Pope, C. (2006). Interpretive perspectives in physical education research. In D. Kirk, D. MacDonald, & M. O'Sullivan (Eds.), *Handbook of physical education* (pp. 21-36). SAGE Publishing.

Power, E. M. (1999). An introduction to Pierre Bourdieu's key theoretical concepts. *Journal for the Study of Food and Society*, 3(1), 48-52.

Powers, S. (1999). The educational attainments of deaf students in mainstream programs in England: Examination results and influencing factors. *American annals of the deaf*, 261-269.

Powers, S. (2001). Investigating good practice in supporting deaf pupils in mainstream schools. *Educational Review*, 53(2), 181-189.

Powers, S. (2002). From concepts to practice in deaf education: A United Kingdom perspective on inclusion. *Journal of deaf studies and deaf education*, 7(3), 230-243.

Powers, S. (2003). Influences of student and family factors on academic outcomes of mainstream secondary school deaf students. *Journal of deaf studies and deaf education*, 8(1), 57-78.

Powers, S. (2011). Learning from success: High achieving deaf students. *Deafness & Education International*, 13(3), 92-109.

Powers, S., Gregory, S., & Thoutenhoofd, E. D. (1999). The educational achievements of deaf children: a literature review executive summary. *Deafness & Education International*, 1(1), 1-9.

Pozzebon, M. (2018). From aseptic distance to passionate engagement: reflections about the place and value of participatory inquiry. *RAUSP Management Journal*, 53(2), 280-284.

Pozzebon, M., Rodriguez, C., & Petrini, M. (2014). Dialogical principles for qualitative inquiry: A nonfoundational path. *International Journal of Qualitative Methods*, 13(1), 293-317.

Preisler, G., Tvingstedt, A.-L., & Ahlstrom, M. (2005). Interviews with deaf children about their experiences using cochlear implants. *American annals of the deaf*, 150(3), 260-267.

- Pringle, R., & Thorpe, H. (2017). Theory and Reflexivity. In M. L. Silk, Andrews D. L., & H. Thorpe (Eds.), *Routledge Handbook of Physical Cultural Studies* (pp. 32-41). Routledge.
- Pudans-Smith, K. K., Cue, K. R., Wolsey, J.-L. A., Wright, S. J., & Clark, M. D. (2019). The odyssey of Deaf epistemology. *American annals of the deaf*, 164(3), 395-422.
- Punch, K. F. (2013). Introduction to social research: Quantitative and qualitative approaches (3rd ed.). Sage Publication Ltd.
- Punch, R., & Hyde, M. (2011). Social participation of children and adolescents with cochlear implants: A qualitative analysis of parent, teacher, and child interviews. *Journal of deaf studies and deaf education*, 16(4), 474-493.
- Putnam, R. D. (2000). Bowling Alone: The Collapse and Revival of American Community. Simon & Schuster.
- Ramrathan, L., Le Grange, L., & Shawa, L. B. (2017). Ethics in educational research. *Education studies for initial teacher education*, 432-443.
- Raworth, K., Sweetman, C., Narayan, S., Rowlands, J., & Hopkins, A. (2012). Conducting semi-structured interviews. Oxfam.
- Reagan, T., Matlins, P. E., & Pielick, C. D. (2021). Deaf Epistemology, Sign Language and the Education of d/Deaf Children. *Educational Studies*, 57(1), 37-57.
- Reeves, S., Kuper, A., & Hodges, B. D. (2008). Qualitative research methodologies: ethnography. *Bmj*, 337.
- Reeves, S., Peller, J., Goldman, J., & Kitto, S. (2013). Ethnography in qualitative educational research: AMEE Guide NO.80. *Medical teacher*, 35(8), e1365-e1379.
- Reich, L. M., & Lavay, B. (2009). Physical education and sport adaptations for students who are hard of hearing. *Journal of physical education, recreation & dance*, 80(3), 38-49.
- Reid, A.-M., Brown, J. M., Smith, J. M., Cope, A. C., & Jamieson, S. (2018). Ethical dilemmas and reflexivity in qualitative research. *Perspectives on medical education*, 7, 69-75.

- Renganathan, S. (2009). Exploring the Researcher-Participant Relationship in a Multiethnic, Multicultural and Multilingual Context Through Reflexivity. *Qualitative Research Journal*, 9(2), 3–17. <https://doi.org/10.3316/QRJ0902003> .
- Reyes, V. (2018). Three models of transparency in ethnographic research: Naming places, naming people, and sharing data. *Ethnography*, 19(2), 204-226.
- Richards, L., & Morse, J. M. (2013). README FIRST for a User's Guide to Qualitative Methods (3rd ed.). Sage publications.
- Richardson, L. (2000). Writing A Method of Inquiry. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research*. (2nd ed., pp. 923- 948). Sage Publications Inc.
- Ridsdale, J., & Thompson, D. (2002). Perceptions of social adjustment of hearing-impaired pupils in an integrated secondary school unit. *Educational Psychology in Practice*, 18(1), 21-34.
- Rink, J. (2014). Teacher effectiveness in physical education—Consensus? *Research Quarterly for Exercise and Sport*, 85(3), 282-286.
- Rink, J. E. (1993). Teacher education: A focus on action. *Quest*, 45(3), 308-320.
- Rink, J. E. (1996). Effective instruction in physical education. In S. Silverman, & C. Ennis (Eds.), *Student learning in physical education: Applying research to enhance instruction*. (2nd ed., pp. 171-198). Human Kinetics.
- Rink, J. E. (2013). Measuring teacher effectiveness in physical education. *Research Quarterly for Exercise and Sport*, 84(4), 407-418.
- Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (Eds.). (2013). *Qualitative research practice: A guide for social science students and researchers* (2nd ed.). Sage Publications.
- Robinson, O. C. (2014). Sampling in interview-based qualitative research: A theoretical and practical guide. *Qualitative research in psychology*, 11(1), 25-41.
- Robinson, O. E., & Henner, J. (2017). The personal is political in The Deaf Mute Howls: Deaf epistemology seeks disability justice. *Disability & Society*, 32(9), 1416-1436.

Roman, L. G. (2009). Go figure! Public pedagogies, invisible impairments and the performative paradoxes of visibility as veracity. *International Journal of Inclusive Education*, 13(7), 677-698.

Rose, I. M. (2006). Deaf and Dumb in Ancient Greece. In L. J. Davis (Ed.), *The Disability Studies Reader* (2nd ed., pp. 17-33). Routledge.

Ross, P. T., & Bibler Zaidi, N. L. (2019). Limited by our limitations. *Perspectives on medical education*, 8(4), 261-264.

Roulston, K., & Choi, M. (2018). Qualitative interviews. In U. Flick (Ed.), *The SAGE handbook of qualitative data collection* (pp. 233-249). Sage Publications Ltd.

Royal National Institute for the Deaf (RNID). (2010). Speaker's Conference (on Parliamentary Representation, submission from Royal National Institute for the Deaf (RNID) (SC 86). Retrieved on 2nd April 2025 from: <https://publications.parliament.uk/pa/spconf/239/239we05.htm> .

Ruona, W. E. (2005). Analyzing qualitative data. In R. A. Swanson & E. F. Holton (Eds.), *Research in organizations: Foundations and methods of inquiry* (Vol. 223, pp. 233-263). Berrett-Koehler Publishers.

Ruscitti, R. J., Thomas, S. G., & Bentley, D. C. (2017). The experiences of students without disabilities in inclusive physical education classrooms: a review of literature. *Asia-Pacific Journal of Health, Sport and Physical Education*, 8(3), 245-257.

Rustin, L., & Kuhr, A. (1989). Social skills and the speech impaired. In S. Roffey, T. Tarrant, & K. Majors (Eds.), *Young Friends*. Cassel.

Saikia, B. (2021). "The cripple walked! The cripple talked!": Contextualising Sign Language and Audism in Memoirs of Deafness. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, 13(4).

Salter, J. M., Swanwick, R. A., & Pearson, S. E. (2017). Collaborative working practices in inclusive mainstream deaf education settings: teaching assistant perspectives. *Deafness & Education International*, 19(1), 40-49.

Saunders, B., Kitzinger, J., & Kitzinger, C. (2015). Anonymising interview data: Challenges and compromise in practice. *Qualitative research*, 15(5), 616-632.

Saunders, M. (2012). Choosing research participants. SAGE Publications, Inc.

Schedlin, H. (2012). The academic learning time in physical education of students with visual impairments: An analysis of two students. *Insight*, 5(1), 11.

Schick, B., Williams, K., & Kupermintz, H. (2006). Look who's being left behind: Educational interpreters and access to education for deaf and hard-of-hearing students. *Journal of deaf studies and deaf education*, 11(1), 3-20.

Schmidt, S. (1985). Hearing impaired students in physical education. *Adapted physical activity quarterly*, 2(4), 300-306.

Schreier, M. (2018). Sampling and generalization. In U. Flick (Ed.), *The SAGE handbook of qualitative data collection* (pp. 84-97). SAGE Publications Ltd.

Schultz, J. L., Lieberman, L. J., Ellis, M. K., & Hilgenbrinck, L. C. (2013). Ensuring the success of deaf students in inclusive physical education. *Journal of physical education, recreation & dance*, 84(5), 51-56.

Schwab, S., Wimberger, T., & Mamas, C. (2019). Fostering social participation in inclusive classrooms of students who are deaf. *International Journal of Disability, Development and Education*, 66(3), 325-342.

Scully, J. L. (2019). Deaf identities in disability studies. In *Routledge handbook of disability studies* (pp. 145-157). Routledge.

Séguillon, D. (2002). The origins and consequences of the first World Games for the Deaf: Paris, 1924. *The International Journal of the History of Sport*, 19(1), 119-136.

Senghas, R. J., & Monaghan, L. (2002). Signs of their times: Deaf communities and the culture of language. *Annual Review of Anthropology*, 31(1), 69-97.

Sewell, K. (2011). Researching sensitive issues: a critical appraisal of 'draw-and-write' as a data collection technique in eliciting children's perceptions. *International Journal of Research & Method in Education*, 13(4), 175-191.

- Sharp, P. (2002). Surviving, not thriving: LEAs since the Education Reform Act of 1988. *Oxford Review of Education*, 28(2-3), 197-215.
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for information*, 22(2), 63-75.
- Shilling, C. (1991). Educating the body: Physical capital and the production of social inequalities. *Sociology*, 25(4), 653-672.
- Shilling, C. (2004). Physical capital and situated action: A new direction for corporeal sociology. *British journal of sociology of education*, 25(4), 473-487.
- Siedentop, D. (2002). Ecological perspectives in teaching research. *Journal of Teaching in Physical Education*, 21(4), 427-440.
- Siedentop, D., & Eldar, E. (1989). Expertise, experience, and effectiveness. *Journal of Teaching in Physical Education*, 8(3), 254-260.
- Silva, C. F., & Howe, P. D. (2012). The (in) validity of supercrip representation of Paralympian athletes. *Journal of sport and social issues*, 36(2), 174-194.
- Silva, C. F., & Howe, P. D. (2019). Sliding to reverse Ableism: An ethnographic exploration of (dis) ability in sitting volleyball. *Societies*, 9(2), 41.
- Silverman, D. (2020). *Interpreting Qualitative Data* (6th ed). Sage Publications.
- Silverman, D. (Ed.). (2014). *Interpreting Qualitative Data* (5th ed.). Sage Publications.
- Silverman, S. (1985). Critical considerations in the design and analysis of teacher effectiveness research in physical education. *International Journal of Physical Education*, 22(4), 17-24.
- Silverman, S. (1991). Research on teaching in physical education. *Research Quarterly for Exercise and Sport*, 62(4), 352-364.
- Silverman, S., & Ennis, C. (2003). *Student learning in physical education: Applying research to enhance instruction*. Human Kinetics.

Simms, L., & Thumann, H. (2007). In search of a new, linguistically and culturally sensitive paradigm in deaf education. *American annals of the deaf*, 152(3), 302-311.

Singleton, J. L., Jones, G., & Hanumantha, S. (2014). Toward ethical research practice with deaf participants. *Journal of Empirical Research on Human Research Ethics*, 9(3), 59-66.

Sirna, K., Tinning, R., & Rossi, T. (2010). Social processes of health and physical education teachers' identity formation: Reproducing and changing culture. *British journal of sociology of education*, 31(1), 71-84.

Skelton, T., & Valentine, G. (2003). 'It feels like being Deaf is normal': an exploration into the complexities of defining D/deafness and young D/deaf people's identities. *Canadian Geographer/Le Géographe Canadien*, 47(4), 451-466.

Skidmore, D., & Copeland, I. (1998). The LEA and the administration of special needs education: views from the literature. *Educational Research*, 40(2), 139-152.

Skyer, M. E. (2021). Being and deafness: Examining ontology and ethics within the dialectic of hearing-loss and deaf-gain and deafness-and-disability. *Defining the boundaries of disability: Critical perspectives*, 57-74.

Slingerland, M., Weeldenburg, G., & Borghouts, L. (2024). Formative assessment in physical education: teachers' experiences when designing and implementing formative assessment activities. *European Physical Education Review*, 1356336X241237398.

Small, M. L., & Calarco, J. McCrory. (2022). Qualitative Literacy : A Guide to Evaluating Ethnographic and Interview Research. (1st ed.). University of California Press.

Smith, A., & Thomas, N. (2006). Including pupils with special educational needs and disabilities in national curriculum physical education: A brief review. *European Journal of Special Needs Education*, 21(1), 69-83.

- Smith, B. (2018). Generalizability in qualitative research: Misunderstandings, opportunities and recommendations for the sport and exercise sciences. *Qualitative research in sport, exercise and health*, 10(1), 137-149.
- Smith, B., & McGannon, K. R. (2018). Developing rigor in qualitative research: Problems and opportunities within sport and exercise psychology. *International review of sport and exercise psychology*, 11(1), 101-121.
- Smith, B., & Sparkes, A. C. (2020). Qualitative research. Handbook of sport psychology. In G. Tenenbaum, & Eklund, R. C. (Ed.), *Handbook of sport psychology*. (4th ed., Vol. 1, (pp. 999-1019). Wiley.
- Smith, B., & Sparkes, A. C. (Eds.). (2016). *Routledge handbook of qualitative research in sport and exercise*. Routledge.
- Smith, J. (2007). Getting emotional over class concerns: Reflecting on fieldwork and the pursuit of ethical practice by a fledgling school ethnographer. *Ethnography and education*, 2(2), 159-174.
- Smith, R. J., & Delamont, S. (Eds.). (2023). *Leaving the field: Methodological insights from ethnographic exits*. Manchester University Press.
- Solmon, M. A., & Garn, A. C. (2014). Effective teaching in physical education: Using transportation metaphors to assess our status and drive our future. *Research Quarterly for Exercise and Sport*, 85(1), 20-26.
- Sparkes, A. (2002). Telling tales in sport and physical activity: A qualitative journey. Human Kinetics.
- Sparkes, A. C. (1995). Writing people: Reflections on the dual crises of representation and legitimation in qualitative inquiry. *Quest*, 47(2), 158-195.
- Sparkes, A. C., & Smith, A. (2014). Qualitative research methods in sport, exercise and health : from process to product. Routledge.
- Sparkes, A. E. (Ed.). (1992). Research in physical education and sport: Exploring alternative visions. Psychology Press.
- Sparks, C., Dimmock, J., Whipp, P., Lonsdale, C., & Jackson, B. (2015). "Getting connected": High school physical education teacher behaviors that facilitate

students' relatedness support perceptions. *Sport, Exercise, and Performance Psychology*, 4(3), 219.

Spencer, R., Pryce, J. M., & Walsh, J. (2014). Philosophical approaches to qualitative research. *The Oxford handbook of qualitative research*, 81-98.

Spencer, R., Pryce, J. M., & Walsh, J. (2020). (2014). Philosophical Approaches to Qualitative Research. In P. Leavy (Ed.), *The Oxford handbook of qualitative research* (pp. 81-98). Oxford University Press.

Sprake, A., & Palmer, C. (2022). Understanding the interpretive paradigm: a guide for sports students learning through qualitative research. *Journal of Qualitative Research in Sports Studies*, 16(1), 45-68.

Staller, K. M. (2021). Big enough? Sampling in qualitative inquiry. *Qualitative Social Work*, 20(4), 897-904.

Stapleton, L. (2015). When being deaf is centered: d/Deaf women of color's experiences with racial/ethnic and d/Deaf identities in college. *Journal of College Student Development*, 56(6), 570-586.

Sterling, S. (2016). Teaching Profession, Philosophies of . In: G. Gertz, & Boudreault, P. (Ed.), *The SAGE deaf studies Encyclopedia* (Vol. 1, pp.944-946). SAGE.

Stewart, D. A., & Ellis, M. K. (1999). Physical education for deaf students. *American annals of the deaf*, 144(4), 315-319.

Stidder, G., & Hayes, S. (2012). *Equity and inclusion in physical education and sport* (2nd ed.). Routledge.

Stinson, M. S., & Lang, H. G. (1994). Full inclusion: a path for integration or isolation? *American annals of the deaf*, 139(2), 156-159.

Stinson, M., & Antia, S. (1999). Considerations in educating deaf and hard-of-hearing students in inclusive settings. *Journal of deaf studies and deaf education*, 4(3), 163-175.

Stinson, M., & Liu, Y. (1999). Participation of deaf and hard-of-hearing students in classes with hearing students. *Journal of deaf studies and deaf education*, 4(3), 191-202.

Stirling, J., & Belk, L. (2002). Effective teaching, quality physical education and the New Zealand curriculum. *New Zealand Physical Educator*, 35(1), 69.

Stolz, S. A. (2013). Phenomenology and physical education. *Educational Philosophy and theory*, 45(9), 949-962.

Stone, C., & Woll, B. (2008). Dumb O Jemmy and others: Deaf people, interpreters, and the London Courts in the eighteenth and nineteenth centuries. *Sign Language Studies*, 8(3), 226-240.

Strangwick, R., & Zwondiak-Myers, P. (2004). Communicating in PE. In S. Capel & M. Whitehead. (Eds), *Learning to teach physical education in the secondary school: A companion to school experience*, (4th ed, pp.61-78). Routledge.

Stuij, M. (2015). Habitus and social class: A case study on socialisation into sports and exercise. *Sport, education and society*, 20(6), 780-798.

Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative research journal*, 11(2), 63-75.

Sutherland, H., & Young, A. (2014). Research with deaf children and not on them: A study of method and process. *Children & Society*, 28(5), 366-379.

Swain, J. M., & Spire, Z. D. (2020). The role of informal conversations in generating data, and the ethical and methodological issues. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, Vol 21, No.1, 1-22.

Swain, J., & King, B. (2022). Using Informal Conversations in Qualitative Research. *International Journal of Qualitative Methods*, 21, 1-10. <https://doi.org/10.1177/16094069221085056>.

Swanwick, R. (2010). Policy and practice in sign bilingual education: development, challenges and directions. *International Journal of Bilingual Education and Bilingualism*, 13(2), 147-158.

Tanure Alves, M. L., de Souza, J. V., Grenier, M., & Lieberman, L. (2021). The invisible student in physical education classes: voices from Deaf and hard of hearing students on inclusion. *International Journal of Inclusive Education*, 1-16.

- Tarantino, G., Makopoulou, K., & Neville, R. D. (2022). Inclusion of children with special educational needs and disabilities in physical education: A systematic review and meta-analysis of teachers' attitudes. *Educational Research Review*, 36,1-14.
- Tavallaei, M., & Talib, M. A. (2010). A general perspective on role of theory in qualitative research. *Journal of International Social Research*, 3(11), 570-577.
- Tavory, I., & Timmermans, S. (2014). *Abductive analysis: Theorizing qualitative research*. University of Chicago Press.
- Taylor, I. M., Ntoumanis, N., & Smith, B. (2009). The social context as a determinant of teacher motivational strategies in physical education. *Psychology of sport and exercise*, 10(2), 235-243.
- Taylor, S. D. (1953). Education for the Deaf in England. *American annals of the deaf*, 98(2), 240-248.
- Taylor, S. J. & Bogda, R. & DeVault, M. L. (2016). *Introduction to Qualitative Research Methods : A Guidebook and Resource*. (4th ed) John Wiley & Sons, Incorporated.
- Tedlock, B. (2000). Ethnography and Ethnographic Representation. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research*. (2nd ed., pp. 455-486). Sage Publications Inc.
- Temple, V. A., & Walkley, J. W. (1999). Academic Learning Time—Physical Education (ALT-PE) of Students with Mild Intellectual Disabilities in Regular Victorian Schools. *Adapted physical activity quarterly*, 16(1), 64-74.
- Terry, G., & Hayfield, N. (2020). 38. Reflexive thematic analysis. In M. R. M. Ward & S. Delamont (Eds.), *Handbook of qualitative research in Education*. (2 ed., pp. 430-441). Edward Elgar Publishing Limited.
- Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic analysis. In C. Willig & W. Stainton- Rogers (Eds.), *The SAGE handbook of qualitative research in psychology* (2nd ed., Vol. 2, pp. 17-37). Sage Publications.
- Thanah, N. C., & Thanah, T. (2015). The interconnection between interpretivist paradigm and qualitative methods in education. *American journal of educational science*, 1(2), 24-27.

Thomas, N., & Smith, A. (2009). *Disability, sport and society: an introduction*. Routledge.

Thompson, J. (2022). A guide to abductive thematic analysis. *The Qualitative Report*, 27(5), 1410–1421. <https://doi.org/10.46743/2160-3715/2022.5340>.

Thompson, J. B. (1991). Editors' Introduction In: P. Bourdieu (Ed.), *Language and symbolic power*. (pp. 1-31). Polity Press.

Thomson, A. (2017). *Socially Constructed and Embodied Meanings of Effectiveness in the Lives of Physical Education Teachers* [Unpubslihed Thesis]. Leeds Beckett University.

Thomson, A., & Sparkes, A. C. (2020). The micropolitics of being a head of physical education in a secondary school: insights from an ethnographic study. *Sport, education and society*, 25(7), 815-828.

Thomson, P., & Gunter, H. (2011). Inside, outside, upside down: The fluidity of academic researcher 'identity' in working with/in school. *International Journal of Research & Method in Education*, 34(1), 17-30.

Thornberg, R. (2022). Abduction as a Guiding Principle in Qualitative Research Design. In U. Flick (Ed.), *The Sage Handbook of Qualitative Research Design* (1st ed., pp. 243-256). SAGE Publications.

Thorne, S. (2000). Data analysis in qualitative research. *Evidence-based nursing*, 3(3), 68-70.

Thorpe, H., & Olive, R. (2017). Conducting Observations in Sport and Exercise Settings. In B. Smith & A. C. Sparkes (Eds.), *Routledge Handbook of Qualitative Research in Sport and Exercise* (1st ed., pp. 124-138). Routledge.

Timmermans, S., & Tavory, I. (2012). Theory construction in qualitative research: From grounded theory to abductive analysis. *Sociological theory*, 30(3), 167-186.

Timmermans, S., & Tavory, I. (2022). *Data analysis in qualitative research: Theorizing with abductive analysis*. University of Chicago Press.

Tomlinson, S. (1988). Special educational needs: the implementation of the Education Act 1981. *Journal of Education Policy*, 3(1), 51-58.

Tomlinson, S. (2005). *Education in a post-welfare society* (2nd ed.). Open University Press.

Townsend, M. P., M. (2009). Changing Schools, Changing role for Teaching Assistants. In M. Parker, Lee, C., Gunn, S., Heardman, K., Hincks, R., Pittman, M., and Townsend, M., A (Ed.), *A toolkit for the effective teaching assistant* (2nd ed., pp. 19-32). Sage Publications.

Tracy, S. J. (2010). Qualitative quality: Eight “big-tent” criteria for excellent qualitative research. *Qualitative inquiry*, 16(10), 837-851.

Trainor, L. R., & Bundon, A. (2021). Developing the craft: Reflexive accounts of doing reflexive thematic analysis. *Qualitative research in sport, exercise and health*, 13(5), 705-726.

Treder, D. W., Morse, W. C., & Ferron, J. M. (2000). The relationship between teacher effectiveness and teacher attitudes toward issues related to inclusion. *Teacher Education and Special Education*, 23(3), 202-210.

Tuckett, A. G. (2005). Applying thematic analysis theory to practice: A researcher's experience. *Contemporary nurse*, 19(1-2), 75-87.

Turner, G. (2013). *British cultural studies : an introduction* (3rd ed.). Routledge.

UNESCO. (1994). *The Salamanca Statement and Framework for Action on Special Needs Education at World Conference on Special Needs Education: Access and Quality, Salamanca, Spain, 1994*. Retrieved 4th November 2022 from: <https://unesdoc.unesco.org/ark:/48223/pf0000098427>.

Valentine, G., & Skelton, T. (2009). ‘AN UMBILICAL CORD TO THE WORLD’ The role of the Internet in D/deaf people's information and communication practices. *Information, Communication & Society*, 12(1), 44-65.

Van der Mars, H. (1991). Novice and Expert Physical Education Teachers: They May Think and Decide Differently... But Do They Behave Differently? *ERIC*, 1-24.

Van Der Mars, H. (2006). Time and learning in physical education. In D. Kirk, O'Sullivan, M., & MacDonald, D. (Ed.), *Handbook of physical education*. (pp. 191-214). SAGE.

Van der Smee, C., & Valerio, C. (2023). He isn't a teacher. He is our friend': understanding the challenges and opportunities of conducting ethnographic research with children. *Sport, education and society*, 29(6) 637-648. <https://doi.org/10.1080/13573322.2023.2171979> .

Vanner, C. (2020). Writing in My Little Read Book. The process of Taking Fieldnotes in Primary School Case Study Research in Kirinyaga, Kenya. In C. T. Burkholder, J. (Ed.), *Fieldnotes in Qualitative Education and Social Science Research: Approaches, Practices, and Ethical Considerations*. (1st ed., pp. 15-32). Routledge.

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

Vickerman, P. (2002). Perspectives on the training of physical education teachers for the inclusion of children with special educational needs—is there an official line view? *The Bulletin of Physical Education*, 38(2), 79-98.

Vickerman, P. (2007). Training physical education teachers to include children with special educational needs: Perspectives from physical education initial teacher training providers. *European Physical Education Review*, 13(3), 385-402.

Vickerman, P. (2012). Including children with special educational needs in physical education: has entitlement and accessibility been realised? *Disability & Society*, 27(2), 249-262. <https://doi.org/10.1080/09687599.2011.644934>.

Vickerman, P., & Blundell, M. (2012). English learning support assistants' experiences of including children with special educational needs in physical education. *European Journal of Special Needs Education*, 27(2), 143-156.

Vickerman, P., & Maher, A. (2018). *Teaching physical education to children with special educational needs and disabilities* (2nd ed.). Routledge.

Vidranski, T., & Farkaš, D. (2015). Motor skills in hearing impaired children with or without cochlear implant—A systematic review. *Collegium antropologicum*, 39(Supplement 1), 173-179.

- Wacquant, L. (2011). Habitus as topic and tool: Reflections on becoming a prizefighter. *Qualitative research in psychology*, 8(1), 81-92.
- Wakefield, T. (1998). Achieving access to a broad and balanced curriculum. In S. Gregory, P. Knight, W. McCracken, S. Powers, & L. Watson (Eds.), *Issues in Deaf Education* (pp. 127-134). David Fulton Publishers.
- Walford, G. (2007). Classification and framing of interviews in ethnographic interviewing. *Ethnography and education*, 2(2), 145-157.
- Walford, G. (2009a). For ethnography. *Ethnography and education*, 4(3), 271-282.
- Walford, G. (2009b). The practice of writing ethnographic fieldnotes. *Ethnography and education*, 4(2), 117-130.
- Walford, G. (2018). Recognizable continuity: A defense of multiple methods. *The Wiley handbook of ethnography of education*, 15-29.
- Walford, G. (2018). Recognizable Continuity: A Defense of Multiple Methods. In: D. Beach, C. Bagley & S. M. da Silva (Eds.), *The Wiley Handbook of Ethnography of Education*, (pp.36-49). John Wiley & Sons, Incorporated.
- Walsh, D. (2012). Doing ethnography. In C. Seale (Ed.), *Researching Society and Culture* (3rd ed., Vol. 2012). SAGE.
- Wang, X. (2013). The construction of researcher–researched relationships in schoolethnography: doing research, participating in the field and reflecting on ethical dilemmas. *International Journal of Qualitative Studies in Education*, 26(7), 763-779.
- Wang, Y. (2010). Without boundaries: An inquiry into deaf epistemologies through a metaparadigm. *American annals of the deaf*, 154(5), 428-434.
- Ward, P. (2013). The role of content knowledge in conceptions of teaching effectiveness in physical education. *Research Quarterly for Exercise and Sport*, 84(4), 431-440.
- Ward, P., & O'Sullivan, M. (1998). Similarities and differences in pedagogy and content: 5 years later. *Journal of Teaching in Physical Education*, 17(2), 195-213.

Ward, P., Ayvazo, S., & Iserbyt, P. (2022). Daryl Siedentop's Epistemological Lens, and His Influence on the Fields of Physical Education and Teacher Education. *Quest*, 75(1), 5-15.

Warner-Czyz, A. D., Loy, B., Pourchot, H., White, T., & Cokely, E. (2018). Effect of hearing loss on peer victimization in school-age children. *Exceptional Children*, 84(3), 280-297.

Wauters, L. N., & Knoors, H. (2008). Social integration of deaf children in inclusive settings. *Journal of deaf studies and deaf education*, 13(1), 21-36.

Wearmouth, J. (2023). *Special educational needs and disability : the basics* (4th ed.). Routledge, Taylor & Francis Group.

Webb, L. A., & Macdonald, D. (2007). Techniques of power in physical education and the underrepresentation of women in leadership. *Journal of Teaching in Physical Education*, 26(3), 279-297.

Webb, L., Quennerstedt, M., & Öhman, M. (2008). Healthy bodies: Construction of the body and health in physical education. *Sport, education and society*, 13(4), 353-372.

West, A. (2010). High stakes testing, accountability, incentives and consequences in English schools. *Policy & politics*, 38(1), 23-39.

Wiles, R., Crow, G., Heath, S., & Charles, V. (2008). The Management of Confidentiality and Anonymity in Social Research. *International Journal of Social Research Methodology*, 11(5), 417-428.
<https://doi.org/10.1080/13645570701622231> .

Wilkinson, S. (1988). The role of reflexivity in feminist psychology [Interview]. Pergamon Press.

Willig, C. (2013). *Introducing Qualitative Research in Psychology* (3rd ed.). McGraw-hill Education.

Willis, J. (2007). *Foundations of qualitative research: Interpretive and critical approaches*. Sage Publications.

Wilson, W. J., & Chaddha, A. (2009). The role of theory in ethnographic research. *Ethnography*, 10(4), 549-564.

Wiltshire, G., Lee, J., & Williams, O. (2019). Understanding the reproduction of health inequalities: physical activity, social class and Bourdieu's habitus. *Sport, education and society*, 24(3), 226-240.

Wiskochil, B., Lieberman, L. J., Houston-Wilson, C., & Petersen, S. (2007). The effects of trained peer tutors on the physical education of children who are visually impaired. *Journal of Visual Impairment & Blindness*, 101(6), 339-350.

Wolcott, H. F. (1995). *The Art of Fieldwork*. Sage.

Wolcott, H. F. (1999). *Ethnography: A way of seeing*. Rowman Altamira.

Wolcott, H. F. (2008). *Ethnography: A way of seeing* (2nd ed.). AltaMira Press.

Woll, B., & Adam, R. (2012). Sign language and the politics of deafness. In M. Martin-Jones, A. Blackledge, & A. Creese (Eds.), *The Routledge handbook of multilingualism* (pp. 100-115). Routledge.

Woll, B., & Ladd, P. (2003). Deaf communities. In M. Marschark, & Spencer, P. E. (Ed.), *Oxford handbook of deaf studies, language, and education* (pp. 151-163). Oxford University Press.

Wolters, N., Knoors, H. E., Cillessen, A. H., & Verhoeven, L. (2011). Predicting acceptance and popularity in early adolescence as a function of hearing status, gender, and educational setting. *Research in developmental disabilities*, 32(6), 2553-2565.

Woolard, K. A. (1985). Language variation and cultural hegemony: Toward an integration of sociolinguistic and social theory. *American ethnologist*, 12(4), 738-748.

World Health Organisation (WHO). (n.d.). *Deafness and Hearing loss*. Retrieved 20th September 2024 from <https://www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss>

Wrench, A., & Garrett, R. (2012). Identity work: Stories told in learning to teach physical education. *Sport, education and society*, 17(1), 1-19.

Wrench, A., & Garrett, R. (2015). PE: it's just me: physically active and healthy teacher bodies. *International Journal of Qualitative Studies in Education*, 28(1), 72-91.

Wright, J., & O'Flynn, G. (2012). Conducting ethical research. In K. Armour & D. Macdonald (Eds.), *Research methods in physical education and youth sport* (pp. 66-78). Routledge.

Xie, Y.-H., Potmėšil, M., & Peters, B. (2014). Children who are deaf or hard of hearing in inclusive educational settings: A literature review on interactions with peers. *Journal of deaf studies and deaf education*, 19(4), 423-437.

Young, A., & Temple, B. (Eds.). (2014). *Approaches to social research: The case of deaf studies*. Oxford University Press.

Young, A., Napier, J., & Oram, R. (2019b). The translated deaf self, ontological (in) security and deaf culture. *The Translator*, 25(4), 349-368.

Young, A., Oram, R., & Napier, J. (2019A). Hearing people perceiving deaf people through sign language interpreters at work: on the loss of self through interpreted communication. *Journal of Applied Communication Research*, 47(1), 90-110.

Zevenbergen, R. (2000). Cracking the code" of mathematics classrooms: School success as a function of linguistic, social, and cultural background. *Multiple perspectives on mathematics teaching and learning*, 201-223.

Zwozdiak-Myers, P. N. (2020). Communication in Physical Education. In S. Capel, Cliffe, J., & Lawrence, J. (Ed.), *Learning to teach Physical Education in the secondary school: a companion to school experience*. (5th ed., pp. 262-283). Routledge.

APPENDICES.

Appendix 1: Interview schedule for mainstream staff.

Introduction- Thank staff for taking the time to meet. Provide a brief overview of the research and its aims, reassure participants the researcher is not here to make judgements on effectiveness but is interested in their perceptions of effectiveness. Make it clear participants can ask the researcher to move onto the next question or withdraw from the interview if they feel uncomfortable and lastly ask if participants have any questions before beginning.

Background:

- Can you tell me about yourself?
- Can you tell me about your background working with d/Deaf pupils?

Lived experience of educating D/deaf pupils in PE:

- What does teaching d/Deaf pupils effectively in PE mean to you?
- What teaching strategies do you use to facilitate d/Deaf pupils' learning and inclusion in PE?
- What role do DRB staff play in PE lessons?
- In your opinion, do you believe mainstream teachers' face any barriers to including d/Deaf pupils in PE?
- Have you received any training for education d/Deaf pupils, prior to or during teaching D/deaf pupils?
 - Can you discuss the attainment of d/Deaf pupils in PE?

d/Deaf pupils' social interactions in PE:

- Can you tell me about your social interactions with D/deaf pupils in mainstream PE?
- How do social interactions with D/deaf pupils and hearing peers play out in PE?
- How do social interactions amongst d/Deaf pupils play out in PE?

Aspirations for the future:

- What opportunities do you believe there is or should be to help PE teachers effectively include and educate d/Deaf pupils in PE?
- Can you share examples of good practice or how d/Deaf pupils' experiences of PE be improved?
- Is there anything else you would like to share about your experiences which you think may be relevant to the research?

Thank participants again for their contributions and advise them to be in contact if they have any questions.

Appendix 2: DRB staff Interview schedule.

Introduction- Thank participants for their time. Provide a brief overview of the research and its aims, reassure participants I'm not here to make judgements on effectiveness but rather interested in their perceptions of effectiveness. Make it clear participants can ask the researcher to move onto the next question or withdraw from the interview if they feel uncomfortable and lastly ask if participants have any questions before beginning.

Background:

- Can you tell me about yourself?
- Can you tell me about your current role working with d/Deaf pupils?

Experiences of teaching PE to d/Deaf pupils:

- What does teaching d/Deaf pupils effectively in PE mean to you?
- How does the support you provide to d/Deaf pupils differ in mainstream PE compared to other subjects?
- How does teaching in mainstream PE differ to DRB PE?
- In your opinion, do you believe barriers exist to achieving effective teaching of d/Deaf pupils in mainstream PE?
- Have you experienced specific training in PE?
- Can you discuss the attainment of d/Deaf pupils in mainstream PE?
- Can you describe your role within a mainstream PE lesson?
- What teaching strategies are used in PE to facilitate d/Deaf pupils' learning and inclusion?

d/Deaf pupils' social interactions in PE:

- Can you tell me about d/Deaf pupils' social interactions with mainstream teachers?
- Can you describe how social interactions with d/Deaf pupils and hearing peers play out in PE?
- How do social interactions amongst d/Deaf pupils play out in PE?

Aspirations for the future:

- What opportunities do you believe there is or should be to help PE teachers effectively include and educate d/Deaf pupils in PE?
- Can you share examples of good practice or how d/Deaf pupils' experiences of PE be improved?
 - Is there anything else you would like to share about your experiences which you think may be relevant to the research?

Thank participants again for their contributions and advise them to be in contact if they have any questions.

Appendix 3: d/Deaf pupils' interview schedule

Introduction- Provide a brief overview of the research and its aims, reassure participants the researcher is not here to make judgements but is interested in their experiences, make it clear participants can ask the researcher to move onto the next question or withdraw from the interview if they feel uncomfortable and lastly ask if participants have any questions before beginning. If appropriate, explain for simplicity and conversation flow, I will talk whilst interpreter will sign.

Background:

- Can you tell me about yourself?

Lived PE experiences:

- Can you discuss your experiences in PE?
- Can you tell me about any barriers or challenges you have experienced in PE?
- Can you tell me how PE teachers impact your PE experiences?
- How do your experiences in PE differ to other subjects?
- Do your PE experiences impact your involvement in extra-curricular activities?

Social Interactions in the PE landscape :

- Can you describe your relationships with hearing classmates in PE
- How do you communicate with peers?

Teaching methods in PE:

- In your opinion what does teaching effectively in PE mean?
- Do you receive any support in PE related to your d/Deafness? Who is this from? (peers, PE teachers or d/Deaf support staff), Would you like more support to be offered? If so, what would this look like?
- What does a good PE lesson include?
- What methods do PE teachers use to improve learning in PE?
- How does your PE teacher communicate learning objectives and activities? (methods help you understand activities?)
- What role do d/Deaf support staff play in PE? How does their role differ to PE teachers?
- Do you use any technology in PE and how does this impact your learning?

Aspirations for the future:

- What opportunities do you believe there is or should be to improve PE experiences for d/Deaf pupils in PE? (Prompts- support, d/Deaf awareness, technology, relationships with hearing classmates)
- Is there anything else you would like to share about your experiences which you think may be relevant to the research?

Thank participants again for their contributions and advise them to be in contact if they have any questions.

Appendix 4: Hearing pupils' interview schedule

Introduction- Provide a brief overview of the research and its aims, reassure participants the researcher is not here to make judgements but is interested in their experiences, make it clear participants can ask the researcher to move onto the next question or withdraw from the interview if they feel uncomfortable and lastly ask if participants have any questions before beginning.

Background:

- Can you tell me about yourself?

Lived PE experiences:

- What teaching strategies do PE teachers cater for the needs of d/Deaf pupils and hearing pupils?

Social Interactions in PE:

- Can you describe your relationships with d/Deaf pupils in PE?
- How do you communicate with d/Deaf pupils?
- Can you describe d/Deaf pupils' relationships with other hearing classmates?

Teaching methods in PE:

- In your opinion what does teaching effectively in PE mean?
- What teaching methods are used in PE?
- What role do d/Deaf support staff play in PE?

Aspirations for the future:

- What opportunities do you believe there is or should be to improve PE experiences for d/Deaf pupils in PE?
- Is there anything else you would like to share about your experiences which you think may be relevant to the research?

Thank participants again for their contributions and advise them to be in contact if they have any questions.

Appendix 5: Pupils' writings of PE:

Thursday 30th November 2023 PE

About PE

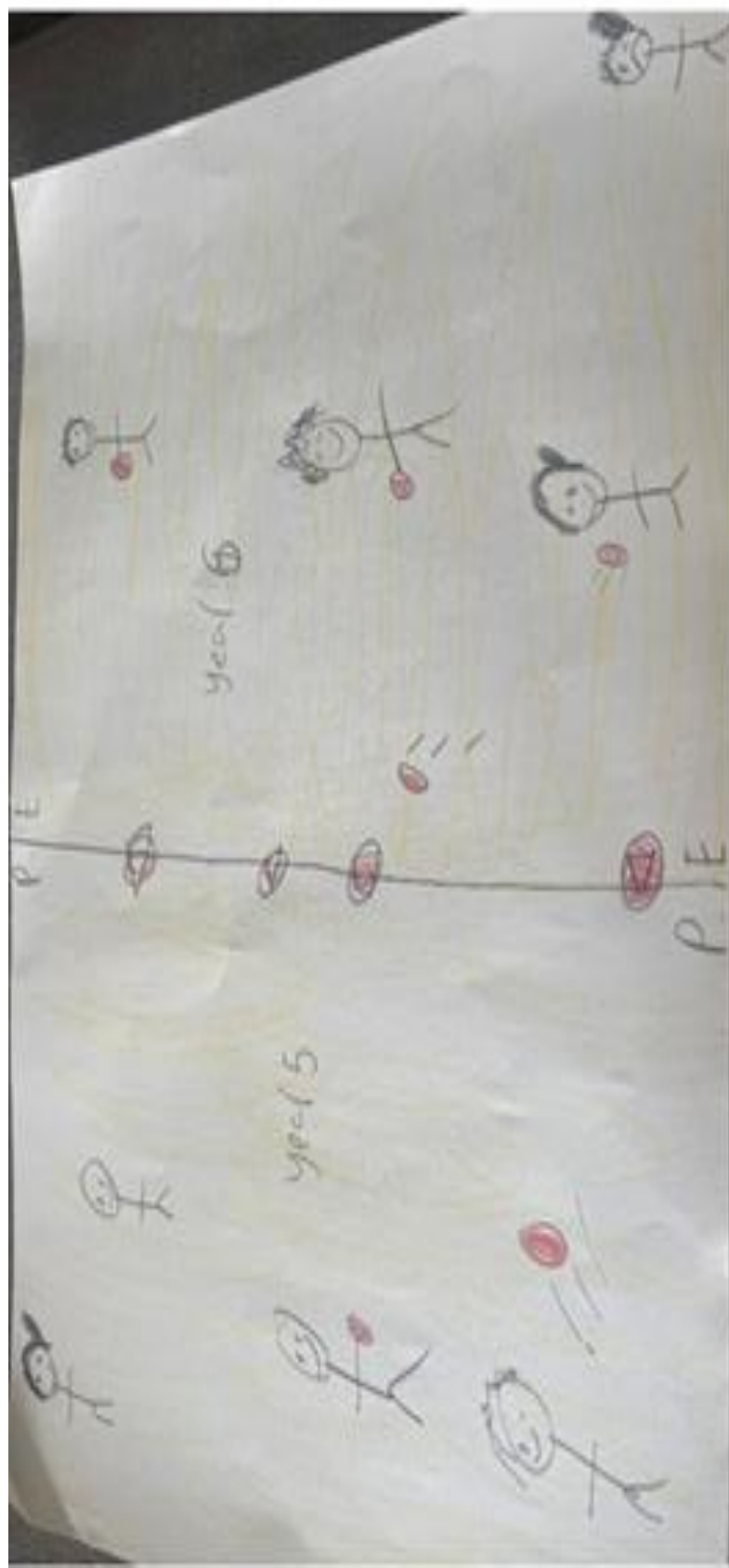
I like Play Football in DfB PE
I like mainly from y6 why my Friends name
[redacted] because good Play Karate
I like mainly from y6 good games Play River
mainly from y6 I learn sign of the
Dr good Fun Play Dodgeball in hall with Deaf
Friends
after school Football with Deaf and hearing
Friends
Sports days Football and Dodgeball and tennis
and rounders and Cricket
I like Play rope in DfB
I like sports in [redacted]

30th November 2023

About Pe

I feel disappointed when I go to mums + learn
because I'm so boring to it, I love DRB Pe
because I play Dodgeball and cat and mouse
and handball and football and Cicket and
Runners

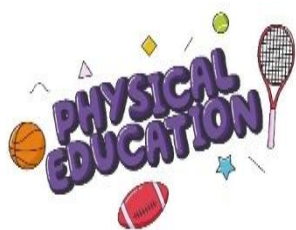
Appendix 6: Pupils' drawing of PE.





Appendix 7: Extract taken from abductive inference chart.

Quote/ text	Code	Abductive inferences
Mr Luck provides a demonstration of a forehand hit and gives teaching points simultaneously. During the demo, Mr Luck verbally states, "look at my feet" and "move back if you need to" - Mrs Doyle fails to interpret this	Instructions & demonstrations provided simultaneously DRB staff not interpreting in full results in key teaching points being missed	Phonocentrism- instructions delivered in speech as 'commonsense'. Audism- interpreter deciding what information is relevant
When Mr Luck asked pupils to stop skipping around the area there was a delay in stopping the activity for Hannah and she continued to skip unaware everybody else had sat down.	Mainstream teachers include D/deaf pupils in demonstrations Verbal teaching causes delays for d/Deaf pupils stopping activities which can highlight difference.	Phonocentrism
After witnessing pupils pair up Mr Wilcock exclaims "we are an inclusive school, I don't know why we've got DRB separate, we are an inclusive school that's not what we do". He encouraged pupils to pick their teams again.	Mainstream class teacher challenges social divisions between hearing and D/deaf pupils when witnessing social divides	Hearing pupils 'other' d/Deaf pupils Low social capital of d/Deaf pupils resulting in their exclusion



Understanding how Physical Education can be taught effectively to D/deaf pupils in mainstream settings.

You are being invited to participate in a research study. Please read the information on this poster before agreeing to participate. If you have any questions about the study, ask your teachers or parents to contact Olivia at owilliams3@uclan.ac.uk

DO I HAVE TO TAKE PART?

No only take part if you want to, participation is optional and you can change your mind at any time.

WHAT WILL HAPPEN IF I TAKE PART?



Olivia will become a member of staff in your PE department. During this time, Olivia may:

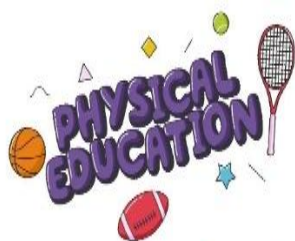
1. Observe your PE lessons.
2. Participate in your PE lessons.
3. Have conversations with you.
4. Complete interviews with you.
5. Have group discussions about PE with you and your peers.
6. Ask you to draw a picture or write a story about your PE experiences.

During interviews/ focus groups, interpreters may be present to help you understand what is being asked.

WHAT IS THE RESEARCH ABOUT?

This research is exploring how PE be taught effectively to D/deaf pupils in mainstream settings. We want to explore:

1. D/deaf pupils' experiences in PE.
2. Relationships between D/deaf pupils, hearing peers, D/deaf support staff and PE teachers.
3. Teaching methods in PE for educating D/deaf pupils.
4. Find out whether you think teaching methods in PE are effective.



Understanding how Physical Education can be taught effectively to D/deaf pupils in mainstream settings.

WILL MY NAME BE USED?



No, you will be given a different name and school, so no one who is reading about the study knows who you are.

WHAT HAPPENS AFTERWARDS?

- I will listen to recordings from your discussions and then write about your experiences of PE.
- The results will be written up in my PhD thesis and be shared in professional conferences and peer-reviewed journals.

Are there any risks in taking part?



It is not expected that there are any disadvantages or risks involved.

Are there any benefits in taking part?

There are no immediate direct benefits to you. However, you may benefit from the outputs of the research as they provide insight into the PE field to inform future practice of teaching D/deaf pupils in PE.

How will my data be used?

- Data will be kept in password protected documents and a secure locked cabinet.
- Audio recordings will be used to recall your answers, these will be kept on a password protected recorder.
- Your data will be stored for 7 years.
- Data will be destroyed using UCLan's confidential waste service and following UCLan guidelines.
- Your personal data will be processed for "advancing education, learning and research for the public benefit".
- Privacy notice can be found on https://www.uclan.ac.uk/data_protection/privacy-notice-research-participants.php.

If you remain unhappy after speaking to me or have a complaints speak to your parents who have details on how to contact UCLan Ethics, Integrity and Governance unit.